

# Public Document Pack

Simon Young, Solicitor  
Head of Legal and Democratic Services



## COMMUNITY AND WELLBEING COMMITTEE

Tuesday 21 March 2017 at 7.30 pm

Council Chamber - Epsom Town Hall

The members listed below are summoned to attend the Community and Wellbeing Committee meeting, on the day and at the time and place stated, to consider the business set out in this agenda.

Councillor Barry Nash (Chairman)  
Councillor Tony Axelrod (Vice-Chairman)  
Councillor Rekha Bansil  
Councillor Kate Chinn  
Councillor Hannah Dalton

Councillor Jane Race  
Councillor Jean Steer  
Councillor Alan Sursham  
Councillor Peter Webb  
Councillor Clive Woodbridge

Yours sincerely

A handwritten signature in black ink, appearing to read 'S Young', written over the printed name.

Head of Legal and Democratic Services

For further information, please contact Tim Richardson, 01372 732122 or [trichardson@epsom-ewell.gov.uk](mailto:trichardson@epsom-ewell.gov.uk)

### AGENDA

#### 1. QUESTION TIME

To take any questions from members of the Public.

**Please note: Members of the Public are requested to inform the Democratic Services Officer before the meeting begins if they wish to ask a verbal question to the Committee.**

#### 2. DECLARATIONS OF INTEREST

Members are asked to declare the existence and nature of any Disclosable Pecuniary Interests in respect of any item of business to be considered at the meeting.

**3. MINUTES OF THE PREVIOUS MEETING** (Pages 5 - 8)

The Committee is asked to confirm as a true record the Minutes of the Meeting of the Committee held on 24 January 2017 (attached) and to authorise the Chairman to sign them.

**4. HORTON COUNTRY PARK LOCAL NATURE RESERVE MANAGEMENT PLAN 2017-2117** (Pages 9 - 190)

This report asks the Community and Wellbeing Committee to approve and adopt as policy an updated management plan 2017-2117 for Horton Country Park Local Nature Reserve.

**5. THE HOGSMILL LOCAL NATURE RESERVE MANAGEMENT PLAN 2017-2117** (Pages 191 - 332)

This report asks the Community and Wellbeing Committee to approve and adopt as policy an updated management plan 2017-2117 for the Hogsmill Local Nature Reserve.

**6. LOCAL BIODIVERSITY ACTION PLAN - ANNUAL UP-DATE 2016** (Pages 333 - 380)

A report on progress during 2016 in implementing the Epsom & Ewell Local Biodiversity Action Plan 2010-2020.

**7. PARK MANAGEMENT PLANS** (Pages 381 - 538)

This report presents the Committee with five-year park management plans for Auriol Park and Alexandra Recreation Ground, and the results of recent visitor surveys to both parks.

**8. COMMUNITY TRANSPORT AND LONGMEAD CENTRE** (Pages 539 - 546)

This report provides an update on changes to the Routecall service, and proposes rebranding for our Community Services operations and the Longmead Centre.

**9. SUPPLEMENTARY FEES & CHARGES** (Pages 547 - 552)

This report sets out Supplementary Fees & Charges for Epsom Playhouse, the Ebbisham Centre and Ewell Court House that were omitted from the report agreed in January 2017.

**10. OUTSTANDING REFERENCES** (Pages 553 - 556)

The references to Officers outstanding as at 21 March 2017.

**11. EXCLUSION OF PRESS AND PUBLIC (Pages 557 - 558)**

The Committee is asked to consider whether it wishes to pass a resolution to exclude the Press and Public from the meeting in accordance with Section 100A (4) of the Local Government Act 1972 on the grounds that the business involves the likely disclosure of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A to the Act (as amended) and that pursuant to paragraph 10 of Part 2 of the said Schedule 12A the public interest in maintaining the exemption outweighs the public interest in disclosing the information.

**12. HIGHER NEEDS DAY CARE WITHIN WELLBEING CENTRE (Pages 559 - 564)**

This report has not been published because the meeting is likely to be closed to the press and public in view of the nature of the business to be transacted/nature of the proceedings. The report deals with information relating to the business affairs of the Council and the public interest in maintaining the exemption currently outweighs the public interest in disclosing the information.

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**Minutes of the Meeting of the COMMUNITY AND WELLBEING COMMITTEE held  
on 24 January 2017**

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**PRESENT -**

Councillor Barry Nash (Chairman); Councillor Tony Axelrod (Vice-Chairman);  
Councillors Kate Chinn, Hannah Dalton, Jane Race, Humphrey Reynolds (as  
nominated substitute for Councillor Peter Webb), Jean Steer, Alan Sursham and  
Clive Woodbridge

In Attendance:

Absent: Councillor Rekha Bansil and Councillor Peter Webb

Officers present: Kathryn Beldon (Director of Finance and Resources), Ian Dyer (Head  
of Operational Services), Andrew Lunt (Head of Venues & Facilities), Russell Blackmur  
(Business Development Manager), Jo-Anne Chang-Rogers (Chief Accountant), Rachel  
Jackson (Licensing, Grants and HIA Manager) (Items 20 -23 only), Karen Ordoyno  
(Housing Grants Officer) (Items 20 -23 only), Linda Scott (Community Services  
Manager), Teresa Wingfield (Senior Accountant) and Tim Richardson (Democratic  
Services Officer)

**20 QUESTION TIME**

No questions were asked or had been submitted.

**21 DECLARATIONS OF INTEREST**

No declarations of interest were made by Councillors in items on this agenda.

**22 MINUTES OF THE PREVIOUS MEETING**

The Minutes of the meeting of the Committee held on 8 November 2016 were  
agreed as a true record and signed by the Chairman.

**23 THE HARDSHIP FUND**

The Committee received a report setting out a proposal to revise the Council's  
Home Improvement Agency Fund by combining it with the Disabled Facility Grant  
Hardship Fund.

Following consideration, the Committee:

- (1) Agreed that a Home Improvement Agency Hardship Fund be established.

**24 CORPORATE PLAN: PERFORMANCE REPORT TWO 2016 TO 2017**

The Committee received a report providing an update against Key Priority performance targets for 2016/17.

The following matters were considered:

- a) Routecall Service. The Head of Operations informed the Committee that customisation of the Flexiroute software by the developer to enable pre-payment for bookings had taken longer than anticipated, but was underway.

Officers had contacted local Care Commissioning Groups regarding the potential to place an information notice board at Drs surgeries within the Borough to promote the service, and had received positive responses to this possibility. Work was currently underway to produce such a notice board.

- b) Empty properties. The Committee enquired what response officers had received following enquiries regarding long term empty properties within the Borough (detailed on page 26 of the agenda). The Chairman would look into this matter and provide an update to Members following the meeting.

- c) Accommodation of households through private sector leasing scheme. Following a question from the Committee, the Director of Finance and Resources informed the meeting that recruitment to the relevant officer post had been undertaken. Officers felt that the target of accommodating at least 5 households through the scheme in the current year was appropriate, but challenging. This would be higher in future years however, as the scheme would already be in place.

Following consideration, the Committee:

- (1) Noted the performance reported in Annexe 1 to the report, and did not identify any areas of concern.
- (2) Noted the actions that had been proposed or taken where performance was currently a concern as shown in table 3.1 of the report.

**25 AUTHORISATION FOR AUDIO VISUAL EQUIPMENT REPLACEMENT AT BOURNE HALL**

The Committee received a report providing a summary of the issues relating to the current audio/visual equipment at Bourne Hall and proposing its replacement. It was noted that the proposed works would be funded through a £16,687 use of the repairs and renewals fund, following an equal underspend on the Bourne Hall Main Hall reinstatement works. The estimated cost of works was £16,900, and the Head of Venues and Facilities informed the Committee that the variance

between this and funds available from the repairs and renewals fund would be met from the revenue budget.

Following consideration, the Committee:

- (1) Supported the improvement work to the audio visual equipment at Bourne Hall and recommended that the Strategy and Resources Committee released £16,687 from the repairs and renewals fund.

## 26 CAPITAL PROGRAMME 2017/18

The Committee received a report proposing the 2017/18 capital programme and provisional programme for 2018-20. It was noted that a petition supporting the proposed refurbishment of Alexandra Recreation Ground Tennis Court had been received by the Council. The following matters were considered:

- a) Schemes for 2017/18. The Committee noted that the following three schemes were proposed for 2017/18: Rosebery Park Pond Refurbishment, Alexandra Recreation Ground – Tennis & Basketball Court Refurbishment and Disabled Facilities Grants.
- b) Disabled Facilities Grants. The Committee was informed that if additional officer capacity was required for the delivery of projects under the Disabled Facilities Grants scheme, it was intended to use an element of fund to provide an officer post to undertake these duties.

Following consideration, the Committee:

- (1) Agreed to submit the Capital Programme for 2017/18 as identified in section 4 and 5 of this report to the Council for approval on 14 February 2017;
- (2) Confirmed that it supported all of the schemes included in the provisional programme for 2018-20 as identified in section 6 of the report;
- (3) Noted that:-
  - a) Schemes subject to external funding from section 106 and Government Grants would only proceed when funding had been received;
  - b) Schemes for 2018-20 were provisional pending an annual review of funds available for capital investment.

## 27 FEES AND CHARGES 2017/18

The Committee received a report recommending fees and charges for which it was responsible, with the new charges to be effective from 1 April 2017. It was noted that an Annexe 2 to the report had been published as a supplement following the publication of the main agenda pack.

Following consideration, the Committee:

- (1) Agreed the fees and charges for 2017/18 as set out at Annexe 1 and Annexe 2 to the report, subject to the approval of Council.

## 28 REVENUE BUDGET 2017/18

The Committee received a report setting out the revenue estimates for income and expenditure on services in the financial year 2017/18. The following matter was considered:

- a) Longmead Centre capacity. It was noted that the income from room hire at the Centre in 2016/17 was anticipated to be below the budgeted level. This was due to a reduction in capacity following an increase in venue membership levels, and use of facilities by members. The Head of Venues and Facilities informed the Committee that the potential to undertake improvements to the capacity of the Longmead Centre were currently being investigated. Improvements to parking arrangements for the Centre would also be considered as a part of this process.

Following consideration, the Committee:

- (1) Agreed to recommend the 2017/18 service estimates for approval at the budget meeting of the Council on 14 February 2017.

## 29 OUTSTANDING REFERENCES

The Committee received and noted the outstanding references to Officers.

*The meeting began at 7.30 pm and ended at 8.20 pm*

COUNCILLOR BARRY NASH (CHAIRMAN)

**HORTON COUNTRY PARK LOCAL NATURE RESERVE MANAGEMENT PLAN  
2017-2117**

Report of the: Head of Place Development

Contact: Stewart Cocker

Urgent Decision?(yes/no) No

If yes, reason urgent decision  
required:

Annexes/Appendices (attached): Annexe 1 – Executive Summary - Draft Horton  
Country Park Local Nature Reserve  
Management Plan 2017-2117

Annexe 2 - Draft Horton Country Park Local  
Nature Reserve Management Plan 2017-2117

Other available papers (not  
attached):

Environmental Stewardship Higher Level  
Scheme Agreement 2010 – 2020

Horton Country Park Local Nature Reserve  
Management Plan 2006 - 2016

**REPORT SUMMARY**

**This report asks the Community and Wellbeing Committee to approve and adopt as policy an updated management plan 2017-2117 for Horton Country Park Local Nature Reserve.**

**RECOMMENDATION (S)**

- (1) That the Committee adopts the updated 2017-2117 Horton Country Park Local Nature Reserve Management Plan as Council policy.**
- (2) That the Committee receives an Annual Review of costs and funding associated with the Plan.**

*Notes*

## **1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 The adoption of an updated management plan for Horton Country Park Local Nature Reserve (LNR) will make a long term positive contribution to all four of the Council's four Key Priorities and the Community Strategy by guiding the management of one of the Borough's largest areas of countryside in line with this Council's objective of committing to the principles of sustainability.

## **2 Background**

- 2.1 Horton Country Park LNR is along with nearby Epsom Common LNR one of the largest nature reserves in Surrey and is managed by Epsom & Ewell Borough Council (EEBC) in partnership with the Friends of Horton Country Park and the Lower Mole Partnership. The proposed management plan covers approximately 100ha of Horton Country Park LNR. Excluded from the plan are areas of land within the Country Park managed by the Equus Equestrian Centre, the Horton Park Country Club (golf course) and Hobbledown (formerly Horton Park Farm). Throughout the plan, unless otherwise stated, reference to Horton Country Park relates only to the EEBC managed part of the Local Nature Reserve.
- 2.2 The 2017-2117 management plan is intended to succeed the 2006-2016 plan and aims to update and build on the progress made during the implementation of the previous plan which was the first to be agreed formerly and implemented by EEBC. The previous plan has significantly improved the management of woodland, grassland, scrub and ponds, improved biological monitoring, increased volunteer input, commenced a programme of veteran tree management and improved public access and interpretation. The previous plan also secured the substantial external funding required to achieve some of the above improvements.
- 2.3 The title of 'Country Park' is a national designation, originating from the 1968 Countryside Act, which enabled local authorities to create country parks specifically to allow people living in urban environments easy access to countryside. There is little doubt that Horton Country Park LNR successfully offers the residents of the Borough just such an opportunity. Its creation in 1973/4 was also seen as a way of managing the visitor pressure on the Epsom and Ashted Common's Site of Special Scientific Interest, helping to protect their less robust nationally and internationally important habitats, as well as a way of protecting the Green Belt when the health authorities decided to close the hospital farms. The achievement of Local Nature Reserve Status in 2004 has helped to consolidate past achievements and give direction to the Council's future plans.

- 2.4 Successfully managing the Country Park involves actively managing public access and nature conservation. With 10km of surfaced paths and tracks there is a constant need to manage inappropriate access, encroaching vegetation and to maintain the infrastructure of the tracks, accompanying signs, seats and gates. The nature conservation value of the Country Park's rural landscape, made up of woodlands, hedgerows, meadows and ponds, is very high. Of special note are the presence of six 'Ancient Woodlands', now rare traditional hay meadows and the provision of habitat for species, such as the extremely rare ladybird 'Clitosthetus arcuatus' and no less than 28 bird species on the RSPB 'Red List' and 21 on their 'Amber List'.
- 2.5 An agreed management plan is a requirement for the current Environmental Stewardship Higher Level Scheme Agreement 2010-2020 between this council and Natural England, which has secured an annual contribution to the Council totalling approximately £90,000 for Horton Country Park LNR from 2010 to 2020, along with additional capital payments available, to assist with for example, the management of veteran trees.
- 2.6 The draft 2017-2117 plan has been produced following a number of additional site surveys carried out during the lifetime of the previous plan with consequent re-appraisal, a review of available historical data and liaison with a number of individuals and representatives of relevant organisations (e.g. EEBC and Natural England). This has resulted in the objectives and outline prescriptions set out in the plan.
- 2.7 The experience of implementing the 2006-2016 plan and the need to continually make management decisions with a very long term view, such as those affecting veteran trees, has resulted in a plan that aims to provide a consistent and stable approach to the management of Horton Country Park LNR over the next one hundred years. The plan will be reviewed every ten years during its lifetime.

### **3 Proposals**

- 3.1 The Community and Wellbeing Committee is asked to consider adopting as policy the 2017-2117 Horton Country Park Local Nature Reserve Management Plan. Subject to ten year reviews the plan sets out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years. Implementing the plan enables the Council to demonstrate that it is proactively fulfilling its 'Biodiversity Duty' (Natural Environment and Rural Communities Act 2006) and actively encouraging access to and protecting, the Borough's natural heritage. An executive summary of the Plan is attached as Annexe 1 to this report. The full Plan is attached as Annexe 2.

- 3.2 Below is a summary of the key management proposals within the draft management plan that are thought unlikely to change in the next one hundred years:
- 3.2.1 Ensuring good public access via a network of well-maintained and signed paths and bridleways.
  - 3.2.2 Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of Horton Country Park LNR.
  - 3.2.3 Managing and maintaining the features of nature conservation interest in 'favourable' condition.
  - 3.2.4 Encouraging and supporting the work of volunteers and the 'Friends of Horton Country Park'.
  - 3.2.5 Interpreting Horton Country Park LNR to the public.
  - 3.2.6 Maintaining a close working relationship with the operators of the Equus Equestrian Centre, Horton Park Country Club (golf course) and Hobbledown (formerly Horton Park Children's Farm).

#### **4 Financial and Manpower Implications**

- 4.1 Successful management of a nature reserve and designated Site of Nature Conservation Importance requires the informed, consistent, systematic and long term approach to habitat management and public access that a management plan provides.
- 4.2 Stage three of the draft management plan provides a guide to delivering the plan up to the first ten year review in 2027. The plan is aspirational and for guidance purposes only, estimated costs are given and as in the case of the previous plan 2006-16, implementation of the new plan is not dependent upon increased spending by the Council. During the previous plan substantial external funding was successfully secured and remains in place until 2020 with the prospect of future scheme eligibility. It should be noted that, without a management plan there is very little chance of securing funds from other sources.
- 4.3 There is no significant impact on current or future staffing levels. However, Horton Country Park LNR is unusual in being a very large site of national/regional importance for nature conservation but without dedicated staff. Whilst no increase in staff is proposed by the adoption of the new management plan, it should be noted that the plan does include the aspiration if resources ever permit for dedicated staff which would improve both this Council's ability to manage habitats, public access and interpretation.



- 4.4 **Chief Finance Officer's comments:** The Plan assumes that existing revenue budgets for staffing, grounds and tree maintenance and small incidental expenses will be maintained in future years. Agreed financial implications arising from the annual review of the Plan will be reflected in annual service estimates.
- 4.5 No additional internal funding is available for any items included in the Management Plan. Significant external contributions have been secured until 2020, and it is anticipated that we will apply for further funding in subsequent years.

## **5 Legal Implications (including implications for matters relating to equality)**

- 5.1 The Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006 impose a duty on "public bodies" including local authorities to have regard to biodiversity, conservation and to maintaining lists of species and habitats for which conservation steps should be taken or promoted.
- 5.2 **Monitoring Officer's comments:** The legal issues have been addressed in this report.

## **6 Sustainability Policy and Community Safety Implications**

- 6.1 The adoption of an updated Horton Country Park LNR Management Plan will help ensure that a significant area of countryside with the Borough of Epsom and Ewell is protected and enhanced in terms of nature conservation and well managed in terms of public access for a period of one hundred years.
- 6.2 Access to countryside is recognised nationally as a key to social wellbeing, indeed countryside walks are the nation's most popular recreational pursuit. The adoption of the updated management plan will play a vital role in ensuring the proper management of Horton Country Park LNR with regard to public access.
- 6.3 The presence of accessible well-managed countryside can powerfully effect perceptions and can be a key factor with both individuals and businesses in their decision to locate and stay in an area
- 6.4 The updated plan does offer community safety benefits by interpreting the site to visitors and encouraging local residents to get more involved in helping to manage the site which by default helps increase an informed on site presence that can report issues to Council staff.

## **7 Partnerships**

- 7.1 The current management of Horton Country Park LNR relies heavily on a range of partnerships both internal and external. For example, the Countryside Team works closely with the Ranger Service to maximise the effectiveness of the available Council presence. The Friends of Horton Country Park formed in 1999 have helped with practical tasks, interpretation and biological monitoring and the Lower Mole Partnership have provided essential support for over thirty years, carrying out practical nature conservation and access improvement tasks. Continuing these partnerships and in particular with our volunteers is an aim of the management plan and will be crucial to its successful implementation.

## **8 Risk Assessment**

- 8.1 Financially it has become increasingly challenging for local authorities to manage large areas of countryside, both maintaining good public access and fulfilling duties regarding biodiversity. Continuing to secure external funding to help meet the financial challenge requires a Management Plan.
- 8.2 The national trend in recent decades has been towards the statutory implementation of measures to maintain and enhance biodiversity as has been seen with protected species legislation and the 'Biodiversity Duty' for all public bodies. This would imply that the greatest financial risk to the Council would be the failure to address the management of biodiversity on Horton Country Park LNR today leading to greater costs in the future, trying to regain what will have been lost.

## **9 Conclusion and Recommendations**

- 9.1 In conclusion, the adoption of the new management plan would significantly assist this Council in meeting its responsibilities and contributes to a broad range of Council strategies. The management plan highlights the special nature of Horton Country Park LNR, and demonstrates this Council's ability to manage its countryside to a high standard.
- 9.2 Much has been achieved by Council staff and volunteers in protecting valuable habitats, improving access and interpreting the Country Park under the guidance of the 2006-2016 Management Plan. The progress of recent years can be maintained and built upon by the adoption of a successor management plan 2017-2117 to guide this Council's role in managing the site for good public access and nature conservation over the next century.

**WARD(S) AFFECTED: Ruxley Ward; Stamford Ward;**

**Horton Country Park Local Nature Reserve Management Plan 2017-2117 - Executive Summary**

The Horton Country Park Local Nature Reserve Management Plan 2017-2117 covers approximately 100ha of Horton Country Park Local Nature Reserve (LNR). Excluded from the plan are areas of land within the Country Park managed by the Equus Equestrian Centre and the Horton Park Country Club (golf course), together with Hobbledown (formerly Horton Park Farm (Map 1). Throughout the remainder of the plan, unless otherwise stated, reference to Horton Country Park relates only to the Epsom & Ewell Borough Council (EEBC) managed part of the Local Nature Reserve.

The management plan succeeds the 2006-2016 plan and aims to update and build on the progress made during the implementation of the previous plan which was the first to be agreed formerly and implemented by Epsom & Ewell Borough Council. The previous plan has significantly improved the management of woodland, grassland, scrub and ponds, improved biological monitoring, increased volunteer input and commenced a programme of veteran tree management and improved public access and interpretation. The previous plan also secured the substantial external funding required to achieve some of the above improvements.

Subject to ten year reviews the plan aims to describe the important features of Horton Country Park LNR and set out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years.

**The plan prescribes in detail (Stage Two Evaluation & Objectives section 2.8 and Stage Three Prescription) how the site will be managed from 2017 to 2027.** Stage three of the draft management plan provides a guide to delivering the plan up to the first ten year review in 2027. The plan is aspirational and for guidance purposes only, estimated costs are given and as in the case of the previous plan 2006-16, implementation of the new plan is not dependent upon increased spending by the Council. During the previous plan substantial external funding was successfully secured and remains in place until 2020 with the prospect of future scheme eligibility. Possible funding sources currently include:

- EEBC
- DEFRA
- Lower Mole Trust
- The Friends of Horton Country Park
- Surrey County Council
- Community infrastructure levy
- Environment Agency
- South East Rivers Trust
- Heritage Lottery
- Other grants

It should be noted that, without a management plan there is very little chance of securing funds from other sources. The plan ensures that Horton Country Park LNR continues to provide good public access whilst at the same time providing an important home for wildlife.

The management plan has been updated following a number of additional site surveys carried out during the lifetime of the previous plan with consequent re-appraisal of available data, liaison with a number of individuals and representatives of relevant organisations (e.g. Epsom and Ewell Borough Council, the Friends of Horton Country Park and the Lower Mole Partnership) has again taken place.

Objectives and outline prescriptions set out in consultation drafts have been agreed by all parties concerned. The aim has been to achieve a realistic balance, between a range of issues that include:

- Nature conservation
- Maintaining and enhancing the historical, landscape and cultural value
- Providing appropriate facilities for public recreation and enjoyment
- Encouraging opportunities for education in all aspects of the Country Park's ecology, history, culture and landscape.

#### **A PLAN FOR THE NEXT 100 YEARS**

Over the last 100 years the land that is today Horton Country Park LNR has undergone significant change. This farmed landscape created over centuries to provide arable crops, meat, milk, wool, wood products and timber, today provides local people with fresh air, exercise, tranquillity and protection for wildlife. As readers of this plan will discover Horton Country Park is locally very important for its wildlife and maintaining that value requires an informed, consistent, systematic and long term approach to habitat management and public access. For example, trees live for hundreds of years, the ecological benefits of re-introducing rotational woodland management will take many decades to be fully realised, and biological monitoring often yields really valuable information after many years of recording effort.

The plan provides a regularly reviewed (10 years) 100 year approach to the management of Horton Country Park LNR to ensure the protection, maintenance and enhancement of the wildlife and heritage of Horton Country Park LNR whilst also ensuring good public access to a wonderful place!

**The key components in managing Horton Country Park LNR which are unlikely to change in the next one hundred years are as follows:**

- Ensuring good public access via a network of well-maintained and signed paths and bridleways.
- Managing and maintaining the features of nature conservation interest in 'favourable' condition.
- Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of Horton Country Park LNR.
- Encouraging and supporting the work of volunteers and the 'Friends of Horton Country Park'.
- Interpreting Horton Country Park LNR to the public
- Maintaining a close working relationship with the operators of the Equus Equestrian Centre, Horton Park Country Club (golf course) Hobbledown (formerly Horton Park Childrens' Farm).

#### **Management Plan Page References:**

- Page 4 - Introduction
- Page 5 - A plan for the next 100 years
- Page 67 - Identification of operational objectives and outline prescriptions
- Page 76 - Prescription tables for first ten years of the plan
- Page 98 - Maps and appendices

# Horton Country Park

## Local Nature Reserve

### MANAGEMENT PLAN 2017-2117

*First review 2017 –2127*



**First Draft Produced by:**  
***Epsom & Ewell Borough Council***  
***Countryside Team***

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## INTRODUCTION

This management plan covers approximately 100ha of Horton Country Park Local Nature Reserve (LNR). Excluded from the plan are areas of land within the Country Park managed by the Equus Equestrian Centre and the Horton Park Country Club (golf course), together with Hobbledown (formerly Horton Park Farm<sup>1</sup> (Map 1). Throughout the remainder of the plan, unless otherwise stated, reference to Horton Country Park relates only to the Epsom & Ewell Borough Council (EEBC) managed part of the Local Nature Reserve.

This management plan succeeds the 2006-2016 plan and aims to update and build on the progress made during the implementation of the previous plan which was the first to be agreed formerly and implemented by Epsom & Ewell Borough Council. The previous plan has significantly improved the management of woodland, grassland, scrub and ponds, improved biological monitoring, increased volunteer input, commenced a programme of veteran tree management and improved public access and interpretation. The previous plan also secured the substantial external funding required to achieve some of the above improvements.

Subject to ten year reviews this plan aims to describe the important features of Horton Country Park LNR and set out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years. This plan prescribes in detail how the site will be managed from 2017 to 2027, ensuring that Horton Country Park LNR continues to provide good public access whilst at the same time providing an important home for wildlife.

The management plan has been updated following a number of additional site surveys carried out during the lifetime of the previous plan with consequent re-appraisal of available data, liaison with a number of individuals and representatives of relevant organisations (e.g. Epsom and Ewell Borough Council, the Friends of Horton Country Park and the Lower Mole Partnership) has again taken place. Objectives and outline prescriptions set out in consultation drafts have been agreed by all parties concerned. The aim has been to achieve a realistic balance, between a range of issues that include:

- Nature conservation
- Maintaining and enhancing the historical, landscape and cultural value
- Providing appropriate facilities for public recreation and enjoyment
- Encouraging opportunities for education in all aspects of the Country Park's ecology, history, culture and landscape.

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<sup>1</sup> Hobbledown includes the 5.12ha "Cabbage Field" (Former compartment 30), which is in the LNR but is leased to Hobbledown (the 125 year lease runs from 1986 to 2101). This field may in future be used for grazing.



## ***A PLAN FOR THE NEXT 100 YEARS***

Over the last 100 years the land that is today Horton Country Park LNR has undergone significant change. This farmed landscape created over centuries to provide arable crops, meat, milk, wool, wood products and timber, today provides local people with fresh air, exercise, tranquillity and protection for wildlife. As readers of this plan will discover Horton Country Park is locally very important for its wildlife and maintaining that value requires an informed, consistent, systematic and long term approach to habitat management and public access. For example, trees live for hundreds of years, the ecological benefits of re-introducing rotational woodland management will take many decades to be fully realised, and biological monitoring often yields really valuable information after many years of recording effort.

This plan provides a regularly reviewed (10 years) 100 year approach to the management of Horton Country Park LNR to ensure the protection, maintenance and enhancement of the wildlife and heritage of Horton Country Park LNR whilst also ensuring good public access to a wonderful place!

The key components in managing Horton Country Park LNR which are unlikely to change in the next one hundred years are as follows:

- Ensuring good public access via a network of well-maintained and signed paths and bridleways.
- Managing and maintaining the features of nature conservation interest in 'favourable' condition.
- Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of Horton Country Park LNR.
- Encouraging and supporting the work of volunteers and the 'Friends of Horton Country Park'.
- Interpreting Horton Country Park LNR to the public
- Maintaining a close working relationship with the operators of the Equus Equestrian Centre, Horton Park Country Club (golf course) Hobbledown (formerly Horton Park Childrens' Farm).

### **ACKNOWLEDGEMENTS**

We remain very grateful to consultant ecologists Giles Groome and Karl Crowther whose excellent work in writing the 2006-16 plan, still provides much of the content of this updated plan.

Thanks are also due to all the staff and volunteers from Epsom & Ewell Borough Council, The Lower Mole Countryside Partnership, Natural England, and the Friends of Horton Country Park whose work in implementing the previous plan so successfully has made the production of this new plan a much more straightforward task.

## STAGE ONE - DESCRIPTION

### 1.1 Introduction

Horton Country Park (Map 1) covers a total area of approximately 100.13ha<sup>2</sup> and represents land that once formed part of a mediaeval manor estate in the north-west of the Parish of Epsom. In the 1890s the Horton Manor Estate was purchased by London County Council who developed a complex of large psychiatric hospitals on the estate, all of which possessed their own farms. Around 1960, two of these farms, namely Long Grove Farm and West Park Farm, were leased to independent tenant farmers and run as separate, autonomous units. In 1972 the Regional Health Authority decided to sell off the farmland as surplus to hospital requirements and it was purchased in 1973 by Epsom and Ewell Borough Council with financial assistance from Surrey County Council and the Countryside Commission, to be established as Horton Country Park in 1974.

The whole area of Horton Country Park LNR lies upon land designated in the local plan as Metropolitan Green Belt. During the 1990's the Surrey 'Local Sites' Committee designated several large areas within Horton Country Park as Sites of Nature Conservation Importance (SNCI). In 2013 a Borough wide review of SNCI designated all of Horton Country Park LNR as one SNCI. In 2004 Horton Country Park Local Nature Reserve (LNR) (Map 1) was officially designated which includes all the land managed and controlled by EEBC, the field known as 'Cabbage Field' leased by Hobbledown and from 2006 the land leased by Horton Park Country Club.

Horton Country Park LNR as managed by EEBC comprises a mosaic of habitats that includes woodland of varying maturity and composition (including six 'Ancient' Woodlands), together with a range of grasslands, scrub and hedgerows. There are also a number of streams and ponds, the largest of which is Meadow Pond.

There is good public access to the Country Park, and it forms an important local amenity for a variety of informal recreation activities. The main access point for visitors is the West Park Farm complex, where the main car park and toilet block are situated<sup>3</sup>.

As already outlined, also forming part of the Country Park (but for the most part outside the LNR) are three amenities operated by the private sector in co-operation with Epsom & Ewell Borough Council, namely the Horton Park Country Club (Golf Centre), Hobbledown (formerly Horton Park Farm<sup>4</sup>) and the Equus Equestrian Centre. Within certain guidelines the development of these centres is in the hands of their operators, although control is exercised by

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<sup>2</sup> This area relates to that of the Horton Country Park Local Nature Reserve (excluding the "Cabbage Field") being considered under this management plan. The total area of Country Park is c.180ha.

<sup>3</sup> The Epsom & Ewell Borough Countryside Team Office and associated storage & interpretive facilities are also situated at West Park Farm.

<sup>4</sup> "Cabbage Field" (former compartment 30) is leased by Hobbledown. It is included within the LNR, but is largely excluded from this plan.

EEBC through their respective leases and management agreements. Also lying within the Country Park, but excluded from the LNR, are four residential dwellings, namely Keeper's Cottage, Laundry Cottage, Primrose Cottage and West Park Farm House (which includes the offices of the Lower Mole Countryside Partnership, the Lower Mole Countryside Trust and the EEBC Countryside Team).

## **1.2 Location**

Horton Country Park lies to the west of Epsom and is bounded to the north by residential areas of West Ewell (Map 1). The western edge lies along the Epsom & Ewell Borough boundary; beyond this lies agricultural land occupied by Park Farm in the Royal Borough of Kingston. To the east lies a new residential housing estate constructed on the site of the former Long Grove Hospital, whilst adjoining the southern boundary the former West Park Hospital site has been redeveloped as a residential housing estate called Noble Park.

**County:** Surrey

**District/Borough:** Epsom and Ewell

**Local Planning Authority:** Epsom & Ewell Borough Council

**National Grid Reference:** TQ 19098 61902 (West Park Farm complex)

### **Map Coverage:**

Ordnance Survey (1871 to 1989– available via EEBC GIS)

Ordnance Survey Landranger series at 1:50,000 scale, sheet number 187.

Ordnance Survey Explorer series at 1:25,000 scale, sheet numbers 161.

Ordnance Survey 1:10,000 series sheets TQ16NE, TQ26NW.

Ordnance Survey maps at 1:2500 series sheets TQ1863, 1963, 2063, 1862, 1962, 1861, 1961.

Ordnance Survey map at 1:1250 scale.

1843 Tythe Map of Horton (held at Bourne Hall)

## **1.3 Land Tenure**

All of the land covered by this plan is in the ownership of Epsom and Ewell Borough Council and was purchased from London County Council in 1973. The Country Park also includes an area of 'exchange land' resulting from the construction of new housing on the site of the former Long Grove Hospital.

The various conveyance documents can be found in the Town Clerk and Chief Executives Department of the Council.

Of the four residential dwellings within the Country Park, as of 2016 two are privately owned, (Laundry Cottage & Primrose Cottage) whilst the remaining two (Keepers Cottage & Number 1 West Park Farmhouse) are occupied by an Epsom & Ewell Borough Council employee and retiree.

Excluding the Epsom & Ewell Borough Council-owned, but privately-operated, Horton Park Country Club (Golf Centre), Hobbledown (formerly Horton Park Farm) and the Equus Equestrian Centre, the adjacent land is owned by a variety of individuals and organisations. Most significantly this includes land owned by Park Farm and the the owners of bordering properties in Clarendon and Noble Park housing estates.

### **1.3.1 Services**

Crossing beneath the Country Park are a newly installed water main between Epsom and Chessington, a major gas pipeline installed during the 1970s, a high capacity electricity supply to a mobile telephone mast, major sewers linked to Noble Park (former West Park Hospital), plus services such as water, electricity, telephone and sewerage to individual buildings. The appropriate utilities should be contacted for up to date information, immediately before any work likely to affect any of these services is undertaken.

## **1.4 Photographic Coverage**

The EEBC Planning Department hold a series of aerial photographs of the site covering the period 1971-2013.

Photographs depicting the Horton Light Railway, constructed to serve several of the psychiatric hospitals (see Section 1.5.3.2), are held by the Epsom and Ewell Borough Council. Many views have been taken by EEBC staff since 1980 for use in displays etc. A digital picture library is now being compiled on the Epsom and Ewell Borough Council computer network.

The Lower Mole Countryside Partnership holds a collection of slides from the 1980s onwards, depicting views of the Country Park.

## **1.5 Summary Description**

### **1.5.1 Physical**

#### **1.5.1.1 Climate**

Meteorological Office data (1981-2010 averages) for Wisley (approximately 10km due west), show an annual rainfall average of 656.6mm per year (no measurements have been taken on Horton Country Park itself). During this period, there was an average of 112.2 days per year with more than 1mm of

rainfall recorded. In addition, an average total of c.1564.2 hour's sunshine were recorded per year, along with 47.7 days of air frost. The average monthly maximum temperature was 15°C (July being the hottest, at 23°C), whilst the average monthly minimum temperature was 6.5°C (with February being the coldest at 1.7°C). It is interesting to note that the previous plan used 1961 - 1990 data and the average monthly maximum temperature has increased by 0.8°C.

#### **1.5.1.2 Geology**

The greater portion of Horton Country Park is situated on the London Clay. There are local surface deposits of gravel (S. Cocker, pers. comm.). The extent of such deposits may require further investigation.

Further details of the geology can be seen in the Geological Survey maps for the area, although these do not show in sufficient detail the changes in geology which are important for detailed land management.

#### **1.5.1.3 Topography and Hydrology**

Horton Country Park lies to the north of the dip slope of the North Downs in the London Basin and has a gently undulating, but complex topography. The highest area of the Park (around 55m AOD) lies to the south-east adjacent to West Park Farm. West of here, a broad, shallow valley runs from the southern boundary with Noble Park in a roughly northerly direction towards Pond Wood, before the land rises again before approaching Four-Acre Wood. To the extreme north lies the fairly level area comprising Butcher's Grove with, to the south-east of here, a further shallow valley that drains in a north-easterly direction towards West Ewell, along the southern edge of land that now forms part of the golf course.

The clay nature of the soils across much of the Country Park means that most rainfall runs off this relatively impermeable substrate. Movement of water is along two main watercourses. The first of these (known as Green Man Stream) arises at the Park's southern boundary adjacent to Noble Park. It flows along the base of the more southerly valley as far as Pond Wood, whereupon it skirts the northern edge of the wood before leaving the Park and draining into the catchment area of the Bonesgate Stream, a tributary of the Hogsmill River. In 2015 a wetland area with two small on line ponds was created in compartment 14. There is another small online pond along this watercourse within Pond Wood itself (known as Pond Wood Pond), with a further, smaller off line pond a little further upstream, to the south (known as Field Pond).

The second flow of water, known as Horton Stream, lies along the base of the more northerly valley along the golf course boundary, and drains in the direction of West Ewell. This is joined part way along by Lambert's Stream, which originates within the Lambert's Orchard area. Meadow Pond (constructed in 1986 and the largest water body within the Country Park

excluding the golf course pond) lies along Horton Stream, as does the larger golf course pond. Two ponds lie along Lambert's Stream, namely Lambert's Pond de-silted in two stages during September 2013 and August 2015 and the new Orchard Balancing Pond. Unconnected with Horton Stream is the more northerly Poplar Pond, a further, newly constructed balancing pond beside the A284 Chessington Road which takes surface water from the road.

#### **1.5.1.4 Soils**

The predominant soil types are Windsor pelo-stagnogleys, comprising heavy clay to medium clay loams, which also occur on much of the adjacent Epsom Common (the word 'Horton' means 'muddy place'). The presence of such soils leads, in many parts of the Park, to waterlogging during the winter months, whereas in summer, the ground surface dries hard. There is no information available on soil pH, but this is likely to be circumneutral.

### **1.5.2 Biological**

Prior to the previous plan there had been a fairly limited level of biological recording activity at Horton Country Park (mostly on an informal basis). During the lifetime of the previous plan recording activity increased significantly particularly with regard to fauna. The following two sub-sections outline some of the more important surveys and other biological recording undertaken. Appendix 3 lists all known recorded species.

The first known botanical list for the park was compiled in 1974. Further recording was undertaken in 1990, 2003 and then progressively during the previous plan 2006-2016. (See below). Most recording of fauna dates to relatively recent times, especially following the formation of the Friends of Horton Country Park in 1999. Their records are compiled into quarterly newsletters and are primarily concerned with birds. However, there are also some records for invertebrates such as dragonflies and butterflies. Mammal records still remain relatively sparse and have been drawn from a variety of sources.

#### **1.5.2.1 Flora and Vegetation Communities**

The site has a varied vascular plant flora, with around 350 taxa recorded (including non-native species), reflecting the variety of habitats present (see below). A list of vascular plants of 'Horton Lands' was compiled by R.C. Stern and J. E. Smith in 1974. Subsequently, a series of species lists were prepared for various localities within the Country Park in 1990 (source – EEBC files, The recorder was Countryside Ranger David Dutton). Additional plant species information was compiled in 1998 for a number of blocks of woodland within the Country Park that were the focus of surveys conducted by Surrey Wildlife Trust as part of the 'SNCI' project. More recently, certain areas of the Park (Pond

Wood and an area at “West Ewell, south-east of Butcher’s Grove”) were examined by J.F. Leslie and K.W. Page in 2003.

With the exception of the Surrey Wildlife Trust surveys, previous habitat surveys of the Park had been very ‘broad-brush’ in their approach (e.g. the simplified map of ‘broad habitats’ produced for the Country Park information leaflet). As a result, a more detailed NVC Phase 1 survey of habitats and vegetation communities was conducted to form a baseline for the previous management plan (Appendix II). Much additional information on the occurrence and distribution of various vascular plant species was obtained during that period. Subsequently a further more detailed assessment was carried out to provide the ‘Farm Environment Plan’ for the 2010-2020 Environmental Stewardship Higher Level Scheme agreement. In 2011 a survey of veteran trees took place and in 2013 a further NVC Phase 1 habitat survey was carried out during the process of re-assessing the Borough’s Sites of Nature Conservation Importance by Countryside Officer Pete Howarth who has also carried out a comprehensive survey of bryophytes. A brief outline of the main habitats is given below, with more detailed information being provided in Appendix 2, Map 2 shows the distribution of the main habitat types.

### **Grasslands**

Grassland of various types represents the most extensive habitat type within Horton Country Park. As well as making up many of the individual component fields, grassland vegetation lines many of the track-sides and often forms glades or more extensive areas within wooded portions of the site. Fundamental factors influencing what type of grassland that occurs are the underlying geology as well as current and past management regimes.

One of the more extensive grassland communities is characterised by a dominance of False Oat-grass (*Arrhenatherum elatius*). This vegetation occurs in areas that are unmanaged or mown/hay-cut only occasionally and thus the vegetation is very tall and coarse in character. Often this vegetation is very species-poor, with False Oat-grass overwhelmingly dominant. However, locally, and where False Oat-grass is not quite so dominant, a greater species diversity occurs supporting, for example, Cut-leaved Cranesbill, (*Geranium dissectum*), Grass Vetchling (*Lathyrus nissolia*), Meadow Barley (*Hordeum secalinum*), Hairy Tare (*Vicia hirsuta*), Common Knapweed (*Centaurea nigra*), Smooth Tare (*Vicia tetrasperma*), Lesser Stitchwort (*Stellaria graminea*) and, very rarely, Common Spotted-orchid (*Dactylorhiza fuchsii*).

Another extensive grassland type is characterised by rank, tussocky growth of Tall Fescue (*Festuca arundinacea*) and is indicative of a low level of management on clay soil types. The most extensive areas of this type of vegetation occur in the complex of fields that appear to have been formerly managed as permanent pasture, in the area between Great Wood and the golf course.



Around the car parking/barbecue area, grasslands regularly mown for amenity purposes are dominated by Perennial Rye-grass (*Lolium perenne*), and are presumably of sown origin, comprising a generally species-poor sward. Similar vegetation occurs along frequently-mown track margins.

Several fields within the Country Park are let for almost year-round horse-grazing. Here, a resulting closely-grazed sward tends to be dominated by a combination of Creeping Bent (*Agrostis stolonifera*), Common Bent (*Agrostis capillaris*), Rough Meadow-grass (*Poa trivialis*) and Yorkshire-fog (*Holcus lanatus*). Often there is much bare ground present due to trampling. A generally similar suite of dominant grasses occurs in some generally ungrazed and seldom-mown grasslands, once again, probably former pasture-land. Herb composition can be quite variable, ranging from rather species-poor swards to moderately diverse.

### Hay Meadows

A significant proportion of fields within the Country Park are managed as hay meadows See Map 9. Hay making organised by the Council started in the 1980's but was inconsistent during the 1990's. However, from around 2000 haymaking has taken place every year with the aim of encouraging a more diverse range of wild flowers as nutrient levels within the fields begin to decline. There are significant signs that the policy is working with plants such as Yellow Rattle (*Rhinanthus minor*) appearing and increasing in several fields. The Equus Equestrian Centre based within the Country Park currently (2016) pays the Council to take the hay crop.

### Rank Grasslands

In addition to the hay meadows several fields have been managed on a rotation of up to five years to provide rank grassland that is attractive to small mammals and a broad range of invertebrates. See Map 9. Management of the more sensitive locations where there are ant hills has been achieved by volunteers with the remaining areas cut and cleared by a tractor mounted flail collector. The arising's are deposited along the field margins and provide habitat piles with care taken not cause problems of nutrient enrichment for example close to veteran trees. The importance of retaining and managing areas of rank grassland was highlighted by an invertebrate survey carried out by Dr. Jonty Denton FRES FLS MIEEM in 2010 which concluded that the rank grassland areas were providing ideal habitat for many invertebrate species.

### Woodlands and scrub

There are extensive areas of woodland within the Country Park. A significant proportion of this is of recently planted origin (i.e. during the early 1980's), often upon what was originally grassland habitat. In such locations trees are often present in formally planted rows. Species include Norway Maple (*Acer platanoides*), Hornbeam (*Carpinus betulus*), Limes (*Tilia* spp.), Ash (*Fraxinus excelsior*), Narrow-leaved Ash (*Fraxinus angustifolia*), Pedunculate Oak

(*Quercus robur*), Poplars (*Populus* spp.), Aspen (*Populus tremula*), Willows (*Salix* spp.), Cherries (*Prunus* spp.) and Pines (*Pinus* spp.).

The main areas of such woodland include Lambert's Wood, Hollymoor Grove, Godbold's Copse, Porter's Grove, Sherwood Grove, Laundry Copse and Hendon Grove. The mainly Aspen-dominated Stone's Copse has not been planted but appears to have regenerated spontaneously. It originally formed a southerly portion of Pond Wood, shown as woodland as late as the 1933 OS map, which was grubbed up for cultivation during WW2 and the present day fragment supports a poor ground flora.

Under the 2010-2020 Environmental Stewardship Higher Level Scheme and in line with the 2006-2016 Management Plan a significant amount of woodland thinning has taken place allowing more light to reach the woodland floor or to create new coppice. The main locations are Sherwood Grove (which supports good regeneration of coppiced Hazel and Hornbeam), in addition to Godbold's Copse, Lambert's Wood, Hollymoor Grove, Porter's Grove, Laundry Copse and Hendon Grove. A small area of rather older plantation woodland (Sandy's Copse) occurs within what would have been the grounds of the former Long Grove Hospital in addition to the much older Long Grove Wood which the former hospital was named after.

In contrast to these recent stands, there are six areas of more established woodland which are ancient in origin – i.e. continuously managed as woodland habitat since at least 1600AD. The areas of ancient woodland are Pond Wood, Stone's Copse, Great Wood, Four Acre Wood, Long Grove Wood and Butcher's Grove. Prior to the Ancient Woodland re-survey of Surrey in 2010/11 only Pond Wood and Great Wood were identified as ancient.

Within the woodland and along hedgelines there are a number of veteran trees (mainly but not exclusively oak). During the previous plan a survey to identify veteran trees within the Country Park was carried out and a programme of restorative works commenced under the guidance of the Environmental Stewardship Higher level Scheme 2010-20. In addition in 2015 the Borough's planning policy now considers veteran trees to be a heritage asset, recognising their cultural value as well as nature conservation value.

In 2010 an Environmental Stewardship Higher Level Scheme was adopted for the Country Park with a programme of coppice restoration/creation and thinning which affects almost all woodland within the site. See map 7

**Butcher's Grove** (Compartment 1) represents the largest single area of broad-leaved woodland within the Country Park and is primarily a mixed coppice with Oak standards. It has a long history of woodland management (see 1.5.3.2), and is included in the Surrey Inventory of Ancient Woodland. The unusual name of the wood is thought to be due to the coppiced Hornbeam trees still present within the wood, hornbeam is the preferred wood for butcher's chopping boards being able to withstand the repeated impact of meat cleavers.

The canopy is dominated by Pedunculate Oak, but with a range of other species, including Scots Pine (*Pinus sylvestris*), Hornbeam (*Carpinus betulus*), Poplars (*Populus* spp.) and, more locally, False-acacia (*Robinia pseudoacacia*). In some areas the Oak standards are old and closely-spaced with well-developed crowns, whereas elsewhere they are younger and crowns are smaller. In these latter areas, similar-sized over-stood coppice stools of Ash coppice (*Fraxinus excelsior*) can also form a component of the canopy.

The shrub layer is patchy, but mainly comprises over-stood Hazel (*Corylus avellana*) coppice beneath the mature Oaks, mainly in the south-western corner of the wood. The Hazel is mixed with Wych Elm and other species such as Hawthorn and Ash. Elsewhere within the wood, the shrub layer is more varied, with less Hazel overall and includes some Hornbeam coppice.

The field layer is also variable in both its diversity and extent. Thus, some areas are quite species-poor, in part due to winter waterlogging as a result of poor drainage caused by the construction of the former railway line. Other areas, including some of those opened-up by recent coppicing, are more diverse and include Bluebell (*Hyacinthoides non-scripta*), Hairy Brome (*Bromopsis ramosa*), Greater Stitchwort (*Stellaria holostea*), False-brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*), Wood Melick (*Melica uniflora*), Wood Millet (*Milium effusum*), Wood Anemone (*Anemone nemorosa*), Three-veined Sandwort (*Moehringia trinervia*) Primrose (*Primula vulgaris*) and Violets (*Viola* spp.).

A number of compartments within Butcher's Grove have been re-coppiced since 1984 and are in varying stages of regeneration. The most recent coppicing was undertaken during the winter of 2015/2016.

**Pond Wood** (Compartment 8) comprises two distinct areas. In the east is an area of ancient woodland with an Oak (and Ash) canopy and a coppiced Hazel understorey. The northern and western portion corresponds to an enclosure known as "Peaked Riding", clearly indicated on the 1871 Ordnance Survey Map. The old boundary between these two areas is still clearly visible within the wood.

Field layer characteristics of the two areas are markedly different. The original Pond Wood supports an ancient woodland flora characterised by species such as Bluebell, Wood Melick, Wood Millet and Wood Anemone. In contrast, Peaked Riding generally has a dense field layer of Bramble (*Rubus fruticosus* agg.), accompanied locally by Bracken (*Pteridium aquilinum*) within some open glades. In 2013 an aerial photograph taken C1930 was obtained which showed clearly that the section of Pond Wood between the stream and the old railway track was in fact a meadow which explains the marked difference in the field layer of this part of the wood in comparison to the wood on the western side of the stream. This area was thinned and planted with hazel with view to future management as hazel coppice in 2011/12. A programme of coppicing and thinning within the ancient woodland commenced in 2012 including in 2013 the use of horses to extract timber to reduce damage to the field layer. The aim of creating four or five coppiced

cants within the wood to improve the diversity of habitats within the wood was achieved in 2015 with four areas of restorative coppice created.

**Stone's Copse & Field** (Compartments 11 & 10) is shown as woodland, contiguous with Pond Wood, on the 1933 OS map. It is thought to have been grubbed and subsequently ploughed during WW2. The extant woodland of Pond Wood also appears to have been largely felled at this time, although there is no evidence to suggest that it was ploughed.

**Four Acre Wood** (Compartment 4) is a further small area of ancient woodland appearing on the 1843 Tythe Map. The southern portion supports a well-structured canopy of Oak (and Ash) standards, a coppiced Hazel shrub layer and a well-developed field layer (e.g. Bluebell, Wood Melick, Wood Millet, Wood Anemone). In contrast, the northern portion supports a dense shrub layer dominated by small Elms (*Ulmus* spp.), with only occasional Hazel. The wood is surrounded by well-defined wood banks, one of which supports two old boundary trees of Small-leaved Lime (*Tilia cordata*). A programme of restorative coppicing of approximately two thirds of the wood with a view to future management as hazel coppice was commenced in 2007.

**Great Wood** (Compartment 46) is an area of much-modified ancient woodland. The canopy has been much influenced by planting of trees such as White Willow (*Salix alba*) and Hornbeam. A number of large boundary Oaks occur on the northern and eastern boundaries, some of which support a recently formed (1990'S) Heronry. As a result of past management much of the woodland is quite open and scrubby, with dense Hawthorn and other shrubs. Much of the field layer is dominated either by Bramble and Stinging Nettle (*Urtica dioica*) or Ivy (*Hedera helix*), possibly reflecting past disturbance of the soils [it is thought that the wood was used extensively for cattle grazing during the 1960s (S. Cocker, pers. comm.)]. The wood appears to retain a possibly ancient bank and ditch around its boundary and here the ground flora is of more typical of undisturbed woodland with Bluebell in abundance.

**Long Grove Wood** (Compartment 52) is an area of 'Ancient' woodland that came in to the Country Park as part of the former Long Grove Hospital grounds. As the name suggests it gave its name to the former hospital. The northern portion is characterised by mature oaks, a coppiced Hazel shrub layer and a well-developed field layer (e.g. Bluebell, Wood Melick, Wood Millet, Wood Anemone). In contrast, the southern portion has large stands of Cherry Laurel that have reduced light levels to the point where the field layer is very poor and with only occasional Hazel.

Other more established woodlands occur more locally and include, on the south-western fringe of the Park, an area of damp woodland characterised by Crack Willow (*Salix fragilis*).

A number of scrub types are present, occurring in a variety of situations, e.g. alongside linear features such as tracks, paths and drains. Scrub also tends to be associated with previously disturbed, but generally unmanaged parts of the site – such as within a number of old gardens, the Burning Area

(Compartment 12) and the demolished 'piggery' (Barn Platt – Compartment 39). In some cases, narrow sections of scrub appear to have developed by growing outwards from previously managed hedgerows (see below). The main scrub types include examples dominated by Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Bramble and/or Willows (*Salix* spp.).

Features of particular historical interest are the old orchards of the former Long Grove Hospital. The Pear trees in Lambert's Orchard are believed to represent the variety "Bellesime D'Hiver", a 17<sup>th</sup> Century French Cooking Pear (EEBC website – [www.epsom-ewell.gov.uk](http://www.epsom-ewell.gov.uk)).

### **Hedgerows**

These occur alongside many of the track and field margins. Many are single-species dominant and include Hawthorn (including some fairly recently-planted examples), Blackthorn and less frequently, Elm. There are known to have been some fine old Elm hedgerows before the arrival of Dutch Elm disease (e.g. alongside the Equestrian Centre boundary). Other hedgerows are much more varied in their species composition and may include a range of more mature trees. Many of the recently-planted hedgerows have been augmented by a fence to render them stock-proof. More established hedgerows can, in places, represent effective stock-proof barriers in their own right, whilst elsewhere, they can be 'gappy' and essentially in a 'defunct' condition. A number of hedgerows appear to follow boundary lines depicted on the 1843 Tythe Map and are therefore important landscape and historical features, as well as being of high nature conservation value.

### **Non-woodland trees**

Away from woodlands, mature trees, mainly of Oak, are generally associated with old boundary features (e.g. hedgerows). Evidence from historical maps suggests that some apparently open-grown trees also lie on old boundary lines that no longer exist in the landscape.

A variety of mainly planted trees occur elsewhere, such as around the main car park/barbecue site, within the former Long Grove Hospital site, within the two old orchards, and as a roadside avenue. Species include ornamental Cherries (*Prunus* spp.), Cherry Laurel (*Prunus laurocerasus*), Sweet Chestnut (*Castanea sativa*), Turkey Oak (*Quercus cerris*), London Plane (*Platanus x hispanica*), Red Horse-chestnut (*Aesculus carnea*), Tulip Tree (*Liriodendron tulipifera*), Hornbeam, Larch (*Larix* sp.) and Apple (*Malus* sp.).

### **Weed Communities**

A number of areas of 'weed'-dominated vegetation occur within the Country Park, often as a mosaic within other vegetation types. Most common are stands of Common Nettle (*Urtica dioica*), often with species such as Cleavers (*Galium aparine*), Thistles (*Cirsium* spp.), Hogweed (*Heracleum sphondylium*), False Oat-grass and Bramble. Of more local occurrence are

stands of Greater Willowherb (*Epilobium hirsutum*) – primarily occurring along watercourses. Other types of weed-dominated vegetation include species such as Teasel (*Dipsacus fullonum*), Mugwort (*Artemisia vulgaris*), Hoary Ragwort (*Senecio erucifolius*), Hedge Parsley (*Torilis japonica*), Scentless Mayweed (*Tripleurospermum inodorum*), Black Horehound (*Ballota nigra*), Burdock (*Arctium* sp.), Red Bartsia (*Odontites vernus*), Melilots (*Melilotus* spp.) and Black Medick (*Medicago lupulina*).

### **Water Bodies and Swamp Vegetation**

A number of ponds and small watercourses are present within the Country Park (Map 3). These are described below.

#### **Meadow Pond** (within compartment 48)

This is the largest water body, created in 1986 by damming a stream originating in the vicinity of Lambert's Orchard. It supports extensive emergent stands of Bulrush (*Typha latifolia*) with smaller stands of Common Spike-rush (*Eleocharis palustris*) and emergent Reed Canary-grass (*Phalaris arundinacea*). Southern and eastern pond margins support mixed inundation communities of Hard Rush (*Juncus inflexus*) and Common Fleabane (*Pulicaria dysenterica*).

#### **Pond Wood Pond** (within compartment 8)

The pond within Pond Wood is thought to be many centuries old. It has been reinstated in recent years after it was drained following a bombing raid in World War 2, which breached the dam. This pond supports extensive stands of emergent Bulrush but it is now badly silted as a result of the development of West Park Hospital .

#### **Field Pond** (within compartment 9)

Situated to the south of Pond Wood, this small pond, as its name suggests, is thought to represent an old field pond, probably used in the past as a cattle-drink (providing further evidence of past pasture-management) and is marked on the 1871 Ordnance Survey map. It includes areas of swamp vegetation dominated by Floating Sweet-grass (*Glyceria fluitans*). The pond has suffered a severe loss in diversity in recent years due to constant daily disturbance caused by dogs entering the pond. In 2005 Great Crested Newts were discovered during an educational visit/pondip and in 2014 the pond was fenced to prevent easy access to dogs with a consequent dramatic improvement in pond fauna and flora. Field Pond has a history during the lifetime of the Country Park of being used for pond dipping and the improvement in fauna is very welcome. Sadly the purpose built dipping platform installed by Lower Mole Project Volunteers in the 1990's was vandalised and subsequently removed, however the dipping steps remain and there is a small shore line that gives good access for safe pond dipping.

#### **Lambert's Pond** (within compartment 47)

This too appears on the 1871 Ordnance Survey Map. In 2005 the pond was described as very overgrown by aquatic and swamp vegetation and is over-shaded by mature trees of Oak and Willow. The vegetation of the pond

includes stands of Bulrush, Yellow Flag (*Iris pseudacorus*) and marginal fringes of Floating Sweet-grass. The open water supports colonies of Water-starwort (*Callitriche* sp.) along with species such as Brooklime (*Veronica beccabunga*). In particular the pond became heavily silted due to the development of the former Long Grove Hospital site and in two stages 2013 and 2015 the greater part of the pond was de-silted and some of the overhanging vegetation removed.

### **Recent Balancing Ponds**

There are two recently-constructed balancing ponds, namely Orchard Balancing Pond (compartment 44) and Poplar Pond (compartment 51). The former has been provided in association with new housing construction on the site of the former Long Grove Hospital (Clarendon Park). It supports extensive stands of Bulrush, with dense marginal growth of Rushes (*Juncus* spp.). At times of high flow, the pond is by-passed by an overflow channel. Poplar Pond has been provided to drain storm water from the newly-constructed dual-carriageway section of the B284 Chessington Road. It again supports stands of emergent Bulrush, plus fringes of Greater Willowherb (*Epilobium hirsutum*). In 2015 construction of two off-line balancing ponds was completed at the southern end of the Event Field (compartment 16) associated with the re-development of West Park Hospital. Although intended to be largely dry depressions capable of accepting large quantities of runoff both ponds have deeper sumps which can hold water for longer periods. During 2016 it has been observed that the depressions regularly fill with water following heavy rain.

### **Other Water Bodies**

Small ponds in both Butcher's Grove and Great Wood both occasionally dry out during the summer months. There is also evidence that there was once a pond situated east of where the Horton Light Railway crossed the southern boundary of the Country Park and this location now forms the smaller of the two C2015 balancing ponds..

### **Other areas of wetland vegetation**

A tiny patch of swamp vegetation dominated by Common Spike-rush occurs in a wet area close to the southern boundary of the Country Park, within the field known as Emmett's Mead (compartment 18).

In 2015 a wetland was created in association with the creation of the two new balancing ponds described above, located in compartment 14 (Upper Norris's). Approximately half of the existing hay meadow has been used with the Greenman Stream which runs down the western boundary of the meadow diverted through the middle of the field with meanders, two small on-line ponds and scrapes created. This should provide a significant habitat improvement.

### **Alien and invasive non-native species**

In addition to many of the planted trees (see above), there are a number of non-woody non-native species at Horton Country Park (Appendix 3). Whilst some

of these can be regarded as 'casual', others can be regarded as undesirable invasives. Of particular concern is New Zealand Pigmyweed (*Crassula helmsii*), which is present in the margins of Meadow Pond. Whilst it is currently stable and not spreading it requires monitoring. Michaelmas Daisy (*Aster novi-belgii*) seems to have disappeared (2016) from the margins around Meadow Pond and Goat's Rue (*Galega officinalis*), which although much reduced by recent volunteer tasks is still present and requires further effort to eradicate from compartment 34 (Slip Meadow)

### **Bryophytes**

During the previous plan there was a significant improvement in the recording of bryophytes within the Country Park, with 75 species recorded including the locally scarce mosses *Syntrichia papillosa* and *Platygyrium repens*. A well-developed community of common mosses has developed on the concrete bases of the old piggery, situated within the area known as Barn Platt (compartment 40). The bryophytes have been recorded by Howard Wallace and Pete Howarth.

### **Fungi**

The EEBC files hold a list of fungi dated 06/11/1984, although the origin of this information is not known, nor is the status of any species on the list. In addition, there are records from 1990 (primarily from Pond Wood) for a limited number of common woodland fungi.

### **Lichens**

There has been no known recording of lichens from within the Country Park.

## **1.5.2.2 Fauna**

### **Invertebrates**

Prior to the 2006-16 management plan recording of invertebrates was limited, John Biglin, former Countryside Development Officer for Epsom & Ewell Borough Council, undertook some recording of moths (Lepidoptera) during the 1990s. More recently and guided by the management plan there has been a significant improvement with both formal surveys (Dr J Denton 2010), a regular butterfly transect, and casual invertebrate recording, for example Dragonflies (Odonata), by Ian Menzies a notable expert and others. A moth recording evening using light traps took place in July 2016 with 71 species recorded in compartment 5 (Great Ridings).

A total of 27 butterfly species have also been recorded. Six are of particular note, namely Purple Emperor (*Apatura iris*) and Silver-washed Fritillary (*Argynnis paphia*), both noted within Butcher's Grove, and White Admiral (*Lagoda camilla*), recorded within Pond Wood. More recently both Brown Hairstreak has been found and is known to be breeding on blackthorn within



the Country Park. Marbled White butterflies have also been recorded regularly during 2015/16. Also the White Letter Hairstreak has been recorded in 2016

There are six recorded species of dragonfly and one damselfly: Broad-bodied Chaser (*Libellula depressa*), Emperor Dragonfly (*Anax imperator*), Southern Hawker (*Aeshna cyanea*), Migrant Hawker (*Aeshna mixta*), Brown Hawker (*Aeshna grandis*) Common Darter (*Sympetrum striolatum*) and Common Blue Damselfly (*Enallagma cyathigerum*). Most records do not specify where the species have been observed, although Broad-bodied Chaser has been recorded from Meadow Pond and it is likely that many of the other sightings were from here. However, dragonflies were seen at some of the other water bodies in the Park during the 2004 habitat survey and an exuvia was noted on the fringe of the Orchard Balancing Pond.

The Common Jewel Beetle (*Pryochroa serraticornis*) was observed during a botanical survey of Pond Wood by Surrey Wildlife Trust in 1998. Recently, the nationally rare (RDB1) Ladybird *Clitosthetus arcuatus* was found within the 'old part' of Pond Wood and subsequently also in Butcher's Grove by Ian Menzies (March 2005). The 2010 survey concluded that the country park "supports a very diverse and rich invertebrate assemblage, as confirmed by the ISIS programme, which shows that the scrub edge and flower source components are in favourable condition" (Dr J Denton 2010) Several nationally scarce species were recorded. (see Appendix III)

## **Vertebrates**

### **Birds**

Birds are the best-recorded group of fauna within the Country Park, mainly as a result of the efforts of certain members of the Friends of Horton Country Park (primarily T. Quinn, A. Gibbs and R. Smith).

Habitat diversity is largely responsible for the relatively rich community of resident and/or summer breeding visitors, although there are records for winter and passage migrants. A significant number of the recorded species fall within the RSPB 'Red' and 'Amber' List categories, in addition to a number of species that are defined as 'species of principle importance' under the Natural Environment And Rural Communities Act 2006 (NERC) (see Appendix III).

Recently recorded (in last 10 years) resident breeding birds on the RSPB Red List include Song Thrush (*Turdus philomelos*), Yellowhammer (*Emberiza citrinella*), Reed Bunting (*Emberiza schoeniculus*), Bullfinch (*Carduelis chloris*), House Sparrow (*Passer domesticus*) and Starling (*Sturnus vulgaris*), which are all present in small numbers (there are quite good winter flocks of Starling). Also on the Red list and occasionally seen within the Country Park, (although it breeds on the adjacent Park Farm) is Skylark (*Alauda arvensis*), whilst Lesser Spotted Woodpecker (*Dendrocopus minor*) may possibly breed.

Breeding resident birds on the RSPB Amber list include Green Woodpecker (*Picus viridis*), again in small numbers, with Dunnock (*Prunella modularis*)

common across the Park and Willow Warbler (*Phylloscopus trochilus*) in several localities. Further birds on the RSPB Amber list that occasionally breed in the locality are Barn Owl (*Tyto alba*), Mistle Thrush (*Turdus miscivorus*) and Kestrel (*Falco tinnunculus*).

A heronry, supporting up to 10 nests, is present on the south eastern fringe of Great Wood having moved from the northern fringe probably due to disturbance from landscaping carried out by the golf course around 2005.

Summer visitors on the Red List include Turtle Dove (*Streptopelia turtur*), Linne (*Acanthis cannabina*) and Spotted Flycatcher (*Musciapa striata*), whilst Amber-listed species include Swallow (*Hirundo domestica*), Willow Warbler (*Phylloscopus trochilus*) and Nightingale (*Luscinia megarhynchos*). The last-named has only been seen as a casual visitor in recent years, although it formerly bred in Pond Wood. Most recently, the species has been heard singing during April 2005 within Nightingale Corner (compartment 36) (S. Cocker, pers. comm.). Also on the Red List is Grasshopper Warbler (*Locustella naevia*), a bird which formerly held breeding territories in Hendon Grove during the 1990s, but has not been recorded from the Park since this time.

Important winter visitors include the Fieldfare (*Turdus pilaris*) and Redwing (*Turdus iliacus*), which occur in flocks of up to 200 birds, both of which are on the RSPB Amber List. Redpoll (*Acanthis flammea*) has been recorded in smaller numbers. Winter visitors on the RSPB Amber List include Lapwing (*Vanellus vanellus*) (seen in small numbers and known to breed on the adjacent Park Farm), Snipe (*Gallinago gallinago*) (seen in small numbers, around Meadow Pond in particular), Meadow Pipit (*Anthus pratensis*) (flocks of up to 20 birds) and Goldcrest (*Regulus regulus*) (in small numbers), with rare sightings of Woodcock (*Scolopax rusticola*) and Water Rail (*Rallus aquaticus*). Long-eared Owl (*Asio otus*) and the Amber-listed Short-eared Owl (*Asio flammeus*) are also seen on rare occasions.

Since the adoption of the management plan in 2006 there have been some significant and notable changes with the arrival in the area of several raptor species. These include Common Buzzard (*Buteo buteo*), Peregrine Falcon (*Falco peregrinus*) and Red Kite (*milvus milvus*). It remains to be seen what the impact of these birds will be on the ecology of the site. In addition there has also been in line with the national trend an increase in sightings of Sparrow Hawk (*Accipiter nisus*).

### **Reptiles and Amphibians**

No formal records of herptiles are available, although there is a reference to "frogs, toads and newts" on Meadow Pond and some amphibians are undoubtedly present. Smooth Newts (*Triturus helveticus*) are present in abundance at Field pond and Great Crested Newts (*Triturus vulgaris*) have been found in this location since June 2005 (S. Cocker, pers. comm.). There have also been confirmed sightings of Grass Snake (*Natrix natrix*) and Common Adder (*Vipera berus*).

During the last plan the ponds on the site were surveyed for amphibians with Common Frog, Common Toad, Smooth Newt (*Triturus helveticus*) and Great Crested Newt (*Triturus vulgaris*) recorded. Great Crested Newt have been found in Field Pond since June 2005 (S. Cocker, pers. comm.) and are being regularly surveyed. In recent years (since 2014) the population has declined almost certainly due to disturbance from dogs. Management work has been carried out to improve the conditions of the pond including fencing to protect from disturbance from dogs. The pond has responded very positively with respect to plant and invertebrate life and it is hoped that this will also be the case for Newt species. There have also been confirmed sightings of Grass Snake (*Natrix natrix*) and Common Adder (*Vipera berus*).

## Mammals

There has been a limited amount of mammal recording within the Country Park, focusing on Dormice, Water Voles, small mammals in woodland and bats.

Water Voles (*Arvicola terrestris*) are a “Priority Species” of the UK BAP and were recorded within the Country Park in 1998 (Newman, 2000). They were recorded along the Greenman stream that runs from the Park boundary with Noble Park to Pond Wood Pond. More recent surveys have failed to find signs of Water Voles but the stream banks have been maintained by volunteers to encourage them. Unfortunately, Mink are known to have been in the area and have almost certainly preyed on the population, so they are no longer present on site. This is a reflection of the general status of water voles in Surrey. Water Vole “places of shelter” are afforded protection under Schedule 5 of the 1981 Wildlife and Countryside Act.

A limited number of bat detector surveys have taken place in the last 20 years (mainly concentrating on tracks in the southern part of the Park). From these, a number of species have been identified, including the two species of Pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*); both Priority Biodiversity Action Plan species. The others are Serotine (*Eptesicus serotinus*), Noctule (*Nyctalus noctula*) recorded over Meadow Pond during the summer of 2013 and Brown Long-eared Bat (*Plecotus auritus*). A survey conducted in 2002 (Baker and Whitfield, 2002) suggested the use of one of the disused former Long Grove Hospital buildings, Farmstead School as a night time feeding roost for Brown Long-eared bats. There is also a possibility that some of the roof space of this building could be used as a daytime roost by this species. A decision to demolish this building resulted in an application for a licence and mitigation that included the construction in 2006 of a bat roost using a part of the building. The roost has been successful and is currently in 2016 being used by Brown Long-eared bats. All species of bat are protected by Schedule 5 of the 1981 Wildlife and Countryside Act.

A further species with protection under the 1981 Wildlife and Countryside Act (i.e. Schedule 5) which has been recorded as present within the Country Park, is Dormouse (*Muscardinus avellanarius*) and an extensive on going survey

using boxes within Pond Wood, Four Acre Wood and Butcher's Grove is under way to investigate their current status.

Roe Deer (*Capreolus capreolus*) are frequent throughout the park, especially in wooded areas. Deer can have a significant influence upon tree regeneration and the current programme of woodland management that involves coppicing has had to protect re-growth using plastic mesh fencing (Tenax) erected by volunteers. Grey squirrels (*Sciurus carolinensis*) are also frequently seen and again can have a significant impact on tree regeneration, particularly hornbeam. From Pond Wood there are records (early 1990s) for Pygmy Shrew (*Sorex minutus*), Bank Vole (*Clethrionomys glareolus*) and Wood Mouse (*Apodemus sylvaticus*), whilst there have also been casual sightings elsewhere of Fox (*Vulpes vulpes*) and Weasel (*Mustela nivalis*). A survey carried out in Pond Wood and Lambert's Wood during summer 2015 as part of a student dissertation found populations of Wood Mouse, Bank Vole and both Common and Pygmy Shrew.

It is also known that there are several badger setts on site.

### **1.5.3 Cultural**

#### **1.5.3.1 Archaeology**

There are no scheduled archaeological features within the Country Park itself<sup>5</sup>. Ancient landscape features include the old wood banks that surround many of the ancient woodland areas. Pond Wood also contains an enclosure known as Peaked Riding (evident on the 1843 Tythe Map and 1870 Ordnance Survey map), which may have been a mediaeval woodland clearing. See Map 10 (Circa 1895)

Butcher's Grove contains a series of low, parallel ridges that underlie the railway embankment. Originally these were thought to represent evidence of former ridge and furrow cultivation, although the Surrey Archaeological Unit now believe they represent relics of a former forestry technique used to encourage planting or over-planting. In addition, an old boundary bank runs across Butcher's Grove in a north-west to south-east direction.

More recent archaeological interest has arisen from developments that took place within the old Horton Manor Estate during the 19<sup>th</sup> and 20<sup>th</sup> centuries, in particular the remains of the embankments and cuttings of the old Horton Light railway.

West Park farm house is thought to be the oldest free standing building in Epsom and Ewell Borough (some parts of the house may date back to the 15<sup>th</sup>

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<sup>5</sup> The Scheduled Ancient Monument of "Castle Hill" lies beyond the site boundary, adjacent to Butcher's Grove. It is thought to be the site of a mediaeval moated farmstead known as Brettgrave. Whilst not scheduled, there are signs of Roman activity (in the form of kilns) within the grounds of West Park Hospital and (associated with a former tile factory) on Ashted Common.

century). There is a suggestion that there may have been activity of some sort within Pond Wood adjacent to the pond with very large coppiced Alder stools and possible evidence of a system of leats down stream of the pond, along with the clearing referred to as 'Peaked Riding' which included had a small bridge for access across the stream, leading from the much larger 'Great Riding'.

### **1.5.3.2 Land Use**

The present day Horton Country Park was formerly a part of the mediaeval manor of Horton. Reference to the 1843 Tythe Map shows the distribution of fields and other features within the Horton Manor Estate at a time prior to the development of the various psychiatric hospitals during the late 1800s. Whilst many changes are evident if this is compared with the present day situation (see Map 6), it can be seen that some elements of the original field patterns still remain and most of the newly revised management compartments have been named on the basis of names given on the 1843 Tythe Map (Map 5).

Great Wood, part of Pond Wood, Four Acre Wood, Long Grove Wood, Stones Copse (formerly part of Pond Wood before 1941) and Butcher's Grove have all been continuously wooded since at least 1600AD, as highlighted in the Surrey Ancient Woodland Survey (Davies *et al.*, 2011). All these areas of woodland would most likely have been previously managed as coppice-with-standards; the remnant structure of which can readily be seen in Four Acre Wood in particular. There are almost no signs of former coppice management within Great Wood due to past disturbance (possibly associated with pigs or cattle) and introductory planting.

The name Butcher's Grove is comparatively recent, the area being known as Brettgrave until relatively recently. Records of the Chertsey Abbey refer to the planting of a wood at Brettgrave in 1307, apparently as an addition to an existing wood (an old, weathered bank runs across Butcher's Grove, which may be a relic of this). However, Butcher's Grove does not appear on any of the historical maps that were consulted in compiling the Surrey Inventory of Ancient Woodland and this seems to suggest that, for a time at least, the area was being managed by some other form of land use. Indeed, some areas with a poor ground flora may provide evidence of recent secondary woodland (although this could also in part be due to the effect of localised winter flooding).

The 1843 Tythe Map shows Butcher's Grove as 'Plantation', a fact consistent with the presence of a very few senescent Scots Pine trees within the southern and eastern parts of the wood. Photographs of the Horton Light Railway taken after World War 2 show many more mature and over-mature Scots Pines in the same part of the wood. These photographs also provide evidence that the wood was planted over again in the early years of the 20<sup>th</sup> Century, probably accompanied by clear-felling of the areas concerned. This is consistent with there being very few old Oaks, the majority of these being situated along the old internal wood bank referred to previously. Whether the conifers were planted as the only crop with the current hardwoods surviving by default or whether

they were planted as a nurse crop for hardwoods or replanted coppice is not known (Owen & Wilmott, 1995).

In the 1950s the size of Butcher's Grove was reduced from 41 acres to the current 25 acres to provide agricultural land. The reason for the name-change to Butcher's Grove is not known. However, the presence of an area of old Hornbeams has led to a suggestion that it may be to do with this wood being used to make butcher's chopping boards (S. Cocker, pers. comm.).

The area of Butcher's Grove closest to Castle Hill contains numerous large, even-aged, evenly spaced Oaks, as does the area immediately adjacent on the other side of the railway. These have been planted, possibly in early Victorian times, although they might be even older (Owen & Wilmott, 1995). In recent years, (1983 onwards) a coppice cycle has been reintroduced into parts of Butcher's Grove by the Lower Mole Countryside Management Project, with the remainder being mainly managed as high forest. Prior to this, the last probable management within Butcher's Grove was the taking of firewood/fuel by the hospitals, around 1950 (Owen and Wilmott, 1995).

Following purchase of the Horton Estate in the 1890s and the construction of the various psychiatric hospitals, there followed a major change in the way the land was managed. What is today the Country Park then became West Park and Long Grove Farms, serving the hospitals. Very early in the 20<sup>th</sup> Century it became apparent that a light railway would be needed to service the cluster of hospitals (in part following the route of the original contractor's line used to build Long Grove Hospital) and linking them to West Ewell station. This eventually opened in 1913, with a branch to the new central power and pumping station at Sherwood (where the David Lloyd Leisure Centre now stands). The system was extended in 1915 to help construct and later supply the last hospital to be built (West Park), which was not completed until 1924 due to the First World War.

The Horton Light Railway eventually closed in 1950 and little remains of the railway today. However, the route of the line is still clearly visible as a series of shallow embankments and cuttings. Indeed, the route of the old railway forms an important element of the footpath/track network within the Country Park.

Whilst managed as farmland, some fields were used for growing crops (e.g. photographic evidence), whilst others were permanent pasture and used by grazing livestock e.g. presence of dairy and cow sheds in the West Park Farm complex) (S. Cocker, pers. comm.). There were also small orchard areas (the present day Lambert's and Long Grove Orchards). This feature appears to date only from the psychiatric hospital farm era, as it is not shown as such on the 1843 Tythe Map, but is present on the 1933 OS map.

In recent decades, all the Hospitals have now closed down. For the most part, their buildings have been demolished and the sites redeveloped for housing. The Country Park includes an area of 'exchange land' comprising part of the grounds of the former Long Grove Hospital, which has been developed as housing (Clarendon Park). The majority of former hospital buildings on this

land were demolished during the early 1990s. However, the boiler room of the former Farmstead Villa has been retained and converted in to a bat roost for Brown Long Eared bats, due to their presence in the building prior to demolishen.

Today, Horton Country Park is used primarily for recreational and educational purposes, although the status of the Country Park's open space as a Local Nature Reserve (LNR) and Site of Nature Conservation Importance (SNCI) means that there is a strong emphasis on nature conservation. Some fields are let for the grazing of horses and other livestock. (Stone's Field – cpt. 10, Black Field – cpt. 13, Upper Noriss's – cpt. 14 and Blacklands – cpt. 28) are leased by the Equestrian Centre. Hither West Field (cpt. 32) is leased to the Equestrian Centre for six weeks of aftermath grazing following the hay crop and is also availabale as an emergency holding field for the cattle that graze Epsom Common each summer.

### **1.5.3.3 Public Access and Recreation**

#### **Background**

The legal mechanism for the creation of Country Parks is embodied in the 1968 Countryside Act. Around this time there was a perceived concern that the wider countryside would be threatened by an influx of visitors from urban areas. Country Parks would act as 'honey pot' sites to prevent this from happening. By the late 1970s this idea had been discredited and there was a move away from creating Country Parks in rural locations, towards their establishment in 'urban fringe' settings. Although the impetus for the creation of Country Parks declined during the 1980s, the principle of their representing an opportunity of introducing nature to the wider public became more fully appreciated. It is against this background that the public amenity and educational value of Horton Country Park should be viewed. In addition reducing visitor pressure on the Epsom and Ashted Commons SSSI was a stated aim for the creation of Horton Country Park in 1973.

#### **Access**

There is open public access across much of Horton Country Park, facilitated through a variety of different routes (Map 4). The track bed of the former Horton Light Railway forms a major component of a well-developed network of tracks and paths throughout the entire site, totalling some 10km of hard-surfaced routes.

In 2013 almost all hard surfaced paths and tracks on the site were dedicated as definitive rights of way. The existing public footpaths 20 and 73 became bridleways reflecting their sutablility as multi use routes. (See Map 4). All the paths were signposted in 2013 by the Lower Mole Partnership.

Also passing through the Country Park is the Thames-Down Link long-distance footpath, which forms a link between the Thames Path and the North Downs Way. In 2012 a new 20 mile, long distance walking and cycling route was created called the 'Round the Borough Hike & Bike'. The route uses bridleways

within the site and hosts the routes annual cycling event in May and walking event in September.

The main point of access is the car park, located off Horton Lane, where toilet facilities and an Information Centre are provided. The close by West Park Farm complex provides a base for the Epsom & Ewell Borough Council (EEBC) Countryside Team who have an office within number two West Park Farm House (Number One is currently residential) and a volunteers tools store located in one of the stables. The Lower Mole Partnership and Trust is also based within number two and have their stores located in one half of the two former cow sheds. In addition they have two storage containers and volunteers maintain the 'Countryside Garden' a remnant of a former orchard. The remaining space within the former cow sheds is used for storage and a small hall that is used for band practices, talks and small events. There is also a more modern barn that is used by EEBC for storage and use by the Maintenance Ranger and graffiti removal service as are the former bull pens located near the stables. The stables are in use being let for use by horses.

The Country Park is also accessible from a number of other points. (See map 4) and public footpath 26 runs along the Southern boundary between the Country Park and Noble Park (former West park Hospital) connecting to other routes both leading in to the Country Park and also to Epsom Common.

A number of grazed fields are fenced for the purposes of containing the livestock and there is thus effectively no public access into these areas.

### **Recreational use**

The Country Park is popular for a variety of uses that include walking, exercising of dogs, horse riding, running and cycling. There is also an orienteering course. The public rights of way are all signed and locally produced wooden benches are placed regularly along paths. The area around the car park contains a number of barbecue sites that can be hired though a pre-booking arrangement (charcoal produced locally on Epsom Common by the the Epsom Common Association Eco Vols is on sale at the nearby Old Moat Garden Centre). The Park is also the focus of regular countryside related events such as organised walks and wildlife watching, carriage driving and the annual Round the Borough Hike & Bike events. Little Acres (Compartment 20) in the south of the Park is used as a camping site by a local Guide group.

The close proximity to housing and the extent of the open space within Horton Country Park make it a tremendous potential resource available to the local community. There is however a lack of knowledge relating to the number visits to the site and visitor attitudes. The car park may also present an opportunity for raising revenue for the Council and that could be further encouraged by providing improved facilities. For example, at present there is no provision of childrens play space or refreshment facility. The Country Park would be an ideal location for a play space that would enable children to explore and connect with nature. In addition, the Country Park also includes the leased Equus equestrian centre, Horton Park Country Club golf course and Horton



Park Farm (Now called Hobbledown) these further enhance the value as a recreational facility.

### **Educational use, site interpretation and volunteer groups**

The provision of educational and interpretative facilities remains an important objective for the Country Park and a significant amount of promotional and educational literature has been provided since the Country Park was created including a small information centre that is open daily to the public and supported by the Friends of Horton Country Park. The most recent general information leaflet adopts a 'house style' employed for similar ones that describe Epsom Common and the Hogsmill Local Nature Reserves. These provide an overview of features of interest, including the ecological and historical aspects of each of the three sites. Another leaflet describes the history of the Horton Light Railway. In addition, there is a large amount of information about the Country Park available on the Epsom & Ewell Borough Council website; including an informative 'virtual tour' that provides some information on the ecology and natural history of the park, together with a series of photographs. There is also a regular advertised annual series of walks offering Sunday afternoon walks that interpret both the human and natural history of the site.

The Friends of Horton Country Park started in 1999. The group holds regular meetings, produces a regular newsletter and hosts its own website (<http://www.hortoncountrypark.co.uk/TheFriends.aspx>). The friends have helped in the management of the site with events and through members taking part in volunteer tasks. However in recent years this has declined due to ageing members not being physically able to take part, highlighting the need to recruit younger active members.

The Friends of Horton Country Park have worked with the Council and the Lower Mole Partnership to provide occasional large scale events including a countryside show day which attracts large crowds.

In recent years, the use of Horton Country Park as an educational facility has declined with only very occasional use by local schools and youth groups. This has been due in part to both a drop in demand from local schools in particular and EEBC no longer offering an environmental education service due to the need to focus scarce staff time and resources on the over riding priority of managing and conserving the sites habitats and wildlife.

Whilst educational use of the park has declined in recent years the opposite has happened in terms of volunteers, who help with practical habitat management supported by either EEBC staff or the Lower Mole Partnership.

### **Site boundaries/security**

Much of the Country Park boundary is still marked by the original metal railing fence provided when the psychiatric hospitals were constructed. However, the fence is generally in a very poor state of repair providing little security. Gates

providing vehicular access onto the site are locked at all times, and gates to the main car park are locked at dusk. Apart from the main car park, no access by public vehicles is normally allowed.

C2006 the Country Park boundary was extended to include an area of 'exchange land' representing part of the former grounds of the Long Grove Hospital. The areas concerned have been successfully integrated in to the Country Park and are now managed under several different habitat management regimes.

### **Problems of inappropriate use**

There are a number of activities within the Country Park that contravene the byelaws or are considered as inappropriate and require a managed Council response to reduce their impact and occurrence. These include:

- Dogs not under proper control
- Flying of remote control drones, driving of remote control cars
- Fires
- Graffiti and vandalism to furniture
- Fishing
- Poaching (and possibly bird snaring)
- Access (Motor bikes/cars; horses straying from designated routes; cycling too fast, running/cycling groups racing and training)
- Traveller encroachment and site security
- Un-booked events
- Vandalism to furniture such as wooden signs and benches

A common factor involved in many of these issues is the need for a regular on-site presence. Many forms of inappropriate use are most effectively addressed by a regular patrolling presence that enables face to face contact with the individuals and groups causing issues.

Recently there seems to have been a significant increase in owners walking two or more dogs and dog walking businesses using the Country Park. There is widespread debate over how controllable two or more dogs are, especially as is often the case they are off the lead. In addition there is growing concern from managers of open space about how sustainable current dog walking numbers and practices are. For example, damage to ponds and the constant trampling of ground flora often many metres from the tracks is already showing signs of a significant impact with only species able to withstand constant disturbance flourishing. There is little or no prospect of ground nesting birds breeding anywhere on the Country Park due to disturbance from dogs. Dog walking businesses currently operate without any overhead in respect of a contribution to the maintenance of the facility that allows them to operate their business.

## **STAGE TWO – EVALUATION AND OBJECTIVES**

### **2.1 Statutory Designations**

Horton Country Park received statutory designation as such in 1974. Designation of the Local Nature Reserve was confirmed in May 2004.

#### **2.1.1 LNR Byelaws and Other Statutory Information**

These are included in Appendix IV.

### **2.2 Non-statutory Designations**

In 2013 the whole of Horton Country Park excluding the three privately operated centres was designated as Site of Nature Conservation Importance (SNCI) see (Map 1). In addition, the whole area of Horton Country Park LNR lies upon land designated in the current local plan as Metropolitan Green Belt.

#### **2.2.1 SNCI Selection**

Prior to 2013 only certain parts of the site were designated as SNCI, however a re-survey in 2013 carried out by EEBC Countryside Officer Peter Howarth proposed that the whole site should be designated for the following reasons which were accepted by the Surrey Nature Conservation Liaison Group: Species rich grasslands including a number with 20 of the indicator species including 6 of the higher priority species, amphibian interest, the site has populations of Great Crested Newt, Smooth Newt, Common Toad and Common Frog, ancient woodland, there are six areas of ancient woodland across the site as outlined in the revision of the ancient woodland inventory for Surrey 2011. Butterflies recorded from the site include the White Admiral, Dark Green Fritillary and the Silver Washed Fritillary. All three are on List A of butterflies of conservation importance in Surrey.

### **2.3 Criteria for Evaluation**

This section provides an evaluation of the features described in Section 1 based on the Nature Conservation Review (NCR) criteria developed by Ratcliffe (1977). This evaluation forms the basis for objective setting given in Section 2.6.

#### **Size**

Horton Country Park Local Nature Reserve covers an area of 111.2ha. which includes the Horton Park Country Club (golf course). Land managed by the

Equus Equestrian Centre, Horton Park Farm, now known as Hobbledown (with the exception of one field) and the Horton Park Country Club (golf course) have been excluded .

### **Diversity**

Horton Country Park supports a diverse mosaic of habitats that include ancient and recently-planted woodlands, scrub and hedgerows, semi-natural and improved grasslands and open water habitats. There are also smaller areas of wetland and old orchards. Around 350 vascular plant species have been recorded, along with approximately 400 invertebrates, over 100 birds and 13 mammals. However, there has been no systematic recording of many groups and the current lists (Appendix III) should be regarded as incomplete.

### **Naturalness**

There are six ancient woodlands, i.e. they have been continuously wooded since at least 1600AD. Pond Wood (excluding a former field Peaked Riding), Great Wood, Butcher's Grove, Long Grove Wood, Four Acre Wood and Stone's Copse are all included in the 2011 Surrey Inventory of Ancient Woodland as ancient semi-natural woodland. Most other stands of woodland are very recent in origin, having been planted over previous grassland habitat within the last forty years.

Whilst it is possible that stands of semi-natural grassland may have been ploughed during the period that the site formed part of the psychiatric hospital farm holdings, small areas are believed to represent unimproved neutral grassland. Some areas of permanent pasture may therefore date back to the time when the site was managed as part of the Horton Manor Estate. Other grassland swards appear to be of a relatively recent re-seeded origin. Some old fields, now supporting semi-natural grassland were almost certainly former arable.

In addition to woodland and grassland, the site supports stands of scrub that have originated from previously managed hedgerows. In a number of places hedges lie along boundaries that were clearly marked on the 1843 Tythe map. Some hedges therefore date back at least 150 years, perhaps much longer (e.g. the western site boundary which marks the Parish boundary between the Borough of Epsom and Ewell and the Royal Borough of Kingston and is therefore probably of Anglo-Saxon origin, making it over 1,000 years old).

All ponds within the Country Park are artificial in origin, with several being very recently created. However, Pond Wood Pond is believed to be many centuries old. Whilst some exotic invasive species have recently colonised some of the Country Park's ponds, most vegetation can be regarded as semi-natural.

## Rarity

Ancient semi-natural woodland is a rare habitat in this part of Surrey. Approximately 7.1% (Davies *et al.*, 2011) of the land area of the county is believed to support ancient semi-natural woodland; most of which is found to the south of the North Downs (Drucker *et al.*, 1988).

The Country Park contains areas of semi-natural grassland that may be regarded as unimproved neutral grassland, a habitat that is becoming increasingly rare in Surrey and indeed nationally. It has been estimated that by 1984, during the preceding 50 years, semi-natural grassland had undergone a 97% decline in lowland England and Wales (UK Biodiversity Group, 1998).

There are two records of county rarity plant species (Lousley, 1976 and Leslie, 1987): Good King Henry (*Chenopodium bonus-henricus*) (last recorded in 1990) and Small-leaved Lime (*Tilia cordata*). Whilst most Small-leaved Limes within the Country Park have been planted, the northern wood bank of Four Acre Wood supports two old individuals of this species that are believed to be site-native.

In 2016 there are no less than 28 birds recorded from within the Country Park appear on the RSPB “Red List”, with a further 21 species on the “Amber List” (see Appendix III).

Water Vole (*Arvicola terrestris*) is a rapidly-declining species in Britain and is rare in Surrey. The results of the second national Water Vole survey (Strachan *et al.*, 2000) suggest that the animal has disappeared from more than 89% of the sites it occupied 60 years ago, whilst the population density at occupied sites has also declined. Many of the remaining Water Vole colonies in Surrey occur within the upper reaches of river catchments. The species is largely absent from the larger river systems themselves (primarily due to the presence of Mink).

An invertebrate survey primarily of grassland carried out in 2010 by Dr J Denton concluded that Horton Country Park “supports a very diverse and rich invertebrate assemblage” with a significant number of scarce and notable species See appendix III. Previous records were lacking although the nationally rare (RDB1 - endangered) Ladybird *Clitosthetus arcuatus*, was first recorded in 2005 (in the ‘old part’ of Pond Wood) by Ian Menzies. The nationally scarce (i.e. recorded from between 16-100 ten km squares of the Ordnance Survey grid) butterfly Purple Emperor (*Apatura iris*) is also present.

## Fragility

Woodlands are a robust habitat but particular features within them may be dependent upon continued traditional management practices such as coppicing and canopy thinning. Mature trees in general are susceptible to a variety of inappropriate land-management practices such as cultivation too

close to the root system, trampling, soil compaction and damage to bark by livestock and compaction by vehicles.

Grasslands are a product of some form of management such as grazing and/or hay-cropping and thus generally require appropriate management to maintain them. Therefore they are vulnerable to modification or cessation of such traditional management activities. However, some areas of rank, unmanaged grassland are likely to be relatively resilient and unlikely to develop into scrub for some considerable time.

Scrub is a relatively robust habitat, although in the longer term, a lack of management will allow a succession to woodland to occur. Hedgerows, again, without continued management, may become overgrown and scrub-like or develop into a discontinuous line of mature trees.

Ponds are fragile habitats which are vulnerable to overshadowing, excessive vegetation growth, changes in hydrology, pollution and invasion by non-native species such as New Zealand Pigmyweed (*Crassula helmsii*).

Many of the groups of fauna present within the Country Park are vulnerable to unfavourable habitat and management changes. Water Voles are a particular example, in that they require a mosaic of habitats that includes tall, diverse bank-side herbaceous vegetation, free from grazing, without excessive scrub cover, and where water levels do not fluctuate too greatly throughout the year. Such a fragile balance of habitat conditions could all too easily be disturbed by a lack of appropriate management. Water Voles are also extremely vulnerable to Mink predation.

### **Typicalness**

The habitats present with Horton Country Park LNR are typical of the site's underlying geology and land-use history. Most vegetation is circumneutral in character and indicative of the underlying heavy clay soils. Some stands of ancient semi-natural woodland and semi-natural grassland are present, along with long-established boundary features which date back to the time when the LNR formed part of a farming landscape. However, much of the site has been modified by recent treatment including relatively extensive replanting and amenity grassland management. These modifications are largely in keeping with the recreational use to which the Country Park has been tailored in recent decades.

### **Recorded history**

Historical records relating to the Abbey of Chertsey, prior to its abolition (which have never been translated from their original Latin) and also in relation to Horton Manor are held at the Surrey records office.

There are excellent historical records relating to the era of the psychiatric hospitals complex, including the Horton Light Railway, into more recent times.

The level of historical information on the ecology of the Country Park is low. The earliest biological records relate to the 1970s (botanical), with a renewed interest in recent years following the formation of the Friends of Horton Country Park in 2000 (mainly birds) and the implementation of the 2006-2016 management plan.

### **Position in ecological unit**

Horton Country Park forms one element of a significant 'green corridor' of open countryside that runs from Ashtead Common and Prince's Coverts, via the Bones Gate Stream Corridor and then the Hogsmill River, eventually passing through the Royal Borough of Kingston and linking with the River Thames. During the lifetime of the 2006-2016 plan a targeted landscape scale approach to conserving and enhancing biodiversity has emerged termed Biodiversity Opportunity Areas (BOAs). In Surrey a number of BOAs have been identified one of which is Ashtead and Epsom Woodland (Commons), Princes Coverts and Horton Country Park. The BOA is described as follows:-

The site is located to the north of Ashtead and Leatherhead.

**Joint Character Area:** Thames Basin Lowlands, North Downs

**Geology:** London Clay, River Terrace Deposits, Blackheath

**Topography:** To follow

**Soils:** Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils. Loamy soils with naturally high groundwater

### **Biodiversity:**

Lowland Mixed Deciduous Woodland

Wet Woodland

Wood Pasture and Parkland

Ancient Semi-Natural Woodland

The Opportunity Area includes one SSSI (Epsom and Ashtead Commons) and nine SNCIs

### **Access:**

Ashtead Common; Corporation of London, Epsom Common; Epsom and Ewell Borough Council, Leatherhead Common; Mole Valley District Council,

Ashtead Park; Mole Valley District Council/SWT, Princes Coverts; Crown Estates, Horton Country Park; Epsom and Ewell Borough Council

### Potential for enhancement

There are a range of opportunities for enhancing both the nature conservation, educational and public amenity value of Horton Country Park LNR. The major areas are highlighted below:

- Woodland management. The ancient semi-natural woodlands are benefiting from coppice with standards management that has been re-introduced on a large scale during the lifetime of the last management plan. This traditional woodland management regime has also been implemented in some of the younger plantation woodlands. In addition there have also been thinning operations carried out in some of the younger plantation woodland, for the benefit of both woodland ground flora and the remaining trees. The commercial value of the felled trees has been realised and has allowed woodland management carried out under the last plan to be at no cost to the Council. It should be noted however that the 'no cost' aspect has been achieved through a combination of contractors operational costs being covered by the value of the wood and grant funds received via both the existing 2010-2020 Environmental Stewardship Higher Level Scheme and the European Single Farm Payments Scheme, highlighting the crucial role agri-environment schemes currently play in delivering the nature conservation benefits of managing woodland. The re-introduction of hazel & fire wood coppice with standards has commercial potential which it is hoped will play an important role in the viability of continuing to manage woodland on the site. During winter 2014/15 an area of coppiced hazel in Butcher's Grove was coppiced commercially and the value of the coppiced hazel and grant money available for deer fencing meant that there was again no cost to the Council. Through the efforts of volunteers since 1983 and the implementation of the previous plan there is now a significant amount of commercially attractive hazel coppice whose continued management will ensure that the sites woodland retains a varied age structure that attracts a much greater variety of plant and animal life. There remains potential to extend the coppice with standards management regime and that is currently being realised through the implementation of the Environmental Stewardship Scheme. It should be noted that the experience of restoring hazel coppice in the ancient woodland has resulted in a more extended rotational time scale than originally envisaged. The reason is the temporary loss of the springtime carpets of Bluebells and Wood Anemone which are hidden from view in the first years after coppicing under an explosion of bramble and grasses that respond to the increased light levels. Whilst there is no question that nature benefits from the varied age structure introduced by coppicing there is also no question that the springtime carpets of Bluebells are a much loved sight. By extending the length of rotation the aim is to observe how long it takes for a coppiced area to return to a springtime carpet of flowers. Future rotations can then be worked out which find the best balance between the nature conservation benefits of coppicing and the commercial and aesthetic factors. .



- The previous plan identified that many hedgerows were in an overgrown condition through lack of recent management. Valuable to wildlife and distinctive landscape features they required regenerative management to maintain their nature conservation and landscape values. The management commenced during last plan needs to continue with a rotational system of hedgerow scalloping having been set up. The technique has proved successful with volunteers now returning to scallop adjacent sections. It is worth noting that eggs of the Brown Hairstreak butterfly have been found on young blackthorn regenerating in recently cut scallops.
- There remains a potential to enhance many of the grassland communities within the Country Park. Historical evidence suggests that some areas were formerly grazing pasture and a long-term aim would be to reintroduce cattle grazing to these areas. Areas of recently unmanaged grassland have benefited from mowing on a long rotation to improve their structural diversity for invertebrate populations and that process is being extended and needs to be maintained in the long term. Haymaking has continued and the species diversity of flowering plants has improved since 2006 and again needs to continue to maintain a diverse flora. Other grasslands are currently heavily-grazed year-round by horses and would benefit from a reduction in stocking density, possibly by extending grazing onto some areas not currently managed as pasture.
- There is an opportunity for enhancing the management of the Country Park for a number of its mammal species, in particular Water Vole and also possibly Bats, plus Dormice if found to be present. During the last plan work was carried out along Green Man Stream to make it more suitable for Water Voles and the possibility of a re-introduction. Maintaining a more open stream bank with grassy margins is a key requirement that needs annual maintenance along with the control of Mink. Surveys for both Dormice and Bats have been carried out. Signs of Dormice have been discovered in Pond Wood and the Country Park contains a lot of suitable habitat. Bats are present and continue to be monitored and where and when appropriate it is suggested that measures are taken such as the installation of bat boxes in woodland to encourage and attract bats.
- The Country Park contains a diverse range of habitats suitable for birds and their management and enhancement through woodland, scrub and hedgerow management is essential. To assist certain bird species for example Owls, it is recommended that nesting boxes are provided.
- Invasive species are present in various parts of the Country Park, in particular Goat's Rue and colonies of New Zealand Pigmyweed and Michaelmas Daisy at Meadow Pond. It is essential to control the spread of such species within the Country Park.
- The Country Park includes two old orchards, which are publicly accessible and support scarce varieties of pear, together with apple varieties typical of south-eastern England. Both orchards have benefited under the previous plan from work (much of it volunteer) to restore existing trees and plant new fruit trees of appropriate provenance and a strong working link with the London Orchard Trust

has been forged. It is recommended that the current community-based approach to their restoration and management continues.

- Seek to create new water bodies and continue to restore/manage existing ponds and wetlands (e.g. *Typha* control).
- Public access – Complete the process of designating currently permissive paths into public rights of way. A significant proportion of the current network of paths and bridleways is in need of restoration and improved/ regular maintenance. Carry out a visitor survey to identify both numbers and reasons for visiting the Country Park. Consider the option of charging for car parking.
- Interpretation – There is a need to review how the Country Park is interpreted to the public to both incorporate new technology and to make savings where possible. The rise in smart phone use in particular needs to be catered for and may offer opportunities for reducing the number of paper leaflets. Consideration should also be given to the future of the Information Centre where currently displays are aging and in need of updating/replacing. There is a need to develop guided trails that make use of new technology – e.g. hand held guides. Existing signage and information boards should be maintained.
- There is scope for additional guided walks to be run by both EEBC staff and the Friends of Horton Country Park.

### **Intrinsic appeal**

Given its urban fringe location, Horton Country Park represents an important and well-used facility with a high level of both nature conservation and recreational value. The present day landscape contains strong elements of the historical land-use pattern including six 'Ancient Woodlands' present before 1600 and the Fifteenth Century West Park Farmhouse, whilst the fabric of the site owes a great deal to the present intricate mosaic of woodland, mature trees, scrub/hedgerow, grassland and other habitats. Further interest is provided by the more recent development of the area as part of the psychiatric hospitals complex with remnants of the former Horton Light Railway. Maintenance of livestock (i.e. horses) also adds to the site's intrinsic appeal.

### **Demonstration of excellence**

The establishment of Horton Country Park in 1974 was mainly for the purposes of providing opportunities for public access to the countryside, in an urban fringe setting. The Local Nature Reserve designation in 2004 sets a priority for management aimed at nature conservation in line with the Council's 'Biodiversity Duty' whilst still retaining a priority of providing good public access. The Countryside and Rights of way Act, 2000, places an obligation on Government Departments, in performing their functions, to give due regard to the conservation of biodiversity. This provides an opportunity to to promote and ensure a greater understanding and appreciation of nature conservation within an urban fringe setting.

## 2.4 Natural Area Context

The site lies within the London Basin Natural Area. Natural Area profiles can be obtained from Natural England.

## 2.5 Identification/Confirmation of Important Features

Site Features	National Importance	Regional/County Importance	Local Importance
<b>1. Habitats</b>			
Ancient and mature semi-natural broadleaved woodlands		*	
Recent plantation woodlands			*
Veteran trees		*	*
Scrub and hedgerows			*
Old orchard		*	
Unimproved neutral grasslands			*
Improved grasslands			*
Open water/wetland			
<b>2. Species groups</b>			
Plants		*	*
Bird assemblage (Red and Amber Listed)		*	
Mammal assemblage (, Dormice, Bats)	*		
Invertebrates ( <i>Clitosthetus arcuatus</i> and Butterflies)	*	*	

Site Features	National Importance	Regional/ County Importance	Local Importance
<b>3. Culture and amenity</b>			
Public recreation			*
Educational opportunities		*	*
Historical and cultural features		*	*
Note: features marked with two levels of importance are considered to lie between categories. For example, in the case of plants, two Surrey-rare species afford county importance, although the assemblage as a whole is considered to be of local importance			

## **2.6 Ideal Long-term Management Objectives**

The ideal long-term management objectives outlined below have been determined on the basis of the foregoing evaluation. This process has also taken account of reviews of historical data and aerial photographs, liaison with various individuals and organisations and new information gained during recent site surveys.

### **2.6.1 Objectives for Nature Conservation**

- To maintain and enhance the ancient and older semi-natural woodland habitat by appropriate management, including restoration of 'coppice with standards', high forest management with selective thinning (but retaining older trees), 'minimum intervention' and the encouragement of a decaying timber resource.
- To maintain and enhance the recent plantation woodland habitat by appropriate management aimed at encouraging native tree species, including selective thinning of non-native trees, replanting with appropriate native stock and creating 'coppice with standards' in selected areas.
- To maintain and enhance the veteran and mature tree population, by, for example, ensuring that excessive trampling or compaction does not occur in the area beneath the canopy of such trees or the bark is not damaged by grazing animals. There should also be some planting of new 'parkland' specimens using appropriate stock.
- To maintain and enhance the unimproved grassland habitat of the former pasture swards. These swards should continue to be managed either as hay meadows (i.e. annual summer cut, with less regularly cut margins maintained for invertebrates), or with a late summer cut every two or three years to maintain areas as grassland and prevent scrub encroachment. Consideration should be given to low intensity grazing and aftermath grazing should continue in cpt 32 Hither West
- To maintain and enhance the improved grassland habitat. This could be achieved through enhancing structure and species composition by less frequent cutting and possible creation of hay meadow areas (where this does not conflict with current amenity management objectives).
- To maintain and enhance the scrub and hedgerow habitat, through activities such as rotational scrub cutting, re-planting and hedge-laying.
- To maintain and enhance the orchards by initiating a programme of planting, pruning and management of the underlying grassland habitat.

- To maintain and enhance open water and associated wetland habitats by appropriate marginal vegetation control, maintaining water quantity and quality, in addition to restoring a number of ponds.
- To monitor and control the spread of non-native species such as New Zealand Pigmyweed, Goat's Rue and Michaelmas Daisy.
- To maintain and enhance the ornithological interest across all habitats present by monitoring the ornithological interest of the site and using this information to inform subsequent habitat management.
- To maintain and enhance habitat suitable for Water Vole populations by ensuring appropriate habitat management and on-going monitoring if a possible re-introduction occurs.
- To maintain and enhance bat populations, with an initial survey phase to establish bat usage of the site, followed by appropriate habitat management.
- To maintain and enhance populations of other mammals by ensuring appropriate habitat management and surveys (e.g. Dormouse).
- To maintain and enhance invertebrate interest across all habitats by first conducting appropriate surveys and then using this to inform subsequent habitat management.
- To maintain and enhance the botanical interest across all habitats present by undertaking monitoring to inform subsequent habitat management.

#### **2.6.2 Objectives for Recreation, Education, Historical and Cultural value**

- To manage/improve public access and recreational use of the Country Park and to provide facilities for members of the public to enjoy in a way that does not conflict with the nature conservation objectives.
- To promote educational and research use in a way that is consistent with maintaining the nature conservation value.
- To maintain and enhance the cultural, historical and landscape value of the Country Park, including features associated with the former psychiatric hospitals.
- To promote and encourage an understanding and respect for the wildlife, landscape and historical value of the Country Park.
- To promote a greater understanding of the archaeology of the Country Park – e.g. Pond Wood.

- To control inappropriate use of the site.

## **2.7 Rationale**

### **2.7.1 Ancient and Mature Semi-natural Broadleaved Woodlands**

A management regime of Hazel Coppice with Oak standards is widely regarded as an appropriate form of management for ancient woodland, as many of the associated flora and fauna are adapted to such conditions (Sutherland and Hill, 1995). It also provides a greater variety of habitat structure that encourages species diversity. Despite the likely gap in its history as a woodland, an earlier assessment of Butcher's Grove provided evidence that parts of the wood were formerly managed as Hazel coppice with Oak standards (Owen and Wilmott, 1995). On this basis, it was decided to reintroduce a coppice cycle into appropriate areas of Butcher's Grove, covering an area of 2.5ha approx.. Between 1984 and 1994, a total of 10 compartments or 'cants' were coppiced and this cycle is now being repeated for a third time and is available for commercial coppicing. During the winter of 2014/15 for the first time a cant was coppiced commercially at no cost to the Council due to the value of the crop and the grant aid available to pay for subsequent temporary fencing to exclude deer. There is also considerable evidence on the ground that parts of Pond Wood and Four-acre Wood were formerly managed as coppice with standards and guided by the previous plan a programme of restorative coppicing with additional planting of Hazel is operating and should continue, enabled by the funding received via the Environmental Stewardship Higher Level Scheme 2010-2020.

At present, these areas of woodland, even in parts of Butcher's Grove, generally still have too many standard trees, causing some shading and impeding coppice re-growth. Therefore, there is still a need to thin the standard trees to an appropriate spacing (between 5-12 trees per hectare) and the sale of this timber may help fund future coppice management. The straighter, more valuable timber trees can be cropped, whilst those with more irregular shape, being less valuable as timber, can be encouraged as mature standards, and are likely to have the greater value as a decaying timber resource in the longer term (valuable habitat to birds and invertebrates). There maybe public concern about such felling, and so the positive side of encouraging the mature tree population should be emphasised. As well as retaining the older specimens of a variety of species, it is also important to leave some younger trees and seedlings to allow recruitment of future standards.

Whilst some of these areas of woodland have a sufficient density of Hazel coppice stools, in other areas they are too widely-spaced and additional planting has taken place and will be required (spacing of stools should be at 3-metre intervals) for future areas of restored coppice. Browsing by Roe Deer in Butcher's Grove became a problem during the 1990's and all areas coppiced in the Country Park since 2010 have been secured using plastic mesh fencing erected by volunteers and paid for by the current agri-environment scheme. The fences are erected using locally produced fence posts and are left in place for two to three years if no Hazel is planted and for up to five years if Hazel whips are planted to protect them from deer browsing.



Rabbits are not thought to be a problem at the present time, but the situation should be closely monitored.

The ideal length of a Hazel coppice cycle is seven to eight years, although a longer rotation can be used for sites where management is aimed solely at nature conservation and not at underwood production. Therefore within the Country Park, where hazel is now being made commercially available there is a need to identify the most suitable areas for short and long rotation. A longer rotation of 10-15 years may be more appropriate (especially if the Hazel is to become sufficiently mature to produce food for Dormice and there is also the aesthetic issue described above of maintaining a springtime carpet of flowers (Bluebells). A minimum cant size of 0.5 ha is recommended; as if they are any smaller, there will be too much shading from the surrounding canopy (the exception is where Dormice are present, where large cants pose a barrier to their movement in the wood).

However, it is proposed that the network of cants continues to conform to that established by the Lower Mole Partnership, for the time being at least. This means continuing with the current cant size of 0.5 acre (approx. 0.2 ha), representing around a third of the recommended minimum of 0.5 ha but more manageable for the volunteer resource currently available. Thus, with a total area of approximately 3ha under coppice management, a 0.2ha cant size allows for the option of a 15 year cycle to completion. Continued monitoring of the ground flora and surveys for Dormice (currently not thought to be present), will inform future decisions on whether a change to a 0.5ha cant size would be more appropriate. There is also potential to thin and restore to coppice with standards management, a further area that previously was managed as minimum intervention. This area lies on the Northern edge of Butcher's Grove with the main path running along its northern edge. This area is the same as those previously identified for restoration of coppice management which lack the large veteran standards of the remainder of the minimum intervention areas within the wood.

The suitable area of Pond Wood is significantly smaller than Butcher's Grove (around 2.6ha), and that within Four-acre Wood smaller still (1.3ha). During the lifetime of the previous plan Pond Wood had a total of four cants created, with three created in Four-acre Wood. In 2015 it was decided that in Pond Wood for a period of at least ten years no more new coppice areas would be created whilst the recently coppiced areas are monitored and similar monitoring of Four Acre Wood is in place.

In addition to 'coppice with standards' some areas of these mature woodlands will continue to be managed as high forest. Such a combination of coppice and high forest increases the overall structural diversity of woods and thus enhances the range of habitat conditions present. The most appropriate areas for such a treatment are those where there is little evidence of past coppice management. This includes parts of Butcher's Grove and smaller areas of Pond Wood and Four Acre Wood. These areas of woodland will primarily be managed to encourage their mature and veteran tree population in areas where there is little suitable material of Hazel or other species to form

coppice. Thus the primary management activities will be thinning and group-felling (but retaining any veteran or near-veteran trees and any decaying timber) in order to promote natural regeneration and increase structural diversity.

Great Wood and Long Grove Wood are slightly different cases to the other ancient woodlands. Great Wood is heavily planted-up and supports a rather species-poor, disturbed ground flora (apparently due to cattle grazing in the 1960s). Whilst it would be possible to re-introduce a coppice with standards regime, the option is currently precluded by the presence of a Heronry within the wood that has expanded since its first appearance in the 1990's to use many of the trees within the wood. Therefore the overall management is to treat as high forest and where possible to thin out the non-native species in favour of planted site-native stock, and also to encourage a small number of larger Oak trees that are present. Possible waterlogging caused by the construction of a large bund on the adjoining golf course has not happened, although the boundary ditch still needs to be effectively maintained to guard against this, and the health of the trees should be monitored. Any proposed thinning should retain any trees used by the Herons and care must be taken not to cause any disturbance to the Heronry (i.e. undertake this work in the autumn).

Long Grove Wood which came within the Country Park boundary in 2006 has two distinct areas, at its northern end where it is very narrow there remains a good field layer, coppiced hazel stools and mature oaks but at the southern end the understory is dominated by Cherry Laurel and the field layer is poor. Removal of the Cherry Laurel followed by planting of hazel are the logical steps in restoring the woodland, with a view to the likely restoration of coppice with standards management in the future.

Finally, some areas of woodland will continue to be managed as 'minimum intervention' stands, the main such area being "Peaked Riding" within Pond Wood. There are certain advantages in allowing some areas of woodland to develop according to natural processes, without management intervention. A good example within the UK is Langley Wood National Nature Reserve in Hampshire (Mountford *et al.*, 1998). Such woodlands represent an important research resource and act as a 'control' against which the impact of active woodland management can be assessed. To be most effective, stands of minimum intervention woodland need to be large and the areas proposed within the Country Park do not therefore satisfy this criterion. Nonetheless, it will be informative to maintain minimum intervention stands within the Country Park, as it will add further to the diversity of woodland conditions present. "Peaked Riding" is of particular interest in having developed through natural processes of succession upon an area that was formerly grassland, (as shown in the first edition Ordnance Survey map) with little management intervention. Despite its small size, it is worthy of retention as an area of minimum intervention woodland, contiguous with the ancient semi-natural woodland stands of Pond Wood, on the basis of its educational and research value.

### **2.7.2 Recent Plantation Woodlands**

These are now over 30 years in age, tend to include a high proportion of non-native tree species and appear mainly to have been planted upon former grassland habitat (one exception is Sandy's Copse, which was planted during the Long Grove Hospital period and is thus much older). Under the previous plan a great deal of management work has taken place enabled by the funding provided by the Environmental Stewardship scheme and European Single Farm Payments Scheme (Basic Payments Scheme 2015 onwards).

Within Sherwood Grove, Hazel and Hornbeam have successfully been coppiced in recent years and this area is therefore appropriate for continued management as coppice-with-standards. Much of Hendon Grove still requires a first thinning and as with the already thinned area is also suitable for coppice management, with supplementary planting of Hazel being required. Godbold's Copse already supports some areas of Hornbeam and a high proportion of Ash regeneration and is also suitable for coppice management, as both of these species can be coppiced, although in this case coppice for firewood with a twenty to thirty year cycle is the option that has been chosen, as is the case in Lambert's Wood and Hollymoor Grove where there is a high proportion of ash. Some planting of surplus hazel has also taken place within these woods in recent years so that they can also provide an under story crop as well. In 2016 Godbold Copse was coppiced and 150 Sweet Chestnut trees were planted. This Ash dominated wood may well fall victim to the rapidly spreading 'Ash Dieback' disease and with very little Sweet Chestnut elsewhere on the site the planting is seen as providing both insurance and also adding variety both ecologically and commercially.

The remaining plantation woodland is being managed as High Forest. Selective thinning, including areas of excessive Ash regeneration, is allowing a gradual replacement of non-native species with appropriate native ones and improving structure. A further benefit will come from managing the margins of these woodlands to improve their nature conservation value. At present, there is often an abrupt woodland edge against the adjoining grasslands. The nature conservation value of this ecotone can be improved by thinning to produce a more gradual transition from woodland to grassland. The extent and diversity of the 'edge habitat' can be further enhanced by scalloping of the woodland margins. A similar technique will be employed to widen the main ride along the edge of Hendon Grove, which is quite narrow at present. Further selective thinning should take place to 'release' the canopy of occasional more-mature individuals of probably self-sown native tree species (e.g. within Porter's Grove).

The generally recent, plantation woodlands around the southern boundaries of the Country Park provide an important screen and need to be maintained as such, with thinning to encourage a dense under storey to help reduce traffic noise. In addition supplementary planting of native species can be employed if needed to fill any gaps. The existing recent planting beside Horton Lane in the area north of the main entrance toward the David Lloyd

Sports Centre could be enhanced by additional planting to further encourage the development of an established woodland fringe along this boundary.

### **2.7.3 Veteran Trees**

In 2011 a veteran tree survey was carried out to both identify and provide a programme of work for each tree. Subsequently starting in 2012 a twenty year works programme was commenced using funds provided by the 2010-20 Environmental Stewardship Higher Level Scheme. The survey revealed veteran trees of varying species located widely and subsequent informal surveys have revealed additional veteran or near veteran trees. Funds permitting it should be a priority to continue with the works programme. It should be noted that as of 2015 Epsom & Ewell Planning Policy recognises all veteran trees as 'Heritage Assets' to be registered with the Ancient Tree Forum.

A small number of veteran Oaks are thought to be associated with old boundary features (e.g. hedgerows). At the present time, some of these lie within overgrown hedgerows, whilst others exist in an open, parkland situation. Such trees are extremely vulnerable to damage to their bark by horses and trampling from their hooves and this is amply demonstrated by existing examples within the Country Park (i.e. several dead and stressed trees occur due to this cause). Any such trees in areas where horses are allowed to graze should be securely fenced at a distance from the trunk, equal to that of the canopy.

Care should also be taken to prevent any other activity that could result in soil compaction around the roots of these trees (e.g. by driving vehicles too close to them). If any events are planned within fields where such trees occur, adequate temporary fencing should be employed to prevent any disturbance such as soil compaction around their root systems. At the present time, several of these trees appear to already be in a somewhat stressed condition and their health will require close monitoring during the course of this management plan.

The current population of 'parkland' Oak specimens is rather limited and even-aged. When these trees expire, there are at present no younger trees developing that could take their place. As well as the potential value that these parkland trees have in terms of their decaying timber resource, they are also important for the aesthetic qualities they bring to the landscape of the Country Park. It would therefore be appropriate to plant a number of young trees, ideally grown from acorns collected from those Oaks already present, which could become parkland trees of the future. These will require individual small fenced enclosures to protect them from grazing by deer and other herbivores, and other forms of damage.

#### 2.7.4 Grasslands

There is historical evidence that some areas of the Country Park were formerly grazing pasture. This is provided by field names on the 1843 Tythe Map such as "Poplar Meadow", "New Pasture", "Lambert's Mead", "Long Pasture", "Carthouse Mead", "Porter's Meadow", "Emmett's Mead" and "Cow Pasture". The mention of the word Poplar further suggests that some areas at least were wet, which would imply land more suitable for grazing than cultivation. At present most of these fields are mainly maintained by an annual summer hay cut, although their composition also suggests they are derived from long established pastures.

The ideal form of management for these old pasture areas would be to reintroduce cattle grazing. There is much available evidence which shows that for invertebrates in particular, grazing is the preferred option for grassland maintenance (Kirby, 1992), as it maintains a wide variety of structural elements to the sward. In contrast, hay cropping produces a sudden, drastic modification of habitat conditions that many invertebrates will be unable to survive. Whilst hay-making artificially encourages a population of plant species tolerant of this management regime, the majority of these plants are still encouraged within a grazing regime, but merely with a lower frequency.

Whilst there is a strong ecological case for reintroducing cattle-grazing to the old pastures, there are many obstacles to be addressed before this could be achieved and currently it is felt that it is not a practical option with the resources available. In addition whilst traditional hay cropping may not be the best option it is not without its benefits and it is also now incredibly rare, having declined nationally by 97%. If a late crop is taken then many flowering plant and insect species can complete their life cycles and butterflies in particular can benefit. The current arrangement where the Equus Equestrian Centre based on the Country Park takes the hay crop at no cost to the Council is both financially attractive and sustainable in terms of transport/energy use. If not grazed the ideal regime would be a rotational cut once every two or three years, retaining un-mown margins to provide a continuity of habitat for invertebrate populations. However, the longer grassland that this would encourage represents a fire risk in dry summers (both accidental and deliberate). One area of the Country Park where such a risk is seen as especially high are the old pasture grasslands adjacent to the golf course in the north of the site. As well as the issue of public safety, fire would also be extremely damaging to the invertebrate interest. Therefore, until such a time that grazing could become practicable in this part of the Country Park, the old pastures (with the exception of Emmett's Mead and Blacklands – see below) will be hay cropped annually with a late cut from mid July onwards to reduce the fire hazard. Un-mown borders for invertebrates can still be retained as this is considered to represent a lower fire risk than if the whole field was un-cut and is also currently a requirement for receiving funds from both the 'Basic Payment Scheme' and Environmental Stewardship. (S. Cocker, pers. comm.).

The remaining areas are managed to benefit invertebrate and small mammal populations. This is achieved by managing the structural diversity of the sward by rotationally mowing (in late summer/autumn), on a cycle spanning a period of between 2-5 years. To achieve maximum diversity, different parts of the same field are cut in different years. Whilst many areas of coarse grassland can resist colonisation by scrub for many years, such a treatment will further resist a tendency for these swards to develop into scrub. Included within this category of management is one of the old pasture fields (Emmett's Mead), in the extreme south of the Country Park. This area is considered to represent less of a fire risk than the cluster of old pastures in the northern part of the Country Park (S. Cocker, pers. comm).

There are further areas of grassland where the early stages of scrub colonisation are already taking place. This occurs within quite an extensive area of Hendon Grove, where only very limited tree planting has taken place. This intricate mosaic of coarse, tussocky grassland and young scrub/trees, as well as being good invertebrate habitat, is especially important for a range of birds. This mosaic is being maintained by periodic mowing and scrub management.

The variation in grassland management regime is also providing the opportunity to monitor the impact upon invertebrate populations of the different types of grassland management and provide an educational resource. It should also be noted that in one meadow 'Hither West' aftermath grazing by horses for six weeks post hay cropping has been taking place for several years and will be monitored to see if there is a consequent increase in plant diversity.

In some circumstances it may be considered appropriate to enhance the botanical composition of restored or re-created haymeadows by introducing new plant species (e.g. from seed) into the sward. As well as adding to the cost, unless carefully sourced, this also risks the introduction of plant material that is not native to the locality. However, there are no immediate plans for such intervention and it is proposed to allow colonisation by 'natural' means to occur, encouraging elements of the local grassland flora and provide an opportunity for this process to be monitored.

The areas of grassland in the vicinity of the Country Park car park are of necessity mown intensively throughout the summer months, with the emphasis being upon amenity management/use. However, the Event Field, west of Keeper's Cottage is now required for only occasional amenity use. As recommended by the previous plan approximately two thirds of the area has been converted to traditional haymeadow, providing the opportunity to monitor changes in botanical composition that develop after this change in management has taken place (see Section 2.7.14 below). A summary of the current grassland management regimes is shown on Map 9.

Finally, other grasslands are currently heavily-grazed year-round by horses belonging to the Equestrian Centre on fields that are either within their lease or are rented from the Council. Whilst botanically the fields would benefit from

a reduction in stocking density, it is not thought to be either practical or reasonable to request such an option which would have a significant impact on the business.

### **2.7.5 Hedgerow and Scrub**

A wide range of hedgerow types are present, with variation in characteristics such as age, species composition and management history. To simplify management, four categories of existing hedge were defined for the purposes of implementing the previous plan and whilst this was useful it is possible to simplify even further and define just two categories: intact managed hedges and over-grown unmanaged hedges. The previously categorised over-grown hedges that can be considered as linear scrub can be described as scrub and managed appropriately. A third category comprises areas proposed for new hedges. The different types of hedge are shown on Map 8 along with scrub.

#### **Intact managed hedges**

Approximately 1.1km of more recently-planted hedgerow have either already been, or are suitable for traditional hedgelaying. This is the most appropriate continued management technique for these features (as a 'demonstration' of the adverse effects of flail-cutting, one section of the field adjacent to Godbold's Copse should continue to be managed by this technique). Hedges to be managed in this way should ideally be allowed to reach around 4m in height when they should still possess many stems under 15cm in diameter. Where stems are larger than this, it may be more appropriate to re-shape the hedge using a tractor-mounted circular saw (Adams, 2005). Currently volunteers lay a section of hedge annually and are currently (2016) working to a twelve year rotation with tractor mounted flailing of the path sides required to maintain public access.

#### **Unmanaged over-grown hedges**

This category covers approximately 5.8km of overgrown hedge. Some features are remnants of once fine Elm hedges that succumbed to Dutch Elm disease. Some of these would benefit from trimming back a proportion of the dead Elm trees to encourage new suckers to grow from the base, and the planting up of any gaps with species such as Hawthorn and Blackthorn. In addition, the Blackthorn hedge alongside the old railway line adjacent to Field Pond needs maintaining by cutting back to its original line to prevent encroachment into the drainage ditch. Some hedges are extremely overgrown and 'gappy'; often being reduced to a line of mature trees, although some have encroached sideways onto adjacent 'verges'. These hedges are appropriate for a complete restoration, cutting back to the original hedge-line, retaining any mature trees, and re-planting the gaps. Restoration of old hedgerows should be a particular priority for any surviving boundary features evident on the 1843 Tythe Map. Examples include the overgrown hedge that now lies on the eastern margin of Lambert's Wood and the overgrown hedge on the opposite side of the track beside Hendon Grove. These could be restored by coppicing and re-planting as necessary.

Although not strictly a hedge, the avenue of tall Hornbeams alongside the lane leading to Keeper's Cottage, are too closely-spaced at present and need thinning out, in addition to planting new trees into a few gaps and future management of this location as linear scrub is more practical.

### **Unmanaged over-grown hedges that can be considered as linear scrub features**

Approximately 2.7km of hedge, primarily associated with the old pasture fields, have developed into wide bands of (primarily Blackthorn) scrub. Ongoing restoration of these features is taking into account the the landscape character of the fields and also recognises their importance as habitat features for fauna especially birds and importantly the Brown Hairstreak butterfly which lays its eggs exclusively on young Blackthorn. Restoration is taking place by clearing short sections on rotation cutting back to the centre-line on alternating sides, to create a series of wide scallops, thus maintaining a continuous horizontal outline.

### **Proposed new hedges**

There is potential to plant new hedges, the previous plan proposed approximately 2.7km of new hedges. For example, beside many of the wooden fences around the amenity grassland areas in the south-east of the Country Park. However, the cost of maintaining hedges in the future has to be budgeted for and it was felt that for the time being the existing fencing was preferable both in terms of effectiveness as a barrier and cost of maintenance. A location that could benefit is the boundaries of Slip and Fly Meadows beside the main North South path. A hedge would help reduce disturbance from dogs off leads. The locations of all new hedges are shown on Map 8.

### **Other scrub**

Several areas of scrub, apart from that associated with old hedgerows, would benefit from rotational coppicing (e.g. as potential nesting habitat for Nightingale). For example, within the old paddock area (keepers Shaw) adjacent to Keeper's Cottage. There are further, smaller areas around the old Piggery (Barn Platt) and also Nightingale Corner (again some of these may have originated as boundary features) See Map 8.

## **2.7.6 Old Orchards**

Orchards were once a common feature of the farming landscape, but many have now been grubbed out in favour of other agricultural land uses. There is both educational and ecological benefit from developing the two old orchards as a community resource, with visitors encouraged to sample the fruit for themselves.

Existing trees are being managed and retained as long as possible, as they represent traditional varieties of fruit that are no longer commonplace. As



many of the trees are now in a senescent condition, both orchards will also benefit from the planting of new stock, again of traditional varieties appropriate to this part of Surrey. Lambert's Orchard has been extended into the adjacent portion of Lambert's Mead and there remains an opportunity to extend further. The grassland within both orchards is being maintained through occasional rough mowing (although a long-term aim would be to graze with cattle).

### **2.7.7 Open Water and Wetland**

Existing ponds represent an important component of the range of habitats occurring within the Country Park. In time, marginal and aquatic vegetation (e.g. Bulrush) will extend across the entire area of a pond, reducing the area of open water and cutting out light. Therefore there is a need to periodically manage the marginal vegetation in all ponds to maintain a balance. This work should be done in the autumn and any plant material removed should be piled up beside the pond to allow aquatic invertebrates chance to make their way back into the pond.

It is important to maintain the quality and quantity of water within the ponds and watercourses of the Country Park. There is little control over the quality of water entering the site, although one source, namely that originating at the Great Pond on Epsom Common, is at least partially under the influence of Epsom and Ewell Borough Council. Elsewhere, there are potential sources of pollutants along this watercourse (e.g. the run-off from B280 and also the former West Park Hospital site now mainly a housing estate (Noble Park) with some residual NHS use). There is also a potential risk of pollutants coming from urban run-off via the Orchard Balancing Pond and Poplar Pond (however these recent balancing ponds will tend to strip out pollutants, if present).

As there is only a limited scope to influence the quality of water entering the Country Park, there is therefore a need to monitor the quality of water inputs so that action can be taken if necessary. The construction in 2015 of the two off-line balancing ponds and wetland should assist in trapping pollutants and preventing them from reaching further down stream. The balancing ponds in particular are designed to work during periods of high flow when pollutants from local roads caught in silt traps are most likely to be washed out. Further opportunities for the creation of wetlands do exist along the Greenman Stream and if opportunities arise should be considered.

Within the Country Park itself it is important to ensure that all catchment areas are maintained free of any potential pollutants, with special care being taken to ensure that no chemicals are used adjacent to watercourses and ponds. In time, all ponds and watercourses will require de-silting.

Biological monitoring is another very important aspect of pond and wetland management critically so for ponds like Field Pond which has a population of Great Crested Newts. Monitoring can provide essential information on the health of a pond or wetland and the timing and types of management work that may be required. Another example of the importance of monitoring is the

possible presence of Water Voles which have very specific habitat requirements.

In addition to the existing ponds listed below there is potential for the creation of a small new pond on the eastern edge of Hollymoor Grove, beside the track and roughly opposite Long Grove Orchard. This location is a natural low point and floods during wet weather. A pond in this location would also assist in managing water that often floods across the track.

Additional recommendations for specific ponds are as follows:

### **Pond Wood Pond**

This water body is currently very shaded by overhanging trees and the redevelopment of West Park Hospital has unfortunately seen a great deal of silt deposited. The pond would benefit from thinning of the surrounding woodland to enable greater light penetration through the tree canopy (in part for Water Voles – see below). In addition if funds can be found the ponds first de-silting since its restoration in 1994 is now overdue including a reduction in the amount of Reed Mace (*Typha latifolia*). The pond should also continue to be monitored for Great Crested Newts.

### **Meadow Pond**

At the time of its creation in 1986, this pond was provided with a spillway at its downstream end. This has received little attention since this time and now requires refurbishment. Meadow Pond is also now in need of work to reduce the extent of Reed Mace (*Typha latifolia*) and Yellow Flag Iris (*Iris pseudacorus*) which has increased to around one third of the ponds area since last being cleared in the late 1990's. This pond also has problems with alien/invasive plant species (see 2.7.8).

### **Field Pond**

The Great Crested Newts discovered during a pond dipping session in 2006 have focused attention on Field Pond and in particular it's rapid decline of invertebrate fauna due to disturbance by dogs. The fencing of the pond in 2014 has so far proved highly effective but the fence and gates need to be maintained along with the notices explaining the function of the fence and the issue dog's cause. In addition the woody marginal vegetation on the pond edges has become very overgrown and casts too much shade. Recent work by volunteers to clear the pond margins should continue and thereafter be maintained to allow sufficient light to reach the pond. The pond also has a tendency to dry out completely in the summer and whilst one half of the pond was de-silted in the 1990's the time has now come to desilt the other half of the pond taking care not to impact on the roots of the large over hanging near veteran oak on the Southern side of the pond. This pond is also of potential importance to Water Voles, whose management is being considered under Section 2.7.10.

### **Lambert's Pond**

This pond, situated within Lambert's Orchard, was restored (2013 & 2015) by the Lower Mole Partnership retaining the small weir constructed by volunteers in the early 1990s. Restoration included de-silting and removing considerable amounts of bankside vegetation and opening up a long lost northern arm. Mature trees have been retained, including the large veteran Weeping Willow, which has naturally pollarded itself in recent years. Monitoring for Great Crested Newts and maintenance of marginal vegetation should now be a priority for the ponds management.

### **Poplar Pond**

PoplarPond is a balancing pond created when Chessington Road was developed in to a dual carriage way. There is a control valve designed to allow the slow release of excess water in to the Horton Stream and this needs maintaining annually to stop it becoming over grown and inaccessible. The Pond retains water all year round. However, it is becoming increasingly shaded. A path leading in to the Country Park from Chessington Road goes around one side of the pond and is fenced due to a steep slope and the fence will require occasional repair/maintenance.

### **Butcher's Grove Pond**

This tiny seasonal pond is located in the heart of the wood. The pond is noted on the 1870 1<sup>st</sup> edition Ordnance Survey map. The pond tends to dry up in summer but it could be de-silted and increased in size to help it avoid drying out completely. In addition the removal of some over hanging vegetation to allow more light should be considered.

### **Great Wood Pond**

This is another small seasonal pond like the one described in Butcher's Grove above and would benefit from the same proposed actions.

### **Lambert's Orchard Balancing Pond**

This pond was created to take excess surface water runoff from the Clarendon Park housing estate built on the former Long Grove Hospital site in the late 1990's/early 2000's. The stream which flows north from the southern end of the Country Park under the housing estate is diverted around the side of the balancing pond and when flows increase water flows over a lip in to the balancing pond. Both the stream the pond and the island separating them have become very overgrown. The pond is almost completely covered by Reed Mace (*Typha latifolia*), the island is slowly scrubbing over and the stream is hidden under rank native vegetation. The stream may have value for water voles and should be cleared and kept clear, the island would benefit from areas of grass being retained to create a scrub grass mosaic and the balancing pond would benefit from rotational clearance of 50% of the Reed Mace.

### **Upper Norris's Wetland**

In 2015 approximately one half of the Upper Norris's hay meadow was turned in to a wetland with two on-line ponds, several shallow scrapes and extensive bare ground. Biological monitoring of both flora and fauna will hopefully yield interesting information and should be seen as monitoring priority for 2017 to 2027.

### **Event Field Balancing Ponds**

During 2015 two large off-line balancing ponds were constructed and whilst designed to be shallow dry depressions designed to take excess surface water runoff both incorporate deeper sumps in the middle of the depressions which it is hoped will retain water long enough in to the summer season for pond life to thrive. In addition the depressions have been left as bare earth to vegetate naturally. Monitoring of both the bare ground and sumps should be a priority for 2017 to 2027.

### **Water Courses (See 2.7.10 Water Voles)**

**Note:** any dredging of ponds and watercourses will require the appropriate Environment Agency consents.

### **2.7.8 Invasive Non-native Plant Species**

New Zealand Pigmyweed (*Crassula helmsii*) is present in an area at the margin of Meadow Pond. At present, the extent of the plant is relatively small and it has remained stable and not spread for ten years. Its presence should be monitored as the stability it is exhibiting in coexisting with other native marginal plants is of interest and to some extent atypical. That said the ideal course of action would be to carefully remove with the most appropriate method of removal being hand-weeding, taking care not to leave detached fragments which would colonise other parts of the water body. A further reason for the careful eradication of *Crassula* from Meadow Pond is the risk it poses of spreading to the Golf Course Pond and the possibility of it eventually spreading into the Bonesgate Stream.

The small area of Michaelmas Daisy (*Aster novi-belgii*) established in an area of the marginal swamp on the fringe of Meadow Pond appears to have disappeared (2016). If it reappears the most effective control is by hand-weeding.

A large colony of Goat's Rue (*Galega officinalis*) that existed in compartment 34 (Slip Meadow) has been tackled several times during the 2006-16 plan and almost eradicated. However, it is still present and requires monitoring and further efforts to eradicate it. If it persists it may be necessary to treat with an appropriate herbicide (e.g. "Round Up").

### **2.7.9 Ornithological Interest**

Horton Country Park has a well-recorded and diverse avifauna, reflecting the diversity of habitat conditions. In order to ensure that management is compatible with this interest, it is important that monitoring of wintering and breeding bird populations is undertaken. This information can then be used to make appropriate refinements to the management regime.

### **2.7.10 Water Voles**

Survey work during 2000 (Newman, 2000) indicated the presence of a population of Water Voles on 'Green Man Stream' in the area between the West Park Hospital Boundary and Pond Wood. Subsequent searches during 2006-16 have indicated they may no longer be present, most likely due to predation by Mink which have been seen very occasionally nearby (Stew Pond Epsom Common C2012). Nevertheless the habitat remains suitable and the recent construction of the Upper Norris's Wetland should create a significant habitat enhancement.

In view of the high conservation priority attached to Water Voles, it is important that all watercourses within the Country Park are managed as habitat for this species. The main habitat requirements include a well-developed marginal vegetation fringe, with a low level of tree shading, and fairly constant water levels. Opening up pond and watercourse margins allows more light to reach these areas and encourage more prolific vegetation growth, thus, tree shading needs to be reduced along watercourses, including around the margins of Pond Wood Pond and along the length of 'Green Man Stream' (this includes those sections of this watercourse which pass through Pond Wood, where shading can be reduced by creating open glades). Whilst significant work to clear overshadowing scrub from the banks of the Green Man Stream both in Lower Norris's and Pond Wood has taken place, there are still sections requiring clearance. Maintenance of the cleared sections including the annual mechanical cutting of bank side vegetation to control scrub encroachment in Lower Norris's should be continued. Regular monitoring for the presence of Water Voles should also continue to inform future management.

### **2.7.11 Bats**

Limited surveys to-date have provided some evidence that the Country Park may be of importance for this group of mammals. A programme of baseline surveys is required to inform management aimed at bats. In the 2006-16 plan the imminent demolition of a large former Long Grove Hospital building in land being transferred to the Country Park was highlighted due to the knowledge that it provided a feeding roost for Brown Long-eared Bats. A licence to demolish was required and the mitigation was the retention of the buildings boiler room, converted in to a bat hibernaculum. The 'Bat Roost' as it is known is located in Compartment 34 (Slip Meadow) and to date has been successful

in providing shelter for small numbers of Brown Long-eared Bats with the last check carried out in 2016. Along with regular monitoring, maintenance of the building and the information lecturn should be a priority along with ensuring that surrounding vegetation in Slip Meadow and in particular scrub is not allowed to impede access for bats and people to the building.

**2.7.12 Other Mammals** Dormice: Surveying for Dormice using both boxes and tubes has been ongoing for a number of years. Results to date have proved inconclusive; however the habitat remains favourable and they are known to exist nearby on both Epsom & Ashted Commons. The extensive areas of both Hazel understory within the 'Ancient Woodlands' and hedgerows with adjoining scrub make their presence likely and it is recommended that surveying continue for what can be a very elusive but protected small mammal. If found their presence will be a key factor in future management of habitats where they are present.

**Other Small Mammals:** Currently (2016) there are recent records for Pond Wood and Lambert's Wood following a student project in 2015 that was looking for possible differences between older woodland and younger woodland. The project confirmed the presence of Wood Mouse, Field Vole, Common Shrew and Pigmy Shrew. There are however no records for small mammal populations within the grassland habitats. Given the ongoing work to restore coppice woodland and management taking place in the grassland habitats it is recommended that monitoring should take place to determine which species are present and if possible to look for differences in both species and numbers between different habitats and the impact of current management techniques.

**Mustalids:** The most commonly seen native mustalid on the Country Park is the Weasel, no sightings of Stoats have been reported in recent times and whilst Otters are making a come back in Surrey the habitat in the Country Park makes their presence at any stage highly unlikely. There has been a resurgence nationally in Polecat populations and it is not unlikely that they will re-colonise the Country Park in the near future. Perhaps one day in the more distant future the recovering Pine Martin population will also re-colonise the Country Park. Of more concern is the impact of Mink on Water Voles as described above and this non-native species and voracious predator also has an impact on other species, for example King Fishers and other birds. It is recommended that if Mink are thought to be present, it is a priority to catch and destroy them.

**Roe Deer:** The Country Park forms a part of the territory of a sizeable Roe Deer Population. Whilst Roe Deer are a native species and an important part of the ecosystem, the lack of predators can lead to deer over browsing on vegetation which can have negative ecological and economic effects. It is not advised that any attempts are made to manage the population but to prevent damage to recently coppiced or planted woodland it is recommended that the practice of temporarily fencing areas is continued. Vigilance against poaching should also be maintained.

**Badger:** There are several badger setts on the Country Park anecdotal evidence suggests that numbers are relatively stable following their re-appearance in the 1980/90's. It is recommended that setts are monitored and care is taken not to publicise the location of setts.

**Grey Squirrel:** Whilst this non-native species does have negative impact on some tree species and bird populations it is not thought practical to control numbers as surrounding populations would rapidly re-colonise.

**Fox:** Foxes are present and may well be more urban in nature being supported by the food opportunities provided by the surrounding development. Nevertheless the presence of a top predator may well play an important role in helping to maintain the balance of the local ecosystem an effect that may be worthy of future study. It is recommended that sightings of foxes and den locations are recorded.

### 2.7.13 Invertebrates

The recent C2005 discovery of the nationally rare ladybird *Clitosthetus arcuatus* underlines the need for baseline invertebrate surveys covering habitats such as ancient woodland, mature/veteran trees and associated decaying timber, plus grassland and open water habitats. In 2010 an invertebrate survey of rank grassland and hedgerows concluded that the associated invertebrate population was of a very high quality and provided confirmation that maintaining substantial areas of managed rank grassland is a very important part of habitat management within Horton Country Park.

Whilst planned woodland and grassland habitat management does takes into account the likely needs of invertebrate populations, the encouragement and appropriate management of the dead and decaying timber resource and rank grassland is of particular importance. It is recommended that a range of appropriate actions includes:

- Retain natural features of decay in mature and veteran trees wherever possible (subject to issues of public safety).
- Retain as much fallen timber *in situ* (not brash from felling) as possible.
- Create log plies from smaller timber. Whilst not as valuable as large, decaying timber, they do represent significant invertebrate habitat. The logs should be tightly packed together and have a hollow in the centre. They should be situated at the edge of a ride or clearing, so that one side is in the sun, whilst the other is shaded.
- Create occasional brash piles, ideally from tightly bundled brushwood (to encourage a constant humidity within the pile).
- Thinning of standards should seek to retain those trees that are likely to have the greatest value as future veteran specimens (e.g. signs of decay and irregular shape, as opposed to tall and straight).
- Timber cut for commercial purposes should be removed immediately, as this will help to prevent colonisation by invertebrates (cover-up first if to be left on site for any time).

- Allow some growth of Brambles to partially shade dead wood.
- Ensure adequate nectar sources in the vicinity (e.g. Hawthorn, Hogweed and Ivy).
- Continue the programme of rotational cutting and clearing (maximum 5 year rotation to prevent scrub encroachment)
- Protect ant hills by use of appropriate machinery e.g. brushcutters rather than tractor and flail.

Maintain On-going monitoring to review the effectiveness of management will allow any necessary changes to be made, in the light of monitoring results.

It is recommended that during the period 2017-2027 all ponds are surveyed to determine their invertebrate populations and that a survey of invertebrates associated with decaying timber takes place to compliment similar surveys on Epsom and Ashted Commons and to determine if the Country Park has the same species present, indicating a wider presence locally than just Epsom & Ashted Commons.

#### 2.7.14 Botanical Interest

The Country Park remains quite well provided with botanical recording information at the present time. The primary requirement continues to be for monitoring to investigate the effectiveness of planned management (e.g. the composition of grasslands under varying mowing regimes). The aim is to help to evaluate the relative merits of annual hay-cropping as opposed to swards which are cut on the longer rotation of between 2-5 years. It would also be valuable to monitor grassland in the Event Field (Section 2.7.4) following the change from frequent amenity mowing to a single annual hay cut.

A further priority for botanical monitoring is within the ancient/mature woodland stands, in particular to assess the effects of the coppice cycle upon ground flora composition.

Fixed-point photography can play an important role in botanical monitoring (e.g. Roworth, 2004) with the advent of digital photography it is much less expensive to establish. Suggested targets for fixed-point photographic monitoring are outlined below:

Feature	Recommended minimum number of points	Notes on location
Old pasture grasslands	2 per field	Furze Farm Meadow; Orchard Meadow; Oziers
Long-rotation cut grasslands	2 per field/feature	Event Field (south); Henry Stone Lower Noriss's; Fly Meadow; Slip Meadow
Hay meadow swards	2 per field	Lawn Barn Meadow; Great Ridings; Cart House Mead



Feature	Recommended minimum number of points	Notes on location
Coppice woods	TBA	Butcher's Grove, Pond Wood, Four Acre Wood,
High Forest*	TBA	Butcher's Grove, Pond Wood, Four-acre Wood, Great Wood (from margins/boundaries)
Minimum intervention woodland*	TBA	Butcher's Grove, Pond Wood, Stone's Copse (from margins/boundaries)
Plantation woodlands (other than coppice)	TBA	Hendon Grove (part); Lambert's Wood; Hollymoor Grove; Porter's Grove;
Woodland fringe	TBA	Emmett's Mead; Little Westcott's; Laundry Copse; Car Park field; Cart House Mead
Mature trees	TBA	As appropriate – Parkland specimens; large hedgerow trees; Great Wood boundary/Heronry trees (ideally with winter and summer views taken in each year of recording).
Hedgerows	TBA	Ideally at least two per individual feature
Orchards	TBA	At least two per orchard
Scrub	TBA	Little Acres (and adjacent 'unnamed'); Barn Platt
Ponds and watercourses	TBA	At least two per individual water body and watercourse
*Fixed-point photography has limited applications in closed canopy woodland, although woodland rides/glades can be monitored.		

Photographic points should be fixed wherever possible, using existing features such as fence posts. Where necessary, 'permanent' wooden marker posts could be erected. Elsewhere, bearings and distance measurements could be taken from features such as individual trees. In addition, all monitoring stations should ideally be recorded with differential GPS. Frequency of re-photographing will depend upon the precise nature of the monitoring work, but in the absence of any other requirement, it is recommended that stations be re-photographed at 5-yearly intervals.

### 2.7.15 Public Access and Recreation

Whilst in 2013 a major aim of the previous plan was achieved in dedicating many of the paths and tracks as public rights of way and signing them, their condition is now poor along significant stretches. Two locations were restored in 2015 but several other long stretches remain, particularly in the North of the site. It is a priority to seek the funding required to restore the path and

track network and to maintain the signage installed in 2013 by the Lower Mole Partnership and ensure access for all users. In addition public footpath 26 and the two main links from it into the Country Park were not included pending possible upgrading to bridleway standard as part of improvement works associated with the re-development of West Park Hospital. In 2016 approx 50% of FP26 was surfaced but the width remains too restricted to enable bridleway status. This important route and its links in to the the Country Park that would encourage residents in Noble Park to use the Country Park should when the opportunity arises be widened to allow bridleway status and to become a safe multi-use route. .

Improve access for the visually impaired around the site and the possibility of providing hand-held audio-guides should be explored (this could also facilitate the provision of educational and other information to this user group).

Benches along paths are a well used and appreciated facility and there is a need to maintain them. The benches are constructed and installed by the Lower Mole Partnership volunteers often using timber produced on the Country Park and there is scope to increase the number of benches if resources permit.

The main car park is another area where regular maintenance of the surface is required, although a long-term aim is to provide this with a metalled road surface. Vegetation around the parking bays needs to be periodically cleared to keep these areas accessible. Associated furniture within and around the car parking area, such as picnic tables need to be maintained (and possibly new ones provided), as does fencing around the dog-free area and the height barrier (but see below). The number of bins available should be kept under review and it is recommended that the current policy of placing bins at all main entrances is continued. Regular checks need to be made to check for and remove litter/dumping, and finally, a procedure needs to be in place to ensure that the gates are locked and re-opened at the appropriate times.

There have in the past been problems with the security of the Country Park's boundaries. This primarily relates to inappropriate use of the site (see Section 2.7.20 below). To maintain site boundary security a number of measures are proposed. Firstly it is important that effective liaison is maintained with the Park's neighbours, including the Golf Course, Equestrian Centre and Hobbledown. The risk of breaches of boundary security would be reduced by increasing the current levels of on-site presence. This might be achieved in future through the possible creation of a new permanent post (see Section 2.7.20). It is crucially important that the various locked access gates are not accidentally left unlocked in particular the gates by 'Primrose Cottage and the gate leading to the 'Burning Area'.

## **Dog Control**

There are a range of ecological, visual, and visitor safety/enjoyment issues relating to dogs and their owners which are negatively impacting the Country Park and which pose a significant management challenge. Before identifying

the key issues it is important to realise that dog owners can play a very positive role in helping to manage the Country Park, in many cases they are the most frequent visitors to the site and therefore an invaluable set of 'eyes and ears' Below the issue are described.

- Dogs off lead:-There is little doubt that dogs off the lead that are allowed free reign across the Country Park cause disturbance to wildlife. Dogs are often seen chasing deer which is both stressful for the deer, poses a road safety hazard and is upsetting to many. Along path edges there is evidence of long term impacts to vegetation through both constant trampling and nutrient enrichment from defecation. Ponds in particular are a magnet for dogs with owners not realising that their dogs seemingly innocent swim is one of many taking place every day, year in year out. Disturbance to the bed of the pond and the consequent turbid water impacts the invertebrate life, bird life is disturbed and there can even be serious erosion problems where dogs regularly enter the pond. In 2012 a sum of £20,000 had to be found to repair the dam to Great Pond on nearby Epsom Common, where erosion caused by dogs was threatening the integrity of the dam.
- Multiple dog walking:- The problems outlined above are often compounded by owners who bring more than one dog, bringing control issues which can be very distressing to other visitors, dog owners, horse riders and cyclists.
- Commercial dog walkers:- Again the problems outlined above are compounded but with an additional aspect where businesses are being run that impact the site but make NO contribution to the management of the site and control of the issues identified.
- Dog fouling:- Whilst dog fouling is still an issue with potential long term impacts regarding nutrient enrichment there has been a significant improvement in recent years on most public open spaces in the Borough. It is now more generally accepted that owners pick up after their dogs and there is a peer pressure to conform. Bins are placed at the main entrances for owners to use.

Identifying and understanding the issues are one aspect of the problem the other is the challenge of practical solutions that involves and does not exclude dog owners who form a very significant part of the community. Below are some potential approaches that could/should be investigated/implemented under this plan.

- Dogs off lead:- It is possible via 'Dog Control Orders'/'Environmental Improvement Orders' to insist that dog owners keep their dogs on the lead and in some places in particular where ground nesting birds are an issue this approach has been implemented. For Horton Country Park there are two major issues set against the general feeling of dog walker's preference for letting their dogs off the lead. These are that whilst ground nesting birds such as Skylark might choose to nest in one of the meadows areas it is unlikely for reasons associated with the nature/scale of the habitat rather than disturbance by dogs. In addition the level of presence on the site would make enforcing a dogs on lead

‘Control Order’ very problematic. For this reason it is recommended that implementing a policy of educating dog walkers about the long term need to reduce disturbance is the only practical approach and holds out the prospect/advantage of working with dog owners rather than against them.

- Multiple dog walking:- Again it is possible to go down the ‘Dog Control Order’ route and in this case it might be slightly more straightforward to enforce because a lot of dog walkers would be likely to agree with some form of control. As with dogs off leads it is possible to take an educational approach but the control issues associated with multiple dog walking do seem to warrant some kind of limit. A suggested upper limit of 3 dogs per person would seem reasonable. Again however, a crucial factor will be the assessment of whether there is the ability to enforce such a rule?
- Commercial dog walkers:- There is little doubt that serious consideration should be given to charging a licence fee to commercial dog walkers and their numbers and frequency of visits limited to a sustainable level. That said Dog owner’s in general but commercial dog walkers in particular, represent a possible opportunity to significantly improve the level of organised presence on our open spaces and could play a role in policing dog walkers in general.

Dog fouling:- Whilst as described there have been noticeable improvements in the behaviour of dog owners and improved measures put in place there is still room for improvement. Aside from the unpleasant nature of dog faeces the two key concerns are public health and the long term chemical impact on soils. A continuing programme of highlighting the issues should be maintained using noticeboards and press articles, with recourse to prosecution if necessary for a persistent offender

#### **2.7.16 Education, Site Interpretation, Research and Volunteer Groups**

The previous plan highlighted the potential for encouraging greater educational and research use of the Country Park via the creation of a “Resource Room” within the West Park Farm Complex, to provide a base for activities offered to schools and other educational groups. Unfortunately resource constraints have so far thwarted the creation of a ‘Resource Room’ and schools educational use has as described above declined. The likely re-development of the West Park Farm buildings could still afford the possibility of providing a multi-use room that would enable the Country Park to offer an educational facility and it is recommended that this option be considered.

As previously mentioned the Country Park does not currently provide a children’s play space, yet there is the potential to offer such a space and if designed as a natural play space to connect children with nature it would have a significant educational benefit. If the funding were to become available it is recommended that this option be investigated.

Whilst paper leaflets and the information centre remain available the rise in the use of the internet and in particular mobile technology for accessing information and maps is calling in to question the need to continue expenditure on the older forms of interpretation. It is recommended that the information currently available in leaflets is made more accessible to mobile technology and the need for providing information on paper is kept under review.

Work undertaken by various volunteer groups, such as the Lower Mole Partnership and the Countryside Team Volunteers makes a very significant contribution to the management of the Country Park. It is therefore very important that the contribution of these groups is maintained and further enhanced through promoting these types of activities and securing appropriate on-going funding to support the work of volunteers. Currently tools stores and a workshop for the Lower Mole Partnership and EEBC Countryside Team volunteers working across the Borough's open spaces are provided by buildings within the West Park Farm complex. Any redevelopment must take in to account this current function and aim if possible to improve the facility.

#### **2.7.17 Cultural, Historical and Landscape**

The present day Country Park has an attractive landscape character and has a strong cultural and historical context. A fundamental component of the Park's landscape character derives from its well-developed hedgerows and field boundaries. It is therefore important that management of these features, as well as being focussed upon providing nature conservation benefit, seeks to maintain the current visual balance. For example, mature/wide hedgerows should continue be cut on one side of the centre line only, to avoid unattractive, abrupt steps being made in its outline.

A further important visual feature is the fringe of woodland along the southern and western margin of the Country Park. This has an added function of also helping to reduce noise levels within the Park. Planned woodland management aims to maintain the visual character of these woodlands and enhance the shrub layer density to increase its effectiveness as an acoustic barrier.

Although relatively few in number, the scattering of mature/veteran field and hedgerow Oak trees also represent an important visual component of the Park's Landscape. Measures to prolong the life of these trees have already been outlined (Section 2.7.3), and new specimens should be planted in appropriate areas, which in the long-term, will ensure a continuity of this important landscape feature.

The old pasture fields also represent an important component of the cultural landscape of the Country Park and the maintenance of these features is appropriate on these grounds in addition to their nature conservation value.

The track bed of the former hospital light railway (The Horton Light Railway) provides the Country Park with a durable spine to the path network and embankments, junctions, fencing and the occasional abandoned rail are all still visible. Interpreting the history of the line to the public provides an interesting and popular way of both describing the history of the former hospitals and current site management for nature conservation. It is recommended that an annual walk and information about the history of the line remain available both in paper leaflet form for the time being and also on the Councils web site.

Veteran trees have both nature conservation and cultural value and should be managed to prolong their lives and maximise their value. It is recommended that the current programme of works is maintained and that a further survey to identify trees that may have been missed is carried out.

### **2.7.18 Interpreting the Site**

Measures to promote a greater understanding of the site's ecology, history and cultural aspects should continue, including the current programme guided walks. Opportunities to develop the range of interpretative literature, such as that dealing with the natural history of the site could be explored. Several new interpretation panels are required at entrance locations leading in to the Country Park from the re-developed former hospital sites.

The Friends of Horton Country Park is a valuable organisation which has helped in raising the awareness of the Country Park among local residents. It provides a platform for promoting many of the educational and other activities, and also has encouraged volunteer participation in both the management of the Country Park and also in biological recording (e.g. birds). It is important, therefore, that support is provided to encourage both the continued existence of the 'Friends' and the further development in the scope of its activities.

An important platform for promoting all aspects of the Country Park in general has been the Park's Home Page on the Epsom and Ewell Borough Council website. For many, this will be a first port of call to find out information about the Park. It is therefore important that resources are available to further develop the website to consolidate and further extend the scope of this function.

The small Information Centre (former dairy) next to West Park Farmhouse was set up with assistance from the Friends of Horton Country Park in 2006. Now ten years later both the décor and displays are in need of some maintenance. The Centre remains unmanned and its location away from the car park and main walking routes means that it receives a fairly low level of use. One of the two rooms is given over entirely to leaflets and as explained elsewhere the rise of online information does call in to question the need to provide expensive paper leaflets. The possible re-development of the West Park farm complex may afford an opportunity to provide a more cost effective interpretative facility.

It is also important to maintain and improve communication between the Local Nature Reserve and the three associated Centres. The possibility of an Annual Forum Meeting involving all stakeholders within the Country Park may represent a way forward on this issue.

### 2.7.19 Archaeology

There is a need for appropriate archaeological surveys – e.g. to investigate the status of “Peaked Riding” and the area downstream of the pond within Pond Wood.

### 2.7.20 Inappropriate Use

A common factor involved in many of the inappropriate activities outlined in Section 1.5.3.3 is the level of on site presence/patrols. Often, the most effective method of educating users in this regard is to have staff on site to draw people’s attention to them through a face-to-face conversation, rather than, for example, placing visually intrusive signs around the site that would in all probability be ignored. Currently the level of presence is low with Ranger Service patrols taking place at most once per day and often less frequently. If the financial resources can be found increasing the level of on-site presence within the Country Park should be considered. Ideally this should take the form of the creation of a new permanent post to enable more effective control of access issues and could be made more cost effective by increasing the scope of the role to include small-scale maintenance tasks relating to public access and nature conservation.

## 2.8 Identification of Operational Objectives and Outline Prescriptions

Operational Objective	Outline Prescription
Maintain and enhance the ancient and older semi-natural woodlands	<ul style="list-style-type: none"> <li>• Continue to restore coppice cycle in appropriate areas, including thinning of standards and supplementary planting of Hazel (Butcher’s Grove, Pond Wood, Four Acre Wood, Long Grove Wood). Consider using horses to extract timber to conserve ground flora</li> <li>• Continue to manage selected areas as high forest (Great Wood, Butcher’s Grove, Pond Wood, Four Acre Wood, Long Grove Wood)</li> <li>• Maintain woodland paths (Butcher’s Grove, Pond Wood, Four Acre Wood)</li> <li>• Manage selected areas as ‘minimum intervention’ (Butcher’s Grove, Pond Wood,</li> </ul>

Operational Objective	Outline Prescription
	<p>Four Acre Wood, Long Grove Wood, Great Wood)</p> <ul style="list-style-type: none"> <li>• Thin non-native plantings and re-plant with appropriate native stock (Great Wood, Long Grove Wood)</li> <li>• 'Release' thin scattering of larger oak trees (retain hybrid Midland Hawthorns) in Great Wood</li> <li>• Continue to monitor woodland ground flora in ancient woodlands managed as coppice-with-standards</li> </ul>
Maintain and enhance the recent plantation woodland	<ul style="list-style-type: none"> <li>• Manage as high forest gradually thinning out non-native species and replacing with site-native stock (Porter's Grove, Laundry Copse, Primrose Copse)</li> <li>• Maintain and create new areas of 'coppice-with standards': Sherwood Grove – continue coppicing existing established stools of Hazel/Hornbeam and thin existing standards. Godbold's Copse – create firewood coppice by thinning existing Ash/Hornbeam/Oak. Note Sweet Chestnut planted in 2016 as insurance against Ash Dieback disease, therefore future use may change from firewood to wood products such as fencing stakes. Hendon Grove – create Hazel coppice from first thinning of Ash/Hornbeam/Lime/Oak standards and undertake supplementary planting of Hazel. Lambert's Wood – create firewood coppice from by thinning existing Ash/Willow. Hollymoor Grove – create firewood coppice from by thinning existing Ash/Willow. Supplementary plant a Hazel understory in all above named woods at 2m density. Consider planting Sweet Chechnut as a replacement for Ash if 'Ash Dieback' disease takes hold.</li> <li>• Thin woodland margins to allow restoration of ancient hedgerow (Lambert's Wood)</li> <li>• Create a rotational scrub edge to eastern boundary of Hendon Grove</li> <li>• Widen verge beside main track and scallop edges (Hendon Grove)</li> <li>• Retain young scrub/grassland mosaic adjoining golf course through periodic mowing</li> </ul>



Operational Objective	Outline Prescription
	<p>and clearing scrub(Hendon Grove)</p> <ul style="list-style-type: none"> <li>• Maintain areas of woodland as a visual screen to the site (to include additional planting of native tree species and enhancing the shrub layer to reduce noise beside Horton Lane at West Park Farm and along boundary with West Park Hospital)</li> <li>• Encourage as 'minimum intervention' woodland (Stone's Copse)</li> </ul>
Maintain and enhance the mature/veteran tree population	<ul style="list-style-type: none"> <li>• Continue existing programme of veteran tree work and carry out further surveys to identify existing and near veterans and add them to the programme of work</li> <li>• Prevent compaction around roots, or grazing damage to mature trees</li> <li>• Plant new 'parkland' specimens from appropriate native stock (including young trees grown from acorns collected from existing on-site veteran Oaks)</li> <li>• Retain and encourage mature Oak trees forming Burnham's Grove and boundary trees on opposite side of field (Great Ridings)</li> <li>• Continue to monitor possible impact of golf course bund upon mature trees supporting Heronry, along boundary of Great Wood</li> </ul>
Maintain and enhance the grassland habitat	<ul style="list-style-type: none"> <li>• Maintain old pasture areas (excluding Emmett's Mead and Blacklands) with an annual summer hay cut, retaining un-mown margins</li> <li>• Manage further areas of grassland as hay meadow with an annual summer hay cut (retaining un-mown margins), under a low input regime (e.g. no introduction of seed) (Great Ridings, Event Field)</li> <li>• Manage additional areas of longer rough grassland on a rotation of between 2 and 5 years, depending upon circumstances (Fly Meadow, Slip Meadow, part of Henry Stone Lower Noriss's and the old pasture of Emmett's Mead, plus parts of Lambert's Mead, Tenzle Hedge, Event Field, Nightingale Corner and Burnham's Grove/Meadow)</li> <li>• Maintain scrub/grassland mosaic in Hendon Grove by periodic mowing and scrub management</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• If possible reduce grazing intensity in some areas of grassland under permanent horse-grazing (Stone's Field, Black Field, Upper Noriss's)</li> </ul>
Maintain and enhance the scrub and hedgerow habitats	<ul style="list-style-type: none"> <li>• Maintain 'intact managed hedges' primarily using the traditional technique of hedge laying, flailing of sides to maintain good public access will also be necessary (leave some flailed sections to demonstrate the adverse effects of flailing)</li> <li>• Restore overgrown, scrubby or defunct hedgerows by various techniques such as coppicing to ground level, cutting back dead Elms, planting-up of any gaps, retaining any mature trees and where appropriate, cutting back to the original hedge-line.</li> <li>• Rejuvenate overgrown, scrubby hedgerows ('unmanaged over-grown hedges that can be considered linear scrub features') by rotational cutting back to the centre-line on alternate sides, in a series of wide 'scallops' and retaining any mature trees. Rotation periods will vary but approx. a period of 8-10 years.</li> <li>• Create new sections of hedgerow (e.g. along the path side boundary of Slip and Fly Meadows to reduce disturbance from dogs by planting appropriate native species such as Hawthorn, Blackthorn, Guelder-rose and Field Maple</li> </ul>
Maintain and enhance the old orchards	<ul style="list-style-type: none"> <li>• Maintain existing trees, plant appropriate new stock of regional provenance, mow surrounding grassland (long term aim of reintroducing grazing)</li> <li>• Continue to extend Lambert's Orchard into Lambert's Mead</li> <li>• Continue to develop both Lambert's Orchard and Long Grove Orchard as 'Community Orchards'</li> </ul>
Maintain and enhance open water and associated wetland habitats	<ul style="list-style-type: none"> <li>• Continue to control marginal vegetation in existing ponds</li> <li>• Thin woodland surrounding Pond Wood Pond to enable greater light penetration through tree canopy (and extend woodland glades along "Green Man Stream" to open up for Water Voles)</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• Monitor quality of water entering the site's watercourses.</li> <li>• Monitor and manage the new (2015) wetland in Henry Stone Upper Norris's and the balancing ponds in the Event Field. Ensure the wetland remains inaccessible to both people and dogs.</li> <li>• Manage the vegetation on the banks of the Green Man stream in Henry Stone Upper and Lower Norris's to ensure scrub is controlled and conditions suitable for water voles are maintained.</li> <li>• If appropriate, develop existing balancing ponds as pollutant traps by managing vegetation.</li> <li>• Maintain water levels through periodic de-silting of ponds and watercourses.</li> <li>• Develop policy for use of chemicals on site with regard to protecting catchments from potential pollutants.</li> <li>• Restore Meadow Pond Spillway</li> <li>• Control bankside erosion caused by dogs as appropriate</li> <li>• Restore a number of ponds and thin surrounding tree cover where appropriate (including Meadow Pond, Field Pond, Lambert's Orchard balancing pond, Poplar Pond balancing Pond, Butcher's Grove Pond, Great Wood Pond and Pond Wood Pond – see Map 7)</li> <li>• Create a new pond in Hollymoor Grove</li> <li>• Obtain E.A. consents for any dredging of ponds/watercourses.</li> </ul>
Monitor and control the spread of non-native species	<ul style="list-style-type: none"> <li>• Control New Zealand Pigmyweed and Michaelmas Daisy at Meadow Pond</li> <li>• Monitor and continue to, control Goat's Rue in Slip Meadow</li> </ul>
Maintain and enhance the ornithological interest	<ul style="list-style-type: none"> <li>• Monitor breeding and winter bird populations</li> </ul>
Maintain and enhance Water Vole populations	<ul style="list-style-type: none"> <li>• Manage bank-side marginal vegetation along watercourses by cutting in appropriate locations as described above.</li> <li>• Continue monitoring for Water Vole populations</li> </ul>

Operational Objective	Outline Prescription
Maintain and enhance bat populations	<ul style="list-style-type: none"> <li>• Undertake baseline survey to establish bat activity</li> <li>• Undertake appropriate management (e.g. provision of bat boxes)</li> <li>• Monitor to establish effectiveness of management activities</li> <li>• Continue to monitor the bat roost in Slip Meadow (Brown Long Eared, 2015 three individuals recorded)</li> </ul>
Maintain and enhance populations of other mammals	<ul style="list-style-type: none"> <li>• Monitor mammal populations (including Dormice)</li> <li>• Undertake baseline Dormouse survey (Butcher's Grove, Sherwood Grove, Four Acre Wood, Hendon Grove and Pond Wood)</li> </ul>
Maintain and enhance invertebrate interest	<ul style="list-style-type: none"> <li>• Undertake baseline and repeat surveys of relevant habitats (e.g. ponds, ancient/mature woodland, mature/veteran trees, rank grasslands and hay meadows)</li> <li>• Undertake appropriate monitoring to inform management (e.g. annual cut and 2-5-year mown longer grasslands)</li> <li>• Encourage and manage dead and decaying timber resource</li> </ul>
Maintain and enhance the botanical interest	<ul style="list-style-type: none"> <li>• Monitor botanical composition of annually mown grasslands as compared with those cut on the longer 2-5 year rotation</li> <li>• Monitor botanical composition of ancient/mature woodland areas, especially with regard to coppice cycle</li> <li>• Monitor botanical composition of ponds and stream channels</li> <li>• Undertake fixed-point photography</li> </ul>
To manage public access and recreational use	<p><b>Main Tracks/Public Rights of Way (PROW):</b></p> <ul style="list-style-type: none"> <li>• Maintain and improve signage where necessary</li> <li>• Maintain/replace existing wooden benches and install new benches in appropriate locations if resources permit.</li> <li>• Maintain surfaces</li> <li>• Maintain trackside vegetation</li> <li>• Ensure that public rights of way are open and accessible at all times</li> <li>• Investigate possibility of securing PROW</li> </ul>

Operational Objective	Outline Prescription
	<p>status for the section of former Horton Light Railway route leading to public path 26</p> <ul style="list-style-type: none"> <li>Investigate possibility of upgrading public path 26 to bridleway status (NB outside of Country Park boundary)</li> </ul> <p><b>Minor paths:</b></p> <ul style="list-style-type: none"> <li>Mow grassland paths as appropriate</li> </ul> <p><b>Access for people with disabilities:</b></p> <ul style="list-style-type: none"> <li>Maintain the path around Pond Wood to allow for wheelchair use</li> <li>Investigate the possibility of providing internet accessible audio guides for the visually impaired.</li> </ul> <p><b>Car Parking and Equestrian Centre access:</b></p> <ul style="list-style-type: none"> <li>Check surface annually and repair as necessary</li> <li>Regular litter/dumping checks – remove as necessary</li> <li>Ensure car park is locked dawn-dusk</li> <li>Maintain the height barrier</li> <li>Maintain vegetation in parking bays</li> <li>Maintain furniture – e.g. picnic tables</li> <li>Replace with tarmac surface in long-term</li> </ul> <p><b>Dog Control:</b></p> <ul style="list-style-type: none"> <li>Investigate ways of reducing the impact of dog walking on the sites ecology and visitors with a focus on education and multiple dog walking</li> <li>Maintain fencing around dog free area</li> <li>Ensure regularly emptied litter bins are provided at main entrances</li> </ul> <p><b>Boundaries/site security:</b></p> <ul style="list-style-type: none"> <li>Regular checks (increased on-site presence, possibly through the creation of a new permanent post)</li> <li>Liaise with neighbours on site boundary security issues (including the Golf Course, Equestrian Centre and Hobbledown)</li> <li>Ensure appropriate gates locked at all times</li> </ul> <p><b>Barbecues:</b></p> <ul style="list-style-type: none"> <li>Keep use of barbecues under review, and monitor the impact on the use of the car park</li> </ul>

Operational Objective	Outline Prescription
	<p>by other users</p> <p><b>Emergency access and other ‘services’:</b></p> <ul style="list-style-type: none"> <li>• Ensure 24-hr contact numbers are provided at main (locked) access points</li> <li>• Maintain up to date information on location of ‘services’ and appropriate emergency procedures</li> <li>• Provide map to emergency services</li> </ul>
To promote educational and research use consistent with maintaining the nature conservation value	<ul style="list-style-type: none"> <li>• If/when resources permit encourage use by school and other educational groups</li> <li>• If/when resources permit develop the resource room</li> <li>• Encourage the use of the site as a training venue for both rural skills and biological monitoring</li> <li>• Promotion and support of volunteers for both habitat management and biological monitoring</li> </ul>
To maintain and enhance the cultural, historical and landscape value	<ul style="list-style-type: none"> <li>• Maintain visual balance of existing hedgerow features</li> <li>• Maintain wooded visual screen along southern and western boundaries</li> <li>• Ensure continued existence of free-standing mature trees in an open landscape setting (including planting of new specimens)</li> </ul>
Interpreting the site (to promote and encourage an understanding and respect for the wildlife, landscape and historical value of the site)	<ul style="list-style-type: none"> <li>• Conduct open days, guided walks and other family oriented events if resources permit</li> <li>• Prepare appropriate literature but also consider use of internet accessible information as substitute or to compliment paper.</li> <li>• Provide two new interpretation panels (McKenzie Way and Footpath 26 entrances)</li> <li>• Encourage and support the Friends of Horton Country Park.</li> <li>• Maintain and promote Horton Country Park Home Page and other related features on the EEBC website (e.g. ‘virtual tour’)</li> <li>• Review the need and function of the Information Centre.</li> <li>• Establish an annual forum meeting to include all relevant stakeholders if resources permit.</li> <li>• Children’s play, Investigate the possible installation of a natural play space to connect children with nature</li> </ul>

Operational Objective	Outline Prescription
To promote a greater understanding of the archaeology of the Country Park	<ul style="list-style-type: none"> <li>• If/when resources permit commission appropriate archaeological surveys (e.g. Pond Wood/Peaked Riding)</li> </ul>
To control inappropriate use of the site	<ul style="list-style-type: none"> <li>• Undertake enforcement as appropriate – possible creation of new permanent post to enable more effective control of access issues and carry-out small-scale tasks relating to public access</li> </ul>

### Possible sources of funding

Resources for management of the Country Park are likely to be available from the following principal sources:

- EEBC core budget
- Revenue from timber sales (to help fund management of coppice woods)
- Funds (S106/CIL) from former West Park Hospital redevelopment
- Agri-environment schemes/grant aid

## STAGE THREE - PRESCRIPTION

The following tables outline management proposals across Horton Country Park during the period 2017/18 to 2027/28. The format follows that given by Crowther and Groome (2005).

The various adopted management compartments are shown on Map 7. The area column outlines the total area (or length of feature) over which each prescription is proposed if applicable. Prescriptions are defined under the heading “proposed work”.

Outline costs are given for each year of the management plan. Year 1 relates to the 2017/18 tax-year, year 2 to 2018/19 etc. Costs have been calculated, during the first five years, and then during the second five-year period, on the following basis. Where ‘No Cost’ is recorded it should be noted that this is where the value of wood products or hay exceeds the operational cost of the contractor, or volunteer costs are not applicable, or volunteer work negates cost or work is included in the in house grounds maintenance schedule (GM) or Operation Services waste management (OPSER) or Ranger Service (RSER):

	First five years	Second five years
Contractors	£170/person/day	£200/person/day
Volunteers	£5/person/day	£6/person/day
Ecological Consultants	£250/person/day	£275/person/day
Arboricultural Contractors	£250/person/day	£275/person/day

### Notes:

Volunteers: In addition, use of volunteer machinery (e.g. chainsaw/brush cutters) is £50/day and the hire of heavier equipment (e.g. mini excavator/dumper) is approx. £100/day.

Where the choice is volunteer/contractors the deciding factor will be availability of volunteers, who would normally be the first choice. In all such cases, costings have therefore been based throughout on the preferential use of volunteers/in house staff/GM.



Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce	
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10		
Maintain and enhance the ancient and older semi-natural woodlands:														
1	11.0	<b>Butcher's Grove:</b> <ul style="list-style-type: none"><li>Coppice 1 of the 10 cants every year as appropriate.</li><li>Thin standards to equivalent density of 10 trees per acre within coppiced area.</li><li>Continue to plant or layerHazel as required to achieve 3-metre spacing of stools.</li><li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li><li>Continue to manage 4.5ha as high forest (thin to encourage regeneration of trees and ground flora where appropriate.</li><li>Continue to manage 3.9ha as minimum intervention. *If resources allow, 30% thin medium aged oaks up to 25m from the main path within the minimum intervention area along side railway line to east of junction to provide both improved woodland edge and woodland floor light levels.</li></ul>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Contractor /Volunteer
			No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Contractor /Volunteer	
			£150	£150	£150	£150	£150	£180	£180	£180	£180	£180	Saff/ Volunteer	
			£250	£250	£250	£250	£250	£280	£280	£280	£280	£280	Staff/ Volunteer	
				£500		£500			£600		£600		Contractor	
			*£500			*£500							Contractor	

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce	
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10		
8	6.4	<b>Pond Wood:</b> <ul style="list-style-type: none"><li>Continue to manage the 10 coppice cants set up during the previous plan. Monitor the regeneration of the 4 cants coppiced upto 2015 to ensure that Pond Wood retains areas that provide a show of Bluebells and other springtime flowers. Re-commence coppicing of remaining cants if ground flora responds as expected. NOTE this may mean waiting a full cycle of 8-10 years. (to include thinning of standards to equivalent density of 10 trees per acre) No Cost if carried out by LMP</li><li>Plant new Hazel to achieve 3-metre spacing of stools</li><li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li><li>Manage .35ha running along the western side of the stream as high forest (following 30% thin in 2014)</li><li>Manage 2.6ha as minimum intervention</li></ul>	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	Contractor Volunteer
			£150	£150	£150	£150	£150	£180	£180	£180	£180	£180	Staff/volunteer	
			£250	£250	£250	£250	£250	£280	£280	£280	£280	£280	Staff/Volunteer	
													Staff/Volunteer	
													Staff/Volunteer	

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
4	1.9	<b>Four Acre Wood:</b> <ul style="list-style-type: none"> <li>Coppice a total of 1.3ha of wood – 3 cants of 0.4ha approx., representing one cant in every third year (to include thinning of standards to equivalent density of 10 trees per acre)</li> <li>Plant new Hazel to achieve 3-metre spacing of stools</li> <li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> <li>Manage 0.7ha as high forest (consider 30% thin)</li> </ul>			£300		£300		£350				Contractor /volunteer
					£50		£50		£50				Volunteer
					£250		£250		£250				Volunteer
							£500						Contractor
46	1.5	<b>Great Wood:</b> <ul style="list-style-type: none"> <li>Manage veteran and near veteran oaks. (take care not to disturb Herons or their roosts – see rationale)</li> <li>Plant hazel understorey when/ where appropriate</li> <li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> <li>Restore pond by clearing overhanging vegetation and de-silt</li> </ul>						£1000				£1000	Contractor
							£150						Volunteer
							£250						Volunteer
								£2000					Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Maintain and enhance the recent plantation woodland:													
33	2.9	<b>Hollymoor Grove:</b> <ul style="list-style-type: none"><li>Monitor regeneration of coppice for firewood NB Ash Dieback. Replant if necessary with suitable native species</li><li>Monitor minimum intervention area, consider thinning and planting native understorey to screen golf fairway.</li><li>In 2017/2018 80% thin remaining third cant to create firewood coppice and plant hazel understorey.</li><li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li></ul>	£2000										Staff/ volunteer
			£250										Staff/ Volunteer
													Contractor /Volunteer
													Staff/ volunteer
25	1.6	<b>Porter's Grove:</b> <ul style="list-style-type: none"><li>Continue programme of 25% thinning and scallop woodland edge to improve structure</li><li>Plant native understorey</li><li>Manage veteran oak as per schedule.</li></ul>		£1000									Contractor
					£300								Volunteer
							£300						Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
45	1.4	<b>Lambert's Wood:</b> <ul style="list-style-type: none"> <li>Monitor regeneration of coppice for firewood NB Ash Dieback. Replant if necessary with suitable native species</li> <li>80% thin remaining fourth cant to create firewood coppice and plant hazel understorey</li> <li>Erect and maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> <li>Restoration of ancient hedgerow along eastern boundary</li> </ul>			£2150								Staff/ volunteer
					£250								Contractor /volunteer
						£500							Staff/ volunteer
													Volunteer
2	3.5ha of wood approx	<b>Hendon Grove:</b> <ul style="list-style-type: none"> <li>Widen verge beside main track and scallop woodland edges</li> <li>Coppice newley created coppice areas if regrowth permitts</li> <li>Maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> <li>Thin remaining non coppiced areas and plant native understorey where appropriate.</li> </ul>	£500		£500		£500						Volunteer
							No cost		No cost		No cost		Volunteer
							£250		£250		£250		Staff/ volunteer
				£1000	£1000								Contractor /Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
31	0.6	<b>Godbold's Copse:</b> <ul style="list-style-type: none"> <li>Manage new coppice cant created from existing native broadleaves and re plant failed Sweet Chestnut (planted 2016)</li> <li>Monitor Ash standards for Dieback and fell and re-plant with oak standards if necessary</li> <li>Maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> </ul>		£200	£150								Staff/ volunteer  Staff /volunteer  Volunteer
3	1.4	<b>Sherwood Grove:</b> <ul style="list-style-type: none"> <li>Manage new coppice areas created from existing native broadleaves and planted hazel understorey</li> <li>Maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> </ul>		£0		£0		£0		£0			Contractor/ Volunteer  Staff/volunt eer
11	0.8	<b>Stone's Copse:</b> <ul style="list-style-type: none"> <li>Manage as minimum intervention woodland</li> </ul>											Staff/ volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
15, 16, 18, 19, 21, 23, 24	3.2	<b>Horton Lane/southern boundary stands:</b> <ul style="list-style-type: none"> <li>Continue programme of 25% thinning in Laundry Copse and scallop woodland edge to improve structure where possible in other stands</li> <li>If resources permit manage veteran trees along boundary with footpath 26</li> <li>Following thinning supplementary planting of native understory to enhance value as visual and sound barrier bordering Horton lane.</li> <li>Maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> <li>Carry out first coppice of Carthouse Copse</li> </ul>	£500	£1000		£500						£500	Contractor /volunteer  Contractor  Volunteer  Volunteer  Volunteer
52	1.8	<b>Long Grove Wood:</b> <ul style="list-style-type: none"> <li>Clear Laurel to conserve and enhance ground flora</li> <li>Plant and fence hazel understory</li> <li>Coppice, &amp; plant hazel in area not affected by Laurel</li> <li>Maintain deer fencing up to the point planted saplings and stools are no longer vulnerable</li> </ul>		£250	£250	£250							Volunteer
				£350	£350	£350							Volunteer
							£300			£300			Volunteer
							£250			£250			Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Maintain and enhance the veteran and mature tree population:													
10, 16, 28, 30, 32	N/A	Plant new parkland specimens using appropriate native stock, including young trees grown from acorns collected from existing veteran Oak trees. Provide appropriate protection (fencing).			£1000			£1000			£1100		Volunteer
All	N/A	Retain and manage the veteran and mature tree population via the existing veteran tree management plan.	£2500	£2500	£2500	£2500	£2500	£2500	£2500	£2500	£2500	£2500	EEBC staff/arboricultural contractor
All	N/A	Carry out a survey of all veteran and near veteran trees to include trees known to have been missed by previous survey and management plan.		No cost	No cost					No cost	No cost		EEBC staff
Maintain and enhance the grassland habitat:													
18, 19, 41, 42, 47, 48, 49	12.6	Investigate and keep under review long-term possibility of reintroducing cattle grazing onto areas of old pasture											EEBC staff
5, 9, 14, 16, 19, 32, 41, 42, 44, 47, 48	14.7	Manage, with annual late summer hay-cut (retaining un-mown borders) – charge Equus equestrian centre for taking hay crop.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Equus

ANNEXE 2



Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
6, 7, 9, 16, 18, 19, 34, 35, 36, 37, 40, 44, 45, 47, 49, 53	11.1	Manage areas of longer grassland on a rotation of between 2 and 5 years, depending upon circumstances. Involves use of volunteer operated brushcutters and tractor mounted flail collectors which currently involves hire expenses	£300	£300	£300	£300	£300	£350	£350	£350	£350	£350	Volunteer /staff /contractor
2	1.6	Maintain young scrub/grassland mosaic adjoining golf course by periodic cutting and clearing	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer /staff
<b>Maintain and enhance the scrub and hedgerow habitats:</b>													
30, 40	1.1km approx	Maintain existing hedgerow:											
		<ul style="list-style-type: none"> <li>Hedgelaying (50m length each year)</li> <li>Flail cutting of hedgerow sides to maintain public access Nb Cabbage Field, golf course and track to Burning Area, flail top &amp; sides for demonstration purposes vs layed sections (500m approx.) In house via GM not all in one year</li> </ul>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
			No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	GM

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
	2.7km approx	Re-shape overgrown, 'linear scrub' hedgerow sections (cut back to centre-line on alternate sides in wide scallops; retain any mature/veteran trees). Cut on rotation so scallop either side of original scallop once rejuvenated. Approx 6-10 years											Volunteer
	5.8km approx	Rejuvenate overgrown hedgerow sections (e.g. tidy up dead Elms and plant into gaps with Blackthorn and Hawthorn; restore to original line, retain any mature trees and re-plant).	£1000		£1000		£1000		£1200		£1200		Contractor /Volunteer
<b>Maintain and enhance the old orchards:</b>													
35, 44, 45	2.3	Continue to maintain existing older trees	£500		£500		£500		£550		£550		Contractor/ Volunteer
35, 44	2.3	Maintain & plant new trees using appropriate stock NB use of Tenax	£100		£100		£400		£120		£120	£450	Volunteer
45	1.2 approx	Further extend Lambert's Orchard into Lambert's Mead (again by planting appropriate stock) NB use of Tenax		£150		£150		£1200		£180		£180	Volunteer
35, 44, 45	3.5 approx	Develop both orchards as a community resource	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/volunteer
<b>Maintain and enhance open water and associated wetland habitats:</b>													
8, 9, 44, 48, 51	N/A	Control marginal vegetation in all existing ponds (depending upon rates of vegetation growth). Initial priorities are <i>Typha</i> in both Meadow Pond and Pond Wood Pond	No cost		No cost		No cost		No cost		No cost		Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	As appropriate	Dredging operations: <ul style="list-style-type: none"> <li>De-silt ponds and watercourses (as appropriate) Pond Wood, Meadow Pond (NB repair of spillway), Field Pond, Butcher's Grove Pond and Great Wood Pond</li> <li>Obtain EA consent for above works as appropriate</li> </ul>		£2500 (Field)			£3000 (Meadow)			£3000 (Pond)			Volunteer/Contract  EEBC staff
21	N/A	Pond Wood Pond (and Green Man Stream within Pond Wood): <ul style="list-style-type: none"> <li>Thin surrounding woodland to improve light penetration as part of management for Water Voles</li> </ul>		No cost		No cost		No cost					Volunteer
48	N/A	Meadow Pond: <ul style="list-style-type: none"> <li>Restore spillway</li> </ul>					£5000						Contractor
9	N/A	Field Pond: <ul style="list-style-type: none"> <li>Maintain fence, gates and signs to prevent dogs entering the pond</li> </ul>			£500					£500			Volunteer
1, 15, 44, 46	N/A	Restore two small former ponds (Butcher's Grove and Great Wood)			£1000			£1000					Volunteer
As appropriate	Whole site	Monitor water quality of water entering site's watercourses (check for visible signs and smell)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteer

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	N/A	Upper Norris's Wetland and Withy Bed Balancing Ponds: <ul style="list-style-type: none"> <li>Ensure these new features are maintained and function as intended including ensuring NO public access to wetland</li> <li>Monitor and manage the natural succession of vegetation</li> </ul>			No cost				No cost				Staff /Volunteers  Volunteer
33		Create new small pond in Hollymoor Gove.				2000							Volunteer
<b>Monitor and control the spread of non-native species:</b>													
48	N/A	Meadow Pond: <ul style="list-style-type: none"> <li>Monitor and control any return of New Zealand Pigmyweed (by careful hand-weeding)</li> <li>Monitor and control any return of Michaelmas Daisy (by hand weeding) NB not present in 2016</li> </ul>		No cost		No cost		No cost				No cost	Staff /volunteer  Staff /volunteer
37	1.8	Fly Meadow: <ul style="list-style-type: none"> <li>Monitor Goat's Rue and control using hand weeding</li> </ul>	No cost		No cost		No cost				No cost		Volunteer
<b>Maintain and enhance the ornithological interest:</b>													
All	Whole site	Monitor breeding and winter bird populations	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
<b>Maintain and enhance Water Vole populations:</b>													

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
8, 9, 13, 14, 40, 41, 47, 49	N/A	Manage marginal bank-side vegetation along appropriate sections of watercourse (scrub-thinning along each section every 5years) NB GM Flail bankside in Lower Norris's	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer /GM
8, 9, 13, 14, 40, 41, 47, 49	N/A	Survey/monitor for Water Vole populations											Staff /Volunteer
<b>Maintain and enhance bat populations:</b>													
All	Whole site	Baseline survey of bat activity	£500		£500		£500						Staff /Ecological consultant /volunteer
As appropriate	As appropriate	Management specifically to encourage bats (e.g. bat boxes, maintenance of the Slip Meadow bat roost building and surrounding vegetation)		£500		£500			£600		£600		Volunteer /contractor)
As appropriate	As appropriate	Monitoring success of management for bats (NB the Slip Meadow bat roost building)							£550		£550		Staff /Ecological consultant
<b>Maintain and enhance populations of other mammals:</b>													

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
	N/A	Undertake further Dormouse surveys within Butcher's Grove, Sherwood Grove, Four-acre Wood, Hendon Grove and Pond Wood (being done on a voluntary basis at present). Cost = boxes	£100		£100				£120			£120	Staff /Volunteer
Whole site	As appropriate	Monitor small mammal populations (mainly to be done by EEBC staff/volunteers following suitable training in first year) Cost = purchase of traps & bait	£500	£20	£20	£20	£20	£25	£25	£25	£25	£25	Staff /volunteer
<b>Maintain and enhance the invertebrate interest:</b>													
	As appropriate	Undertake baseline invertebrate surveys: <ul style="list-style-type: none"> <li>Ancient/mature woodland habitats</li> <li>Veteran trees</li> <li>Open water habitats</li> </ul>	£2000		£2000		£500						Ecological consultant /Staff
	N/A	Monitor invertebrate populations in grassland communities under different management regimes to inform subsequent management, baseline = 2010 survey		£2000									Ecological consultant
As appropriate	N/A	Retain, encourage and manage the dead and decaying timber resource for the benefit of invertebrate populations <ul style="list-style-type: none"> <li>Create log piles (one each year) in vicinity of veteran trees</li> <li>Create brash piles (one in each wood per year)</li> <li>Retain fallen timber in-situ where ever possible</li> </ul>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
<b>Maintain and enhance the botanical interest:</b>													

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	N/A	Monitor botanical composition of grasslands under differing mowing regimes (annual as compared with those cut on longer rotation – i.e. 2-5yearly). NB Event Field where regular amenity mowing changed to an annual hay cut		No cost			No cost				No cost		Staff /volunteer
	19.3	Monitor botanical composition of ancient woodland field layer (e.g. impact of coppice cycle in Butcher's Grove, Pond Wood and Four-acre Wood)	No cost				No cost				No cost		Staff /volunteer
As appropriate	N/A	Fixed point photographic monitoring (to help in part with botanical monitoring – see above two prescriptions)											Staff /volunteers
To manage public access and recreation:													

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	Whole site	Main tracks/public rights of way:											
		• Maintain existing non PROW signage	£250		£250		£250		£300		£300		Volunteer
		• Improve signage where necessary		£250		£250		£270		£270		£270	Volunteer
		• Maintain/replace and install new wooden benches if resources permit.	500	500	500	500	500	600	600	600	600	600	Volunteer
		• Restore worn out surfaces of tracks (based on 8km of tracks at £35/metre)	£28k	£28k	£28k	£28k	£28k	£28k	£28k	£28k	£28k	£28k	Contractor /volunteer
		• Maintain vegetation beside tracks. In house GM some volunteer scope	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	I No cost	No cost	GM /volunteer
		• Ensure that public rights of way are open and accessible at all times. In house GM some volunteer scope	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	GM
		• Investigate possibility of securing PROW status for the access route to Noble Park and bridleway status for FP26	No cost	No cost	No cost								Staff
		• Investigate the possibility of widening FP 26 if BW status possible NB not EEBC owned LMP = delivery option											Staff /volunteer
	N/A	Minor paths:											
		• Mow grassland paths. In house GM	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	GM



Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	N/A	Access for people with disabilities: <ul style="list-style-type: none"> <li>Ensure path round Pond Wood is maintained and suitable for wheelchair use. Cost covered above</li> <li>Investigate the possible provision of internet accessible audio guides' for the visually impaired</li> </ul>											Contractor /volunteer  EEBC staff
23, 25	N/A	Car parking and Equestrian Centre Access: <ul style="list-style-type: none"> <li>Annual check and repair of car park surfaces. Curretly in house GM</li> <li>Replace car park with tarmac surface</li> <li>Maintain vegetation around parking bays</li> <li>Regular litter picking and dumping checks. In house OPSER</li> <li>Ensure car park locked dusk-dawn</li> <li>Maintain car park height barrier</li> <li>Maintain picnic tables and other furniture</li> </ul>	£1500  ?  £1000  No cost  No cost  £250	£1500    No cost  No cost  £150	£1500  £750  No cost  No cost  £250	£1500    No cost  No cost  £150	£1500    No cost  No cost  £250	£1800    No cost  No cost  £180	£1800    No cost  No cost  £270	£1800    No cost  No cost  £180	£1800    No cost  No cost  £270	£1800    No cost  No cost  £180	Contractor /GM   Contractor  OPSER  RSER  RSER  RSER

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
As appropriate	N/A	Dog control: <ul style="list-style-type: none"> <li>Maintain fencing around dog-free areas</li> <li>Ensure regularly emptied litter bins are provided at main entrances</li> <li>Investigate ways of reducing the impact of dog walking on the sites ecology and visitors with a focus on education and multiple dog walking NB possible income opportunity from commercial dog walkers?</li> </ul>	No cost	£500 No cost	No cost	No cost	£500 No cost	No cost	No cost	£600 No cost	No cost	No cost	RSER OPSER Staff
Whole site	N/A	Boundaries/site security: <ul style="list-style-type: none"> <li>Increase level of patrolling presence (to include boundaries and remote areas within the site (for costs see "control of inappropriate use of site")</li> <li>Liaise with neighbours (e.g. Golf Course, Equestrian Centre and Childrens' Farm) on issues such as site security and antisocial behaviour issues no cost</li> <li></li> </ul>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	RSER  Staff
		Barbecues: <ul style="list-style-type: none"> <li>Review the use of BBQ's and the impact on other users <b>NB possible impact on income</b></li> </ul>	No cost										Staff
N/A	N/A	Emergency access and other 'services' <ul style="list-style-type: none"> <li>Ensure 24-hr contact numbers are provided at main (locked) access points</li> <li>Maintain up to date information on location of "services" and appropriate emergency procedures</li> <li>Provide map to emergency services showing points of access</li> </ul>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff Staff Staff

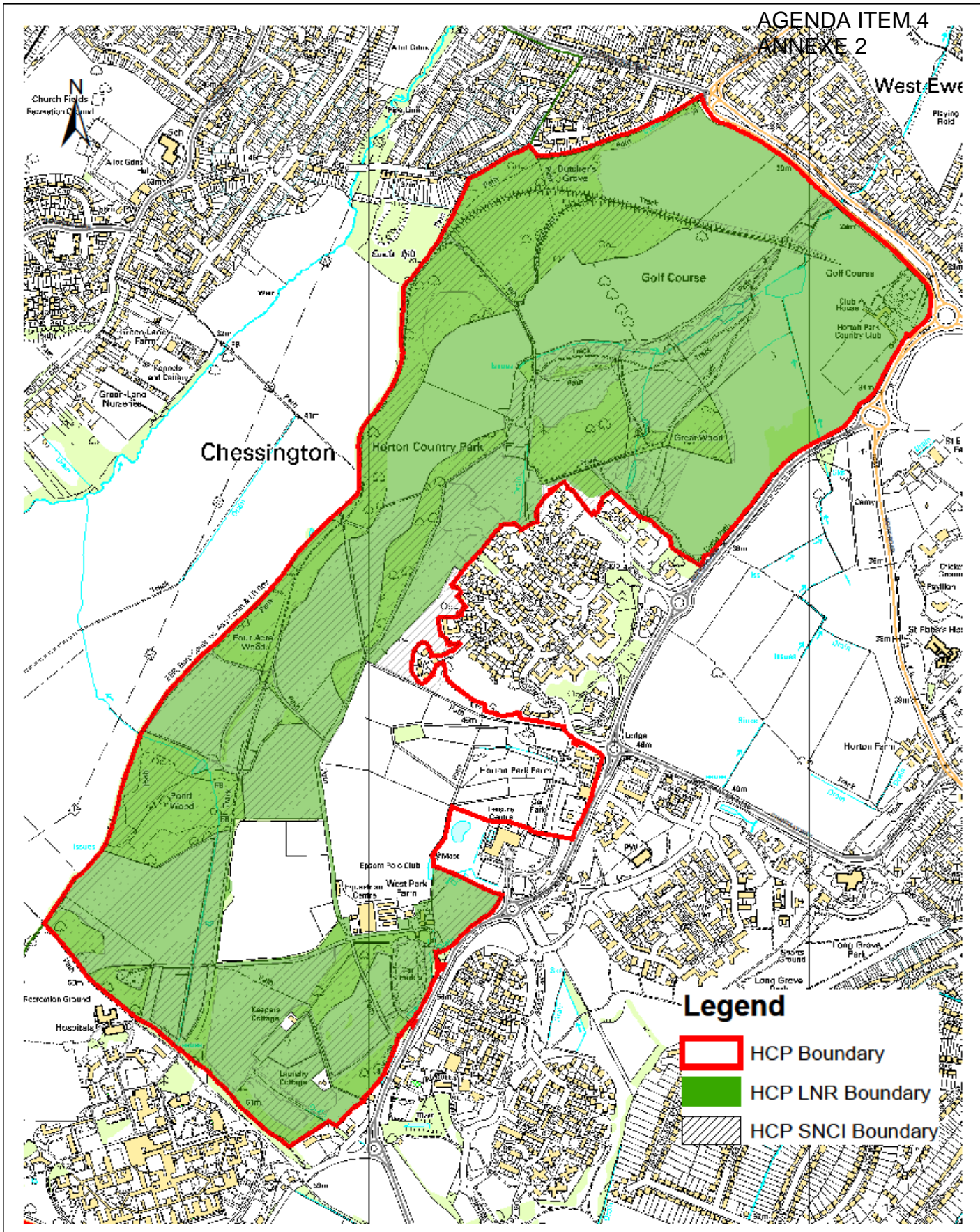
Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
If resources permit promote educational and research use consistent with maintaining the nature conservation value:													
N/A	N/A	If resources permit maintain and develop use by school and other educational groups (£500 per year revenue cost for equipment)	£500	£500	£500	£500	£500	£600	£600	£600	£600	£600	Staff /volunteer
N/A	N/A	If appropriate and resouces permit maintain and develop the resource room (Green Room)	£10k				£500					£500	Staff /volunteer
N/A	N/A	Promote and support volunteer groups ( e.g. Friends of Horton Country Park, Countryside Team Volunteers & Lower Mole Partnership)	£500	£500	£500	£500	£500	£600	£600	£600	£600	£600	Staff /volunteer
To maintain and enhance the cultural, historical and landscape value:													
As appropriate	N/A	Maintain the visual balance of existing hedgerow features (management of hedgerows, and therefore costs, already covered under earlier prescription)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff
	3.2	Maintain the wooded screen along the southern and western boundaries as a visual screen (management of this feature, and therefore, costs, already covered under earlier prescription)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff
	N/A	Ensure the continued existence of free-standing mature trees in an open landscape setting (planting of new trees, and therefore, costs, already covered under earlier prescription)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff
To promote and encourage an understanding and respect for the wildlife, landscape and historical value of the site:													
Whole site	N/A	Conduct open days, guided walks and other family-oriented events	£500	£500	£500	£500	£500	£600	£600	£600	£600	£600	Staff /Volunteer
Whole site	N/A	Prepare appropriate literature/interent accessible information		£500		£500		£600		£600		£600	Staff

ANNEXE

Cpt	Area (ha)	Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
TB A	N/A	Provide 1 new interpretation panels and maintain existing ones	£1500		£500		£500		£600		£600		Staff
N/A	N/A	Encourage and support the Friends of Horton Country Park	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff
N/A	N/A	Maintain and promote the Horton Country Park home page and other related features on the EEBC website (such as the 'virtual tour')	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff
N/A	N/A	Maintain the Information Centre <ul style="list-style-type: none"> <li>Consider future of the building in light of new technology</li> <li>Encourage Friends Group to participate in manning</li> </ul>	£1500		£250		£250	£1000	£270		£270		Staff Staff Staff /volunteer
N/A	N/A	Establish Bi-annual forum meeting to include all relevant stakeholders		No cost		No cost		No cost		No cost		No cost	Staff
21 22 23	N/A	Seek the installation of a natural play space to connect children with nature					£150k						Staff /Contractor
<b>To promote a greater understanding of the archaeology of the Country Park:</b>													
8	6.4	Commission appropriate archaeological surveys (Pond Wood and Peaked Riding)			£2500								Consultant
<b>To control inappropriate use of the site:</b>													
Whole site	N/A	Increase current levels of on-site presence (to enable more effective control of access issues and carry out small scale tasks relating to public access). I.e. funding of new permanent post.	£3000 0	£3050 0	£3100 0	£3150 0	£3200 0	£3250 0	£3300 0	£3350 0	£3400 0	£3450 0	Staff
<b>ESTIMATED ANNUAL COSTS (NB intention is to provide an approximate NOT definitive guide)</b>													
			£ 88050	£ 77120	£ 82870	£ 71620	£ 232870	£ 77795	£ 75075	£ 75625	£ 77605	£ 74295	



## MAPS



Created by: Stewart Cocker

### Map 1 Location of Horton Country Park

Reference:

Revision No:

Date: 14/03/2016

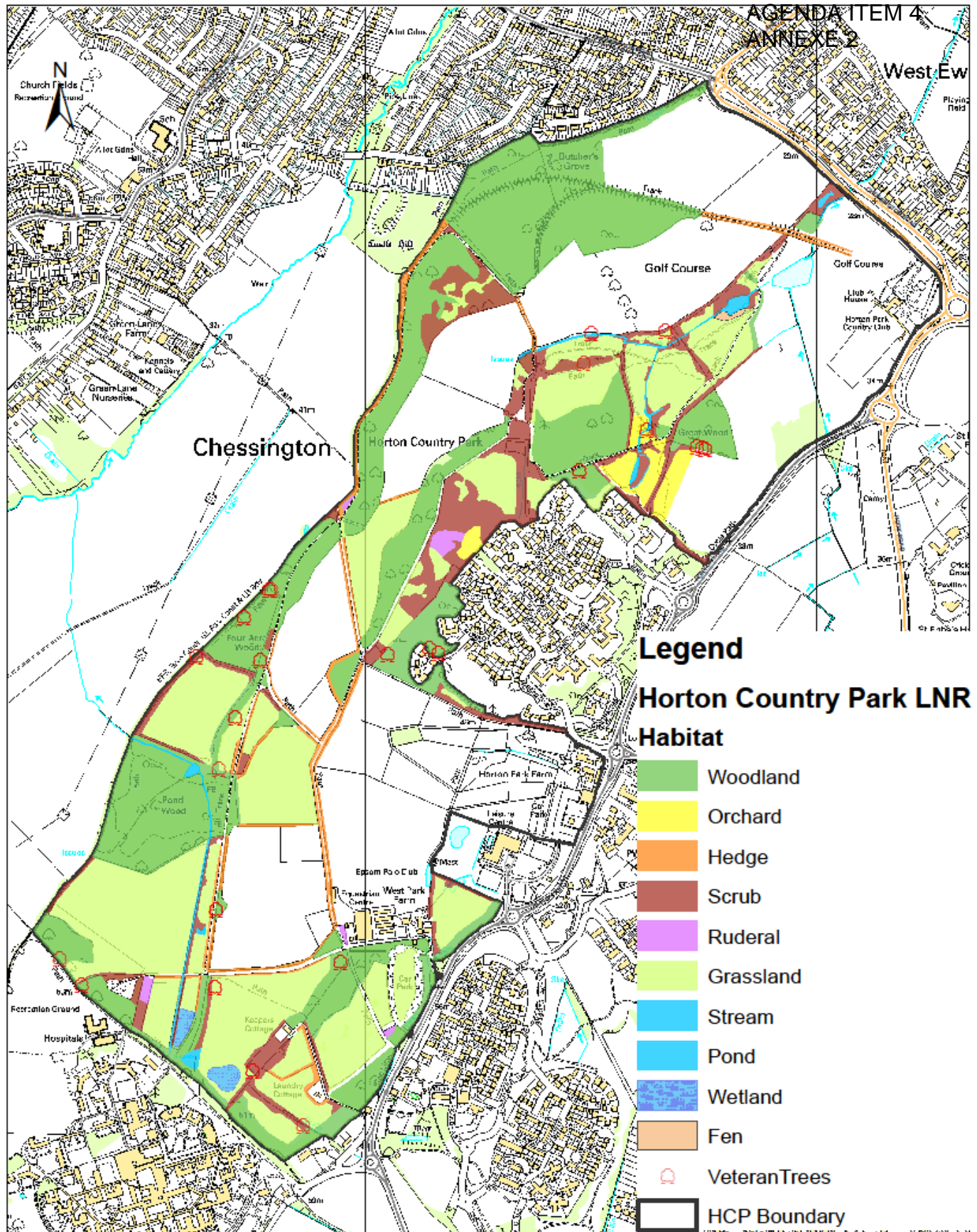
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Created by: Stewart Cocker

Reference:

Revision No: 15/07/2016

### Map 2 Summary Of Broad Habitat Types

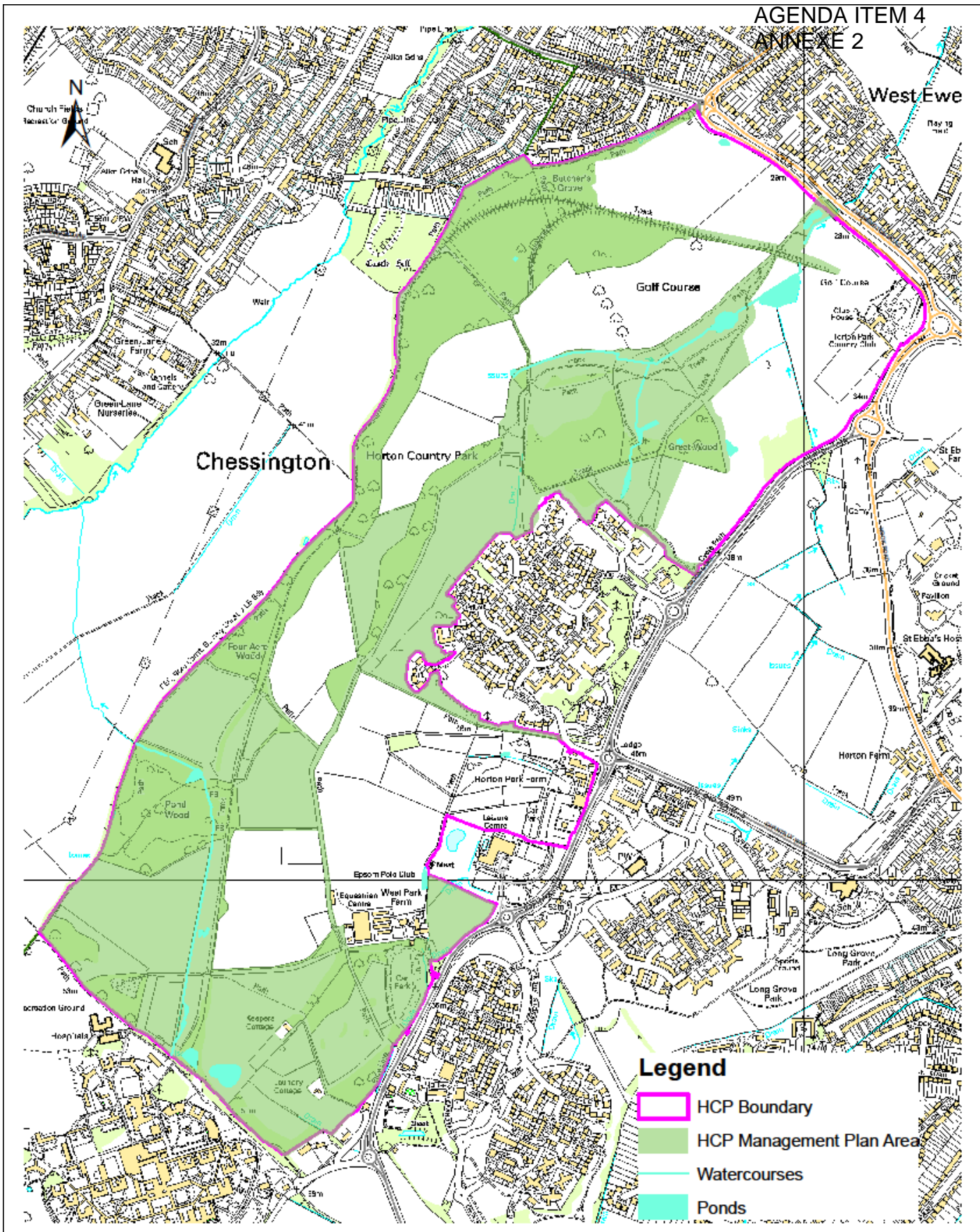
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Created by: Stewart Cocker

Map 3 Ponds and Watercourses

Reference:

Revision No: 21/06/2016

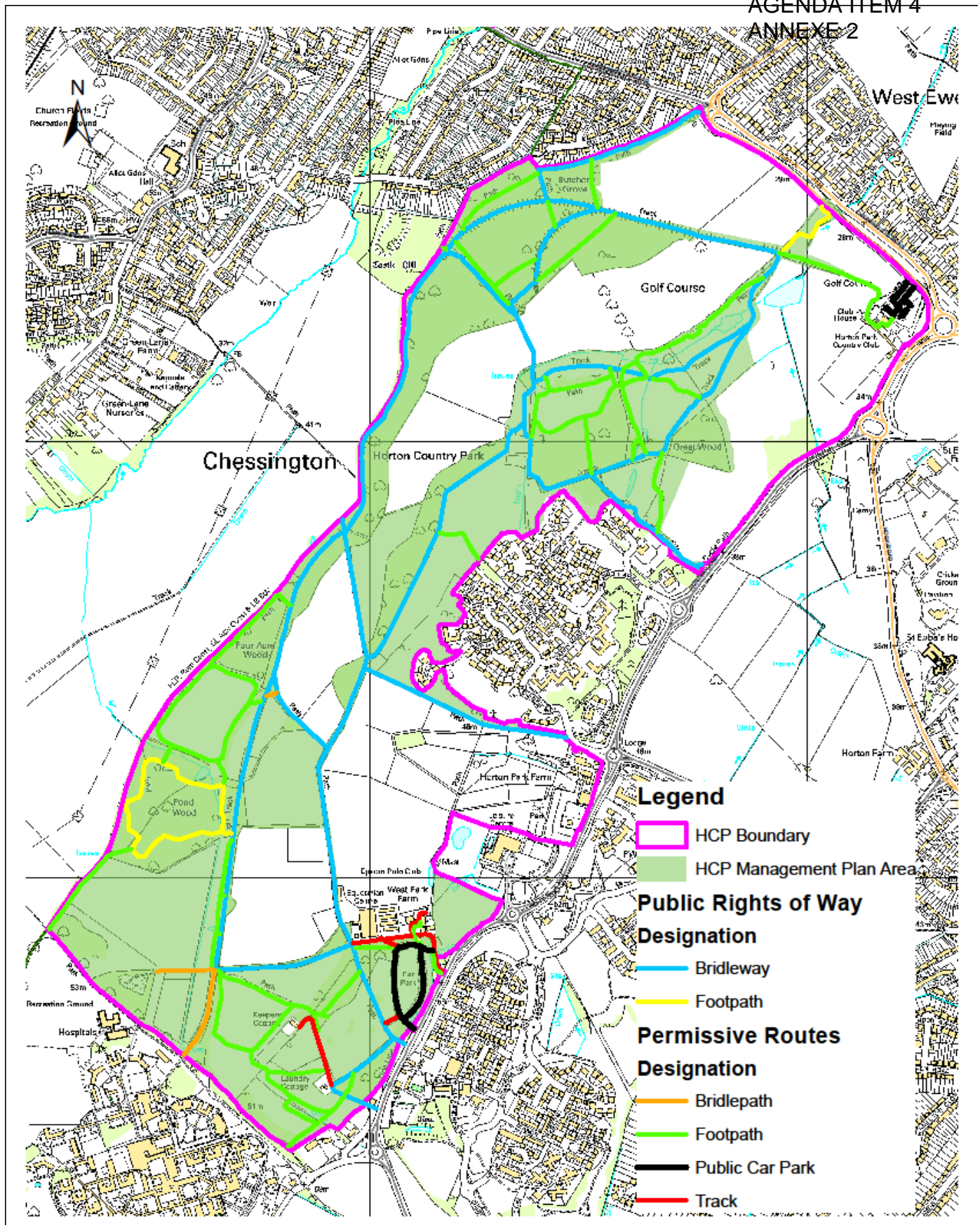
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Created by: Stewart Cocker

Map 4 Public Access

Reference:

Revision No: 21/06/2016

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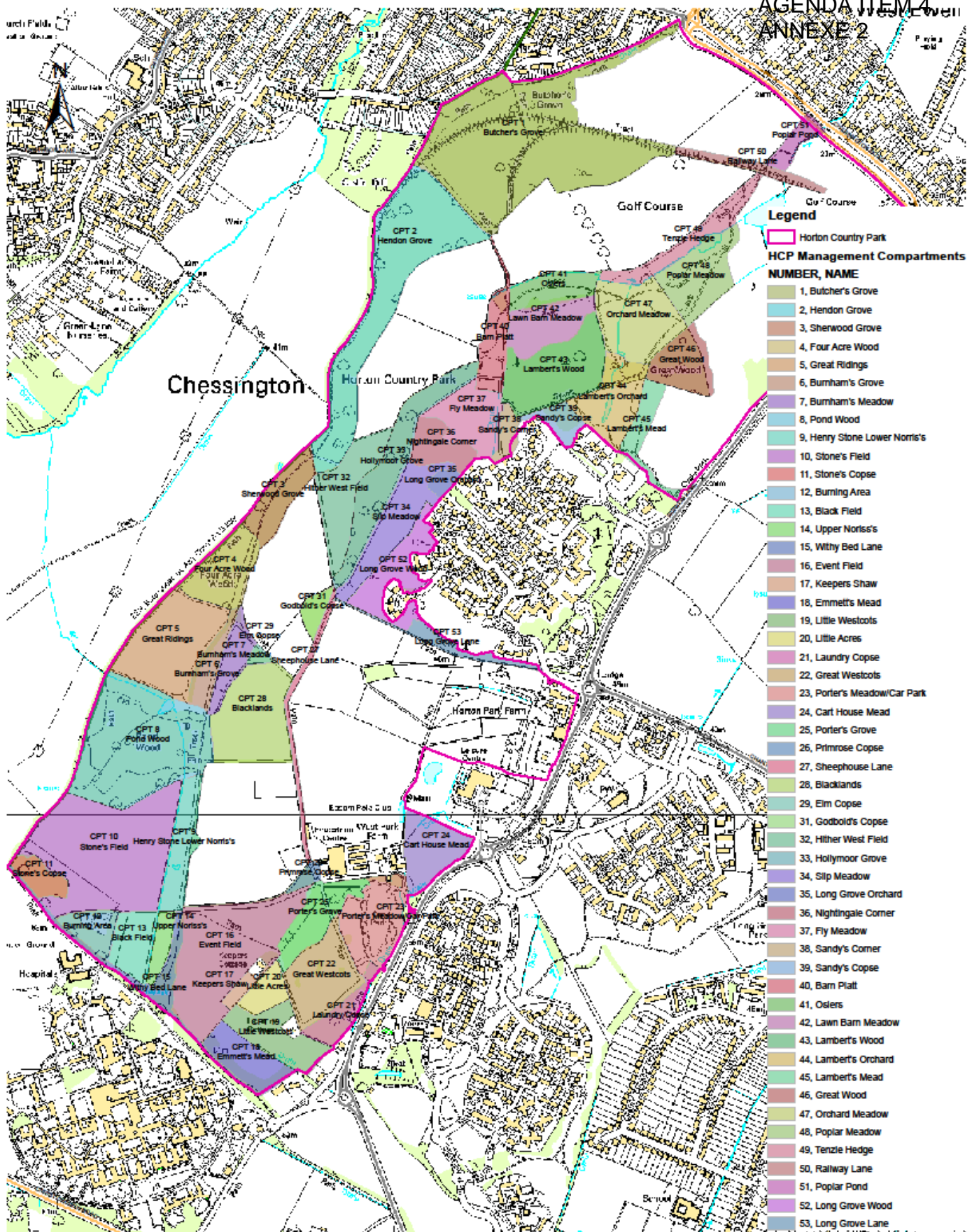
1:7,500



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Created by: Stewart Cocker

Map 6 Management Compartments

Reference:

Revision No:

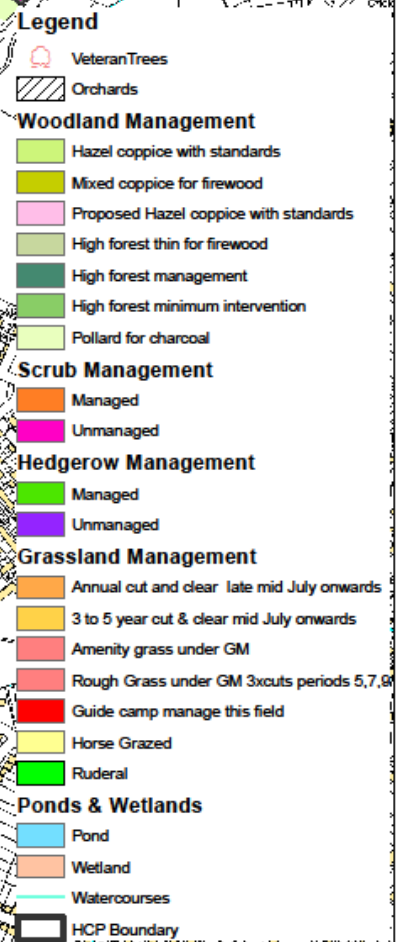
0 125 250 375 500 Meters

1:7,500



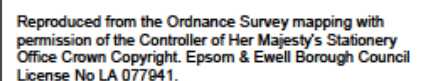
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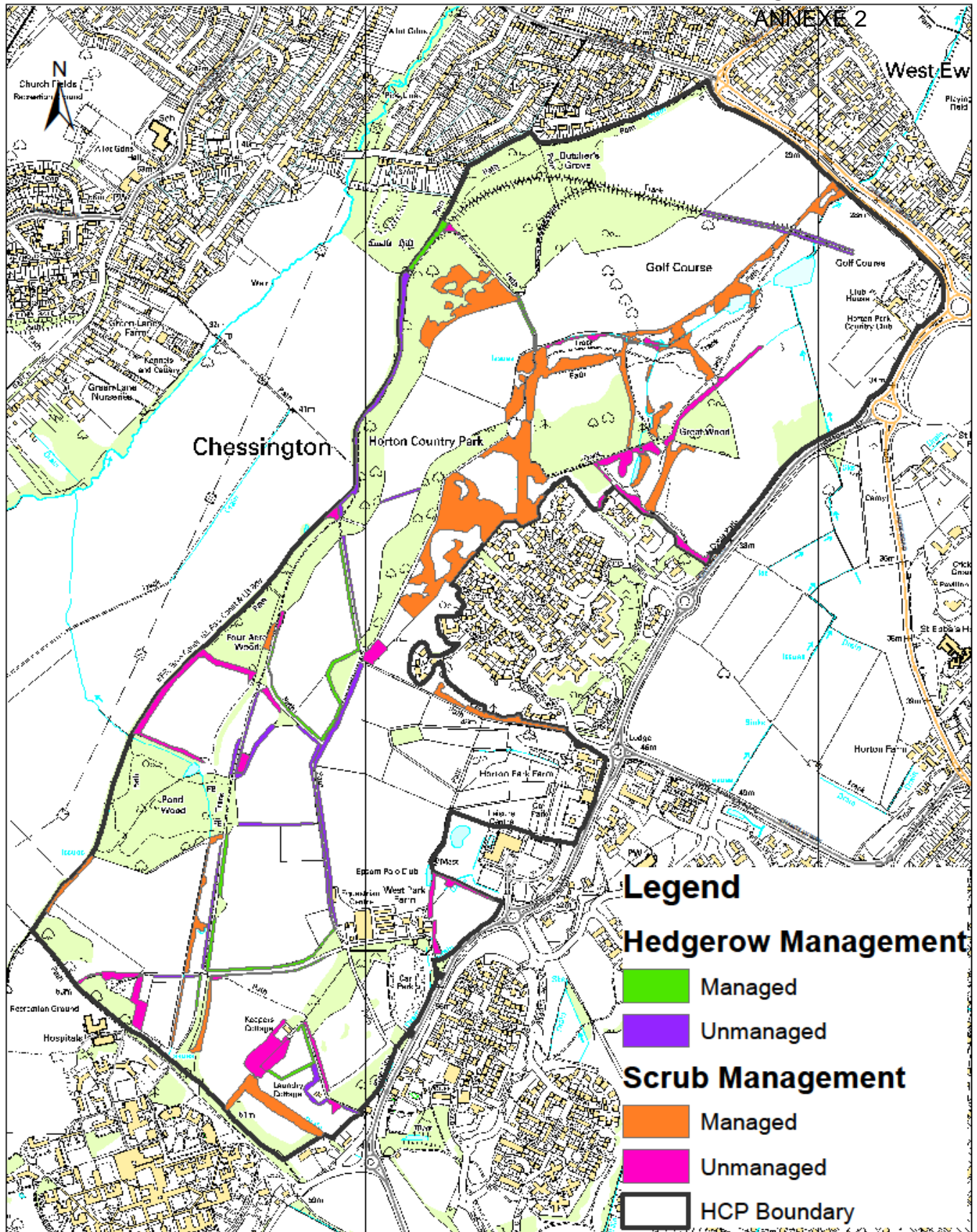


Revision No: 15/07/2016

0 125 250 500 Meters 1:7,500







Created by: Stewart Cocker

Reference:

Revision No: 15/07/2016

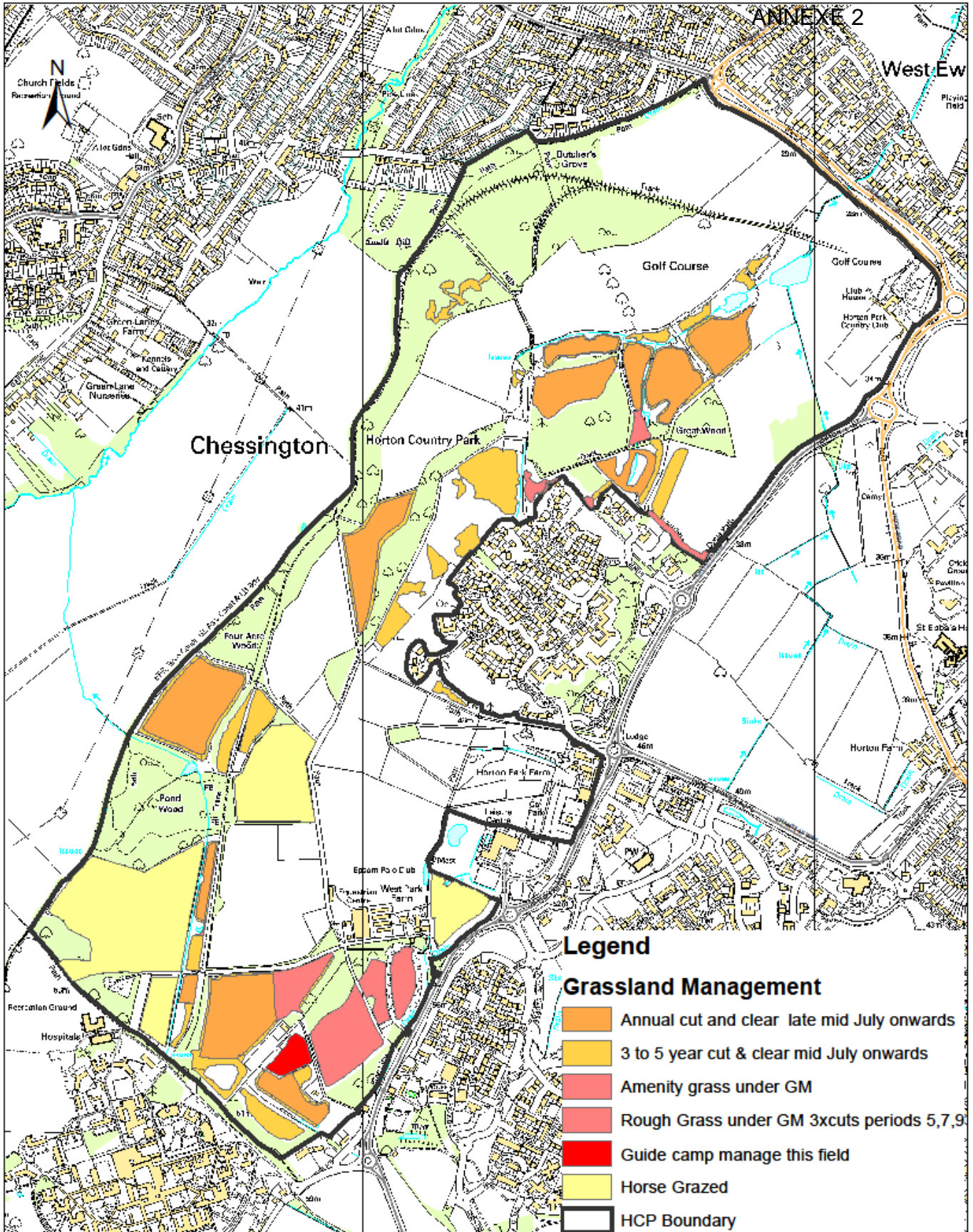
**Map 8 Hedgerow & Scrub Management**

0 125 250 500 Meters 1:7,500



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Created by: Stewart Cocker

Reference:

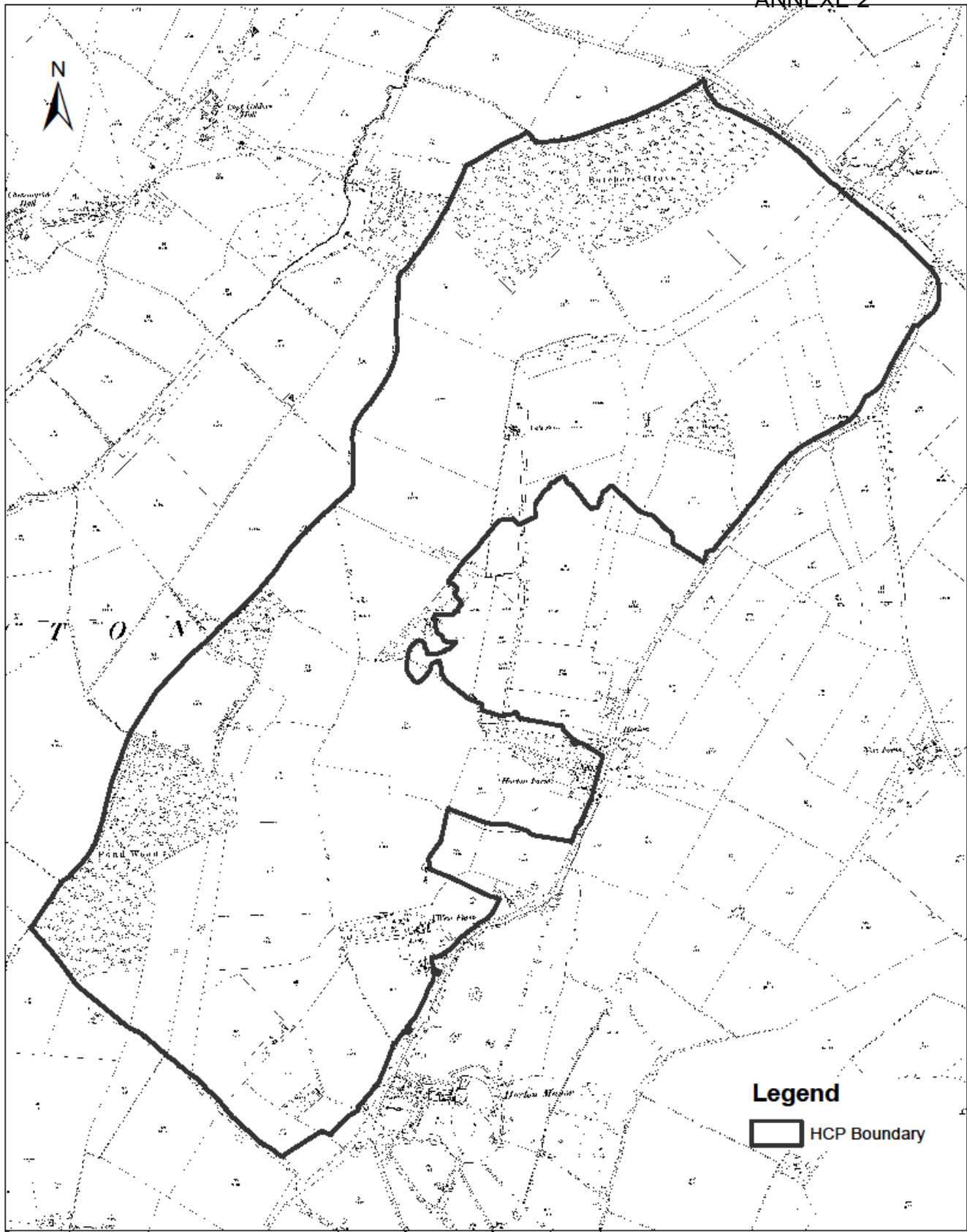
Revision No: 15/07/2016

Map 9 Grassland Management

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**Legend**  
HCP Boundary

Created by: Stewart Cocker

Map 10 Ordnance Survey Map Circa 1895

Reference:

Revision No: 15/07/2016

0 125 250 500 Meters

1:7,500



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## **APPENDICES**

## **Appendix I – SNCI Survey Site Descriptions**

The following information has been extracted from survey reports undertaken and provided by Surrey Wildlife Trust.

### **POND WOOD**

**Site Name :** Pond Wood

**Grid Ref :** TQ185622

**Area :** Approx. 6 ha

**Recorder No. :** 1493/1

**District :** Epsom and Ewell

**Date of Survey :** 3rd June 1998

**Surveyed By :** Kieron Huston

#### **Site Description**

Pond Wood, situated on the western border of Epsom and Ewell, is composed of ancient semi-natural woodland and recent secondary broad-leaved woodland. The site lies over London Clay that gives rise to typical stagnogley soils.

Over much of the site the stands are composed of mature Pedunculate and Sessile Oaks with scattered maiden Ash and frequent Wych Elm. There is an understorey of over-stood Hazel coppice, Hawthorn, Blackthorn and Elder.

The field layer is dominated by abundant Bluebell, Cleavers, Ivy, Ground-ivy and Bramble. Frequently Cow Parsley and Hogweed form a tall herb layer with Wood Millet and Rough Meadow Grass. Additional woodland species are frequent and include Greater Stitchwort, Hairy Brome, False-brome, Enchanter's Nightshade, Wood Melick and Wood Speedwell.

A small stream runs through the wood passing into and out of a pond in the north-east. Ferns, comprising Broad-buckler Fern, Male Fern and Hart's-tongue, are frequent along parts of the stream bank. The pond supports marginal vegetation of Yellow Iris, Soft Rush, Hard Rush and Great Willowherb.

## **BUTCHER'S GROVE**

**Site Name :** Butcher's Grove

**Grid Ref :** TQ195635

**Area :** Approx. 10 ha

**Recorder No. :** 3614

**District :** Epsom and Ewell

**Date of Survey :** 8<sup>th</sup> June 1998

**Surveyed By :** Kieron Huston

### **Site Description**

Butcher's Grove, situated on the western border of Epsom and Ewell, is composed of recent secondary broad-leaved woodland. The site lies over London Clay that gives rise to typical stagnogley soils.

The woodland canopy is dominated by Pedunculate Oak and maiden and multi-stemmed Ash with more occasionally Silver Birch and multi-stemmed Hornbeam. There is a tall understorey of Wych Elm and over-stood Hazel and Field Maple coppice usually with frequent Hawthorn, and Blackthorn and more occasionally Holly and Elder.

The woodland field layer is variable in cover and composition, but is characterised by Bluebell, Bramble, Ivy, Cleavers, Herb-robert, Remote Sedge, Hairy Brome and Wood Millet. In places the field layer is quite diverse and can support additional species like Wood Anemone, Wood Speedwell, Wood Melick, Three-nerved Sandwort and Violets. Several areas are far more impoverished supporting only Ivy, Bramble and Cleavers in any great abundance.

Several areas within the site have been cleared and are at various stages of regeneration. The more developed areas support Bramble underscrub, tall herb and grassland communities comprised of False Oat-grass, Meadow Fescue, Great Willowherb, Soft Rush, Wood Sedge, Tufted Hair-grass and Meadow Buttercup as well as elements of woodland flora like Bluebell, Herb Bennet, False-brome and Herb-robert.

## **GREAT WOOD**

**Site Name :** Great Wood

**Grid Ref :** TQ198630

**Area :** Approx. 2 ha

**Recorder No. :** 1494

**District :** Epsom and Ewell

**Date of Survey :** 3rd June 1998

**Surveyed By :** Kieron Huston

### **Site Description**

Great Wood, situated in the west of Epsom and Ewell, is composed of much modified ancient semi-natural woodland. The site lies over London Clay that gives rise to typical stagnogley soils.

The woodland composition has been modified by the introduction of a variety of trees such that the structure is now very variable. Pedunculate Oak occurs with Ash and sub-canopy Wych Elm and Crack Willow. Planted trees include Willows and Poplars. The understorey is variable and includes both Hawthorn and Midland Hawthorn as well as Blackthorn, Holly and very rarely Field Maple.

The field layer is composed of Cleavers, Common Nettle, Cow Parsley and Bramble with more frequent Ground-ivy, False-brome, Yorkshire Fog and Rough Meadow Grass. Disturbed open areas support Common Nettle, Bramble and Creeping Thistle as well as grass dominated areas of False Oat-grass and Yorkshire Fog.

## **FOUR ACRE WOOD**

**Site Name :** Four Acre Wood

**Grid Ref :** TQ187626

**Area :** Approx. 1.75 ha

**Recorder No. :** 80007

**District :** Epsom and Ewell

**Date of Survey :** 3rd June 1998

**Surveyed By :** Kieron Huston

### **Site Description**

Four Acre Wood, situated on the western border of Epsom and Ewell, is composed of recent secondary broad-leaved woodland. The site lies over London Clay that gives rise to typical stagnogley soils.

Pedunculate Oak and Ash standards are frequent with an understorey of over-stood Hazel coppice, young Wych Elm and Ash. Hawthorn, Blackthorn and Elder are all frequent and Midland Hawthorn is also present though very rare.

The field layer is composed of Bluebell, Cleavers, Greater Stitchwort, Common Nettle, Cow Parsley and Bramble with more locally frequent Wood Anemone, Ground-ivy, Wood Speedwell, Wood Millet and Wood Melick.

Although not listed as ancient woodland in the inventory survey evidence suggests that this wood, if not ancient, is certainly older secondary woodland that has accumulated a fairly rich flora, especially considering its small size.



## Appendix II – 2004 Habitat/NVC Survey

### 1 Methods for habitat survey

The habitat survey was conducted by Karl Crowther over several visits to the site during the period of May to August 2004. The site was separated into 'compartments' of largely homogeneous land cover as identified on a series of orthorectified aerial photographs. Mapping was done directly onto photographs in the field and these boundaries were then transferred into GIS (Mapinfo). The vegetation in each 'compartment' (GIS polygon) was assigned wherever possible into vegetation communities recognised within the National Vegetation Classification (NVC – Rodwell, 1991-2000). Very often, more than one community type was present and so the percentage of total ground cover made up by each individual community was recorded, and appropriate descriptive target notes compiled. These figures were then entered into an Excel spreadsheet, together with abbreviated notes (maximum of 250 characters). This spreadsheet was subsequently imported into the GIS database and was thus linked to the relevant polygons.

Existing information sources were incorporated into the habitat mapping process, these principally including surveys of Butcher's Grove, Pond Wood and Great Wood, carried out by Surrey Wildlife Trust in 1998.

### 2 Description of habitats and vegetation communities

#### 2.1 Woodlands and Scrub

There is a diverse range of woodland and scrub habitats across Horton Country Park. Much of this does not clearly correlate with the NVC communities, because it is of fairly recently planted origin, often upon what was originally grassland habitat. Thus, for example, much of the plantation woodland supports no clearly definable field layer characteristics. However, the site does support several blocks of established semi-natural broadleaved woodland and indeed, some of this is considered to be of ancient origin. In the following account, communities recognised within the NVC are considered first, with 'non-referable' stands being discussed afterwards.

##### 2.1.1 W6b *Alnus glutinosa*–*Urtica dioica* woodland, *Salix fragilis* sub-community

A small area of this woodland occurs in the south-western fringe of the Park, supporting a canopy of mature and often multi-stemmed Crack Willow (*Salix fragilis*). The shrub layer includes small Oaks along with Hawthorn (*Crataegus monogyna*), whilst the dryish field layer is a mixture of Stinging Nettle (*Urtica dioica*), Bramble (*Rubus fruticosus* agg.), Yorkshire Fog (*Holcus lanatus*), Creeping soft-grass (*Holcus mollis*), False Oat-grass (*Arrhenatherum elatius*), Creeping Bent (*Agrostis stolonifera*) and Wood Dock (*Rumex sanguineus*).

Crack Willow woodland occurs elsewhere, but these are of planted origin and do not appear referable with the NVC and are thus not dealt with here.

**2.1.2 W8d *Fraxinus excelsior*–*Acer campestre*–*Mercurialis perennis* woodland, *Hedera helix* sub-community**

This community represents a few stands of established semi-natural woodland, around the south-western periphery of the site, that possess a definable ground flora. The canopy is characterised by a mixture of Ash (*Fraxinus excelsior*) and Oak, with a shrub layer that includes Hawthorn, Elder (*Sambucus nigra*) and Blackthorn (*Prunus spinosa*). Ivy (*Hedera helix*) and Bramble tend to form the dominant elements of the ground flora, with other associates including Bluebell (*Hyacinthoides non-scripta*), Wood Aven (*Geum urbanum*), False-brome (*Brachypodium sylvaticum*), Herb Robert (*Geranium robertianum*), Enchanter's-nightshade (*Circaea lutetiana*), Greater Stitchwort (*Stellaria holostea*), Ground-ivy (*Glechoma hederacea*), Garlic Mustard (*Alliaria petiolata*), Hedge Woundwort (*Stachys sylvatica*) and Hairy Brome (*Bromopsis ramosa*).

**2.1.3 Woodlands transitional between W8 *Fraxinus excelsior*–*Acer campestre*–*Mercurialis perennis* woodland and W10 *Quercus robur*–*Pteridium aquilinum*–*Rubus fruticosus* woodland.**

A majority of the established (and ancient) broadleaved woodland at Horton Country Park appears to fall into this category. This includes Pond Wood, Great Wood, Four Acre Wood and parts of Butcher's Grove. A brief description of each is provided below.

**Pond Wood**

Most is an area of recognised 'Ancient Woodland' and comprises Oak (and Ash) of varying maturity, including occasional standard Oaks, with a coppiced Hazel understorey. Other shrubs include Hawthorn, Elder (*Sambucus nigra*), Holly (*Ilex aquifolium*), Elm (*Ulmus* sp.) and Honeysuckle (*Lonicera periclymenum*). A significant proportion of the field layer supports abundant Bluebells along with Ivy, Wood Anemone (*Anemone nemorosa*), Lesser Celandine (*Ranunculus ficaria*), Cow Parsley (*Anthriscus sylvestris*), Herb Robert, Bramble, Wood Millet (*Milium effusum*), Wood Melick (*Melica uniflora*), Enchanter's-nightshade, Wood Aven, Greater Stitchwort and Cleavers. Species of less common occurrence are False-brome, Hairy Brome, Nipplewort (*Lapsana communis*), Wood Sedge (*Carex sylvatica*), Hairy Brome, Garlic Mustard, Giant Fescue (*Festuca gigantea*), Common Figwort (*Scrophularia nodosa*), Wood Dock, Tufted Hair-grass (*Deschampsia cespitosa*), Male Fern (*Dryopteris filix-mas*), Hedge Woundwort, Pignut (*Conopodium majus*) and Remote Sedge (*Carex remota*).

The northern and western portions of the Pond Wood contrast sharply with the above vegetation in that Bramble forms dense, impenetrable stands, although many of the other associates are still present, albeit at much lower frequency.

In one or two open glades within this part of the wood, the Bramble is also accompanied by Bracken (*Pteridium aquilinum*).

### **Butcher's Grove**

This represents the largest single area of broadleaved woodland within Horton Country Park. It is all of recent, secondary origin. The canopy is dominated by Oak and Ash, with local Silver Birch and Hornbeam. One small area includes a stand of over-stood, coppiced Hornbeam and Hazel with occasional Oak and rare mature Scots pine. The shrub layer includes much Hazel and Field Maple coppice, along with Elm, Hawthorn and Blackthorn with occasional Holly and Elder.

The field layer is variable in both its diversity and extent, being quite species-poor in some areas and supporting mainly Ivy, Bramble and Cleavers. Other characteristic species include Bluebell, Herb-robert, Remote Sedge, Hairy Brome, Lesser Celandine, Greater Stitchwort, False-brome, Enchanter's-nightshade, Wood Avens, Wood Melick and Wood Millet. In the most diverse areas, the field layer also includes species such as Wood Anemone, Wood Speedwell, Three-veined Sandwort (*Moehringia trinervia*), Primrose (*Primula vulgaris*) and Violets.

A number of compartments have been re-coppiced in recent years and are in varying stages of regeneration. The most recent coppicing was undertaken during the winter of 2003/2004.

### **Four Acre Wood**

This comprises an area of established, semi-natural broadleaved woodland. The westernmost portion comprises a canopy of well-spaced mature Oak (and occasional Ash) standards with a Hazel coppice shrub layer. Other shrubs include Holly, Hawthorn, Elm and rarely, Field Maple (*Acer campestre*).

The field layer supports a fairly uniform mixture of abundant Bluebell, with Wood Melick, Ivy, Bramble, Wood Millet, Wood Anemone, Lesser Celandine, Greater Stitchwort, and rare Male Fern.

In contrast, the eastern portion changes abruptly to a much more dense shrub layer dominated by small Elms, with only occasional Hazel. The canopy again comprises mature Oak and Ash. The field layer is much less uniform in character, with much less Bluebell present. Additional species include Wood Avens, False-brome, Nettle, Hedge Woundwort, Enchanter's-nightshade, Barren Strawberry (*Potentilla sterilis*), Ground-ivy, Tufted Hair-grass (*Deschampsia cespitosa*), Herb Robert and Hairy Brome.

### **Great Wood**

Great wood comprises an area of much-modified ancient semi-natural woodland. The canopy includes a sparse scattering of mature standard Oak and Ash, but has been much influenced by planting of trees that include White Willow and Hornbeam. A number of large boundary Oaks occur on the eastern boundary, a number of these supporting a Heronry.

Much of the woodland is quite open and scrub-like, with a dense regeneration of Hawthorn. Other undershrubs include Sallows, Blackthorn and Elder, with rarely, Holly and Field Maple, plus overstood coppice stools of Hazel. Also present are rare individuals of what appear to be the hybrid between Hawthorn and Midland Hawthorn (*Crataegus monogyna* x *C. laevigata*).

The field layer reflects the disturbed character of the wood, with many areas comprising a dense tangle of Bramble and Stinging Nettle, whilst elsewhere, Ivy dominates. Other field layer associates include Hairy Brome, Ground-ivy, Bluebell, Cow Parsley, Wood Dock, Hedge Woundwort, False-brome, Wood Avens and Wood Sedge.

#### **2.1.4 Plantation and other woodlands (communities not referable to the NVC)**

These encompass woodlands that have largely been planted within the last 30-or so years, generally upon habitat that was not originally woodland (i.e. in general often open grassland habitat at the time of planting). As such, they often have a poorly-developed and/or grass-dominated field layer that is not referable to the NVC.

There are a number of such woodlands at Horton Country Park, supporting woodlands of varying species composition, including areas such as Lambert's Wood, Hollymoor Grove, Godbold's Copse, Porter's Grove, Stone's Copse, Sherwood Grove and Hendon Grove. In general these woodlands comprise a closed canopy of trees planted around 30 years ago, often in straight rows. Species present include Norway Maple (*Acer platanoides*), Hornbeam (*Carpinus betulus*), Limes (*Tilia* spp.), Ash (*Fraxinus excelsior*), Poplars (*Populus* spp.), Aspen (*Populus tremula*), Crack Willow (*Salix fragilis*), White Willow (*Salix alba*), Cherries (*Prunus* spp.), Dogwood (*Cornus sanguinea*), Pines (*Pinus* spp.) and Horse-chestnut (*Aesculus hippocastanum*). Some trees are more likely to be self-sown such as Birches (*Betula* spp.) and Sycamore (*Acer pseudoplatanus*), as are scattered shrub layer species such as Hawthorn, Blackthorn, Holly, Elder and Elm.

As already mentioned the field layer is often species-poor and characterised by plants such as Cow Parsley (*Anthriscus sylvestris*), Nettles, Bramble, Ivy, Cleavers (*Galium aparine*), Hogweed (*Heracleum sphondylium*), Wood Avens, Herb Robert and Ground-ivy. Elsewhere the field layer is grass-dominated by species such as Yorkshire-fog, Creeping Bent and False Oat-grass. In other instances, there is almost no ground flora to speak of and the woodland floor is essentially bare with tree leaf litter and fallen twigs etc.

Whilst much of this woodland is of a closed canopy, there are several areas where the planting has been thinned in recent years to create a variety of grass-dominated vegetation supporting scattered trees. The main locations are Sherwood Grove and parts of Hendon Grove.

A small area of rather older plantation woodland occurs within what would have been the grounds of the former Long Grove Hospital. This comprises a

thinned canopy of mature Scots Pine (*Pinus sylvestris*) and occasional Larch. A number of 'ornamental'-type trees are associated with this woodland, namely a mature individual of Monkey Puzzle (*Araucaria araucana*) and a small tree of Walnut (*Juglans regia*) and Holm Oak (*Quercus ilex*). This woodland is also notable in that the former hospital land boundary includes a large, specimen tree of Pedunculate Oak.

### **2.1.5 Scrub communities**

A wide variety of scrub types are present, occurring in a variety of situations such as alongside linear features such as tracks, paths and drains. Scrub also tends to be associated with previously disturbed, but generally unmanaged parts of the site – such as a number of old gardens, the 'works compound' and the demolished 'piggery'. In some cases, narrow sections of scrub appear to have developed by growing outwards from previously managed hedgerows (the latter are discussed separately below).

#### **2.1.5.1 W21 *Crataegus monogyna*–*Hedera helix* scrub**

Hawthorn is the dominant element, but other species present as well, such as Blackthorn, Bramble, Elder and Roses, occasionally with a scattering of mature trees.

#### **2.1.5.2 W22 *Prunus spinosa*–*Rubus fruticosus* scrub**

Tends to be overwhelmingly dominated by dense thickets of Blackthorn, with other species poorly-represented.

#### **2.1.5.3 W24 *Rubus fruticosus*–*Holcus lanatus* underscrub**

Characterised by a mixture of Bramble, rank grasses and tall herbs, occasionally with shrubs such as Hawthorn, Blackthorn and Elder.

#### **2.1.5.4 W25 *Pteridium aquilinum*–*Rubus fruticosus* underscrub**

Occurs within a few glades to the western side of Pond Wood.

#### **2.1.5.5 *Salix cinerea* scrub**

A few stands of scrub dominated by Grey Willow (*Salix cinerea*) were encountered and are not referable to the NVC.

#### **2.1.5.6 Hedgerow features**

Mapped separately from the above scrub categories are linear hedge-features, essentially running along track and field margins. These have been classified according to the dominant species type present. Thus, for example, there are many fairly recently-planted hawthorn hedges. Other hedgerow dominants include Blackthorn and less frequently, Elm. Other hedgerows are much more varied in their species composition and may include a range of

more mature trees. Also of relevance is the distinction between the above recently created hedges, which although not themselves generally forming a stock-proof barrier (a fence is usually there for this purpose), contrast with other features that are 'gappy' and essentially in a 'defunct' condition.

## 2.2 Free-standing trees

Trees have been frequently mapped under this category. It includes a number of notable, maiden Oak trees within a 'parkland' setting, along field-margins, or elsewhere (e.g. further mature Oaks were noted in situations such as hedgerows).

Elsewhere there are a variety of mainly planted specimens, such as around the main car park/barbecue site. Elsewhere, such trees are a remnant of plantings within former hospital, or other gardens, or to act as a screen (e.g. around adjoining new housing), or in one case, a roadside avenue. Species noted include Ornamental Cherries (*Prunus* spp.), Cherry Laurel (*Prunus laurocerasus*), Sweet Chestnut (*Castanea sativa*), London Plane (*Platanus x hispanica*), Red Horse-chestnut (*Aesculus carnea*), Tulip Tree (*Liriodendron tulipifera*), Hornbeam, Larch (*Larix* sp.) and Apple (*Malus* sp.).

## 2.3 Grasslands

Grasslands as a whole form the most extensive habitat type at Horton Country Park. As well as making up many of the individual component 'fields', grassland vegetation lines many of the track-sides and often forms glades or more extensive areas within wooded portions of the site.

### 2.3.1 MG1 *Arrhenatherum elatius* grassland

This represents one of the more extensive grassland communities present at Horton Country Park and is characterised in general by a dominance of False Oat-grass (*Arrhenatherum elatius*). This vegetation characterises areas that are unmanaged or mown/hay-cut only occasionally and thus the vegetation is very tall and coarse in character. The major part is consistent with the **MG1a *Festuca rubra* sub-community**. Often this vegetation is very species-poor, with False Oat-grass overwhelmingly dominant. Other common and frequent associates include Cock's-foot (*Dactylis glomerata*), Common Couch (*Elytrigia repens*), Yorkshire-fog (*Holcus lanatus*), Rough Meadow-grass (*Poa trivialis*), Creeping Thistle (*Cirsium vulgare*) and Tall Fescue (*Festuca arundinacea*). Damp areas can also support species such as Common Fleabane (*Pulicaria dysenterica*) and Hairy Sedge (*Carex hirta*). In smaller areas, where such vegetation is accompanied by frequent Stinging Nettle (*Urtica dioica*) and occasionally, Hogweed (*Heracleum sphondylium*), this represents areas of the **MG1b *Urtica dioica* sub-community**.

Other areas of **MG1a** have a much lower frequency of False Oat-grass and support a more varied species composition. Such vegetation is well-

represented in the extreme southern part of the site. Associated species of such vegetation include Creeping Buttercup (*Ranunculus repens*), Cut-leaved Cranesbill, (*Geranium dissectum*), Grass Vetchling (*Lathyrus nissolia*), Meadow Barley (*Hordeum secalinum*), Hairy Tare (*Vicia hirsuta*), Smooth Tare (*Vicia tetrasperma*) and Lesser Stitchwort (*Stellaria graminea*). In addition, very rarely, plants of Common Spotted Orchid were noted to occur. In reality, these forms of MG1a-type grassland probably represent extremes of a continuum with varying species diversity across the range.

Much more local are areas of the **MG1e *Centaurea nigra* sub-community**. This is a more species-rich form of **MG1** where False Oat-grass is again not so dominant. Thus at Horton Country park, this community is indicated by the more prominent presence of Red Fescue in association with species such as Bird's Foot Trefoil (*Lotus corniculatus*) and Knapweed (*Centaurea nigra*) with rarely, Cowslip (*Primula veris*).

One area of such vegetation has apparently arisen from the spreading of an area with chalk and also supports Ladies Bedstraw (*Galium verum*) and Wild Basil (*Clinopodium vulgare*). A number of plants recorded previously from this area in 1990 could not be re-found during 2004. These include Harebell (*Campanula rotundifolia*), Nettle-leaved Bellflower (*Campanula trachelium*), Greater Knapweed (*Centaurea scabiosa*), Chicory (*Cichorium intybus*), Common Toadflax (*Linaria vulgaris*), White Campion (*Silene latifolia*) and Bladder Campion (*Silene vulgaris*). This apparent decline in diversity is probably due to lack of management. For example, coarse/tall grasses may be more prominent in the sward. False Oat-grass was frequent/abundant throughout much of this area in 2004, but was not even recorded here in 1990.

A further type of grassland that appears to come under the umbrella of MG1 comprises a sward dominated by tussocky growth of Tall Fescue. There is no such community recognised in the NVC, but it has here been assigned into the category of **"MG1a – *Festuca arundinacea* variant"** on the basis of it sharing many of the associated species of the False Oat-grass dominated vegetation and the general lack of management. The colonisation of Tall Fescue into these swards is probably a reflection of the lack of management in conjunction with the presence of clay soil types. The most extensive areas of this type of vegetation occur in the complex of fields in the area between Great Wood and the golf course.

### **2.3.2 MG5 *Cynosurus cristatus* – *Centaurea nigra* grassland**

A tiny area of vegetation that appears to belong to this community occurs within an area of old ant hills that survives within the 'exchange land' on the fringe of new housing on the site of the former Long Grove Park Hospital. This is an area of diverse grassland vegetation dominated by Red Fescue and Common Bent (*Agrostis capillaris*) that includes Self-heal (*Prunella vulgaris*), Creeping Cinquefoil (*Potentilla reptans*), Bird's Foot Trefoil, Yarrow (*Achillea millefolium*), Common Cat's-ear (*Hypochaeris radicata*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Knapweed, Field Woodrush (*Luzula campestris*),

Perforate St. John's Wort (*Hypericum perforatum*), Ribwort Plantain (*Plantago lanceolata*), Hairy Tare and Ox-eye Daisy (*Leucanthemum vulgare*).

### **2.3.3 MG6 *Lolium perenne* – *Cynosurus cristatus* grassland**

Swards falling under this category take two principal forms. The first situation comprises consistently short and closely horse-grazed vegetation generally dominated by a combination of Creeping Bent (*Agrostis stolonifera*), Common Bent (*Agrostis capillaris*), Rough Meadow-grass and Yorkshire-fog. Other frequent associates are Creeping Buttercup, Perennial Rye-grass, White Clover (*Trifolium repens*), Red Clover (*Trifolium pratense*) and Ragwort (*Senecio jacobaea*), along with Ribwort Plantain (*Plantago lanceolata*), Meadow Buttercup (*Ranunculus acris*), Creeping Cinquefoil, Common Mouse-ear, Dandelion (*Taraxacum officinale*), Red Bartsia (*Odontites vernus*), Docks (*Rumex* spp.) and Thistles (*Cirsium* spp.). Often there is much bare ground present due to the trampling effect of horse's hooves.

The second situation involves a generally similar suite of dominant grasses, but within a rank, generally ungrazed and seldom-mown grassland sward. What distinguishes these from the **MG1a-type** grassland is the much lower cover of species such as False Oat-grass, Tall Fescue and Common Couch. However, other frequent grasses can include Perennial Rye-grass (*Lolium perenne*), Timothy (*Phleum pratense*), Meadow Barley, and Meadow Foxtail (*Alopecurus pratensis*), with rarely, Crested Dog's-tail (*Cynosurus cristatus*). As with the **MG1a-type** vegetation, the range of herbs can be quite variable, ranging from rather species-poor swards to more diverse ones with species such as Cut-leaved Cranesbill, Grass Vetchling, Hairy Tare, Smooth Tare, Meadow Vetchling and Bird's-foot Trefoil.

### **2.3.4 MG7 *Lolium Perenne* leys and related grasslands**

Grassland of this type is indicated by the often almost complete dominance of Perennial Rye-grass within a generally species-poor sward. Large areas of this type of grassland make-up the regularly mown fields associated with the car park, barbecue and 'car boot sale' areas of the site.

A further area of grassland falling under this category comprises the re-sown sward that has been planted upon the area disturbed by a fairly recent pipeline construction.

Very often, where the margins of tracks and paths are regularly-mown, a similar vegetation develops, as it does along regularly-trampled paths across grassland. In addition to mowing, the development of such vegetation is also due to the effects of eutrophication from dogs.

### **2.3.5 MG10 *Holcus lanatus* – *Juncus effusus* rush pasture**

A very small area of grassland has been placed within this category. This comprises a sward, associated with a damp area, dominated by Yorkshire Fog and accompanied by Hedge Bindweed (*Calystegia sepium*), Creeping



Bent, Wood Dock (*Rumex sanguineus*), Lesser Stitchwort, Cleavers (*Galium aparine*), Creeping Cinquefoil, Hairy Sedge and Creeping Buttercup. Soft Rush is largely absent, apart from a few clumps associated with an associated small stand of Common Spike-rush (*Eleocharis palustris*). In effect, this vegetation has the characteristics of the matrix in between the tussocks of Soft Rush that occurs in **MG10**, but without any Soft Rush actually present.

## **2.4 Weed Communities**

The NVC recognises a suite of communities associated with weedy/ruderal/open/disturbed habitats. A number of these occur at Horton Country Park.

### **2.4.1 OV24/25 *Urtica dioica*–*Galium aparine* community and *Urtica dioica*–*Cirsium arvense* community**

There is considerable overlap between the characteristic forms of these two communities and they have therefore been grouped together. Both in effect, are Nettle-dominated vegetation. **OV24** has Nettle as the overwhelming dominant in a species-poor sward, where Cleavers is the only constant associate. **OV25** has a more patchy, open cover of Nettles and is thus more diverse, with other associates present, including Thistles in particular.

Good examples of both types occur at Horton Country Park, whereas other stands were difficult to place, and they have therefore been grouped as a single category. The most typical places where such vegetation occurs are alongside tracks and paths and field margins. Other situations include areas of abandoned former gardens, along drains, and where there has been some recent disturbance of grassland or other vegetation.

### **2.4.2 OV26 *Epilobium hirsutum* community**

Small stands of this vegetation were encountered, dominated by Greater Willowherb (*Epilobium hirsutum*), alongside drains – generally as part of a mosaic of **OV24/25** plus bramble (**W24**) and other scrub communities.

### **2.4.3 Non-referable weed communities**

Some stands of weedy vegetation could not be assigned to NVC types. One of the main examples of this is that associated with the outer fringes of a balancing pond situated in the extreme north-east of the site. Species present here include Creeping Thistle, Teasel (*Dipsacus fullonum*), Mugwort (*Artemisia vulgaris*), Hoary Ragwort (*Senecio erucifolius*), Hedge Parsley (*Torilis japonica*), Scentless Mayweed (*Tripleurospermum inodorum*), Black Horehound (*Ballota nigra*), Burdock (*Arctium* sp.), with rarely, Common Mallow (*Malva sylvestris*) and Hemlock (*Conium maculatum*). Also present are occasional small bushes of Sea Buckthorn (*Hippophae rhamnoides*).

A further example comprises an open, weedy sward, dominated by Black Medick (*Medicago lupulina*) that occurs on what appears up until quite recently have been ground. This is situated within the former tip site in the south-west of the Park. Other associates include Red Bartsia (*Odontites vernus*) and Scentless Mayweed (*Tripleurospermum inodorum*), with occasional Mugwort (*Artemisia vulgaris*), Teasel (*Dipsacus fullonum*), Hedge Mustard (*Sisymbrium officinale*), White Melilot (*Melilotus alba*), Ribbed Melilot (*Melilotus officinalis*) and Poppy (*Papaver* sp.).

Further stands of weed-dominated vegetation are developing on areas of bare ground created during the construction of a new carriageway to the B284, which affects two small areas in the extreme north-eastern fringe of the Country Park.

## **2.5 Swamp Communities**

Examples of this type of vegetation are of relatively limited occurrence at Horton Country Park. They occur primarily in association with various water bodies.

### **2.5.1 S12 *Typha latifolia* swamp**

Stands of Bulrush (*Typha latifolia*) occur in most of the ponds within the Country Park. These include Meadow Pond (the largest water body within the Country Park) and Pond Wood Pond, in addition to various more recent balancing ponds. Often, Bulrush is the only species present, although Meadow Pond also includes good amounts of Water Mint (*Mentha aquatica*), Common Spike-rush, Common Fleabane, Greater Willowherb, Yellow Flag, Common Club-rush (*Schoenoplectus lacustris*) and Reed Canary-grass (*Phalaris arundinacea*). Also present rarely here are Water Plantain (*Alisma plantago-aquatica*) and Water Forget-me-not (*Myosotis scorpioides*). A recent infestation of New Zealand Pigmyweed was noted on the fringes of this pond in August of 2004.

### **2.5.2 S19 *Eleocharis palustris* swamp**

The largest sample of this vegetation, dominated by Common Spike-rush (*Eleocharis palustris*), occurs on the margins of Meadow Pond. A tiny patch of this community also occurs in a damp area of a field to the south-east of the Park.

### **2.5.3 S22 *Glyceria fluitans* swamp**

The small pond alongside the main track, south of Pond Wood supports growth of this community, characterised by a mat of Floating Sweet-grass (*Glyceria fluitans*) on the water surface. A further area of the community is to be found within a part of Orchard Pond.

### **2.5.4 S28 *Phalaris arundinacea* tall-herb fen**

Small areas of this vegetation, overwhelmingly dominated by Reed Canary-grass (*Phalaris arundinacea*), occur on the margins of Meadow Pond.

## Appendix III – Horton Country Park Species Lists

The following lists have been extracted from various sources, outlined as appropriate in the following sections. These lists are intended to bring together all known information sources. They do not represent a full inventory of all taxa occurring at Horton Country Park (indeed, such an undertaking would be impossible for any site). Therefore, these lists should be viewed as being very much incomplete, but representing the fullest information about the site at the present time.

### Vascular Plants

Vascular plant records have been drawn from a number of sources. A list of vascular plants of 'Horton Lands' was compiled by R.C. Stern (RCS) and J.E. Smith (JES) in 1974. Botanical recording was undertaken within Pond Wood in June of 1988 by J.F. Leslie (JFL), K. Page (KP) and JES. Subsequently, a series of species lists were prepared for various localities within the Country Park in 1990 (source – EEBC files, but origin and recorder unknown). Additional plant species information was compiled in 1998 for a number of blocks of woodland within the Country Park that were the focus of surveys conducted by K. Huston (KH) of Surrey Wildlife Trust as part of the 'SNCI' project. Certain areas within the Country Park were examined by JFL and KP in 2003. Where their records are marked "WE" this refers to 'West Ewell, south-east of Butcher' Grove' – it is possible that some of these records may lie beyond the boundary of the Country Park. A significant amount of additional information was obtained during the 2004 habitat survey by Karl Crowther (KAC).

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Acer campestre</i>	Field Maple	Pond Wood	29/06/1988	JFL, KP & JES		
<i>Acer platanoides</i>	Norway Maple	Porter's Grove	02/06/2004	KAC		Man Plan habitat survey
<i>Acer pseudoplatanus</i>	Sycamore	Pond Wood	29/06/1988	JFL, KP & JES		
<i>Achillea millefolium</i>	Yarrow					
<i>Aesculus hippocastanum</i>	Horse-chestnut	Pond Wood	27/03/2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Aesculus carnea</i>	Red Horse-chestnut	Exchange Land	14/07/2004	KAC	Planted alien (N)	Man Plan Habitat survey – on site of now demolished hospital buildings
<i>Aegopodium podagraria</i>	Ground Elder	Pond Wood	03/06/1998	KH	Alien (A)	SWT SNCI survey
<i>Agrimonia eupatoria</i>	Agrimony					
<i>Agrimonia procera</i>	Fragrant Agrimony		1974	RCS/JES		
<i>Agrostis canina</i>	Velvet Bent	Pond Wood	27/03/2003	JFL & KP		
<i>Agrostis gigantea</i>	Black Bent	Pond Wood	27/03/2003	JFL & KP		
<i>Agrostis stolonifera</i>	Creeping Bent	Pond Wood	27/03/2003	JFL & KP		
<i>Ajuga reptans</i>	Bugle	Pond Wood	29/06/1988	JFL, KP and JES		
<i>Alisma plantago-aquatica</i>	Water Plantain	Meadow Pond	04/08/2004	KAC		Man Plan Habitat survey – rare plant noted amongst Typha fringe.
<i>Alliaria petiolata</i>	Garlic Mustard					
<i>Alnus glutinosa</i>	Alder	Pond Wood	29/06/1988	JFL, KP & JES		
<i>Alnus incana</i>	Grey Alder	Great Wood	03/06/1998	KH	Planted	SWT SNCI survey
<i>Alnus</i> sp.	An alder	SE of site	15/07/2004	KAC	Planted	Man Plan habitat survey
<i>Alopecurus geniculatus</i>	Marsh Foxtail	Pond Wood	27/03/2003	JFL & KP		
<i>Alopecurus pratensis</i>	Meadow Foxtail	Pond Wood	29/06/1988	JFL, KP and JES		
<i>Anagallis arvensis</i>	Scarlet Pimpernel	Pond Wood	27/03/2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Anemone nemorosa</i>	Wood Anemone	Pond Wood	29/06/1988	JFL, KP and JES		
<i>Angelica sylvestris</i>	Wild Angelica	Pond Wood	27/03/2003	JFL & KP		
<i>Anisantha sterilis</i>	Barren Brome	Pond Wood	27/03/2003	JFL & KP		
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	Various	Jun/Jul 2004	KAC		Man Plan Habitat survey
<i>Anthriscus sylvestris</i>	Cow Parsley	Pond Wood	29/06/1988	JFL, KP and JES		
<i>Apium nodiflorum</i>	Fool's Water-cress	Pond Wood, Meadow Pond	27/03/2003, 04/08/2004	JFL & KP KAC`		
<i>Anisantha sterilis</i>	Barren Brome					
<i>Apium nodiflorum</i>	Fool's Watercress	Abbots Stream	1990			
<i>Arabidopsis thaliana</i>	Thale Cress	WE	04/04/03	JFL, KP		
<i>Araucaria araucana</i>	Monkey Puzzle	WE	04/04/03	JFL, KP	Planted	Planted
<i>Arctium lappa</i>	Greater Burdock	Pond Wood	27 Mar 2003	JFL & KP		
<i>Arctium minus</i>	Lesser Burdock	Pond Wood	29 Jun 1988	JFL, KP and JES		
<i>Armoracia rusticana</i>	Horse radish		1974	RCS/JES		
<i>Artemisia vulgaris</i>	Mugwort	Old Tip area	15.07.04	KAC		Man Plan Habitat survey – old tip area
<i>Arrhenatherum elatius</i>	False Oat-Grass	Pond Wood	29 Jun 1988	JFL, KP and JES		
<i>Arum maculatum</i>	Lords and Ladies	Pond Wood	1990			

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Aster novi-belgii</i>	Michaelmas Daisy	Meadow Pond	06/08/2004	KAC	Naturalised alien (N)	Man Plan Habitat survey. Local colonisation around margins of Meadow Pond.
<i>Athyrium filix-femina</i>	Lady Fern	Pond Wood	1990			
<i>Atriplex prostrata</i>	Spear-leaved Orache	Pond Wood	27 Mar 2003	JFL & KP		
<i>Avena fatua</i>	Wild Oat					
<i>Ballota nigra</i>	Black horehound	Chessington Lane Balancing Pond	06/08/2004	KAC		Man Plan Habitat survey.
<i>Barbarea vulgaris</i>	Common Winter Cress	Pond Wood	27 Mar 2003	JFL & KP		
<i>Bellis perennis</i>	Daisy					
<i>Betula pendula</i>	Silver Birch	Pond Wood	29 Jun 1988	JFL, KP and JES		
<i>Betula pubescens</i>	Downy Birch		Aug 2004	KAC		Man Plan habitat survey – everywhere!!
<i>Brachypodium sylvaticum</i>	False Brome	Pond Wood	1990			
<i>Bromopsis ramosa</i>	Hairy Brome	Pond Wood	29 Jun 1988	JFL, KP and JES		
<i>Bromus hordeaceus</i>	Soft-brome	Pond Wood	27 Mar 2003	JFL & KP		
<i>Bryonia dioica</i>	White Bryony	Pond Wood	27 Mar 2003	JFL & KP		
<i>Buddleja davidii</i>	Butterfly-bush	Pond Wood	27 Mar 2003	JFL & KP	Naturalised alien (N)	

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Callitriche stagnalis</i> sens. lat.	Common Water Starwort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Calystegia sepium</i>	Hedge Bindweed	Pond Wood	27 Mar 2003	JFL & KP		
<i>Calystegia sepium</i> subsp. <i>sepium</i>	Great Bindweed	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Campanula rotundifolia</i>	Harebell	Chalk area	1990			Not re-found during 2004
<i>Campanula trachelium</i>	Nettle-leaved Bellflower	Chalk area	1990			Not re-found during 2004
<i>Capsella bursa-pastoris</i>	Shapherd's purse					
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Cardamine pratensis</i>	Cuckooflower	Pond Wood	27 Mar 2003	JFL & KP		
<i>Carex divulsa</i> ssp. <i>divulsa</i>	Grey Sedge	Exchange Land	14/07/2004	KAC		Man Plan Habitat survey. Rough grassland around old Long Grove Hospital buildings
<i>Carex flacca</i>	Glaucous Sedge	Meadow Pond	04/08/2004	KAC		Man Plan Habitat survey. Swamp fringe to Meadow Pond
<i>Carex hirta</i>	Hairy Sedge	Abbots Stream	1990			
<i>Carex otrubae</i>	False Fox-sedge	Various	Jun, Jul 2004	KAC		Man Plan Habitat survey



Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Carex pendula</i>	Pendulous Sedge	Exchange land	14/07/2004	KAC		Man Plan Habitat survey. Demolished buildings on exchange land area.
<i>Carex remota</i>	Remote Sedge	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Carex sylvatica</i>	Wood-sedge	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Carpinus betulus</i>	Hornbeam	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Castanea sativa</i>	Sweet Chestnut	Butcher's Grove	1990			
<i>Cedrus atlantica</i>	Atlas Cedar	WE	04/04/03	JFL, KP	Planted	Planted alien on old estate
<i>Cedrus libani</i>	Cedar of Lebanon	WE	04/04/03	JFL, KP	Planted	Planted alien on old estate
<i>Centaurea nigra</i>	Common Knapweed	Pond Wood	27 Mar 2003	JFL & KP		
<i>Centaurea scabiosa</i>	Greater Knapweed	Chalk area	1990			Not re-found during 2004
<i>Cerastium fontanum</i>	Common Mouse-ear	Pond Wood	27 Mar 2003	JFL & KP		
<i>Cerastium glomeratum</i>	Sticky Mouse-ear	WE	04/04/03	JFL, KP		
<i>Chamerion angustifolium</i>	Rose-bay Willow-herb	Butcher's Grove	1990			
<i>Chelidonium majus</i>	Greater Celandine	WE	04/04/03	JFL, KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Chenopodium album</i>	Fat-hen	Pond Wood	27 Mar 2003	JFL & KP		
<i>Chenopodium bonus-henricus</i>	Good King Henry	'Field 6'	1990			
<i>Chenopodium ficifolium</i>	Fig-leaved Goosefoot	Pond Wood	27 Mar 2003	JFL & KP		
<i>Chenopodium polyspermum</i>	Many-seeded Goosefoot	Pond Wood	27 Mar 2003	JFL & KP		
<i>Cichorium intybus</i>	Chicory	Chalk area	1990			Not re-found during 2004
<i>Circaea lutetiana</i>	Enchanter's-nightshade	Pond Wood	27 Mar 2003	JFL & KP		
<i>Cirsium arvense</i>	Creeping thistle					
<i>Cirsium palustre</i>	Marsh Thistle	Butcher's Grove	08 Jun 1998	KH		SWT SNCI survey
<i>Cirsium vulgare</i>	Spear Thistle	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Clinopodium vulgare</i>	Wild Basil	Chalk area	1990; 16/09/2004	KAC		Man Plan Habitat survey. Still present, but rare in chalk area.
<i>Conium maculatum</i>	Hemlock	WE	04/04/03	JFL, KP		
<i>Conopodium majus</i>	Pignut	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Consolida ajacis</i>	Delphinium	WE	04/04/03	JFL, KP	Naturalised/Casual (N)	
<i>Conium maculatum</i>	Hemlock					
<i>Convolvulus arvensis</i>	Field Bindweed	Pond Wood	27 Mar 2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Conyza canadensis</i>	Canadian Fleabane	Pond Wood	27 Mar 2003	JFL & KP		
<i>Cornus sanguinea</i>	Dogwood	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Coronopus didymus</i>	Lesser Swine-cress	Pond Wood	27 Mar 2003	JFL & KP		
<i>Coronopus squamatus</i>	Swine-cress	Pond Wood	27 Mar 2003	JFL & KP		
<i>Corylus avellana</i>	Hazel	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Crassula helmsii</i>	New Zealand Pigmyweed	Meadow Pond	04/08/2004	KAC	Alien (N)	Man Plan Habitat survey. Local patches on fringe of pond.
<i>Crataegus laevigata</i>	Midland Hawthorn	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Crataegus x media</i>	Hawthorn/Midland Hawthorn hybrid	Great Wood	August 2004	KAC		Man Plan Habitat survey – two trees noted together
<i>Crataegus monogyna</i>	Hawthorn	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Crepis capillaris</i>	Smooth Hawk's-beard	Pond Wood	27 Mar 2003	JFL & KP		
<i>Crepis vesicaria</i>	Beaked Hawk's-beard	Pond Wood	27 Mar 2003	JFL & KP		
<i>Crocsmia x crocosmiifolia</i>	Montbretia	WE	04/04/03	JFL, KP	Alien (N)	

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Cynosurus cristatus</i>	Crested dog's tail	NE meadow area	16/07/2004	KAC		Man Plan Habitat survey. Meadow area between Golf Course and Lambert's Wood.
<i>Cytisus scoparius</i>	Broom	Exchange Land	14/07/2004	KAC		Man Plan Habitat survey. Demolished buildings on exchange land area
<i>Dactylis glomerata</i>	Cock's-foot	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	Various	23/06/2004	KAC		Man Plan Habitat survey – rare in one or two localities in south of site
<i>Daucus carota</i>	Wild Carrot	Chalk area	1990			Man Plan Habitat survey – single plant noted in chalk area
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Deschampsia cespitosa</i> subsp. <i>cespitosa</i>	Tufted Hair-grass	Pond Wood	27 Mar 2003	JFL & KP		
<i>Digitalis purpurea</i>	Foxglove	Butcher's Grove	08 Jun 1998	KH		SWT SNCI survey
<i>Diplotaxis muralis</i>	Stinkweed	WE	04/04/03	JFL, KP		
<i>Dipsacus fullonum</i>	Teasel	WE	04/04/03	JFL, KP		
<i>Dryopteris carthusiana</i>	Narrow Buckler-fern	WE	04/04/03	JFL, KP		
<i>Dryopteris dilatata</i>	Broad Buckler-fern	Pond Wood	27 Mar 2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Dryopteris filix-mas</i>	Common Male Fern	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Eleocharis palustris</i>	Common Spike-rush	Various	Jun/Jul 2004	KAC		Man Plan Habitat survey
<i>Elodea nuttallii</i>	Nuttall's Water-weed /	Pond Wood	29 Jun 1988	JFL, KP & JES	Alien (N)	
<i>Elymus caninus</i>	Bearded Couch	Pond Wood	27 Mar 2003	JFL & KP		
<i>Elytrigia repens</i>	Common Couch					
<i>Epilobium ciliatum</i>	American Willowherb	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Epilobium hirsutum</i>	Great Willowherb	Pond Wood	29 Jun 1988	JFL, KP and JES		
<i>Epilobium lanceolatum</i>	Spear-leaved Willowherb	Butcher's Grove	08 Jun 1998	KH		SWT SNCI survey
<i>Epilobium montanum</i>	Broad-leaved Willowherb	WE	04/04/03	JFL, KP		
<i>Epilobium tetragonum</i>	Square-stalked Willowherb	Pond Wood	27 Mar 2003	JFL & KP		
<i>Equisetum arvense</i>	Field Horsetail	WE	04/04/03	JFL, KP		
<i>Erysimum cheiri</i>	Wallflower	Pond Wood + WE	27 Mar 2003	JFL & KP	Naturalised alien (A)	Waste ground Alien in WE
<i>Euonymus europaeus</i>	Spindle	Butcher's Grove	1988	JES		E. side of Butcher's Grove
<i>Euphorbia exigua</i>	Dwarf Spurge		1974	RCS/JES		
<i>Euphorbia helioscopia</i>	Sun Spurge	WE	04/04/03	JFL, KP		
<i>Euphorbia lathyris</i>	Caper Spurge	WE	04/04/03	JFL, KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Euphorbia peplus</i>	Petty Spurge	WE	04/04/03	JFL, KP		
<i>Fallopia convolvulus</i>	Black Bindweed		1974	RCS/JES		
<i>Festuca arundinacea</i>	Tall Fescue	Pond Wood	27 Mar 2003	JFL & KP		
<i>Festuca gigantea</i>	Giant Fescue	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Festuca pratensis</i>	Meadow Fescue	Butcher's Grove	08 Jun 1998	KH		SWT SSCI Survey
<i>Festuca rubra</i>	Red Fescue					
<i>Filipendula ulmaria</i>	Meadowsweet	Pond Wood	27 Mar 2003	JFL & KP		
<i>Fragaria vesca</i>	Wild Strawberry	Butcher's Grove	1990			
<i>Frangula alnus</i>	Alder Buckthorn	Butcher's Grove	1990			
<i>Fraxinus angustifolia</i>	Narrow-leaved Ash	BBQ site area	August 2004	KAC	Planted	Man Plan Habitat survey
<i>Fraxinus excelsior</i>	Ash	Pond Wood	29 Jun 1988	JFL, KP & JES		Var. <i>pendula</i> in planted woodland (WE)
<i>Fragaria vesca</i>	Wild Strawberry	WE	04/04/03	JFL, KP		
<i>Galega officinalis</i>	Goat's Rue	Exchange Land	24/06/2004	KAC	Alien (N)	Man Plan Habitat survey – large colony on exchange land area
<i>Galium aparine</i>	Cleavers	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Galium palustre</i> subsp. <i>palustre</i>	Marsh Bedstraw	Pond Wood	27 Mar 2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Galium verum</i>	Ladies Bedstraw	Chalk area	1990; June 2004	KAC		Man Plan Habitat survey – still present in chalk area
<i>Geranium dissectum</i>	Cut-leaved Crane's-bill	Pond Wood	27 Mar 2003	JFL & KP		
<i>Geranium molle</i>	Dove's-foot Crane's-bill	Pond Wood	27 Mar 2003	JFL & KP		
<i>Geranium robertianum</i>	Herb-Robert	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Geum urbanum</i>	Herb Bennet	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Glechoma hederacea</i>	Ground-ivy	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Glyceria declinata</i>	Sweet-grass	Willow Plantation West Park Bdy	1990			
<i>Glyceria fluitans</i>	Floating Sweet-grass	Orchard Pond, Field Pond	2004	KAC		
<i>Hedera helix</i>	Ivy	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Hedera helix</i> ssp. <i>hibernica</i>	Atlantic Ivy	WE	04/04/03	JFL, KP		
<i>Heracleum sphondylium</i>	Hogweed	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Hippophae rhamnoides</i>	Sea Buckthorn	Chessington Rd. Balancing Pond	06/08/2004	KAC		Man Plan Habitat survey – several planted around edges of Chessington Road Balancing Pond.

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Hirschfeldia incana</i>	Hoary Mustard	WE	04/04/03	JFL, KP	Established alien	
<i>Holcus lanatus</i>	Yorkshire Fog					
<i>Holcus mollis</i>	Creeping Soft-grass	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Hordeum murinum</i>	Wall Barley	Pond Wood	27 Mar 2003	JFL & KP		
<i>Hordeum secalinum</i>	Meadow Barley		23/06/2004	KAC		Man Plan Habitat survey – locally quite common in grasslands
<i>Hyacinthoides non-scripta</i>	Bluebell	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Hypericum hirsutum</i>	Hairy St. John's Wort		1974, 14/07/2004	RCS/JES, KAC		Man plan habitat survey – exchange land
<i>Hypericum perforatum</i>	Perforate St. John's Wort	Plantation, side of Field 15	1990			
<i>Hypericum tetrapterum</i>	Square-stalked St. John's-wort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Hypochaeris radicata</i>	Cat's-ear	Pond Wood	27 Mar 2003	JFL & KP		
<i>Ilex aquifolium</i>	Holly	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Ilex x altaclerensis</i>	I. aquifolium x perado	Pond Wood	27 Mar 2003	JFL & KP		The back cross is as the dominant plant with few pure Ilex aquifolium plants showing hybrid vigour, larger leaves, broad flat dull surface.



Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Iris foetidissima</i>	Stinking Iris	Pond Wood	27 Mar 2003	JFL & KP		
<i>Iris pseudacorus</i>	Yellow Flag					
<i>Juglans regia</i>	Walnut	WE		KAC	Introduced	? self-sown in thinned Scots pine plantation in southern part of Lambert's Wood.
<i>Juncus bufonius</i>	Toad Rush	Various	02/06/2004	KAC		Man Plan Habitat survey, esp. in area of new pipeline
<i>Juncus conglomeratus</i>	Compact Rush	Pond Wood, Orchard balancing pond	03 Jun 1998, 04/08/2004	KH, KAC		SWT SNCI survey, Man Plan habitat survey
<i>Juncus effusus</i>	Soft Rush	Butcher;s Grove	1990			
<i>Juncus inflexus</i>	Hard Rush	Pond Wood	27 Mar 2003	JFL & KP		
<i>Lactuca serriola</i>	Prickly Lettuce	Pond Wood	27 Mar 2003	JFL & KP		
<i>Lamium album</i>	White Dead-nettle	Pond Wood	1990			
<i>Lamium purpureum</i>	Red Dead-nettle		1974	RCS/JES		
<i>Lapsana communis</i>	Nipplewort	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Larix decidua</i>	Larch	WE	04/04/03	JFL, KP	Planted	
<i>Lathyrus nissolia</i>	Grass Vetchling		23/06/2004	KAC		Man Plan Habitat survey
<i>Lathyrus pratensis</i>	Meadow Vetchling	WE	04/04/03	JFL, KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Lemna minor</i>		Willow Plantation West Park Bdy	1990			
<i>Lemna minuta</i>	Least Duckweed	Pond Wood	27 Mar 2003	JFL & KP		
<i>Leontodon autumnalis</i>	Autumnal Hawkbit	Pond Wood	27 Mar 2003	JFL & KP		
<i>Leontodon saxatilis</i>	Lesser Hawkbit	Pond Wood	27 Mar 2003	JFL & KP		
<i>Lepidium draba</i>	Hoary Cress	WE	04/04/03	JFL, KP		
<i>Leucanthemum vulgare</i>	Oxeye Daisy	Pond Wood	27 Mar 2003	JFL & KP		
<i>Ligustrum ovalifolium</i>	Garden Privet	Old Hospital Villas	14/07/2004	KAC	Introduced alien (N)	Man Plan Habitat survey. Old lane in grounds of former Long Grove Hospital exchange land
<i>Ligustrum vulgare</i>	Wild Privet	Pond Wood	27 Mar 2003	JFL & KP		
<i>Linaria vulgaris</i>	Common Toadflax	Chalk area	1990			Man Plan Habitat survey – not recorded here in 2004
<i>Linum usitatissimum</i>	Cultivated Flax	Pond Wood	04 Apr 2003	JFL & KP	Escape from cultivation (N)	
<i>Liriodendron tulippa</i>	Tulip Tree	Old Hospital Villas	14/07/2004	KAC	Planted	Man Plan Habitat Survey. Old Long Grove Hospital Villas on exchange land
<i>Lobularia maritima</i>	Sweet Alison	WE	04/04/	JFL, KP	Naturalised alien (N)	
<i>Lolium multiflorum</i>	Italian Rye-grass		1974	RCS/JES		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Lolium perenne</i>	Perennial Rye-grass	Pond Wood	27 Mar 2003	JFL & KP		
<i>Lonicera periclymenum</i>	Honeysuckle	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	Meadow N. of Pond Wood; Chalk area	24/06/2004	KAC		Man Plan Habitat survey. Grassland sward in meadow between Pond Wood and Four Acre Wood. Also still present in Chalk area.
<i>Lotus pedunculatus</i>	Greater Bird's-foot Trefoil	Grassland in extreme SW	24/06/2004	KAC		Man Plan Habitat survey. Grassland in extreme SW, in between pipe line route and southern boundary.
<i>Lunaria annua</i>	Honesty	WE	04/04/03	JFL, KP	Naturalised alien (N)	
<i>Luzula forsteri</i>	Forster's Woodrush		1974	RCS/JES		
<i>Luzula pilosa</i>	Hairy Woodrush	Pond Wood	1990			
<i>Luzula campestris</i>	Field Woodrush	Exchange Land	24/06/2004	KAC		Man Plan Habitat survey. Area of old ant hills in exchange land area
<i>Lycopus europaeus</i>	Gipsywort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Lysimachia nummularia</i>	Creeping Jenny		1974	RCS/JES		
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	Butcher's Grove	1990			

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Mahonia aquifolium</i>	Oregon-grape	Pond Wood	27 Mar 2003	JFL & KP	Naturalised alien (N)	
<i>Malus domestica</i>	Apple	Pond Wood	29 Jun 1988	JFL, KP & JES	Planted in orchards	
<i>Malus sylvestris</i>	Crab Apple sens. str.	Pond Wood	27 Mar 2003	JFL & KP		
<i>Malva sylvestris</i>	Common Mallow					
<i>Matricaria discoidea</i>	Pinappleweed		1974; Aug 2004	RCS/JES; KAC		Man Plan Habitat survey - 2004
<i>Matricaria recutita</i>	Scented Mayweed	Pond Wood	27 Mar 2003	JFL & KP		
<i>Medicago lupulina</i>	Black Medick	Pond Wood	27 Mar 2003	JFL & KP		
<i>Melica uniflora</i>	Wood Melick	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Melilotus albus</i>	White melilot	Old Tip area	16/09/04	KAC		Man Plan Habitat survey – old tip area
<i>Melilotus officinalis</i>	Ribbed Melilot	Chalk area	16/09/04	KAC		Still present in Chalk area. Also M. cf. officinalis on exchange land (KAC)
<i>Mentha aquatica</i>	Water Mint	Meadow Pond	04/08/2004	KAC		Man Plan Habitat survey – locally abundant round margins of Meadow Pond.
<i>Mercurialis annua</i>	Annual Mercury	WE	04/04/03	JFL, KP		
<i>Mercurialis perennis</i>	Dog's Mercury	WE	04/04/03	JFL, KP		
<i>Milium effusum</i>	Wood Millet	Pond Wood	27 Mar 2003	JFL & KP	Native	Native

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Moehringia trinervia</i>	Three-nerved Sandwort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Mycelis muralis</i>	Wall lettuce	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Myosotis scorpioides</i>	Water Forget-me-not	Meadow Pond	06/08/2004	KAC		Man Plan Habitat survey – Typha fringe to Meadow Pond
<i>Myosotis sylvatica</i>	Wood Forget-me-not	WE	04/04/03	JFL, KP		
<i>Odontites vernus</i>	Red Bartsia	Various	24/06/2004	KAC		Man Plan Habitat survey – various localities
<i>Oxalis acetosella</i>	Wood-sorrel	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Papaver somniferum</i>	Opium Poppy	WE	04/04/03	JFL, KP	Casual alien (A)	
<i>Papaver</i> sp.	A Poppy	Old Tip	15/07/04	KAC		Man Plan Habitat survey – old tip area
<i>Persicaria amphibia</i>	Amphibious Bistort	Abbots Stream	1990			
<i>Persicaria lapathifolia</i>	Pale Persicaria	Pond Wood	27 Mar 2003	JFL & KP		
<i>Persicaria maculosa</i>	Redshank	Pond Wood	27 Mar 2003	JFL & KP		
<i>Phalaris arundinacea</i>	Reed canary-grass	Meadow Pond	06/08/2004	KAC		Man Plan habitat survey – good stands on fringes of Meadow Pond.
<i>Phleum bertolonii</i>	Smaller Cat's-tail	Pond Wood	27 Mar 2003	JFL & KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Phleum pratense</i>	Timothy	Pond Wood	27 Mar 2003	JFL & KP		
<i>Phyllitis scolopendrium</i>	Hart's-tongue Fern	Pond Wood	27 Mar 2003	JFL & KP	Native	Streamside banks in woodland 100+ plants of all ages ,thriving colony. Native
<i>Picris echioides</i>	Bristly Ox-tongue	WE	04/04/03	JFL, KP		
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	Exchange Land	24/07/2004	KAC		Man Plan Habitat survey. Exchange land on area of now demolished hospital buildings
<i>Pinus contorta</i>	Lodgepole Pine	WE	04/04/03	JFL, KP	Planted	In Planted woodland
<i>Pinus nigra</i>	Austrian Pine	WE	04/04/03	JFL, KP	Planted	In planted woodland
<i>Pinus nigra</i> ssp. <i>laricio</i>	Corsican Pine	WE	04/04/03	JFL, KP	Planted	
<i>Pinus sylvestris</i>	Scots Pine	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Pistia stratiotes</i>	Water Lettuce	Meadow Pond	16/09/2004	KAC	Garden throw-out	Man Plan Habitat survey – several plants noted around eastern fringe of Meadow Pond. Probable recent introduction.
<i>Plantago lanceolata</i>	Ribwort Plantain	Pond Wood	27 Mar 2003	JFL & KP		
<i>Plantago major</i>	Greater Plantain	Pond Wood	29 Jun 1988	JFL, KP & JES		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Plantago maritima</i>	Sea Plantain	Chalk area	1990			Dubious record, plant not re-found here during Man Plan Habitat survey in 2004
<i>Platanus x hispanica</i>	London Plane	WE	04/04/03	JFL, KP	Planted	
<i>Poa annua</i>	Annual Meadow-grass	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Poa nemoralis</i>	Wood Meadow-grass	Pond Wood	1990			
<i>Poa pratensis</i> sens. lat.	Smooth Meadow-grass	Pond Wood	27 Mar 2003	JFL & KP		
<i>Poa trivialis</i>	Rough Meadow-grass	Pond Wood	27 Mar 2003	JFL & KP		
<i>Polygonum aviculare</i> agg.	Knot-grass (agg.)	Pond Wood	27 Mar 2003	JFL & KP		
<i>Polystichum aculeatum</i>	Hard Shield-fern	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Polystichum setiferum</i>	Soft Shield-fern	Pond Wood	27 Mar 2003	JFL & KP	Native	Streamside banks in damp woodland plants scattered near stream of varying ages. Native
<i>Populus tremula</i>	Aspen	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Populus</i> sp.	Polpars (planted)				Planted	
<i>Potentilla reptans</i>	Trailing Tormentil	Chalk area	19/09/2004	KAC		Man Plan Habitat survey
<i>Potentilla sterilis</i>	Barren Strawberry	Four Acre Wood	1990			

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Primula veris</i>	Cowslip		1974; 2004	RCS/JES; KAC		Man Plan Habitat survey – noted in several localities
<i>Primula vulgaris</i>	Primrose	Pond Wood	27 Mar 2003	JFL & KP		
<i>Prunella vulgaris</i>	Selfheal	Pond Wood	27 Mar 2003	JFL & KP		
<i>Prunus avium</i>	Wild Cherry	Pond Wood	1990			
<i>Prunus domestica</i>	Wild Plum		1974	RCS/JES		
<i>Prunus laurocerasus</i>	Cherry Laurel	Exchange land	14/07/04	KAC	Planted (N)	Man Plan Habitat survey. Local plantings on exchange land areas
<i>Prunus lusitanica</i>	Portugal Laurel	Pond Wood	1990		Established alien (N)	
<i>Prunus spinosa</i>	Blackthorn	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Pteridium aquilinum</i>	Bracken	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Pulicaria dysentrica</i>	Common Fleabane	Chalk area	16/09/2004	KAC		Man Plan Habitat survey. Rare plants noted in Chalk area.
<i>Pyrus communis</i> sens lat	Pear	WE	04/04/03	JFL, KP		Planted in old orchard, Said to be the variety “Bellesime D’Hiver” a 17 <sup>th</sup> century French cooking pear.
<i>Quercus cerris</i>	Turkey Oak	Pond Wood	29 Jun 1988	JFL, KP & JES	Planted	
<i>Quercus ilex</i>	Holm Oak	WE	04/04/03	JFL, KP	Planted	



Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Quercus petraea</i>	Sessile Oak	Pond Wood	03 Jun 1998	KH		SWT SNCI survey
<i>Quercus robur</i>	Pedunculate Oak	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Ranunculus acris</i>	Meadow Buttercup	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Ranunculus auricomus</i>	Goldilocks Buttercup	WE, Butcher's Grove	04/04/03, 1990	JFL, KP		
<i>Ranunculus ficaria</i>	Lesser Celandine	Pond Wood	1990			
<i>Ranunculus ficaria</i> ssp. <i>bulbilifer</i>	Bulbiferous Celandine	WE	04/04/03	JFL, KP		
<i>Ranunculus repens</i>	Creeping Buttercup	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Reseda lutea</i>	Wild Mignonette					
<i>Reseda luteola</i>	Weld	WE	04/04/03	JFL, KP		
<i>Rhamnus cathartica</i>	Buckthorn	Butcher's Grove	1990			
<i>Rhinanthus minor</i>	Yellow Rattle	NE meadow area	16/07/2004	KAC		Man Plan Habitat survey – meadow area in between golf course and Lambert's Wood.
<i>Ribes rubrum</i>	Red Currant	Pond Wood	1990			
<i>Ribes uva-crispa</i>	Gooseberry	Butcher's Grove	1990			
<i>Robinia pseudoacacia</i>	False Acacia	Butcher's Grove	1990		Alien (N)	

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Rorippa nastutrium-aquaticum</i>	Watercress	Abbots Stream, Orchard bal pond overflow	1990, 2004	KAC		Man Plan habitat survey – Overflow/by-pass channel to Orchard balancing pond.
<i>Rorippa sylvestris</i>	Creeping Yellowcress		1974	RCS/JES		
<i>Rosa arvensis</i>	Field Rose	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Rosa canina</i> agg.	Dog Rose	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Rubus caesius</i>	Dewberry		1974	RCS/JES		
<i>Rubus idaeus</i>	Raspberry		1974	RCS/JES		
<i>Rubus fruticosus</i> agg.	Bramble	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Rumex acetosa</i>	Common Sorrel					
<i>Rumex conglomeratus</i>	Clustered Dock	Pond Wood	27 Mar 2003	JFL & KP		
<i>Rumex crispus</i>	Curled Dock	Pond Wood	27 Mar 2003	JFL & KP		
<i>Rumex obtusifolius</i>	Broad-leaved Dock	Various	2004	KAC		Man Plan Habitat survey - widespread
<i>Rumex obtusifolius</i> var. <i>transiens</i>		Pond Wood	27 Mar 2003	JFL & KP	Established	Damp woodland by stream patch 10 x 3 metres. Established.
<i>Rumex sanguineus</i>	Wood Dock	Pond Wood	29 Jun 1988	JFL, KP & JES		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Salix alba</i>	White Willow	Various	Jun/Jul 2004	KAC	Planted	Man Plan Habitat survey – planted in various recent woodlands
<i>Salix caprea</i>	Goat Willow	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Salix cinerea</i> subsp. <i>oleifolia</i>	Grey Willow	Pond Wood	27 Mar 2003	JFL & KP		
<i>Salix fragilis</i>	Crack Willow	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Salix x sepulcralis</i>	Weeping willow	Orchard Pond	04/08/2004	KAC	? Planted	Man Plan Habitat survey – large mature tree
<i>Salix viminalis</i>	Osier	WE	04/04/03	JFL, KP		
<i>Sambucus nigra</i>	Elder	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Scirpus lacustris</i>	Common club-rush	Meadow Pond	06/08/2004	KAC		Man Plan Habitat Survey. Locally frequent around Meadow Pond margins.
<i>Scrophularia auriculata</i>	Water Figwort	Pond Wood; Chalk area	1990; 16/09/2004	KAC		Man Plan Habitat survey – rare plant noted in Chalk area.
<i>Scrophularia nodosa</i>	Common Figwort	Pond Wood/WE	29 Jun 1988	JFL, KP & JES		
<i>Senecio erucifolius</i>	Hoary Ragwort					
<i>Senecio jacobaea</i>	Ragwort					
<i>Senecio squalidus</i>	Oxford Ragwort				Naturalised alien	
<i>Silene dioica</i>	Red Campion	WE	04/04/03	JFL, KP		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Silene latifolia</i>	White Campion	Chalk area	1990			Not noted here during Man Plan Habitat survey.
<i>Silene vulgaris</i>	Bladder Campion	Chalk area	1990			Not noted here during Man Plan Habitat survey
<i>Sinapis alba</i>	White Mustard		1974	RCS/JES		
<i>Sinapis arvensis</i>	Charlock	WE	04/04/03	JFL, KP		
<i>Sison amomum</i>	Stone Parsley		2004	KAC		Man Plan Habitat survey – various localities, including rough grassland in Long Grove Hospital former grounds.
<i>Sisymbrium officinale</i>	Hedge Mustard		Aug 2004	KAC		Man Plan Habitat survey
<i>Solanum dulcamara</i>	Bittersweet	Pond Wood	27 Mar 2003	JFL & KP		
<i>Sonchus arvensis</i>	Field Sow-thistle					
<i>Sonchus asper</i>	Prickly Sow-thistle	Pond Wood	27 Mar 2003	JFL & KP		
<i>Sonchus oleraceus</i>	Smooth Sow-thistle	Butcher's Grove	08 Jun 1998	KH		SWT SNCI survey
<i>Sorbus aucuparia</i>	Rowan	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Stachys officinalis</i>	Betony	Light Rly between burning area and West Park bdy.	1990			
<i>Stachys sylvatica</i>	Hedge Woundwort	Pond Wood	29 Jun 1988	JFL, KP & JES		

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Stellaria alsine</i>	Bog Stitchwort	Willow Plantation West Park Bdy	1990			
<i>Stellaria graminea</i>	Lesser Stitchwort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Stellaria holostea</i>	Greater Stitchwort	Pond Wood	27 Mar 2003	JFL & KP		
<i>Stellaria media</i>	Chickweed					
<i>Symphoricarpos albus</i>	Snowberry	Pond Wood	27 Mar 2003	JFL & KP	Naturalised alien (N)	
<i>Symphytum officinale</i>	Comfrey	Abbots Stream	1990			
<i>Symphytum</i> cf. <i>x uplandicum</i>	Russian Comfrey	Various	24/06/2004	KAC		Man Plan Habitat survey
<i>Tamus communis</i>	Black Bryony	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Tanacetum parthenium</i>	Feverfew	Butcher's Grove	08 Jun 1998	KH		SWT SNCI survey
<i>Tanacetum vulgare</i>	Tansy	Exchange Land	14/07/2004	KAC		Man Plan Habitat survey – demolished buildings on exchange land area.
<i>Taraxacum aggregate</i>	Dandelion	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Taxus baccata</i>	Yew	Pond Wood	27 Mar 2003	JFL & KP	? planted	
<i>Teucrium scorodonia</i>	Wood Sage	Pond Wood	03 Jun 1998	KH		SWT SNCI survey
<i>Tilia cordata</i>	Small-leaved Lime	Pond Wood	04 Apr 2003	JFL & KP	Planted	Planted

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Tilia x europea</i>	Lime	WE, Great Wood	04/04/03, 03/06/98	JFL & KP, KH		
<i>Tilia</i> sp.	a lime	Pond Wood	04 Apr 2003	JFL & KP	Planted	Species <i>T. x euchlora</i> , Caucasian Lime. Planted
<i>Torilis japonica</i>	Upright Hedge-parsley	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Tragopogon pratensis</i>	Goat's-beard	Pond Wood	27 Mar 2003	JFL & KP		
<i>Trifolium dubium</i>	Lesser Trefoil	Butcher's Grove	08 Jun 1998, 23.06.04	KH, KAC		SWT SNCI survey, Man Plan habitat survey
<i>Trifolium pratense</i>	Red Clover	WE	04/04/03			
<i>Trifolium repens</i>	White Clover					
<i>Tripleurospermum inodorum</i>	Scentless Mayweed	WE	04/04/03	JFL, KP		
<i>Typha latifolia</i>	Bulrush	Pond Wood	27 Mar 2003	JFL & KP		
<i>Ulmus glabra</i>	Wych Elm	Pond Wood	1990			
<i>Ulmus procera</i>	English Elm	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Urtica dioica</i>	Common Nettle	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Urtica urens</i>	Small Nettle	WE	04/04/03	JFL, KP		
<i>Veronica beccabunga</i>	Brooklime	Orchard balancing pond	04/08/2004	KAC		Man Plan Habitat survey. Orchard balancing pond and overflow channel, plus Orchard Pond

Latin name	Common name	Location	Date	Recorder (s)	Status	Comments
<i>Veronica chamaedrys</i>	Germander Speedwell	Pond Wood	27 Mar 2003	JFL & KP		
<i>Veronica montana</i>	Wood Speedwell	Pond Wood, Butcher's Grove	27 Mar 2003, 1990	JFL & KP		
<i>Veronica officinalis</i>	Heath Speedwell	Butcher's Grove	08 Jun 1998	KH		SWT SNCI Survey
<i>Veronica persica</i>	Common Field-speedwell	Pond Wood	27 Mar 2003	JFL & KP		
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell	WE	04/04/03	JFL, KP		
<i>Viburnum opulus</i>	Guelder-rose	Pond Wood	29 Jun 1988	JFL, KP & JES		
<i>Vicia cracca</i>	Tufted Vetch	Abbots Stream	1990			
<i>Vicia hirsuta</i>	Hairy Tare		23/06/2004	KAC		Man Plan Habitat survey
<i>Vicia sativa</i>	Common Vetch					
<i>Vicia sativa</i> subsp. <i>segetalis</i>	Common Vetch	Pond Wood	27 Mar 2003	JFL & KP		
<i>Vicia sepium</i>	Bush Vetch	Pond Wood	27 Mar 2003	JFL & KP		
<i>Vicia tetrasperma</i>	Smooth Tare		23/06/2004	KAC		Man Plan habitat survey
<i>Viola reichenbachiana</i>	Early Dog-violet	WE	04/04/03	JFL, KP		
<i>Viola riviniana</i>	Common Dog-violet	Pond Wood	27 Mar 2003	JFL & KP		





## Bryophytes

The following bryophytes have been recorded within the Country Park. The majority were recorded by either Karl Crowther (KAC) and/or Giles Groome (GG) on 10.02.2005.

Latin name	English name	Location	Date	Recorder
<i>Atrichum undulatum</i>	Common Smoothcap	Pond Wood	10.02.2005	KAC/ GG
<i>Barbula unguiculata</i>	Bird's-claw Beard-moss	Concrete base of old piggery	10.02.2005	KAC
<i>Brachythecium rutabulum</i>	Rough-stalked Feather-moss		10.02.2005	KAC/ GG
<i>Bryum capillare</i>	Capillary Thread-moss	Concrete base of old piggery	10.02.2005	KAC
<i>Calliergonella cuspidata</i>	Pointed Spear-moss	Old ant hills in Long Grove Hospital exchange land area	10.02.2005	GG
<i>Ceratodon purpureus</i>	Redshank	Concrete base of old piggery	10.02.2005	KAC
<i>Eurhynchium praelongum</i>	Common Feather-moss		10.02.2005	KAC/ GG
<i>Fissidens</i> sp.	A Pocket-moss	Pond Wood	10.02.2005	GG
<i>Grimmia pulvinata</i>	Grey-cushioned Grimmia	Concrete base of old piggery	10.02.2005	KAC
<i>Lunularia cruciata</i>	Crescent-cup Liverwort	Outfall of Pond Wood Pond	10.02.2005	KAC/ GG
<i>Mnium hornum</i>	Swan's-neck Thyme-moss	Pond Wood	1990	Not known
<i>Plagionmium undulatum</i>	Hart's-tongue Thyme-moss	Pond Wood	10.02.2005	KAC/ GG
<i>Syntrichia ruralis</i>	Great Hairy Screw-moss	Concrete base of old piggery	10.02.2005	KAC

## Lichens

No lichen records available

## Fungi

A majority of these records have been taken from a paper printout of the EEBC database ('list to 06.11.1984'). The recorder is not known. Unfortunately, the corner of one page was torn and information was missing (an un-damaged copy could not be found on file).

Latin name	Common name	Location	Date	Status
<i>Agaricus arvensis</i>	Horse Mushroom		06.11.1984	
<i>Amantia phalloides</i>	Death Cap		06.11.1984	
<i>Armillaria mellea</i>	Honey Fungus		06.11.1984	
<i>Auricularia auricula judae</i>	Ear Fungus		06.11.1984	
<i>Auricularia mesenterica</i>	None		06.11.1984	
<i>Bolbitius vitellinus</i>	None		06.11.1984	
<i>Boletus chrysenteron</i>	??		06.11.1984	
<i>Boletus subtomentosus</i>	??		06.11.1984	
<i>Boletus versicolor</i>	??		06.11.1984	
<i>Calocera viscosa</i>	None		06.11.1984	
<i>Clavariadelphus fistulosus</i>	??		06.11.1984	
<i>Clavulina cristata</i>	None		06.11.1984	
<i>Clitocybe dicolor (decembris)</i>	None		06.11.1984	
<i>Clitocybe flaccida</i>	??		06.11.1984	
<i>Clitocybe geotropa</i>	None		06.11.1984	
<i>Clitocybe nebularis</i>	None		06.11.1984	
<i>Clitocybe phyllophila</i>	None		06.11.1984	
<i>Collybia butyracea</i>	None		06.11.1984	
<i>Collybia dryophila</i>	None		06.11.1984	
<i>Collybia fusipes</i>	None		06.11.1984	
<i>Coprinus disseminatus</i>	None		06.11.1984	
<i>Coprinus micaeus</i>	None		06.11.1984	
<i>Coprinus picaceus</i>	None		06.11.1984	
<i>Coprinus plicatilis</i>	None		06.11.1984	
<i>Coriolus variabilis</i>	??		06.11.1984	
<i>Dacrymyces stillatus</i>	None		06.11.1984	
<i>Daedaleopsis confragrosa</i>	None		06.11.1984	
<i>Daldinia concentrica</i>	None		06.11.1984	
<i>Entoloma rhodopium</i>	??		06.11.1984	
<i>Exidia glandulosa (truncata)</i>	None		06.11.1984	

Latin name	Common name	Location	Date	Status
<i>Flamulina velutipes</i>	None		06.11.1984	
<i>Geastrum triplex</i>	An Earth Star		06.11.1984	
<i>Hebeloma sacchariolens</i>	None		06.11.1984	
<i>Hypholoma fasciculare</i>	Sulphur-tuft		06.11.1984	
<i>Inocybe geophyla</i> var. <i>lilacina</i>	None		06.11.1984	
<i>Laccaria amethystea</i>	None		06.11.1984	
<i>Laccaria laccata</i>	None		06.11.1984	
<i>Lacrymaria velutina</i> ( <i>Psathyrella lacrymabunda</i> )	None		06.11.1984	
<i>Lactarius quietus</i>	??		06.11.1984	
<i>Lepiota procera</i>	??		06.11.1984	
<i>Lepiota rhacodes</i>	??		06.11.1984	
<i>Lepiota rhacodes</i> var. <i>hortensis</i>	??		06.11.1984	
<i>Lepista nuda</i>	A Wood Blewitt		06.11.1984	
<i>Lepista</i> sp.	A Wood Blewitt	Pond Wood	1990	
<i>Macrolepiota procera</i>	Parasol Mushroom	Butcher's Grove	1990	
<i>Marasmius oreades</i>	Fairy Ring		06.11.1984	
<i>Marasmius rotula</i>	None		06.11.1984	
<i>Melamscrella symphyli</i>	??		06.11.1984	
<i>Melanoleuca arcuata</i>	??		06.11.1984	
<i>Melanoleuca melaleuca</i> ( <i>vulgaris</i> )	None		06.11.1984	
<i>Mycena flavo-alba</i>	None		06.11.1984	
<i>Mycena galericulata</i>	None		06.11.1984	
<i>Mycena galopus</i>	None		06.11.1984	
<i>Neobulgaria pura</i>	None		06.11.1984	
<i>Phallus impudicus</i>	Stinkhorn	Pond Wood	1990	
?? <i>Phlebia</i> sp. (torn page)			06.11.1984	
<i>Piptoporus betulinus</i>	Birch Polypore	Pond Wood	1990	
<i>Piptoporus</i> sp. (torn page)			06.11.1984	
<i>Pleurotus</i> sp. (torn page)			06.11.1984	
<i>Pleurotus</i> sp. (torn page)			06.11.1984	
<i>Pluteus cervinus</i>	None		06.11.1984	
<i>Pluteus umbrosus</i>	None		06.11.1984	
<i>Polyporus squamosus</i>	None		06.11.1984	

Latin name	Common name	Location	Date	Status
<i>Psilocybe physaloides</i>	??		06.11.1984	
<i>Puccinia punctiformis</i>	??		06.11.1984	
<i>Rhodotus palmatus</i>	None		06.11.1984	
<i>Russula atropurpurea (krombholzii)</i>	None		06.11.1984	
<i>Russula foetens</i>	None		06.11.1984	
<i>Russula laurocerasi (fragrans)</i>	None		06.11.1984	
<i>Russula ochroleuca</i>	None		06.11.1984	
<i>Russula xerampelina (erythropoda)</i>	None		06.11.1984	
<i>Scleroderma citrinum</i>	None		06.11.1984	
<i>Scleroderma verrucosum</i>	None		06.11.1984	
<i>Stereum hirsutum</i>	??		06.11.1984	
<i>Stropharia inuncta</i>	None		06.11.1984	
<i>Tricholoma ustaloides (albobrunneum)</i>	None		06.11.1984	
<i>Tricholomopsis platyphylla</i>	??		06.11.1984	
<i>Tyromyces caesius</i>	??		06.11.1984	
<i>Volvariella bombycinia</i>	None		06.11.1984	
<i>Xylaria hypoxylon</i>	None		06.11.1984	

## Invertebrates

Prior to the 2006-16 Management Plan the following recording is known to have occurred. John Biglin (former EEBC officer) undertook some recording of moths (Lepidoptera) during the 1990s. Casual invertebrate recording, namely of butterflies (Lepidoptera) and Dragonflies (Odonata) since the formation of the Friends of Horton Country Park in 2000 (recorders include Bob & Ann Smith, Tony Quinn and Tony Gibbs). A recent beetle record has been provided by Ian Menzies (ISM). In 2010 a more formal invertebrate survey was carried out by Dr. Jonty Denton FRES FLS MIEEM.

## Key to Status

RDB                      Nationally rare species, recorded in 1-15 national hectads (RDB1 = endangered; RDB2 = vulnerable; RDB3 = rare).

Notable A	Nationally scarce, recorded in 16-100 hectads (Notable A = 16-30 hectads).
Notable B	Nationally scarce, recorded in 16-100 hectads (Notable B = 31-100 hectads).
LBAP	Species on the National Biodiversity Action Plan Long list

Common name	Latin name	Status	Comments
<b>Lepidoptera (butterflies and moths)</b>			
Orange Tip	<i>Anthocharis cardamines</i>		
Purple Emperor	<i>Apatura iris</i>	Notable B/LBAP	Woodlands
Ringlet	<i>Aphantopus hyperantus</i>		
Silver-washed Fritillary	<i>Argynnis paphia</i>	LBAP	Woodlands
Clouded Yellow	<i>Colias croceus</i>		
Brimstone	<i>Gonepteryx rhamni</i>		
Peacock	<i>Inachis io</i>		
White Admiral	<i>Lagoda camilla</i>	Local	
Small Copper	<i>Lycaena phlaeas</i>		
Meadow Brown	<i>Maniola jurtina</i>		
Speckled Wood	<i>Pararge aegaria</i>		Woodlands
Comma	<i>Polygonia c-album</i>		
Common Blue	<i>Polyommatus icarus</i>		
Gatekeeper	<i>Pyronia tithonus</i>		
White-letter Hairstreak	<i>Strymonidia w-album</i>		
Red Admiral	<i>Vanessa atalanta</i>		
Brown Hairstreak	<i>Thecla betulae</i>		
Marbled White	<i>Melanargia galathea</i>		
Dark Green Fritillary	<i>Argynnis aglaja</i>		
A micro moth	<i>Agapeta hamana</i>		
Mottled/Willow Beauty	<i>Alcis repandata repandata</i>		
Dark Arches	<i>Apamea monoglypha</i>		
Dun-bar	<i>Cosmia trapezina</i>		
Marbled Beauty	<i>Cryphia domestica</i>		
Common Footman	<i>Eilema lurideola</i>		
Common Heath	<i>Ematurga atomaria</i>		
Lime-speck Pug	<i>Eupithecia centaureata</i>		
Riband Wave	<i>Idaea straminata</i>		
Clay	<i>Mythinna ferrago</i>		
Smoky Wainscot	<i>Mythimna impura</i>		
Common Wainscot	<i>Mythimna pallens</i>		
Swallow-tailed Moth	<i>Ourapteryx sambucaria</i>		
Ruby Tiger	<i>Phragmatobia fuliginosa fuliginosa</i>		

Common name	Latin name	Status	Comments
Early <i>Thorn</i>	<i>Selenia dentaria</i>		
5-spot Burnet	<i>Zygaena trifolii</i>		
<b>Odonata (Dragonflies and Damselflies)</b>			
Southern Hawker	<i>Aeshna cyanea</i>		
Brown Hawker	<i>Aeshna grandis</i>		
Migrant Hawker	<i>Aeshna mixta</i>		
Emperor Dragonfly	<i>Anax imperator</i>		
Common Blue Damselfly	<i>Enallagma cyathigerum</i>		
Broad-bodied Chaser	<i>Libellula depressa</i>		
Common Darter	<i>Sympetrum striolatum</i>		
<b>Coleoptera (Beetles)</b>			
A ladybird	<i>Clitosthetus arcuatus</i>	RDB1	Pond Wood (old) (ISM, 18.03.05)
Common Cardinal Beetle	<i>Pyrochroa serraticornis</i>		Pond Wood in 1998 (SWT SNCI survey)

## Vertebrates

Sources of information are discussed under the individual headings below.

### Key to status (general):

LBAP = Species on the United Kingdom Biodiversity Action Plan "Long List"

UKSAP = "Priority Species" of United Kingdom Biodiversity Action Plan

SyBAP = Surrey Biodiversity Action Plan species

## Birds

The list of birds has been based primarily upon the various issues of the Friends of Horton Country Park Newsletter (contributors include Tony Quinn, Bob Smith, Tony Gibbs, Brian Godbold and Alison Fure). Please note the conservation status of each bird species listed was updated in September 2016.

Please note the occurrence of a species whose presence is being regarded as confidential (on the "Long List" of the UKBAP) and thus not included in the table below. Epsom and Ewell Borough Council are aware of its presence and, if necessary, will undertake any appropriate management for this species.

Common Name	Latin name	Conservation status	Comments
Cormorant	<i>Phalacrocorax carbo</i>	LBAP/	Rare sightings
Little Grebe	<i>Tachybaptus ruficollis</i>		Rare migrant, Meadow Pond
Grey Heron	<i>Ardea cinerea</i>		Breeds (Great Wood)
Canada Goose	<i>Branta canadensis</i>		Possibly breeds
Mute Swan	<i>Cygnus olor</i>	LBAP/Amber Listed	Breeds (Meadow Pond, not every year)
Mallard	<i>Anas platyhynchos</i>	LBAP Amber Listed	Breeds
Shelduck	<i>Tadorna tadorna</i>	LBAP/Amber Listed	Rare migrant
Egyptian Goose	<i>Alopochen aegyptiacus</i>		Rare sighting (once only)
Mandarin Duck	<i>Aix galericulata</i>		May have bred
Tufted Duck	<i>Aythya fuligula</i>	LBAP	Rare winter visitor
Common Buzzard	<i>Buteo buteo</i>	LBAP	Occasional sightings (breed nearby)
Sparrowhawk	<i>Accipiter nisus</i>	LBAP	Occasionally breeds (pine plantation nr. orchard)
Kestrel	<i>Falco tinnunculus</i>	UKSAP/Amber Listed	Occasionally breeds (Long Grove Wood area)
Pheasant	<i>Phasianus colchicus</i>		May breed
Water Rail	<i>Rallus aquaticus</i>	LBAP/	Rare winter visitor
Moorhen	<i>Gallinula chloropus</i>		Breeds (most ponds)
Coot	<i>Fulica atra</i>		Breeds (Meadow Pond)
Lapwing	<i>Vanellus vanellus</i>	LBAP/Red Listed	Rare visitor, possibly increasing (now breeds at Park Farm)
Snipe	<i>Gallinago gallinago</i>	LBAP/Amber Listed	Scarce winter visitor (Orchard balancing pond and Meadow Pond)
Jack Snipe	<i>Lymnocyptes minimus</i>	LBAP	Rare winter visitor (Meadow Pond)
Woodcock	<i>Scolopax rusticola</i>	LBAP/Red Listed	Rare winter visitor (possibly overlooked)
Green Sandpiper	<i>Tringa ochropus</i>	LBAP/Amber Listed	Rare migrant
Black-headed Gull	<i>Larus ridibundus</i>	Amber Listed	Common visitor
Common Gull	<i>Larus canus</i>	Amber Listed	Common visitor

Common Name	Latin name	Conservation status	Comments
Lesser Black-backed Gull	<i>Larus fuscus</i>	LBAP/Amber Listed	Scarce winter visitor
Great Black-backed Gull	<i>Larus marinus</i>	Amber Listed	Scarce winter visitor
Herring Gull	<i>Larus argentatus</i>	LBAP/Red Listed	Scarce winter visitor
Wood Pigeon	<i>Columba palumbus</i>		Breeds (up to 200 noted)
Stock Dove	<i>Columba oenas</i>	Amber Listed	Breeds in small numbers
Collared Dove	<i>Streptopelia decaocto</i>		Breeds
Turtle Dove	<i>Streptopelia turtur</i>	UKSAP/Red Listed	Rare summer visitor. Last recorded in 2000 (declining in Surrey)
Cuckoo	<i>Cuculus canorus</i>	Red Listed	Rare spring/summer visitor (last record 1988)
Barn Owl	<i>Tyto alba</i>	LBAP/	Occasional local breeder
Long-eared Owl	<i>Asio otus</i>	LBAP	Rare winter visitor (last record 1991)
Short-eared Owl	<i>Asio flammeus</i>	LBAP/Amber Listed	Rare winter visitor (no details of last record)
Little Owl	<i>Athene noctua</i>		Breeding resident
Tawny Owl	<i>Strix aluco</i>	LBAP Amber Listed	May breed (last heard in 2001)
Swift	<i>Apus apus</i>	Amber Listed	Common summer visitor
Ring-necked Parakeet	<i>Psittacula krameri</i>		Common visitor
Kingfisher	<i>Alecdo atthis</i>	LBAP/Amber Listed	Rare winter visitor (last reported in 2002 at Golf Course balancing pond)
Green Woodpecker	<i>Picus viridis</i>	LBAP/	Breeding resident (2-3 pairs)
Great Spotted Woodpecker	<i>Dendrocarpos major</i>	LBAP	Breeding resident (3-4 pairs)
Lesser Spotted Woodpecker	<i>Dendrocopus minor</i>	LBAP/Red Listed	Possible breeding resident
Woodlark	<i>Lullula arborea</i>	UKSAP/	Rare migrant (last seen Meadow Pond in 1998)
Skylark	<i>Alauda arvensis</i>	UKSAP/Red Listed	Occasional visitor (breeds on Park Farm)
Sand Martin	<i>Riparia riparia</i>	LBAP/	Unusual visitor



Common Name	Latin name	Conservation status	Comments
Swallow	<i>Hirundo rustica</i>	LBAP/	Breeds (one pair usually in stables next to Ranger's Office)
House Martin	<i>Delichon urbica</i>	LBAP/SyBAP /Amber Listed	Unusual visitor
Tree Pipit	<i>Anthus trivialis</i>	LBAP/Red Listed	No recent sightings
Meadow Pipit	<i>Anthus pratensis</i>	LBAP/Amber Listed	Scarce winter visitor (mainly around Meadow Pond and Polo Field)
Grey Wagtail	<i>Motacilla cinerea</i>	LBAP/Red Listed	Rare winter visitor
Pied Wagtail	<i>Motacilla alba</i>	LBAP	Possible breeding resident
Waxwing	<i>Bombycilla garrulus</i>		Rare winter visitor (50+ noted in Feb. 2005)
Red-backed Shrike	<i>Lanius collurio</i>	UKSAP/Red Listed	Rare migrant (recorded mid-1990s)
Wren	<i>Troglodytes troglodytes</i>		Breeding resident
Dunnock	<i>Prunella modularis</i>	LBAP/Amber Listed	Breeding resident
Grasshopper Warbler	<i>Locustella naevia</i>	LBAP/Red Listed	Rare migrant (held summer territories in Hendon Grove in 1990s). No post-2000 records.
Reed Warbler	<i>Acrocephalus scirpaceus</i>	LBAP/LBAP	Breeds (last at Meadow Pond in 1998 and 1999).
Dartford Warbler	<i>Sylvia undata</i>	LBAP/Amber Listed	Very rare visitor (Meadow Pond in October 1999)
Garden Warbler	<i>Sylvia borin</i>	LBAP	Breeds (last recorded as such in 1999)
Blackcap	<i>Sylvia atricapilla</i>	LBAP	Breeding resident (probably most common breeding warbler)
Whitethroat	<i>Sylvia communis</i>	LBAP	Breeds (most common in N. part of park – hedgerows/scrub)
Lesser Whitethroat	<i>Sylvia curruca</i>	LBAP	Occasional breeder (last record as such in 2000)

Common Name	Latin name	Conservation status	Comments
Willow Warbler	<i>Phylloscopus trochilus</i>	LBAP/Amber Listed	Regular breeder in several localities
Chiffchaff	<i>Phylloscopus collybita</i>	LBAP	Regular breeder, fairly common in suitable woodland
Goldcrest	<i>Regulus regulus</i>	LBAP/	Scarce winter visitor
Spotted Flycatcher	<i>Muscicapa striata</i>	UKSAP/Red Listed	Breeds locally
Wheatear	<i>Oenanthe oenanthe</i>	LBAP	Rare migrant
Whinchat	<i>Saxicola rubetra</i>	LBAP Red Listed	Rare migrant
Stonechat	<i>Saxicola torquata</i>	LBAP	Rare migrant
Robin	<i>Erithacus rubecula</i>		Common breeding resident
Nightingale	<i>Luscinia megarhynchos</i>	LBAP/Red Listed	Rare migrant (formerly bred in Pond Wood, no recent records)
Black Redstart	<i>Phoenicurus ochruros</i>	LBAP/Red Listed	Rare migrant
Redstart	<i>Phoenicurus phoenicurus</i>	LBAP/Amber Listed	Rare migrant
Fieldfare	<i>Turdus pilaris</i>	LBAP/Red Listed	Common winter visitor (flocks of up to 200)
Ring Ouzel	<i>Turdus torquatus</i>	LBAP/Red Listed	Rare migrant (last in 1980s)
Blackbird	<i>Turdus merula</i>		Common breeding resident
Redwing	<i>Turdus iliacus</i>	LBAP/Red Listed	Common winter visitor (flocks of up to 200)
Song Thrush	<i>Turdus philomelos</i>	UKSAP/Red Listed	Fairly common breeding resident
Mistle Thrush	<i>Turdus miscivorus</i>	Red Listed	May breed (in south of park)
Long-tailed Tit	<i>Aegithalos caudatus</i>		Fairly common breeding resident
Coal Tit	<i>Parus ater</i>	LBAP	Scarce winter visitor
Blue Tit	<i>Parus caeruleus</i>	LBAP	Common breeding resident
Great Tit	<i>Parus major</i>	LBAP	Common breeding resident
Marsh Tit	<i>Parus palustris</i>	LBAP/Red Listed	Rare visitor (last seen at Pond Wood in 2001)
Nuthatch	<i>Sitta europaea</i>	LBAP	Breeding resident (favours Butcher's Grove)

Common Name	Latin name	Conservation status	Comments
Treecreeper	<i>Certhia familiaris</i>	LBAP	May breed (Butcher's Grove)
Corn Bunting	<i>Emberzia calandra</i>	UKSAP/Red Listed	Formally bred (Horton Farm and presumably the park – last in 1958)
Yellowhammer	<i>Emberzia citrinella</i>	LBAP/Red Listed	Breeding resident
Reed Bunting	<i>Emberiza schoeniclus</i>	UKSAP/Amb er Listed	Breeding resident (mostly around Meadow Pond)
Chaffinch	<i>Fringilla coelebs</i>		Common breeding resident
Greenfinch	<i>Carduelis chloris</i>	LBAP	Breeding resident
Siskin	<i>Carduelis spinus</i>	LBAP	Scarce winter visitor
Goldfinch	<i>Carduelis carduelis</i>	LBAP	Breeding and also some large flocks recorded
Linnet	<i>Carduelis cannabina</i>	UKSAP/Red Listed	Scarce summer visitor and possible occasional breeder
Lesser Redpoll	<i>Acanthis flammea</i>	Red Listed	Scarce winter visitor
Crossbill	<i>Loxia curvirostra</i>	LBAP	Very rare visitor
Bullfinch	<i>Pyrrhula pyrrhula</i>	UKSAP/Amb er Listed	Breeding resident
House Sparrow	<i>Passer domesticus</i>	Red Listed	Breeding resident (around HQ area)
Tree Sparrow	<i>Passer montanus</i>	UKSAP/Red Listed	Probably formerly bred. Last seen in early 1990s (winter)
Starling	<i>Sturnus vulgaris</i>	Red Listed	Breeds around HQ area. Good numbers on grazed pastures in winter)
Jay	<i>Garrulus glandarius</i>		Breeding resident
Magpie	<i>Pica pica</i>		Common breeding resident
Jackdaw	<i>Corvus monedula</i>		Breeding resident - formerly large roost of 500-1,000 birds in ground of Long Grove Hospital, may now have moved to Pond Wood
Carrion Crow	<i>Corvus corone corone</i>		Common breeding resident

Red/Amber list taken from the RSPB website (Anon., 2002), which in turn has been based upon Gregory *et al.* (2002). Species on the 'Long List' of the Biodiversity Action Plan have been taken from Appendix F of the 'UK Steering Group report' (UK Biodiversity Steering Group, 1995).

## Herptiles

The following is the only known record at present (this undoubtedly reflects a lack of records rather than a scarcity of herptiles).

Common Name	Latin name	Conservation status	Comments
Smooth Newt	<i>Triturus Lissotrton vulgaris</i>	WCA Schedule 5	
Great Crested Newt	<i>Triturus cristatus</i>	WCA Schedule 5; UKSAP; LBAP	

## Mammals

Information sources include a bat survey of unknown origin conducted in 1991 (EEBC files), a bat survey by Alison Fure on July 7<sup>th</sup> 2001 and reported in the Friends of Horton Country Park Newsletter no. 6 (April 2002), plus a bat survey of the Long Grove Copse Villa by Ross Baker and Lynne Whitfield, in August 2002.

Mervyn Newman of Surrey Wildlife Trust has identified the presence of Water Voles, whilst a number of casual sightings of other mammals were made during a botanical survey in 1990.

Common name	Latin name	Status	Comments
Roe Deer	<i>Cervus elaphus</i>		Common throughout
Fox	<i>Vulpes vulpes</i>		
Grey Squirrel	<i>Sciurus carolinensis</i>		Common throughout
Weasel	<i>Mustela nivalis</i>		1990 record from Pond Wood during botanical survey
Water Vole	<i>Arvicola terrestris</i>	WCA Schedule 5; UKSAP	Stream S. of Pond Wood

Common name	Latin name	Status	Comments
Bank Vole	<i>Clethrionomys glareolus</i>		1990 record from Pond Wood during botanical survey
Wood Mouse	<i>Apodemus sylvaticus</i>		1990 record from Pond Wood during botanical survey
Pygmy Shrew	<i>Sorex minutus</i>		1991 record from Pond Wood area
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	WCA Schedule 5; UKSAP	1991 and 2001 bat surveys in S. of park
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	WCA Schedule 5; UKSAP	1991 and 2001 bat surveys in S. of park
Serotine	<i>Eptescius serotinus</i>	WCA Schedule 5;	Equestrian Centre area in 2001
Noctule	<i>Nyctalus noctula</i>	WCA Schedule 5;	Equestrian Centre area in 2001
Brown Long-eared Bat	<i>Plecotus auritus</i>	WCA Schedule 5;	Extreme S. of park close to West Park Hospital in 1991 survey. Likely use of Long Grove Villa building as night-time feeding roost (Baker & Whitfield, 2002)

## **Appendix IV – LNR Byelaws and Other Statutory Information**

### **BYELAWS made Under Section 41 of the Countryside Act 1968**

with respect to

#### **HORTON COUNTRY PARK**

**1.** Throughout these byelaws the expression "the Council" means the Council of the Borough of Epsom and Ewell and the expression "the land" means the country park known as Horton Country Park.

**2.** No person shall on the land

**(i)** climb any wall or fence on or enclosing the land or any tree or any barrier, railing, post or other erection.

**(ii)** without reasonable excuse remove or displace any wall or fence on or enclosing the land or any barrier, railing, post or seat, or any part of any erection or ornament or any implement provided for use in the laying out or maintenance of the land.

**3.** No person shall affix or cause to be affixed any advertisement, bill, placard or notice upon any building, wall, fence, gate, door, pillar, post, tree, rock or stone on or enclosing the land.

**4.**

**(a)** No person shall light a fire on the land or place or throw or let fall a lighted match or any other thing so as to be likely to cause a fire. Provided that this byelaw shall not apply to any event held in pursuance of an agreement with the Council.

**(b)** This byelaw shall not prevent the lighting or use of a properly constructed camping stove or cooker in any area set aside for the purpose in such a manner as not to cause danger of or damage by fire.

**5.**

**(a)** No person shall ride or drive a mechanically propelled vehicle on any part of the land where there is no right of way for vehicles.

**(b)** If the Council has set apart a space on the land for use by vehicles of any class this byelaw shall not prevent the riding or driving of those vehicles in the space so set apart or on the direct route between it and the entrance to the land.

**6.** Where the Council indicate by a notice conspicuously exhibited on or alongside any gate on the land that leaving that gate open is prohibited, no person having opened that gate or caused it to be opened shall leave it open.

**7.** No person shall without the consent of the Council erect a tent or use any vehicle, including a caravan or any other structure for the purpose of camping

on the land except on any area which may be set apart and indicated by notice as a place where camping is permitted.

**8.** No person shall except in the exercise of any lawful right or privilege or in pursuance of a lawful agreement with the Council have in his possession while he is on the land any firearm unless it is so covered with a securely fastened gun cover that it cannot be fired.

In this byelaw the expression 'firearm' means any lethal barrelled weapon of any description from which any shot bullet or other missile can be discharged. This byelaw shall apply to all parts of the land except any part thereof which is public right of way.

**9.**

**(i)** No person in charge of a dog, other than a registered blind person in charge of a guide dog shall without reasonable excuse permit the dog to enter or remain in any field on the land used for the grazing of livestock or horses.

**(ii)** Notice of the effect of this byelaw shall be given by a sign displayed in a conspicuous position at each entrance to each such field.

**(iii)** An officer of the Council or any constable may require a person in charge of a dog which has entered any such field to remove the dog from the field.

**(iv)** For the purpose of this byelaw the keeper of the dog shall be deemed to be in charge thereby unless the court is satisfied that at the time when the dog entered or remained on the field it had been placed or taken into the charge of some other person.

**(v)** In paragraph (iv) above "the keeper" shall include the owner of the dog or any person who habitually has it in his possession.

**10.**

**(a)** No person shall without lawful excuse or authority on the land kill, molest or intentionally disturb any animal, bird or fish or engage in hunting, shooting or fishing or the setting of traps or nets or the laying of snares.

**(b)** This byelaw shall not prohibit any fishing which may be authorised by the Council or the checking and recording of mammals or birds.

**11.** No person shall, except in pursuance of a lawful agreement with the Council, turn out or permit any animal to graze on the land.

**12.** No person shall on the land sell or offer or expose for sale or let to hire or offer or expose for letting to hire any commodity or article except in pursuance of an agreement with the Council.

**13.** No person shall obstruct the flow of any drain or watercourse or open shut or otherwise interfere with any sluice gate or similar apparatus on the land.

**14.** Where any rides or parts of the land have by notices affixed in a conspicuous position on the land been set apart by the Council as a place

where horse riding is permitted. a person shall not except in the exercise of any lawful right or privilege ride a horse in any other part of the land.

**15.** No person shall on the land drive pitch or chip a hard golf ball, except on any land set aside by the Council for use as a golf link. golf driving range, golf practice area or putting course.

**16.** No person shall intentionally recklessly or negligently foul or pollute any waterway comprised in the land.

**17.**

**(a)** No person shall place on any lake pond or waterway on or comprised in the land any power driven model boat or control the movement of any such boat.

**(b)** In this byelaw "power driven" means driven by combustion of petrol vapour or other combustible vapour or other combustible substances.

**18.** No person shall by operating or causing or permitting to be operated any wireless set gramophone, amplifier, tape recorder or similar instrument make cause or permit to be made any noise which is so loud or so continuous or repeated as to give reasonable cause for annoyance to other persons in the Country Park.

**19.**

**(a)** No person shall on any part of the land release any power-driven model aircraft for flight or control the flight of such an aircraft or without reasonable excuse cause any such aircraft to take off or land.

**(b)** In this byelaw "model aircraft" means an aircraft which either weighs not more than 5 kilograms without its fuel or is for the time being exempted (as a model aircraft) from the provision of the Air Navigation Order.

**(c)** In this byelaw "power driven" means driven by the combustion of petrol vapour or other combustible vapour or other combustible substances.

**20.** No person shall on the land:

**(a)** intentionally obstruct any officer of the Council in the proper execution of his duties;

**(b)** intentionally obstruct any person carrying out an act which is necessary to the proper execution of any contract with the Council; or

**(c)** intentionally obstruct any other person in the proper use of the land or behave so as to give reasonable grounds for annoyance to other persons on the land.

**21.** Where any lake, pond or waterway has by notice affixed in conspicuous positions on the land been set apart by the Council as a place where boating is permitted, a person shall not except in the exercise of any lawful right or



privilege place or use any boat on any lake, pond or waterway in any other part of the land.

**22.**

**(a)** An act necessary to the proper execution of his duty on the land by an officer of the Council or any act which is necessary to the proper execution of any contract with the Council, shall not be an offence under these byelaws.

**(b)** Nothing in or done under any of the provisions of these byelaws shall in any respect prejudice or injuriously affect any public right of way through the land or the rights of any person acting legally by virtue of some estate, right or interest in over or affecting the land or any part thereof.

**23.** Every person who shall offend against any of these byelaws shall be liable on summary conviction to a fine not exceeding level two on the standard scale.

The Common Seal of the Council of the Borough of Epsom and Ewell was here unto affixed this 10th day of August 1988 in the presence of:—

Mayor, Borough Secretary and Solicitor

The foregoing byelaw(s) are hereby confirmed by the Secretary of State and shall come into operation on the 5th day of December 1988.

Signed by authority of the Secretary of State.

C.L. SCOBLE An Assistant Under-Secretary of State HOME OFFICE,  
LONDON SW1

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**THE HOGSMILL LOCAL NATURE RESERVE MANAGEMENT PLAN 2017-2117**

<u>Report of the:</u>	Head of Place Development
<u>Contact:</u>	Sarah Clift
<u>Urgent Decision?(yes/no)</u>	No
<u>If yes, reason urgent decision required:</u>	
<u>Annexes/Appendices (attached):</u>	<u>Annexe 1</u> - Executive summary - Draft Hogsmill Local Nature Reserve Management Plan 2017-2117 <u>Annexe 2</u> - Draft Hogsmill Local Nature Reserve Management Plan 2017-2117
<u>Other available papers (not attached):</u>	Hogsmill Local Nature Reserve Management Plan 2006-16

**REPORT SUMMARY**

**This report asks the Community and Wellbeing Committee to approve and adopt as policy an updated management plan 2017-2117 for the Hogsmill Local Nature Reserve.**

**RECOMMENDATION (S)**

- (1) That the Committee adopts the updated 2017-2117 the Hogsmill Local Nature Reserve Management Plan as Council policy.**
- (2) That the Committee receives an Annual Review of costs and funding associated with the Plan.**

*Notes*

**1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 The adoption of an updated management plan for the Hogsmill Local Nature Reserve (LNR) will make a long term positive contribution to all four of the Council's Key Priorities and the Community Strategy by guiding the management of one of the Borough's key areas of countryside in line with this Council's objective of committing to the principles of sustainability.

## **2 Background**

- 2.1 The Hogsmill LNR is a vital green corridor within what is quite an urbanised area of Epsom and Ewell and is managed by Epsom & Ewell Borough Council (EEBC) in partnership with the Environment Agency, the South East Rivers Trust, The Hogsmill Catchment Partnership and the Lower Mole Partnership. The proposed management plan covers the whole nature reserve which is comprised by the Hogsmill and Bonesgate Open Spaces covering approximately 40ha.
- 2.2 The 2017-2117 management plan is intended to succeed the 2006-2016 plan and aims to update and build on the progress made during the implementation of the previous plan, which was the first to be agreed as council policy and implemented by EEBC. During the lifetime of the last management plan significant improvements have been achieved on the ground to improve the site for both public access and wildlife. This has included: the creation of 5km/3 miles of surfaced paths; 3 new bridges installed over the water courses and 1 restored bridge; many new benches; artificial channelisation and concrete weirs removed; meanders and riffles created along the water courses; improved biological monitoring including a butterfly transect and of water quality indicator species; hedgerows planted; species-rich grassland, scrub and woodland being actively managed and the installation of information boards at all main entrances. The previous plan also secured the substantial external funding required to achieve some of the above improvements.
- 2.3 Being surrounded by residential housing, the site represents a valuable resource to the local community. The site is popular for a variety of uses that include walking, picnicking, nature watching, exercising of dogs, and cycling. During 2013 the borough's Sites of Nature Conservation Importance (SNCIs) were re-surveyed and the entire Local Nature Reserve has been designated SNCI. The Hogsmill LNR is also designated as a River Biodiversity Opportunity Area (BOA), a county designation recognised in the Epsom & Ewell Local Plan aimed at recognising and enhancing biodiversity on a landscape scale. In addition, the whole area of the Hogsmill LNR is designated as Metropolitan Green Belt. Within the new planning policies of Epsom and Ewell Borough Council, a greater importance is being given towards green infrastructure and the protection of habitat links. The Hogsmill LNR is a vital green corridor within the Borough and so will be protected by the planning policies.

- 2.4 Successfully managing the Hogsmill LNR involves actively managing public access and nature conservation. With 5km of surfaced paths and tracks there is a constant need to manage inappropriate access, encroaching vegetation and to maintain the infrastructure of the tracks, accompanying signs, seats and gates. The nature conservation value of the Hogsmill LNR's river corridor, made up of the watercourses, surrounding woodland, scrub, hedgerows, and meadows, is very high. Of special note are the provision of habitat for species, such as the extremely rare ladybird 'Clitosthetus arcuatus', two butterfly species of conservation concern in Surrey, the Brown hairstreak and White Letter Hairstreak, foraging and roosting bats such as the Soprano and Noctule, which are species of principal importance under section 41 of the Natural Environment and Rural Communities Act (NERC), and a number of bird species on the RSPB 'Red List' and 'Amber List'.
- 2.5 An agreed management plan is a requirement if we are to secure external funding to assist with the management of the Hogsmill LNR. The previous plan helped to secure the funding required for the installation of the new paths, the vital works to the river channel carried out by the Environment Agency and South East Rivers Trust and helped to build the reputation of EEBC as a successful land manager to our external partners.
- 2.6 The draft 2017-2117 plan has been produced following a number of additional site surveys carried out during the lifetime of the previous plan with consequent re-appraisal, a review of available historical data and liaison with a number of individuals and representatives of relevant organisations (e.g. EEBC, Environment Agency and South East Rivers Trust). This has resulted in the objectives and outline prescriptions set out in the plan.
- 2.7 The experience of implementing the 2006-2016 plan and the need to continually make management decisions with a very long term view, such as those affecting veteran trees, has resulted in a plan that aims to provide a consistent and stable approach to the management of the Hogsmill LNR over the next one hundred years. The plan will be reviewed every ten years during its lifetime.

### **3 Proposals**

- 3.1 The Community and Wellbeing Committee is asked to consider adopting as policy the 2017-2117 Hogsmill Local Nature Reserve Management Plan. Subject to ten year reviews the plan sets out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years. Implementing the plan enables the Council to demonstrate that it is proactively fulfilling its 'Biodiversity Duty' (Natural Environment and Rural Communities Act 2006) and actively encouraging access to and protecting, the Borough's natural heritage. An executive summary of the Plan is attached at [Annexe 1](#). The full Plan is attached at [Annexe 2](#).

- 3.2 Below is a summary of the key management proposals within the draft management plan that are thought unlikely to change in the next one hundred years:
- 3.2.1 Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of the Hogsmill LNR
  - 3.2.2 Assisting the Environment Agency in the management and maintenance of the important features of the river channel
  - 3.2.3 Ensuring good public access via a network of well-maintained and signed paths
  - 3.2.4 Encouraging and supporting the work of volunteers
  - 3.2.5 Interpreting the Hogsmill LNR to the public
  - 3.2.6 Maintaining a close working relationship with the owners of the Hogsmill River and banks (Environment Agency) and other partners such as the South East Rivers Trust (SERT)

#### **4 Financial and Manpower Implications**

- 4.1 Successful management of a Nature Reserve and designated Site of Nature Conservation Importance requires the informed, consistent, systematic and long term approach to habitat management and public access that a management plan provides.
- 4.2 Stage three of the draft management plan provides a guide to delivering the plan up to the first ten year review in 2027. The plan is aspirational and for guidance purposes only, estimated costs are given and as in the case of the previous plan 2006-16, implementation of the new plan is not dependent upon increased spending by the Council. During the previous plan substantial external funding was successfully secured. It should be noted that, without a management plan there is very little chance of securing funds from other sources.
- 4.3 There is no significant impact on current or future staffing levels. However, the Hogsmill LNR is unusual in being a site of national/regional importance for nature conservation but without dedicated staff. Whilst no increase in staff is proposed by the adoption of the new management plan, it should be noted that the plan does include the aspiration if resources ever permit for dedicated staff which would improve both this Council's ability to manage habitats, public access and interpretation.

- 4.4 **Chief Finance Officer's comments:** The Plan assumes that revenue budgets for staffing, grounds and tree maintenance and small incidental expenses will be maintained in future years. Agreed financial implications arising from the annual review of the Plan will be reflected in annual service estimates. No additional internal funding is available for any items included in the management plan. External funding contributions have been secured previously and we will seek further funding for future years.

**5 Legal Implications (including implications for matters relating to equality)**

- 5.1 The Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006 impose a duty on "public bodies" including local authorities to have regard to biodiversity, conservation and to maintaining lists of species and habitats for which conservation steps should be taken or promoted.

- 5.2 **Monitoring Officer's comments:** There are no legal issues arising from this report.

**6 Sustainability Policy and Community Safety Implications**

- 6.1 The adoption of an updated Hogsmill LNR Management Plan will help ensure that a significant area of countryside with the Borough of Epsom and Ewell is protected and enhanced in terms of nature conservation and well managed in terms of public access for a period of one hundred years.
- 6.2 Access to countryside is recognised nationally as a key to social wellbeing, indeed countryside walks are the nation's most popular recreational pursuit. The adoption of the updated management plan will play a vital role in ensuring the proper management of the Hogsmill LNR with regard to public access.
- 6.3 The presence of accessible well-managed countryside can powerfully affect perceptions and can be a key factor with both individuals and businesses in their decision to locate and stay in an area.
- 6.4 The updated plan does offer community safety benefits by interpreting the site to visitors and encouraging local residents to get more involved in helping to manage the site, which by default helps increase an informed on site presence that can report issues to Council staff.

## **7 Partnerships**

- 7.1 The current management of the Hogsmill LNR relies heavily on a range of partnerships both internal and external. For example, the Countryside Team works closely with the Ranger Service to maximise the effectiveness of the available Council presence. Volunteers have helped with practical tasks, interpretation and biological monitoring and the Lower Mole Partnership have provided essential support for over thirty years, carrying out practical nature conservation and access improvement tasks. Over the lifetime of the previous plan, EEBC has built up a strong partnership with the Environment Agency, South East Rivers Trust, the Hogsmill Catchment Partnership and Zoological Society London. Through working on the Bonesgate Stream our relationship with Royal Borough of Kingston has been cemented. Continuing these partnerships and in particular with our volunteers is an aim of the management plan and will be crucial to its successful implementation.

## **8 Risk Assessment**

- 8.1 Financially it has become increasingly challenging for local authorities to manage large areas of countryside, both maintaining good public access and fulfilling duties regarding biodiversity. Continuing to secure external funding to help meet the financial challenge requires a Management Plan.
- 8.2 The national trend in recent decades has been towards the statutory implementation of measures to maintain and enhance biodiversity as has been seen with protected species legislation and the 'Biodiversity Duty' for all public bodies. This would imply that the greatest financial risk to the Council would be the failure to address the management of biodiversity on the Hogsmill LNR today leading to greater costs in the future, trying to regain what will have been lost.

## **9 Conclusion and Recommendations**

- 9.1 In conclusion, the adoption of the new management plan would significantly assist this Council in meeting its responsibilities and contributes to a broad range of Council priorities and strategies. The management plan highlights the special nature of the Hogsmill LNR, and demonstrates this Council's ability to manage its countryside to a high standard.
- 9.2 Much has been achieved by Council staff and volunteers in protecting valuable habitats, improving access and interpreting the Hogsmill LNR under the guidance of the 2006-2016 Management Plan. The progress of recent years can be maintained and built upon by the adoption of a successor management plan 2017-2117 to guide this Council's role in managing the site for good public access and nature conservation over the next century.

**WARD(S) AFFECTED: Ewell Court Ward; Ewell Ward; Ruxley Ward; West Ewell Ward;**



## **Hogsmill Local Nature Reserve Management Plan 2017-2117 - Executive Summary**

The Hogsmill Local Nature Reserve Management Plan 2017-2117 plan succeeds the 2006-2016 plan for the Hogsmill Local Nature Reserve and aims to update and build upon its progress. The previous plan which was the first to be formally agreed and implemented for the site, and was successful in significantly improving access, biological monitoring and volunteer activity. In addition, it enabled the substantial external funding required to achieve the above to be secured.

Subject to ten year reviews, the plan aims to describe the important features of the Hogsmill Local Nature Reserve (LNR) and set out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years.

**The plan prescribes in detail (Stage Two Evaluation & Objectives section 2.7 and Stage Three Prescription) how the site will be managed from 2017 to 2027.** Stage three of the draft management plan provides a guide to delivering the plan up to the first ten year review in 2027. The plan is aspirational and for guidance purposes only, estimated costs are given and as in the case of the previous plan 2006-16, implementation of the new plan is not dependent upon increased spending by the Council. During the previous plan substantial external funding was successfully secured. Possible funding sources currently include:

- EEBC
- DEFRA
- Lower Mole Trust
- Surrey County Council
- Community infrastructure levy
- Environment Agency
- South East Rivers Trust
- Heritage Lottery
- Other grants

It should be noted that, without a management plan there is very little chance of securing funds from other sources. The plan ensures that the Hogsmill LNR continues to provide excellent access to nature whilst at the same time protecting an internationally important habitat (Chalk Stream) and providing a home for wildlife of national and local importance.

The Hogsmill LNR is approximately 38ha which comprises the former Hogsmill and Bonesgate Open Spaces.

The management plan has been produced following a review of available ecological, historical and other information. It focuses upon, and attempts to achieve a realistic balance, between a range of issues that include:

- Nature conservation
- Maintaining and enhancing historical, landscape and cultural value
- Providing appropriate facilities for public recreation and enjoyment

- Encouraging opportunities for education in all aspects of the Local Nature Reserve's ecology, history, culture and landscape.

## **A PLAN FOR THE NEXT 100 YEARS**

Over the last 100 years The Hogsmill LNR has undergone great change. A once rural landscape that resulted from local and national economic pressure to provide pasture for grazing and water power for both flour and gunpowder mills, today provides local people with fresh air, exercise and protection for wildlife. As readers of this plan will discover The Hogsmill LNR is of both national and international importance for its habitats and wildlife and maintaining that value requires an informed, consistent, systematic and long term approach to habitat management and public access.

For example, urban rivers require careful management to restore and maintain their ecological health; trees live for hundreds of years and biological monitoring often yields really valuable information after many years of recording effort.

The plan provides a regularly reviewed (10 years) 100 year approach to the management of the Hogsmill LNR to ensure the protection, maintenance and enhancement of the wildlife and heritage of the Hogsmill LNR whilst also ensuring good public access to a wonderful place!

The key components in managing the Hogsmill LNR which are unlikely to change in the next one hundred years are as follows:

- Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of the Hogsmill LNR.
- Assisting the Environment Agency in the management and maintenance of the important features of the river channel.
- Ensuring good public access via a network of well-maintained and signed paths.
- Encouraging and supporting the work of volunteers.
- Interpreting the Hogsmill LNR to the public
- Maintaining a close working relationship with the owners of the Hogsmill River and banks (Environment Agency) and other partners such as the South East Rivers Trust (SERT).

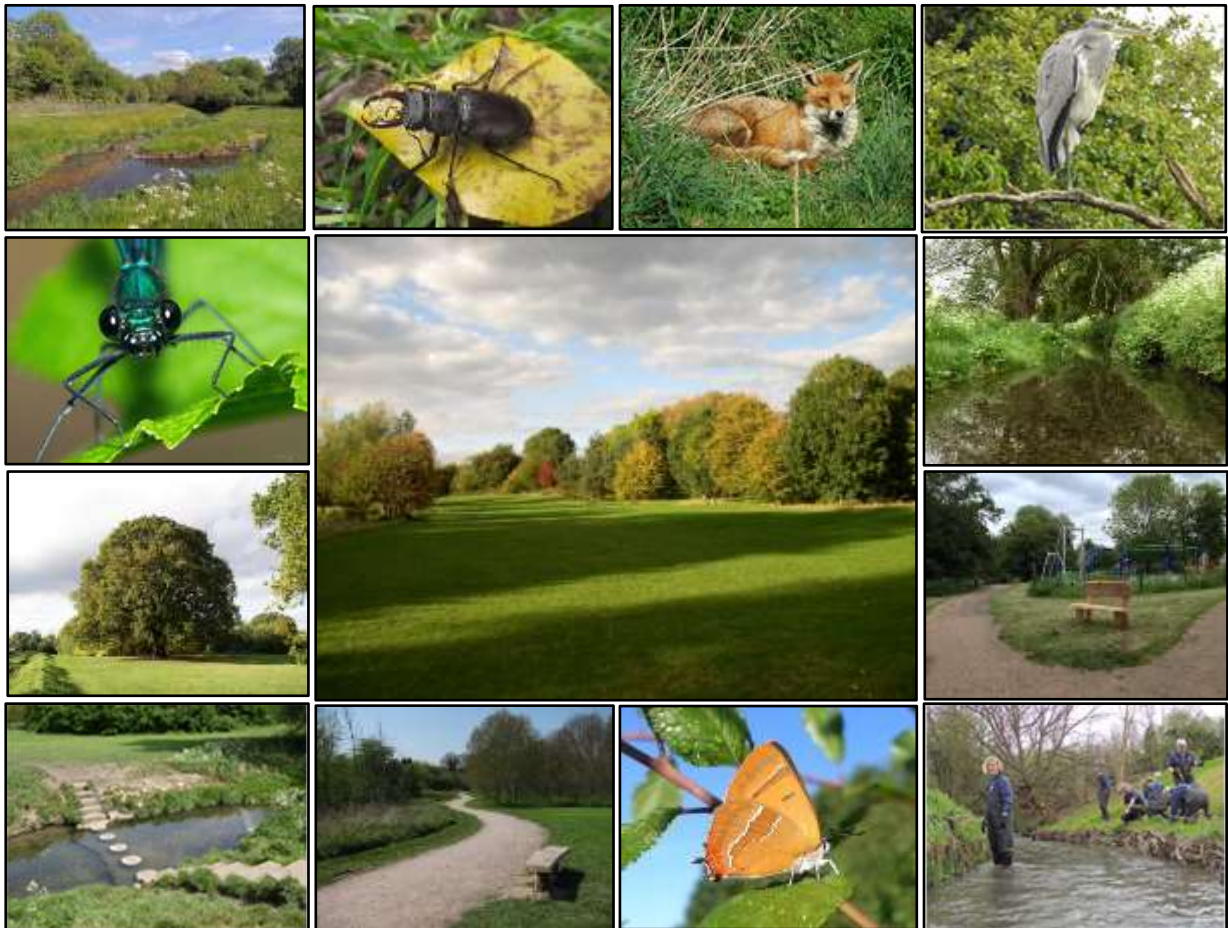
### **Management Plan Page References:**

- Page 5 - Introduction
- Page 5 - A plan for the next 100 years
- Page 57 - Stage Two identification of operational objectives and outline prescriptions
- Page 63 - Stage Three prescription tables for first ten years of the plan
- Page 78 - Maps and appendices

# HOGSMILL LOCAL NATURE RESERVE

## MANAGEMENT PLAN 2017-2117

*First Review 2017 – 2027*



**Produced by:**  
***Epsom and Ewell Borough Council***  
***Countryside Team***

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## **ACKNOWLEDGEMENTS**

This management plan is an update of the one written in March 2006 by Karl Crowther and Giles Groome, consultant ecologists. We remain grateful to Ecological Consultant Alison Fure of Furesfen for making relevant information available from her own surveys in the area, and also to Surrey Wildlife Trust who provided results of the 1998 SNCI survey for the Hogsmill, including Dave Williams for discussing Water Vole surveys carried out in the locality.

Further records have also been provided by Ann Sankey (BSBI Recorder for Surrey), John Edwards (County Ecologist), and Martin Skipper (a Friend of The Hogsmill).

Thanks to Richard Featherstone for supplying the photo of the Brown Hairstreak on the cover page.

## **INTRODUCTION**

This management plan succeeds the 2006-2016 plan and aims to update and build on the progress made during the implementation of the previous plan which was the first to be agreed formally and implemented by Epsom & Ewell Borough Council. The previous plan succeeded in significantly improving access, improved biological monitoring, increased volunteer activity and securing the substantial external funding required to achieve the above.

Subject to ten year reviews this plan aims to describe the important features of the Hogsmill Local Nature Reserve (LNR) and set out an agreed approach for the continued management of the site to benefit both the people and wildlife of Epsom & Ewell for the next one hundred years. This plan prescribes in detail how the site will be managed from 2017 to 2027, ensuring that the Hogsmill LNR continues to provide excellent access to nature whilst at the same time protecting an internationally important habitat (Chalk Stream) and providing a home for wildlife of national and local importance.

The Hogsmill LNR is approximately 38ha which comprises the former Hogsmill and Bonesgate Open Spaces.

This management plan has been produced following a review of available ecological, historical and other information. It focuses upon, and attempts to achieve a realistic balance, between a range of issues that include:

- Nature conservation
- Maintaining and enhancing historical, landscape and cultural value
- Providing appropriate facilities for public recreation and enjoyment
- Encouraging opportunities for education in all aspects of the Local Nature Reserve's ecology, history, culture and landscape.

## **A PLAN FOR THE NEXT 100 YEARS**

Over the last 100 years The Hogsmill LNR has undergone great change. A once rural landscape that resulted from local and national economic pressure to provide pasture for grazing and water power for both flour and gunpowder mills, today provides local people with fresh air, exercise and protection for wildlife. As readers of this plan will discover The Hogsmill LNR is of both national and international importance for its habitats and wildlife and maintaining that value requires an informed, consistent, systematic and long term approach to habitat management and public access.

For example, urban rivers require careful management to restore and maintain their ecological health; trees live for hundreds of years and biological monitoring often yields really valuable information after many years of recording effort.

This plan provides a regularly reviewed (10 years) 100 year approach to the management of the Hogsmill LNR to ensure the protection, maintenance and

enhancement of the wildlife and heritage of the Hogsmill LNR whilst also ensuring good public access to a wonderful place!

The key components in managing the Hogsmill LNR which are unlikely to change in the next one hundred years are as follows:

- Ensuring the protection, maintenance, monitoring and enhancement of biodiversity and cultural heritage of the Hogsmill LNR.
- Assisting the Environment Agency in the management and maintenance of the important features of the river channel.
- Ensuring good public access via a network of well-maintained and signed paths.
- Encouraging and supporting the work of volunteers.
- Interpreting the Hogsmill LNR to the public
- Maintaining a close working relationship with the owners of the Hogsmill River and banks (Environment Agency) and other partners such as the South East Rivers Trust (SERT).



## STAGE ONE - DESCRIPTION

### 1.1 Introduction

The Hogsmill Local Nature Reserve (LNR), incorporating the former Hogsmill and Bonesgate Open Spaces (Map 1), covers a total area of approximately 38ha. It represents the remains of farmland that once ran along the banks of the River Hogsmill and the Bonesgate Stream before the development of housing that surrounds most of the site today. The individual parcels of land that made up the Hogsmill Open Space were purchased in several stages between 1932 and 1937, whilst the Bonesgate Open Space was all purchased in 1937. More recently, an addition to the Hogsmill LNR in 2006 is the area of land known as Riverview Copse (part of compartment 2), formerly leased by Surrey County Council.

All but a tiny portion of the site is designated as Metropolitan Green Belt in the current Epsom & Ewell Local Plan. In October 2013, after having had the Borough's Sites of Nature Conservation Importance (SNCI) resurveyed by EEBC Countryside Officer Pete Howarth, it was agreed by the Local Sites Partnership that the entire Hogsmill LNR would retain its designation as a SNCI, which is also recognised under the current Epsom & Ewell Local Plan (Appendix 1).

The site is linear in character and comprises a mosaic of habitats that includes internationally important chalk stream, woodland of varying maturity and composition, a range of (primarily amenity) grasslands and a number of scrub types. Several large, mature stand-alone Oak trees and over-stood pollarded Willows are also present. The nationally rare (RDB1) Ladybird *Clitosthetus arcuatus* has also been found at the site. The species is associated with Ivy and has also been recorded from several other locations in Surrey relatively recently.

The Environment Agency (EA) owns the riverbed and banks of the Hogsmill River and has responsibility for its management. The Bonesgate Stream however is owned by EEBC and Royal Borough of Kingston upon Thames upon Thames (RBK). This highlights the need for liaison with the EA and RBK over the management of the two watercourses, including the ways that day-to-day management might impact upon wildlife and amenity value. The last plan included proposals to restore more natural channel characteristics to the two watercourses, which was achieved and this plan looks to continue with this along further stretches of the watercourses.

There is open public access to the whole site, which forms an important local amenity for informal recreation. The site is adjoined for the most part by residential housing and there is easy access to the public from a number of points.

During the lifetime of the last management plan significant improvements have been achieved on the ground to improve the site for both public access and

wildlife. This has included: the creation of 5km/3 miles of surfaced paths; 3 new bridges installed over the water courses and 1 restored bridge; many new benches; artificial channelisation and concrete weirs removed; meanders and riffles created along the water courses; improved biological monitoring including a butterfly transect and of water quality indicator species; hedgerows planted; species-rich grassland, scrub and woodland being actively managed and the installation of information boards at all main entrances..

## **1.2 Location**

The site lies in the northern part of the Borough of Epsom and Ewell (Map 1). The Hogsmill LNR runs from the Lower Mill on the Hogsmill River, in a roughly north-westerly direction as far as the bridge that takes the A240 Kingston Road over the river. From here it turns north-eastwards and continues to the Borough boundary with the Royal Borough of Kingston upon Thames upon Thames; opposite the Hogsmill Public House on Worcester Park Road. The former Bonesgate Open Space comprises a narrow strip of land alongside the Bonesgate Stream that runs from near the William Bourne Public House on Chessington Road, north eastwards to the Watersedge Estate, where it joins the Hogsmill River.

**County:** Surrey

**District/Borough:** Epsom and Ewell

**Local Planning Authority:** Epsom & Ewell Borough Council

**National Grid Reference:** TQ 210 635 (Hogsmill); TQ 196 644 (Bonesgate)

### **Map Coverage:**

First Edition of the Ordnance Survey (1871 – present day, held on GIS by EEBC, also available at [www.old-maps.co.uk](http://www.old-maps.co.uk))

Ordnance Survey Landranger series at 1:50,000 scale, sheet number 187

Ordnance Survey Explorer series at 1:25,000 scale, sheet number 161

Ordnance Survey 1:10,000 series sheets TQ16NE, TQ26NW.

Ordnance Survey maps at 1:2500 series sheets TQ 1963, 1964, 2063, 2064, 2065, 2163

Ordnance Survey map at 1:1250 scale.

The site lies within the Thames Basin Lowlands. Natural area profiles can be obtained from Natural England.

### **1.3 Land Tenure and Associated Statutory Requirements**

All of the land covered by this plan, including half of the Bonesgate Stream and the Epsom and Ewell bankside is in the ownership of Epsom and Ewell Borough Council (EEBC) and was purchased in stages during the period of 1932 to 1937. The various conveyance documents can be found in the Town Clerk and Chief Executives Department of the Council. The Hogsmill River and its banks are owned by the Environment Agency.

Much of the adjacent land is in private residential ownership. A significant exception is the Tolworth Court Farm Meadows Local Nature Reserve, which lies to the north west of the Bonesgate Stream, situated within and owned by the Royal Borough of Kingston upon Thames upon Thames. In addition, mid-way along the Hogsmill (and not forming part of the Open Space) is Ewell Court Manor and Gardens (owned by EEBC), and to the south of this lies the King George V playing fields (Poole Road Recreation Ground – again owned by EEBC). East of here lies the West Ewell allotment gardens, also owned by Epsom and Ewell Borough Council.

It has recently been discovered that the Green Lane feeder-stream is owned by Surrey County Council (SCC), which highlights the need for liaison with SCC over the management of this tributary and its effects on the water quality and wildlife value of the river and nature reserve.

The Natural Environment and Rural Communities Act 2006 (NERC) places a requirement in law on all public bodies to take reasonable measures to enhance the aesthetic, cultural, historical and biological interest of its open spaces.

#### **Services**

A large sewage pipe crosses the Hogsmill near to the Curtis Road Playground, whilst a further sewage pipe, together with a gas pipeline, crosses the Bonesgate Stream at Cox Lane. What is also probably a further sewage pipe crosses the Hogsmill River behind Worcester Park Road. These represent only the most obvious known features and the appropriate utilities should be contacted for up to date information, before any work likely to affect any underground or overground services is undertaken.

### **1.4 Photographic Coverage**

Aerial photographs taken in 2003, 2009, 2011 and 2013 are held by the EEBC GIS Section. More recent aerial photographs of the site are available online from Google Maps, Apple Maps and Bing Maps.

### **1.5 Summary Description**

## **1.5.1 Physical**

### **1.5.1.1 Climate**

Meteorological Office data (1981-2010 averages) for Wisley (approximately 10km due west), show an annual rainfall average of 656.6mm per year (no measurements have been taken on the Hogsmill LNR itself). During this period, there was an average of 112.2 days per year with more than 1mm of rainfall recorded. An average total of 1564.2 hours sunshine was recorded per year, along with 47.7 days of air frost. The average monthly maximum temperature was 15.0°C (July being the hottest, at 23°C), whilst the average monthly minimum temperature was 6.5°C (with February being the coldest at 1.7°C).

Such climatic conditions are typical for a lowland site in this part of the country. It is interesting to note that the previous plan used 1961 -1990 data and the average monthly maximum temperature has increased by 0.8 °C.

### **1.5.1.2 Geology**

The site lies over London Clay, River Alluvium and unclassified terrace gravels. Further details of the geology can be seen in the Geological Survey maps for the area.

### **1.5.1.3 Topography and Hydrology**

The site comprises two narrow strips of land beside the associated watercourses and is fairly level, with variations in topography being gently undulating. Ground level is in the order of 30m above sea level at its greatest and around 20m at its lowest.

The Hogsmill River itself is a tributary of the Thames. Its catchment consists almost entirely of built-up land within Epsom and Ewell. Upstream of Green Lane, water feeding into the river originates from springs arising from the chalk, whereas downstream of this point, water joining the Hogsmill runs off clay substrates. The Green Lane feeder-stream itself originates at Barons Pond on Epsom Common. Below this point, several smaller feeder streams join the Hogsmill River, before being eventually met by the Bonesgate Stream (which is thus also a tributary of the Hogsmill River). The Bonesgate Stream has a somewhat larger catchment, rising in countryside to the south of Chessington and including parts of Epsom and Ashted Commons, and Horton Country Park.

Due to the narrow, linear character of the site, water flow along the two watercourses is not so much influenced by precipitation falling within the site itself (there is insufficient ground surface to generate much input), but primarily by rapid urban run-off from the surrounding areas. To try and accommodate high flow events, there are storm water tanks located beside the Hogsmill and the Green Lanes Stream (there are none on the Bonesgate). Unfortunately these tanks regularly overflow during heavy rain allowing raw sewage to enter

the water courses. There remains a potential for flash flooding to occur and properties adjacent to Ruxley Lane Bridge have been flooded in recent years.

Both the Hogsmill River and the Bonesgate Stream were once very artificial watercourses, much modified from their original meandering character and contained within straightened, artificial banks. A short section of the original course of the Hogsmill River near Ewell Court remains, by-passed by an artificial channel constructed c1960.

During the course of the previous plan short sections of the river have been naturalised by restoring meanders, removing toe boards, creating riffles and removing weirs to allow improved fish passage and slow flows when the channel is in spate.

2006 saw the implementation of the Doorstep Green Project (please see section 1.5.3.3 Public Access and Recreation for more details). Leading on from this project and the relationships built up with the local residents and Environment Agency, the momentum was carried on by the management plan and the implementation of a range of improvements. This saw the river running alongside the Watersedge Estate being realigned to a more natural line and a back-water (wildlife refuge) created on the old channelised section. The banks were then planted up with native flowers and grasses. Deflectors were also positioned along the banks to encourage the river to meander and erode a more natural line.

In addition to improvements along the Hogsmill River attention has also been focussed along the Bonesgate Stream under the banner of the Green Arc Initiative which focuses on improvements to the peri-urban area around London. An exemplar project called Thames 2 Downs was set up to carry out landscape scale improvements and improve access and habitats for people and wildlife all the way from the North Downs to the Thames at Kingston upon Thames. A section of the Bonesgate Stream near to Gatley Avenue Playground was realigned removing several concrete weirs, adding new meanders and riffles. In addition logs were positioned along the banks and backfilled to create artificial meanders to allow the water to naturally erode the banks in to a more natural line. At the confluence of the Bonesgate Stream and Hogsmill River the concrete stream bed and weir were completely removed.

More recently, EEBC has been working with the South East Rivers Trust (SERT) and Environment Agency (EA) to remove all the concrete weirs in the Hogsmill River to aid fish passage. The weir located just upstream of the Alway Avenue bridge and the weir beside the running track of Poole Road Recreation Ground were removed in 2013.

Work has also taken place where the Green Lane Stream joins the Hogsmill River to naturalise the confluence with the removal of the concrete base and stone side walls in 2014. In 2015 a rock ramp was installed immediately downstream of the A240 bridge and volunteers began a programme of managing vegetation along the banks to ensure more light reaches the river and the banks. In addition some of the material produced by the volunteers'

activity has been used (2016) to create artificial berms to help scour the river channel and naturalise flows.

EEBC would like to continue working with SERT and the EA via the now established Hogsmill Catchment Partnership. It is hoped that partnership working can deliver some major improvements such as that proposed for Chamber Mead where there is an opportunity to create a wetland area by diverting the Green Lanes stream across Chamber Mead to a new confluence just upstream from the 'Stepping Stones'. There are other improvements planned to enhance habitat diversity, which will be explained in more detail in the following sections of the plan.

Across the site as a whole, the combination of clay soils and fairly level ground means that unsurfaced paths tend to become waterlogged and muddy in wet weather, due to poor surface drainage (probably exacerbated by soil compaction). Adjacent to Meadow Walk, in the south-eastern part of the Hogsmill Open Space, the margin of the site includes a small depression that contains swamp vegetation.

#### **1.5.1.4 Soils**

There is little information available on the soils underlying the Hogsmill LNR. However, an Environmental Report prepared for the Environment Agency called 'Hogsmill River Rehabilitation Project' suggests that this part of the Hogsmill River catchment supports shallow clayey soils and a fine deposit of alluvium over terrace gravels. Most soil within the site itself has been modified in some way, either through excavation, deposition of dredged river material, or of imported materials (Anon, 2005).

#### **1.5.2 Biological**

For the most part, there has been very limited biological recording at the site. Apart from the baseline habitat survey conducted during the course of preparing the 2006-16 management plan, the only known botanical surveys are one conducted of the Hogsmill (but not the Bonesgate) by Surrey Wildlife Trust during 1998 as part of the Surrey SNCI project (this also listed some fauna). The other is a repeat SNCI survey, which covered the entire Hogsmill LNR and was carried out by Countryside Officer Peter Howarth during 2013, results of which are in appendix I.

A number of biological surveys were commissioned in connection with the Environment Agency's 'Hogsmill River Rehabilitation Project' (Anon, 2005), which proposed re-modelling the river channel just south of its confluence with the Bonesgate Stream. Several surveys have also been conducted within the Tolworth Court Farm Meadows LNR area, on the Kingston side of the Bonesgate Stream. Although this area lies adjacent to and therefore outside the area being considered under this management plan, these surveys provide useful information on the ecological resource within which the nature reserve lies. A majority of other records have been informally derived, such as the list

of bird sightings. A local enthusiast, Timothy Tomkins, has been providing bird records for the site since 2009 for which we are very grateful. During the last plan a butterfly transect was set up in 2011 and is walked weekly by volunteers resulting in 26 different species of butterfly recorded. Our thanks goes to our transect walkers; Bob and Carole Guille, Pam Harwood, Robb Reeves and Pat Lowe.

### **1.5.2.1 Flora and Vegetation Communities**

Records to date indicate a vascular plant flora, with nearly 250 taxa recorded to date (including non-native species). This figure compares with a total of around 400 for the nearby Horton Country Park LNR, but that site is very much larger and has also seen a much greater recording effort.

For the purpose of preparing this management plan, a survey of habitats and vegetation communities was conducted. A brief outline of the main habitats is given below, with more detailed information being provided in Appendix II. The distribution of the main habitat types is summarised in Map 2.

#### **Woodlands, Scrub and Trees**

Woodland communities are somewhat variable and poorly-defined, although broadly speaking, there are three main types. At the most recent end of the spectrum are a series of woodlands that were planted around 40 years ago, often upon what was originally grassland habitat. Also present is a suite of older-established and broadly 'semi-natural' woodlands, although even these tend to support a proportion of planted species. Finally, there are also discrete areas of older plantation woodland, generally occurring as small stands within the 'semi-natural' types. Many areas of woodland are disturbed, often scrub-like and patchy in their characteristics, with a generally poor representation of ground flora species.

Of the more-established, broadly 'semi-natural' woodlands, the most widespread species are Ash (*Fraxinus excelsior*), Oak (*Quercus robur*) and Sycamore (*Acer pseudoplatanus*). However, due to the variability of stand types, even these can vary in frequency from being dominant (in the case of Ash) or frequent (in the case of Oak and Sycamore), but all being rare in other areas. Alder (*Alnus glutinosa*) occurs occasionally in some wet areas.

A wide range of other, often planted, trees occur within the canopy; either as infrequently scattered individuals or small stands of long-established plantation. Planted (and subsequently self-sown) tree species include Ornamental Cherries/Plums (*Prunus* spp.), Norway Maple (*Acer platanoides*), Narrow-leaved ash (*Fraxinus angustifolia*), Willows (*Salix* spp.), Limes (*Tilia* spp.), Horse-chestnut (*Aesculus hippocastanum*), London Plane (*Platanus x hispanica*), Turkey Oak (*Quercus cerris*), False-acacia (*Robinia pseudoacacia*), Poplars (*Populus* spp.), Beech (*Fagus sylvatica*) and Scots Pine (*Pinus sylvestris*).

The most common shrub species across the site are Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) (one of the plantation woodland areas contains a multi-stemmed, veteran Elder tree TQ 20745 63796). Elm (*Ulmus* spp.) and Blackthorn (*Prunus spinosa*) are locally common with a very notable mature Elm located at TQ 21054 63580. Widely occurring field layer associates include Bramble (*Rubus fruticosus* agg.), Ivy (*Hedera helix*), False-brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*), Cow Parsley (*Anthriscus sylvestris*), Common Nettle (*Urtica dioica*) and Cleavers (*Galium aparine*). A number of woodland stands have been disturbed by playing children and there are varying amounts of litter and dumped rubbish, including garden refuse.

Broad-leaved woodland planted in recent times occupies significant areas within the Hogsmill Open Space and largely comprises discrete copses planted-up on what was formerly grassland habitat. Mowing of surrounding amenity grasslands has created a very abrupt edge to these woodlands although this has improved under the guidance of the previous plan and the grounds maintenance team continue to be instructed to leave margins around the copses and woodlands. A wide range of tree species are present and include Hornbeam (*Carpinus betulus*), Ash, Narrow-leaved Ash, Limes, Birches (*Betula* spp.), Horse-chestnut, Ornamental Plum/Cherry and Pear (*Pyrus* sp.), plus Grey/White Poplar (*Populus x canescens/alba*). The field layer is generally extremely sparse.

Away from woodlands, there are a number of much older, larger trees present. Notable examples include a number of fine old Pedunculate Oak trees. The largest such specimen, in the south of the Hogsmill Open Space, has a diameter at breast height (DBH) of 1.75m. There are also a number of larger Oak trees to be found alongside the Bonesgate Stream. An area alongside the Hogsmill River contains a number of veteran, lapsed pollarded White Willows (*Salix alba*), which appear to be aligned along the course of the former river channel. In addition, there are also two avenues of established White Willows beside the Hogsmill River itself.

Scrub of all types occupies approximately 35% of the site, although in places, it is difficult to make a clear separation between scrub and woodland habitat. As with many other habitats, it tends to occur in narrow strips, reflecting the linear character of the site. The three most frequent and extensive scrub types are dominated by Bramble, Hawthorn and Blackthorn. Less common species include Elder, Elm and Field Maple (*Acer campestre*).

The recently incorporated Riverview Copse represents a significant area of established scrub-woodland, bordered on its margin by a narrow fringe of dense Blackthorn scrub. During the last plan work took place to punch through a section of this Blackthorn to open up a pathway through the copse, with vegetation managed on either side. In addition the blackthorn is now managed by scalloping on a rotational basis to ensure a diverse age structure. Brown Hairstreak eggs have been found on young blackthorn at this location.



Mature trees, especially of Oak and Ash, are occasionally present throughout scrub-dominated habitats, enhancing structural diversity. As with woodlands, scrub can be quite disturbed as a result of trampling by children and the dumping of litter and other rubbish, including garden refuse along the site margins.

A number of trees in the Watersedge area were examined to assess their potential suitability for roosting bats during a bat survey undertaken in 2004 (Bailey, 2005). The results of this work are discussed under Section 1.5.2.2. In 2015 work on bank side willows was carried out by the Environment Agency to address the safety issues resulting from a tree safety inspection.

## **Grasslands**

Grasslands as a whole form one of the most extensive habitat types within the site, much of this taking the form of the regularly-mown amenity grassland areas that typify the Local Nature Reserve, along the Hogsmill in particular. These swards are typically dominated by Perennial Rye-grass (*Lolium perenne*) within a generally species-poor sward. Common associates include White Clover (*Trifolium repens*), Dandelions (*Taraxacum officinale* agg.), Greater Plantain (*Plantago major*), Ribwort Plantain (*Plantago lanceolata*), Daisy (*Bellis perennis*) and Wall Barley (*Hordeum murinum*). Along sections of the Hogsmill, Tall Fescue (*Festuca arundinacea*) also occurs as a component of the sward.

Amenity grassland alongside the Bonesgate Stream appears less frequently-mown than alongside the Hogsmill River. Thus, although Perennial Rye-grass still tends to dominate, the sward is generally taller and more 'weedy' than those of the Hogsmill, with species such as Common Chickweed (*Stellaria media*), Shepherd's Purse (*Capsella bursa-pastoris*), Cow Parsley (*Anthriscus sylvestris*), White Dead-nettle (*Lamium album*), Broad-leaved Dock (*Rumex obtusifolius*) and Hogweed (*Heracleum sphondylium*).

Very locally there are indications of a somewhat more diverse sward marked, in particular, by Common Knapweed (*Centaurea nigra*) and, less commonly, Common Bird's-foot-trefoil (*Lotus corniculatus*).

In addition to these main areas of mown amenity grassland, there are smaller, more marginal areas of generally unmanaged, rank grasslands, especially beside the two watercourses. This vegetation is characterised by often species-poor vegetation dominated by grasses such as False Oat-grass (*Arrhenatherum elatius*) and Common Couch (*Elytrigia repens*). Other common and frequent associates include Cock's-foot (*Dactylis glomerata*), Field Bindweed (*Convolvulus arvensis*), Cleavers, Creeping Thistle (*Cirsium vulgare*) and Tall Fescue, with more local Common Nettle and Hogweed.

One of the larger areas of rank grassland lies at the edge of the recently incorporated Riverview Copse, notable for the presence of frequent ant-hills. This rough grassland margin has been maintained along the southwestern edge of the copse and sections are cut and cleared on rotation by volunteers.

Small or infrequent areas of somewhat more species-rich, but still unmanaged grassland, occupy a 'middle ground' between the frequently managed Perennial Rye-grass swards and these tall, unmanaged swards. The dominant grass here tends to be Creeping Bent (*Agrostis stolonifera*), but with Perennial Rye-grass still present at varying frequency. Other common grasses and herbs include Red Fescue (*Festuca rubra*), Timothy (*Phleum pratense*), Yorkshire Fog (*Holcus lanatus*), Meadow Barley (*Hordeum secalinum*) and Cock's-foot, Red Clover (*Trifolium pratense*) Greater Plantain, Creeping Cinquefoil (*Potentilla reptans*), Autumn Hawkbit (*Leontodon autumnalis*), Yarrow (*Achillea millefolium*) and Dandelion. Hairy Sedge (*Carex hirta*), Ox-eye Daisy (*Leucanthemum vulgare*) and Cranesbills (*Geranium* spp.) are infrequent. For example the area of rough grassland by the stepping stones, which is now being managed in sections, being cut and cleared on rotation by volunteers.

### **Nettle and other weed-dominated communities**

A number of stands of vegetation dominated by Common Nettle and other weed species occur across the site. In many stands, Nettle is overwhelmingly dominant, with Cleavers being the only constant associate. This type of vegetation is especially common along the unmanaged fringes of the site, including beside the two watercourses. Beside the Bonesgate Stream, this vegetation used to support locally abundant Himalayan Balsam (*Impatiens glandulifera*). However, an annual volunteer task to pull it up has significantly reduced its presence with only a few stands left. This plant, an invasive, invasive species, also occurs along the Hogsmill River downstream of where it is joined by the Bonesgate Stream, but is not present on the Hogsmill upstream of the confluence. Volunteer effort has also been put in to removing Himalayan Balsam from the Bonesgate stream within the Royal Borough Kingston Upon Thames by the Lower Mole Partnership.

Elsewhere, Common Nettle is not so dominant and other species such as Thistles (*Cirsium* spp.), Hedge Bindweed (*Calystegia sepium*), Field Bindweed, Hogweed and Bramble are present. Less frequent plants include Black Horehound (*Ballota nigra*), Russian Comfrey (*Symphytum x uplandicum*), Burdock (*Arctium* sp.), Greater Willowherb (*Epilobium hirsutum*) and White Dead-nettle (*Lamium album*).

Small stands dominated by Greater Willowherb are present in a few places, as well as a stand of Rose-bay Willowherb (*Chamerion angustifolium*). Two small stands of the invasive alien, Japanese Knotweed (*Fallopia japonica*) persist beside the Bonesgate Stream. Treatment has taken place but the problem does still remain and further treatment is required.

Other types of weed-dominated vegetation are present in some recently-disturbed parts of the site. One example occurs on the banks of the Hogsmill River, following ground disturbance caused by reconstructing the B284 Ruxley Lane road-bridge. A further example is located along recently-constructed earth bunds beside a path crossing the Bonesgate at Cox Lane. This vegetation is characterised by an abundance of Oraches (*Atriplex* spp.) and Goosefoots (*Chenopodium* spp.). Other species present (not necessarily at both locations) include Mugwort (*Artemisia vulgaris*), Scentless Mayweed

(*Tripleurospermum inodorum*), Smooth Sow-thistle (*Sonchus oleraceus*), Knotgrass (*Polygonum aviculare*), Burdocks, Creeping Thistle, Nipplewort (*Lapsana communis*), Poppies (*Papaver* sp.), Prickly Lettuce (*Lactuca serriola*), Bristly Ox-tongue (*Picris echioides*), Russian Comfrey, and Shepherd's Purse. The Bonesgate stand also includes Hoary Mustard (*Hirschfeldia incana*) and the invasive alien, Goat's Rue (*Galega officinalis*). The Goat's Rue has been pulled by volunteers and only a very small patch remains which needs to be tackled.

### **Watercourses, water margin and swamp vegetation**

Map 3 shows the location of the Hogsmill River and the Bonesgate Stream, plus their associated watercourses. Their vegetation was not included in the field surveys when writing the last plan, as it is understood that responsibility for management of watercourses and their banks lay with Environment Agency. However, during the repeat survey carried out in 2013 to determine if the Hogsmill LNR still qualified for SNCI status, Peter Howarth did survey the banks. Updated species lists are in appendix III. In general the Hogsmill River has a restricted aquatic and marginal vegetation as the result of channelisation, sometimes within a concrete concourse. Locally, however, the vegetation is well-established and includes Watercress, Fool's Watercress, Branched Bur-reed (*Sparganium erectum*), Brooklime (*Veronica beccabunga*), Reed Canary-grass, Curled Pondweed (*Potamogeton crispus*) and Common Water-starwort (*Callitriche stagnalis*).

During the lifetime of the 2006-16 plan, EEBC has facilitated work carried out in conjunction with the Environment Agency and more recently the South East Rivers Trust removing much of the concrete channelling and weirs. Species are colonising quickly and it will be a priority for this plan to facilitate and encourage surveys of the aquatic and bankside vegetation in these areas.

One section of watercourse that was surveyed in 2006 is part of the original course of the Hogsmill River (Cpt 11 around the clinker bridge), where Reed Sweet-grass (*Glyceria maxima*) is abundant, along with Common Duckweed (*Lemna minor*) and Fool's Watercress (*Apium nodiflorum*).

A further small example of swamp vegetation within the Hogsmill LNR (Cpt 11 at the far south east of the site) is dominated by Reed Canary-grass (*Phalaris arundinacea*). Associates include Meadowsweet (*Filipendula ulmaria*), Hairy Sedge, Greater Willowherb, Water Figwort (*Scrophularia auriculata*), Pendulous Sedge (*Carex pendula*), Bulrush (*Typha latifolia*) and Watercress (*Rorippa nasturtium-aquaticum*).

### **Non-native and invasive species**

In addition to many of the planted trees (see above), and invasive non-native weeds like Himalayan Balsam, Japanese Knotweed and Goat's Rue, a number of plants have been introduced to the site as a result of the dumping of garden rubbish. These are listed in Appendix III).

## **Bryophytes**

Peter Howarth carried out a survey of bryophytes along the Hogsmill LNR in October 2015. A total of 28 bryophytes were recorded. An interesting and nationally scarce species was found; *Hennediella macrophylla*, a moss which is spreading along British watercourses. Previous to this survey there had been no systematic recording of bryophytes. The only species previously recorded are *Brachythecium rutabulum* and *Eurhynchium praelongum* (from both sites), plus *Rhytidiadelphus squarrosus* (from the Bonesgate section of the LNR only).

## **Fungi**

There has been no known recording of fungi at the site.

## **Lichens**

There has been no known recording of lichens, although *Xanthoria parietina* was noted whilst conducting the habitat survey for the 2006-16 management plan.

### **1.5.2.2 Fauna**

#### **Invertebrates**

A number of invertebrates (mainly butterflies) were recorded during the Surrey Wildlife Trust SNCI survey in 1998. Since April 2011, a butterfly transect has been set up and walked initially by staff and volunteers and is now entirely carried out by volunteers. A list of butterflies recorded on the site is listed in appendix III.

In total, 26 species of butterfly have been recorded, which can be largely divided into two main groups. The first covers those whose larvae feed upon Common Nettle, namely Comma (*Polygonia c-album*), Red Admiral (*Vanessa atalanta*) and Small Tortoiseshell (*Aglaia urticae*). As can be seen from the above habitat description, there is an abundance of suitable food for these species at both the Hogsmill and the Bonesgate Open Spaces.

The second main group feed upon a variety of grasses and includes Gatekeeper (*Pyronia tithonus*), Large Skipper (*Ochlodes venata faunus*), Meadow Brown (*Maniola jurtina*), Ringlet (*Aphantopus hyperantus*) and Small Skipper (*Thymelicus sylvestris*). All tend to be associated with scrub/grassland habitat and therefore are well provided for at both sites. Although each has its preferred range of food plant, it is the fine-to-medium range of leaves that are favoured, and coarse swards dominated by False Oat-grass tend to be less suitable, as are the frequently mown and trampled Perennial Rye-grass amenity swards. Therefore it is probably some of the smaller areas of rather 'intermediate' grassland that are the most important to this group of butterflies.

Another species whose larvae feed on grasses (mainly Common Couch and Cock's-foot) is Speckled Wood (*Pararge aegaria*). However, this prefers shadier conditions and tends to be associated with wooded habitat.

There are also those within in the Pieridae family present on site, including the Small White (*Pieris rapae*) and Large White (*Pieris brassicae*) which have larvae that feed on members of the cabbage family. The Orange Tip (*Anthocharis cardamines*) feeds on cuckoo flower and garlic mustard which are common plants on the site and the Brimstone's (*Gonepteryx rhamni*) larval food plant is Alder buckthorn and Buckthorn.

Species regularly recorded since the transect was set up are from the Lycaenidae family, Common blue (*Polyommatus icarus*) whose larval food plant is Common bird's foot trefoil and Holly Blue (*Celastrina argiolus*) whose larval food plant is Holly and Ivy. It is important to ensure all these plants encouraged and maintained.

Importantly, the rare Brown Hairstreak butterfly has been recorded on site, both eggs and adult sightings. Considering the abundance of Blackthorn, the larval food plant, the Hogsmill LNR is an important site for this butterfly. A timed count survey in which the eggs are looked for has taken place on the nearby Horton Country Park with good results. The Blackthorn should therefore be managed to encourage the Brown Hairstreak.

During 2016 a concerted effort was made in conjunction with Butterfly Conservation to monitor the presence of Elm and the associated White Letter Hairstreak butterfly, a butterfly species of conservation concern in Surrey. As mentioned above a notable large Elm was discovered as was the presence of the White Letter Hairstreak butterfly which relies on the flowers of Elm and Wych Elm.

A number of species of dragonfly have been noted within the Hogsmill LNR. Limited recording during the summer of 2004 resulted in confirmation of the presence of Common Darter (*Sympetrum striolatum*), although Southern Hawker (*Aeshna cyanea*) may also be present. Also known to be present along both watercourses are Common Blue Damselfly (*Enallagma cyathigerum*), Large Red Damselfly (*Pyrrhosoma nymphula*) and Beautiful Demoiselle (*Calopteryx virgo*) (S. Cocker, pers. comm.). The two watercourses undoubtedly represent good potential habitat for dragonflies and damselflies and it is likely that other species await recording. Consequently it is a priority of this plan to improve the recording of Odonata along the watercourses.

The Environment Agency (EA) monitors the biological quality of watercourses by assessing the number of macroinvertebrate taxa present and their individual susceptibility to pollution (as part of the General Quality Assessment (GQA) system, which also encompasses chemical quality as well). The purpose of this monitoring is therefore to provide a measure the environmental quality and is not especially relevant for assessing nature conservation value. For example, macroinvertebrates are generally only identified down to broad groupings and not to the individual species present.

Since 2014, under the guidance of Zoological Society London (ZSL), a survey of macroinvertebrates in the Hogsmill River and Bonesgate Stream is being carried out by volunteers, also to assess water quality.

A strategic EA macroinvertebrate survey of the Hogsmill River and its tributaries (date and reference unknown) identified over 130 species, including London rarities. Particularly rich assemblages of water beetles, molluscs and water bugs were found. However, the variety of caddisflies, mayflies and dragonflies, which are more sensitive to water quality, was lower. The upper reaches of the Hogsmill River had the most diverse macroinvertebrate communities which included several taxa characteristic of a chalk stream, whilst the Bonesgate and Horton Streams were identified as supporting communities typical of lowland headwater streams.

One of the most notable findings during a macroinvertebrate study of the Hogsmill River in 2005 was the presence of the leech *Dina lineata*, which was found approximately 20m north of the 'stepping stones' (M. Skipper pers. comm.). The discovery of this species so far south in the UK is thought to be unusual. The same observer also reports that Freshwater Shrimp *Gammarus pulex* was understandably the most numerous of the aquatic invertebrates noted during this study.

Of greater interest is the Ladybird *Clitosthetus arcuatus*. This species is listed as nationally rare (endangered) and was recorded from Ivy at several locations in Surrey during 2005 by entomologist Ian Menzies. It is a priority of this plan to re-survey for *Clitosthetus arcuatus*.

Other invertebrates recorded for the site are Water Cricket (*Velia caprai*) (actually a bug), 7-spot Ladybird (*Coccinella 7-punctata*) and Common Wasp (*Vespula vulgaris*).

## **Vertebrates**

### **Birds**

Birds are the best-recorded group of fauna, within the Hogsmill LNR. The list includes a number that are included on either the 'Red' or 'Amber' Lists of the RSPB, and/or Annex 1 of the EC 'Birds Directive' (see Appendix III).

A significant proportion of the recorded species are common residents, or frequent visitors to the site. Breeding species include Blue Tit (*Parus caeruleus*), Great Tit (*Parus major*), Blackcap (*Sylvia atricapilla*), Chiffchaff (*Phylloscopus collybita*), Pied Wagtail (*Motacilla alba*), Grey Wagtail (*Motacilla cinerea*) and Greenfinch (*Carduelis chloris*) (all LBAP), in addition to Wren (*Troglodytes troglodytes*), Robin (*Erithacus rubecula*), Blackbird (*Turdus vulgaris*) and Chaffinch (*Fringilla coelebs*). The 'Amber', LBAP and EC 'Habitats Directive' Annex 1 listed Kingfisher (*Alecdo atthis*) also breeds here and is regularly seen along the Hogsmill. The 'Amber'/LBAP listed Green Woodpecker (*Picus viridis*) has been recorded from both the Hogsmill and Bonesgate.

Common visitors throughout the year include Grey Heron (*Ardea cinerea*) and Mallard (*Anas platyrynchos*), as well as Sparrowhawk (*Accipiter nisus*) (LBAP) and Starling (*Sturnus vulgaris*) ('Red' listed). Ring-necked Parakeets (*Psittacula krameri*) are frequent visitors to the Hogsmill and probably also the Bonesgate. Summer visitors include Swallow (*Hirundo rustica*) and House Martin (*Delichon urbica*) (both 'Amber'/LBAP listed) in addition to Swift (*Apus apus*). Birds recorded as winter visitors or on passage include Linnet (*Carduelis cannabina*), Skylark (*Alauda arvensis*) (both 'Red'/LBAP Listed), Fieldfare (*Turdus pilaris*), Redwing (*Turdus iliacus*) and Meadow Pipit (*Anthus pratensis*) (all 'Amber'/LBAP listed).

The Little Egret (*Egretta garzetta*) has been seen quite regularly and is included on the Amber List as a rare breeding species. It is a recent colonist of the UK and it is most common along the south and east coasts of England, and in Wales. They are an increasingly common sight in inland areas too and are gradually increasing their range northwards. They can be seen all year round, although numbers increase in autumn and winter as birds arrive from the Continent.

## **Fish**

The last fisheries survey of the Hogsmill River was undertaken in 2016 and the results of this are to be found in Appendix III. This survey was carried out at Chamber Mead, Oakland Way and Worcester Park Road. Species found were European Eel (*Anguilla anguilla*), 3-spined Stickleback (*Gasterosteus aculeatus*), Bullhead (*Cottus gobio*) a species listed under Annex II the EC 'Habitats Directive', Minnow (*Phoxinus phoxinus*), Chub (*Squalius cephalus*), Rudd (*Scardinius erythrophthalmus*), Dace (*Leuciscus leuciscus*), Gudgeon (*Gobio gobio*), Roach (*Rutilus rutilus*).

It is clear that since the improvements to the Hogsmill River channel and the Environment Agency releasing (2006) several native fish species in to the river between the new meander and the confluence with the Bonesgate Stream the fish population has been significantly improved.

As directed by the European Water Framework Directive the South East Rivers Trust (SERT), working in partnership with the Environment Agency and EEBC, have recently (c2013) removed several large concrete weirs to enable fish passage upstream and have also added 'in channel' features such as berms to encourage fish to re-colonise the river. This work is coordinated by the Hogsmill Catchment Partnership which is hosted by SERT.

## **Reptiles and Amphibians**

No records have been made.

## **Mammals**

There has been limited recording of mammal activity with most relating to bats. A bat survey of the Watersedge area was conducted during 2004 (Bailey,

2005). The area covered by this survey encompassed the section of the Hogsmill LNR between Ruxley Lane and Kingston Road. It also included a large field (part of Tolworth Court Meadows LNR), beyond the confluence of the Hogsmill River with the Bonesgate Stream – this is outside the area covered by this management plan.

At least four species of bat were recorded. These were Common (45 kHz) Pipistrelle (*Pipistrellus pipistrellus*), Soprano (55 kHz) Pipistrelle (*Pipistrellus pygmaeus*), Noctule (*Nyctalus noctula*) – Soprano and Noctule are species of principal importance under section 41 of the Natural Environment and Rural Communities Act (NERC), in addition to an unidentified myotis, thought most likely to be Daubenton's Bat (*Myotis daubentonii*) was recorded. Most frequent was the 45 kHz Pipistrelle, which appears to use the site for foraging on a regular basis, followed by the 55 kHz Pipistrelle, also probably foraging. For Noctules, this section of the Hogsmill is likely to represent part of a regularly-used flight line, rather than a foraging area. Likewise, the unidentified myotis bat was considered most likely to be a commuting individual. All species of bat are included under Schedule 5 of the 1981 Wildlife and Countryside Act and also Annex IV of the EC 'Habitats Directive'.

The author of the survey also suggested that although not recorded, the site could be suitable as an occasional flyway for Brown Long-eared Bat (*Plecotus auritus*), also a species of principal importance. It is a common and widespread species in Surrey with a known roost in Horton Country Park, but is difficult to pick up using echolocation.

A number of trees and groups of trees were examined to assess their likely suitability for roosting bats. Whilst many of the trees are in 'good locations' (one of the grading criteria), it was generally found that their potential value as bat roost sites was limited by a lack of decaying wood or rot. Eighteen out of the total 66 of these trees/groups occur within the Hogsmill LNR. Using a grading system of 1 (very low probability) to 5 (very high), half of them were placed in either categories 1 or 2. Of the remaining nine, all but one fell within Category 3 (medium probability), which encompasses mature trees, with more than one type of potential roost site, or many holes and crevices, but in poor location (from a bat point of view).

Only one tree was placed in category 4, a dead willow (now felled) with some split branches and much peeling bark, and situated on the river-bank, immediately south of Kingston Road. Category 4 trees (high probability) are mature, in a good location with obvious deadwood and many holes and crevices, representing a variety of potential roost sites. During the survey as a whole, no trees were found to be in the highest category of suitability (category 5).

The author stresses that although the habitat suitable for bats within the site is limited in both size and quality, it represents an important linear habitat corridor for bats linking known better quality habitats to the south, north and west.



A separate, survey (Fure 2004) noted the presence of feeding Pipistrelles (species unspecified) in the vicinity of the car park of the William Bourne Public House, situated at the extreme south-western point of the Hogsmill LNR. This 'protected species survey' was conducted in advance of works to strengthen the culvert beneath the Moor Lane Bridge over the Bonesgate Stream.

Peter Howarth and Stewart Cocker carried out a limited bat survey in 2015 around compartments 11, 12 and 13. Bats heard included pipistrelles and noctules/leislers, indicating the need for a more comprehensive survey

An arboricultural bat habitat survey was carried out by Alison Fure and Daniel Simmons in 2015, looking at trees from Ruxley Lane to the A240 prior to tree safety works being carried out by the Environment Agency. Trees of high potential were noted between the Ruxley lane and Riverview footbridge.

Grey Squirrels (*Sciurus carolinensis*) are frequent throughout. Foxes (*Vulpes vulpes*) are also likely to be common inhabitants and Roe Deer (*Capreolus capreolus*) are known to be present c2016.

Despite a number of visits to the Hogsmill River in recent years, no sightings of Water Vole (*Arvicola terrestris*) have been made (D. Williams, pers. comm.), although it is cited as one of the Surrey 'refuges' for populations of this species. A survey at the confluence of the Hogsmill with the Bonesgate Stream in 2003 (Fure, 2004) also found no evidence of Water Vole presence. Brown Rats (*Rattus norvegicus*) are present along the Hogsmill River and it is likely these are being encouraged by the feeding of birds (D. Williams, pers. comm.).

There has been no formal recording of the small mammal population on the site, or of the large mammal population. However, there are records of hedgehogs in the vicinity. When the last plan was written there was no known badger activity on the site. However, a large sett has developed over the last few years and is being monitored.

## **Non-native species**

Mink (*Neovison vison*) has been sighted in the river catchment area in the nearby Horton Country Park LNR and Epsom Common LNR. Signal Crayfish (*Pacifastacus leniusculus*) has also been spotted recently in the Hogsmill River near the confluence of the Bonesgate Stream.

### **1.5.3 Cultural**

#### **1.5.3.1 Archaeology**

There are no scheduled archaeological features within the site. The 1871 Ordnance Survey map highlights the original meandering course of both watercourses as compared with the much channelised features present today.

However, a section of the meandering course of the Hogsmill River still exists, south of Ewell Court. As previously mentioned, during the last plan work was carried out to remove some of the channelisation by re-creation of meanders and in channel berms to encourage the formation of meanders. There is significant scope for continuing that process.

Little evidence remains today of the once extensive Ewell Gunpowder Mills beside the Hogsmill River. The swathes of farmland that once occupied this part of Surrey have all but disappeared, including Ruxley Farm (beside what is now the Ruxley Lane Bridge). However, Talworth (now Tolworth) Court Farm (in the Royal Borough of Kingston upon Thames) still exists on land north of the Bonesgate Stream.

### **1.5.3.2 Land Use**

The 1871 Ordnance Survey map shows that in the mid-nineteenth century this part of Surrey was largely farmland with no significant settlements. The one exception was the complex of Gunpowder Mills, situated along the Hogsmill River between Ewell Court Gardens and Chamber Mead, which fell into decline in the latter part of the 19<sup>th</sup> Century. Today, the site is one of the few surviving fragments of this agricultural landscape, although much-modified, and is now used for public amenity and nature conservation.

### **1.5.3.3 Public Access and Recreation**

#### **Access**

Subject to the various byelaws (Appendix IV), there is open public access across the entire site, which is accessible on foot or by bicycle with a variety of surfaced paths being provided. No horse riding is permitted under the byelaws. There are numerous access points throughout the reserve.

Definitive rights of way crossing the site are all public footpaths (Map 3). Two public footpaths cross the southernmost section of the reserve (one of these appearing on the 1871 O.S. map), whilst a third runs along the northernmost edge of this portion, in the proximity of Ewell Court Gardens. A single public footpath bisects the Bonesgate Stream at Cox Lane. In 2010 the path running along the Bonesgate Stream from Chessington Rd to where the Hogsmill meets the A240 was designated as a public footpath to assist in securing grant aid to restore the surface. This section is a part of the Thames Down Link, a 15-mile long distance footpath linking the Thames Path and the North Downs Way. In addition, the London Loop (Section 8) long distance footpath passes through the Hogsmill LNR, forming a link between Ewell and Royal Borough of Kingston upon Thames upon Thames.

In 2004 The Doorstep Green Project was implemented under the banner of the Hogsmill Improvement Project, which involved the now defunct Ruxley Community Partnership, and the Environment Agency. The project led to the creation of the Friends of the Hogsmill. Lottery funding was provided via the

Countryside Agency (Doorstep Green Scheme) which paid for a 2.5m wide hard surfaced path from the A240 to Ruxley Lane, with feeder paths to Curtis Rd playground and Riverview footpath. The scheme also paid for new benches, new entrance gates and new information boards, (including maintenance of the new amenities provided for a 25-year period). In addition to the Doorstep Green, the Environment Agency created a new meander and retained the old river channel as a backwater (wildlife refuge). They also funded the refurbishment of the green bridge crossing the Hogsmill River just before the confluence of the Bonesgate Stream. A Living Spaces Grant secured funding for the construction of a new bridge across the Bonesgate Stream just before it joins the Hogsmill River

Following on from the investment of the Doorstep Green Project, during the lifetime of the previous plan further sections of path along the Hogsmill and Bonesgate Open Spaces have been surfaced, totalling 5km/3 miles of new footpaths/cycleways. It is now possible to walk the entire length of the LNR and beyond on a surfaced path, from Bourne Hall, to the A240 Kingston Road and along the Bonesgate Stream to Chessington Road. In addition, the surfacing of the path along the Bonesgate was upgraded in 2012 with the laying of 'Fibredeck' surfacing. This was paid for by Sustrans and was carried out as part of the Thames2Downs landscape scale project under the banner of the Green Arc initiative.

A further two new bridges have also been installed, one across the Bonesgate Stream near Gatley Avenue, linking the Royal Borough of Kingston upon Thames upon Thames with Epsom and Ewell and across the Green Lane Stream just before its confluence with the Hogsmill River.

There have also been new benches and information boards installed along the length of the reserve.

### **Recreational use**

Being surrounded by residential housing, the site represents a valuable resource to the local community. The site is popular for a variety of uses that include walking, picnicking, nature watching, exercising of dogs, and cycling. The reserve also includes two children's playgrounds, which are fenced and provided with safety surfacing. One playground is located near to Curtis Road, whilst the other playground is at the end of Gatley Avenue

The creation of a Community Green for the benefit of adjoining housing at Gatley Avenue was completed in 2016, and is known as Gatley Green. The children's playground was refurbished along with improvement and realignment of paths to allow access to this area. New benches have also been installed along with a bespoke wooden sign saying Gatley Green. In addition, a BMX/skate ramp has been installed in the reserve at the end of Cox Lane.

### **Educational use and site interpretation**

A variety of promotional and educational literature has been provided for the site. The general information leaflet adopts a 'house style' employed for similar ones that describe Epsom Common and the Horton Country Park Local Nature Reserves. These provide an overview of features of interest, including the ecological and historical aspects of each of the three sites. In addition, the Hogsmill LNR is featured on the Epsom & Ewell Borough Council website, which includes information on history and wildlife.

During 2004, as part of the Hogsmill Doorstep Green project the EEBC Countryside Team launched the Friends of the Hogsmill initiative to encourage local people to become involved in a range of activities. This led to some very successful community litter picking days. However in more recent times, activity has decreased the Friends of the Hogsmill have now become a 'virtual' group. An email list of interested people is kept by The Countryside Team enabling them to be contacted and to receive occasional newsletters. Volunteering opportunities are provided with regular practical conservation tasks and opportunities to help with biological monitoring of the site, supported by the Countryside Team and partnership working with the South East Rivers Trust, the Lower Mole Partnership and Zoological Society of London (ZSL). These partner organisations will continue to be supported

The creation of the Hogsmill Doorstep Green has brought some educational benefits, with the local Riverview School having used it to find out more about the wildlife on their doorstep.

Over the duration of the last plan, in total, 7 new interpretation boards have been installed at main entrance points on to the reserve, containing a map of the LNR and a space for posting notices and task programmes.

The Lower Mole Partnership continues to play a significant role carrying out practical work. For example; the construction of a path to the white bridge over the Bonesgate Stream, signage of routes such as the London Loop, Round the Borough Hike & Bike and the Thames Down Link, hedge planting, (Lower Mole volunteers planted a hedge along the southern boundary with Ruxley Lane in 2006 and returned to the hedge in Feb 2015 to lay it in the traditional style) and channel improvements to the Hogsmill River in 2016.

### **Site boundaries/security**

Site boundaries are largely formed by those of the adjoining properties, or the Bonesgate, stream itself (which runs along the Royal Borough of Kingston upon Thames upon Thames/Borough of Epsom and Ewell boundary). In some parts of the reserve, the boundary runs beside public roads and there is no physical barrier as such. However, all site entrances have barriers to prevent inappropriate access (e.g. by vehicles).

A major problem affecting the site is the illegal dumping of refuse, primarily (although not exclusively) of garden origin, along the fringes. This activity tends to be most noticeable where there are private gardens bordering directly onto the site. In a few cases within the Hogsmill section of the LNR, there has been

direct encroachment by householders of adjacent properties. A number of measures are being taken to address these unwelcome activities. During the last plan owners of adjacent properties were written to asking them to cease such infringements. Further litter-picking days were held by the Hogsmill 'Friends' and the possibility of clearing some areas of dense vegetation along property boundaries is a possible approach.

In 2010 a trial approach was carried out using a £25,000 grant which removed 250 tons of rubbish from the back of the properties along Rowden Rd. The aim was to create a cleared 8 metre swathe that would be regularly mown and maintained as open grassland to dissuade dumping, ease access and also provide a community space. Unfortunately, the maintenance of the strip has proved problematic and vegetation is encroaching once more, encouraging dumping to return, although it is less than previously, pointing to the concept having worked to some extent. Littering and dumping issues do still occur occasionally but the situation is much improved.

## **STAGE TWO – EVALUATION AND OBJECTIVES**

### **2.1 International and National Status**

The Hogsmill LNR is not subject to any international designation. The designation of the entire site as a Local Nature Reserve was confirmed in late 2006.

### **2.2 Local Designations**

During 2013 the borough's Sites of Nature Conservation Importance (SNCIs) were re-surveyed and the entire Local Nature Reserve has been designated SNCI (see appendix I). The Hogsmill LNR is also designated as River Biodiversity Opportunity Area (BOA) a county designation recognised in the Epsom & Ewell Local Plan aimed at recognising and enhancing biodiversity on a landscape scale. In addition, the whole area of the Hogsmill LNR is designated as Green Belt. Within the new planning policies of Epsom and Ewell Borough Council, a greater importance is being given towards green infrastructure and the protection of habitat links. The Hogsmill LNR is a vital green corridor within the Borough and so will be protected by the planning policies

#### **2.2.1 Byelaws and Other Statutory Information**

These are included in Appendix IV.

#### **2.2.2 SNCI Descriptions**

The description from the 2013 survey of the entire Local Nature Reserve is reproduced in appendix I.

### **2.3 Criteria for Evaluation**

#### **Size**

The site as a whole covers an area of 38.3ha. Although the area involved is relatively small, it represents an important resource of undeveloped land in what is otherwise an urban area.

#### **Diversity**

Overall diversity of species and habitat types is low. For the Hogsmill LNR, around 250 vascular plant species have been recorded. These figures should be compared with the total of around 400 for Horton Country Park LNR

(although this is a much larger and more diverse site and has been the focus of a greater recording effort).

A total of 101 birds have been recorded from the site as a whole, confirming that the site is a very valuable habitat for them. However, it should be noted that a small proportion of these are migrants passing overhead, rather than specifically visiting the site.

Monitoring of aquatic macroinvertebrates within the Hogsmill River and its tributaries suggests an interesting diversity of species are present, especially so in its upper reaches where several taxa characteristic of a chalk stream have been recorded. However, only a small number of other invertebrate species have been recorded (again largely from the Hogsmill River, with only two from the Bonesgate). Of these, the greater proportion are butterflies, with a set butterfly transect route being walked annually since 2011. The records are passed to Butterfly Conservation, contributing to the national recording effort

It is important to stress that, with the exception perhaps of aquatic macroinvertebrates for the purposes of monitoring water quality, there has been no systematic recording of many groups and the current lists (Appendix III) should be regarded as incomplete.

### **Naturalness**

The present day Local Nature Reserve represents a much-modified remnant of the former river-margin habitat mosaic, which includes relatively large areas of planted woodland and improved amenity grassland. However, the reserve includes a short surviving section of the original meandering river-bed, now bypassed by a man-made channel and where there is scope for its reconnection to the current main channel.

As mentioned in the description, over the lifetime of the last plan, much has been done to naturalise and restore the Hogsmill River and Bonesgate Stream channels e.g. removal of weirs and concrete channelling. The re-naturalisation can be continued over the lifetime of this plan.

A majority of species recorded from the Hogsmill River and the Bonesgate Stream are believed to be site-native. However, a significant number of accidentally or deliberately introduced invasive (neophyte) plant species are known. A number of the larger Pedunculate Oak trees clearly date back to the earlier agricultural landscape and could be 'semi-natural' in origin.

### **Rarity**

Given their relatively small extent and condition, none of the habitats can be considered as rare, even at the county level. The Natural Environment and Rural Communities Act, along with the Epsom and Ewell Biodiversity Action Plan recognises the importance of woodlands at the local level, with 'Broadleaved mixed and Yew woodland', being a 'Broad Habitat' category and 'Lowland Mixed Deciduous' being a priority habitat category. However, even

the most-mature woodlands of the site are either of quite recent origin or much modified by planting. 'Rivers and Streams' are also classed as a priority habitat hence the Surrey BOA designation. .

Some of the free-standing trees date back to the former agricultural landscape and are thus remnants of a much larger mature tree population. Most notably these include the mature Pedunculate Oak trees and the row of lapsed veteran White Willow pollards along a former course of the Hogsmill River. Such trees take many centuries to reach maturity and are becoming increasingly rare in the English Countryside.

There are no records for any nationally rare or scarce vascular plant species on the reserve. However, there is a 1939 record from reserve near Tolworth for Summer Snowflake (*Leucojum aestivum* ssp. *aestivum*) (Ann Sankey, pers. com.), although it is highly likely that this species has since been lost.

Native Black Poplar (*Populus nigra* ssp. *betulifolia*) is rare in the county (Leslie, 1987). Trees of Black Poplar (*Populus nigra*) at the site are of planted origin and therefore unlikely to be the native species. The various types of Lime could also include Small-leaved Lime (*Tilia cordata*), a further rare species in the county, but again, these have all been planted in recent times.

The most notable invertebrate is the nationally rare (RDB1/endangered) Ladybird *Clitosthetus arcuatus*. The species has possibly been overlooked in the past, and was found by Ian Menzies on Ivy at a number of sites locally during 2005.

Another interesting invertebrate is the rare Brown Hairstreak butterfly. As noted in the description it has been recorded on site, both eggs and adult sightings. Considering the abundance of Blackthorn, the larval food plant, the Hogsmill LNR is undoubtedly an important site for the butterfly. A timed count of egg survey has taken place on the nearby Horton Country Park with good results. The Blackthorn should therefore be managed in a way that incorporates the requirements of the Brown Hairstreak.

Of the birds recorded, only two can be considered to be local important in Surrey, namely Skylark (*Alauda arvensis*), a species on the RSPB "Red List" of birds of conservation concern, together with Marsh Tit (*Poecile palustris*). The full list of birds includes a further three species from the RSPB "Red List", plus fourteen from the "Amber List", the most notable of these being Kingfisher (*Alecdo atthis*) (a species appearing on Annex 1 of the EC 'Birds Directive'), (see Appendix III).

The upper catchments of rivers such as the Hogsmill are possibly some of the last refuges within the county for Water Vole (*Arvicola terrestris*). The species is largely absent from the larger river systems primarily due to the presence of predatory Mink (*Mustela vison*). Whilst there have been no recent Water Vole sightings within the Hogsmill LNR itself, there have been more recent sightings in nearby Horton Country Park LNR and Epsom Common LNR. The last sighting was in 2012. Work has taken place to improve suitable habitat in Horton



Country Park LNR with the hope of possibly reintroducing water voles in the future, reflecting at the national desire of encouraging its return.

### **Fragility**

Habitats and species occurring along the Hogsmill River and the Bonesgate Stream have developed to exist within the current, amenity-focussed management regime and are thus mainly quasi-artificial in nature and not especially fragile. Current threats to the grasslands of the site include habitat loss through tree-planting, plus the possible loss of more diverse swards under the current mowing regime.

Scrub is a relatively robust habitat, although in the longer term, a lack of management will allow the development of a dense and closed scrub cover, with a consequent loss of structural diversity, and an eventual succession to woodland.

Woodlands are primarily at risk of general habitat degradation through the combined effects of illegal tipping and trampling. The main threats to the mature tree population are deliberate damage through vandalism (e.g. fire) and disease (e.g. Chalara – Ash Dieback). There is also a risk of over-zealous pruning on the grounds of public safety, coupled with that of losses through 'natural' causes (e.g. the large White Willow tree that toppled over during the winter of 2003/2004). Further threats include stresses posed by atmospheric pollution, coupled with the loss of site-native trees in the presence of so many exotic species. Some habitat features at the site could be at risk due to possible channel realignments. Whilst these will be carried out to provide a net overall environmental gain, important features, such as the row of lapsed veteran pollarded willows, should be protected from any adverse effects resulting from such drastic topographical and hydrological modifications.

Some invasive plant species can lead to a loss of habitat and the displacement of native flora and fauna. Two of the most problematic on a national scale are Japanese Knotweed and Himalayan Balsam, with Goat's Rue being especially widespread in the Greater London area.

Many of the groups of fauna associated with the site are vulnerable to unfavourable habitat changes and indeed this site illustrates what can happen when watercourses are inappropriately managed. Water Voles are a particular example, in that they require a mosaic of habitats that includes tall, diverse bank-side herbaceous vegetation, free from grazing, without excessive scrub cover, and where water levels do not fluctuate too greatly throughout the year. Such a fragile balance of habitat conditions could all too easily be disturbed by a lack of sympathetic management and it is perhaps therefore understandable why the species has not been recently seen at the site.

## **Typicalness**

The traditionally managed farming landscape is now virtually unrecognisable and only a small section of the original course of the Hogsmill River survives. Much of the site is fairly typical of amenity-managed parkland in an urban/suburban location.

## **Recorded history**

From about 1754 to 1875 land on the south-western side of the Hogsmill was occupied by an extensive Gunpowder Mill complex. At its height, in the mid-19<sup>th</sup> Century, this employed 156 men. The location of the Mill complex is clearly visible on the 1871 O.S. map, although there is little physical evidence remaining on the ground today.

There is very little information about the site prior to this period (i.e. the manor estate and before) and further research would be welcome (S. Cocker, pers. comm.).

With a single exception (a botanical record from 1939), there are only three known biological surveys, the older of these dating from 1998. Therefore the recorded history of the site in terms of biological information is poor.

## **Position in ecological unit**

The site represents a significant 'wildlife corridor' in the Borough of Epsom and Ewell. The open space in the reserve either side of the Hogsmill River forms the most southerly extension of such a corridor, which extends northwards from the Epsom and Ewell Borough boundary, well into the Royal Borough of Kingston upon Thames, almost to the River Thames itself. The Bonesgate Stream in turn forms a tributary of the Hogsmill River and this eventually forms a link with Horton Country Park.

## **Potential for enhancement**

The site is an important 'green corridor' and also a place where people and nature meet. There are a range of opportunities for enhancing the value of both these facets. The major areas are discussed below.

To improve diversity of both flora and fauna young plantation woodland would benefit from a programme of thinning and under planting with hazel to provide an understorey and potentially useful by-products. Clearing rubbish and other encroachments, in conjunction with public education and enforcement would improve appearance in certain locations, such as the rear of Fendall Road. Invasive tree species could be gradually thinned-out and replaced with native stock. All veteran trees require appropriate safeguards, including reducing competition and arboricultural surgery, to maintain longevity.

Scrub management could be undertaken to improve structural diversity and the potential value to a range of species (e.g. birds, invertebrates). Ensuring the

continuity of the scrub habitat is one of the most important aspects of wildlife management across the site. To retain a varied scrub age structure rotational cutting and especially scalloping of scrub edges should take place.

Localised areas of more species-rich grassland would benefit from being mown less frequently, to further encourage their botanical diversity, whilst the spread of invasive species such as Himalayan Balsam, Goats Rue and Japanese Knotweed needs to be controlled.

Much of the channel of the River Hogsmill and the Bonesgate Stream remains currently over-engineered – i.e. artificially straightened, steep-sided and in places concrete-lined. This restricts the potential for the development of aquatic and marginal vegetation and reduces the ability of the watercourses to absorb excess water at times of flooding. It is also damaging to the aesthetic qualities of the river corridor, which has encouraged neglect by the local community and a general low appreciation of its value. There is opportunity a need to continue working in partnership with the Environment Agency and South east Rivers Trust to continue the restoration and progress made since 2006 to bring the two watercourses back to a more natural channel and bank profile. Not only will this enhance the wildlife value of the river corridor, it will provide an aesthetic improvement and enable it to play a more effective role in flood alleviation.

There are opportunities to promote the site as an educational resource and make better provision for public interpretation.

During the previous plan very significant improvements to public access were achieved with new paths and bridges. There remains scope for improvement, for example, opposite the confluence where the Green Lanes Stream joins the Hogsmill River a well-used but very wet and muddy section of path would benefit from a hard surface. In addition there is space for new benches and most importantly the new paths, bridges, benches, etc. need to be looked after to maximise their useful lives.

### **Intrinsic appeal**

Given its urban fringe location, the Local Nature Reserve represents an important and well-used recreational facility, forming a 'green corridor' in a heavily urbanised area. Individual specimen trees, stands of woodland and scrub, open areas of grassland and the rivers themselves provide an attractive landscape where people and wildlife can come together. The site has a long history, representing remnants of the former agricultural riverside landscape. The Hogsmill has its past associations with the gunpowder-making industry of the 18<sup>th</sup> and 19<sup>th</sup> centuries. In addition, this stretch of the Hogsmill River is where the pre-Raphaelite painters John Everett Milais painted his famous "Ophelia" and Holman Hunt painted "The Light of the World". The Bourne Hall Museum has an early Twentieth Century collection of photographic material showing what the area looked like around this time.

### **Demonstration of excellence**

The Hogsmill LNR in Borough terms is an important areas for public access and amenity in an urban setting, as well as being an important 'wildlife corridor'. The designation of the site as a Local Nature Reserve and re-affirmation as an SNCI offers a clear incentive to enhance the management of the site and thereby increase both its wildlife and amenity value. This in turn will promote a greater understanding and appreciation of nature conservation within an urban fringe setting.

The partnership working between EEBC, Surrey County Council, the Lower Mole Partnership, the Environment Agency and in more recent years the South East Rivers Trust, has achieved a broad and very significant raft of improvements to public access, the river channel and biodiversity. The work in naturalising the river channel is challenging both financially and in engineering terms but is set to continue and is a clear demonstration of excellence that has and can transform the reserve both visually and for nature.

## 2.4 Identification/Confirmation of Important Features

Site Features	National Importance	Regional Importance	Local Importance
<b>1. Habitats</b>  Remnant mosaic of river-corridor habitats (including 'Rivers and Streams' of NERC)  Mature and veteran trees  Lowland mixed deciduous woodlands (NERC)  Scrub  Fen swamp  Neutral grasslands (NERC)	*		*  *  *  *  *
<b>2. Species groups</b>  Plants  Bird assemblage (Red and Amber Listed)  Mammal assemblage (Bats – Soprano pipistrelle, Noctule and Brown Long-Eared – NERC. and Badgers – Badger Act 1992)  Invertebrates - <i>Clitosthetus arcuatus</i> RDB1  Butterflies - White Letter Hairstreak, Brown Hairstreak and White Admiral - NERC	*       *		*  *  *  *  *

Site Features	National Importance	Regional Importance	Local Importance
<b>3. Culture and amenity</b>			
Public recreation			*
Educational opportunities			*
Historical, landscape and cultural features			*

NERC – Natural Environment and Rural Communities Act (2006) habitats and species designations.

RDB1 – Red Data Book 1

## **2.5 Ideal Long-term Management Objectives 2017-2017**

The ideal long-term management objectives outlined below have been determined from reviews of historical data and aerial photographs, liaison with various individuals and organisations and new information gained during recent site surveys (see also Maps 5 and 6).

### **2.5.1 Objectives for Nature Conservation**

- Continue to work with partners Environment Agency (EA), South East Rivers Trust (SERT), Lower Mole Partnership (LMP), Royal Borough of Kingston upon Thames (RBK) and Surrey County Council (SCC) to facilitate habitat and wildlife enhancements of the LNR and river catchment
- To manage the site as an important 'wildlife corridor' by ensuring the continuity of semi-natural habitat, in a way that is compatible with achieving the recreational, educational, cultural and historical objectives.
- To maintain and enhance the mature and veteran tree population by protecting individuals from damage through vandalism, 'releasing' competition, appropriate surgery and ensuring veteran tree recruitment.
- To maintain and enhance the woodland habitat by selective thinning of plantations and non-native trees, re-planting with appropriate native stock and encouraging natural regeneration of an understorey that could allow coppicing to take place in future.
- To maintain and enhance the scrub and scrub-margin habitat by rotational cutting (scalping) and planting where appropriate.
- To maintain and enhance the grassland habitat by reducing the frequency of cutting in selected areas.
- To work in partnership to secure effective, sustainable long-term management of the watercourses, water-margin and other wetland habitats in a way that encourages the restoration of more natural channel dynamics through close liaison with the EA and other key partners such as the SERT.
- To monitor and control the spread of invasive species such as Japanese Knotweed, Himalayan Balsam, Goat's Rue, Mink and Signal Crayfish.
- To maintain and enhance the ornithological interest across all habitats present by ensuring habitat management meets with species requirements.

- To maintain and enhance populations of key mammal species, such as bats and to encourage the return of species such as water voles, by ensuring appropriate habitat management.
- To maintain and enhance the invertebrate interest, including the RDB1 ladybird *Clitosthetus arcuatus*, across all habitats.
- To maintain and enhance the botanical interest across all habitats present by ensuring habitat management is compatible with species requirements.
- To work in partnership to maintain and enhance aquatic fauna in both the Hogsmill River and Bonesgate Stream.
- Continue to support and facilitate the monitoring of pollution, particularly at the outfalls in conjunction with SERT, ZSL and the EA.
- Maintain a biological monitoring programme by conducting appropriate surveys and using results this to inform subsequent habitat management.

#### **2.5.2 Objectives for Access, Recreation, Education, Historical and Cultural Value**

- To maintain and enhance public access and recreational use and to provide facilities for members of the public to enjoy the LNR in a way that is compatible with achieving the nature conservation objectives.
- To maintain and enhance the landscape value of the site by appropriate management such as grassland mowing, scrub/woodland cutting and tree/scrub planting.
- To enhance the aesthetic qualities of the site by addressing issues of inappropriate use through a programme of litter and other rubbish removal, public education and enforcement.
- To promote and encourage an understanding and appreciation of the nature conservation, landscape, cultural and historical value of the Open Space by the provision of appropriate interpretation and other resources.

#### **Possible sources of funding**



Resources for management of the Hogsmill LNR are likely to be available from the following principal sources:

- EEBC core budget
- Community Infrastructure Levy (CIL)
- Environment Agency
- South East Rivers Trust
- Heritage Lottery Funding

## **2.6 Rationale**

### **2.6.1 The Site as an Important Wildlife Corridor**

The most important ecological feature of the site is the 'green corridor' that it forms in what is otherwise a largely built-up area. Thus, strips of scrub, woodland and coarse grassland form an almost continuous link along the length of the site, mainly along its margins and also beside the two main watercourses. A major focus of this management plan will therefore be aimed at maintaining the linear continuity of habitats and enhancing where possible. This work is addressed under the individual habitat headings. In general, it will be achieved by managing scrub, woodland and grassland areas, and allowing wider fringes of un-mown grassland to develop that will then form links between the existing features.

### **2.6.2 Mature and Veteran Trees**

The site supports some notable veteran trees, in particular the lapsed pollard White Willows along the old course of the Hogsmill plus the two White Willow avenues beside the existing river channel. In addition, there are also the very large Pedunculate Oaks in the east of the Hogsmill Open Space (compartment 13), plus some further large Oaks along the margins of the Bonesgate Stream. As well as the potential value that these veteran trees have in terms of their decaying timber resource, they are also important for the aesthetic qualities they bring to the landscape of the Reserve.

Damage through vandalism (e.g. fire) poses a major threat to these trees. There are a number of examples of mature trees within the LNR that have been damaged in this way. The presence of decay at the base of a tree seems to be a temptation to vandals to set fire to a tree at this point. The occurrence of such activities may to some extent be encouraged by the levels of litter and rubbish giving an uncared for impression in some scrub/woodland areas of the site. Continued clearance of rubbish from these areas may help to reduce the temptation for such acts of vandalism. The situation also reinforces the need for a greater on-site presence, which will again discourage acts of vandalism in general.

A proportion of these veteran trees are currently at risk of collapse – resulting in the loss of a valuable ecological resource. It is perhaps these old trees where the risk of collapse is currently most acute, but the possibility has to be considered for all of the LNR's major trees. Therefore it is proposed that an arboricultural specialist survey these trees to establish what work is required to maintain their long-term stability and minimise any risk to the public. The veteran Elder in compartment 6 needs particular attention as it is showing signs of decline.

In a few situations, large trees including some veterans are currently 'hidden' by surrounding regeneration of younger specimens. This may offer a degree of protection from the attention of vandals. However, the 'release' of some individuals by thinning of competing younger trees will help not only the tree itself, but will improve the landscape character of the site. One such example is a large Ash tree on the edge of the area formerly used for the disposal of silt dredged from the pond at Ewell Court, (Compartment 10). This individual is currently surrounded by extensive regeneration of Grey Poplar trees which could be thinned to make a feature of the tree. As it lies in a very conspicuous location, the increase in risk of vandalism here would probably be fairly minimal. A further group of trees that would benefit from a reduction in potential competition are the large maiden Oaks in the extreme south of the Hogsmill Open Space (compartment 13) (as discussed under Section 2.6.3).

With all veteran trees, care should also be taken to prevent any other activity that could result in soil compaction around their roots (e.g. by driving vehicles too close to them). Whilst it is generally unlikely that this might happen at this site, such impacts should be considered if any vehicular access is being planned. For example, tractor-mounted mowing around the large Pedunculate Oak trees in the south of the Hogsmill Open Space should avoid the area directly beneath the canopy to reduce the risk of soil compaction around their root systems.

The current population of veteran Oak and White Willow specimens is rather even-aged and action is needed to ensure a continuity of such trees when this generation expires. To some extent this can be achieved through retaining and managing existing planted trees to become mature specimens. However, there are at present no younger specimens that could take the place of the veteran White Willows and therefore suitable stock should be planted and encouraged in this area. In addition, it would be appropriate to plant a number of young Oak trees, grown from acorns collected from veteran Oaks already present, which could become parkland trees of the future. As well as planting in areas where veterans currently exist, scattered individuals will be planted out into open grassland areas, primarily to improve the landscape character of the Local Nature Reserve. Any planted trees will require appropriate stakes and tree guards to protect them from damage in their early years (e.g. grazing by deer and other herbivores, and vandalism).

To enhance the continuity of habitats along the corridor there is a case for planting new scrub margins. This subject is considered below under Section 2.6.4.

There is a need to continue managing the two avenues of White Willows beside the Hogsmill River. The more southerly feature (compartments 11 and 12) supports multi-stemmed trees that have obviously been coppiced or pollarded in the past. These trees would therefore be suitable for re-pollarding and coppicing. This would be better achieved over a number of years to maintain the canopy structure and visual elements of the landscape. There is also a need to plant new specimens into gaps between existing trees and manage these by coppicing and pollarding in future.

The more northerly avenue of trees (compartment 3) are mature and rather tall, but not veteran in character. The main value of these specimens lies in the visual impact they possess in this relatively narrow part of the site, sandwiched in between areas of housing on either side. It would therefore be inappropriate to coppice these trees to ground level, as this visual function would be severely compromised. Instead, it would be beneficial to undertake careful thinning and crown reduction to maintain them roughly at their current extent.

Trees beside the two watercourses are regularly inspected by EEBC and the EA. The EA are responsible for the management of trees on the riverbank, so continued liaison with them on the management of these features is essential. In 2015 work on the northern avenue of willows was carried out by the EA to address the safety issues resulting from tree safety inspection.

### **2.6.3 Broadleaved Woodlands**

Within the plantation woodlands, there is a need to change the balance of tree species more in favour of native ones over time. A majority of stands have developed to a stage where thinning of the canopy is required, which can be followed by the planting of Hazel to create an understorey. The plantation in compartment 6 has a veteran Elder tree on its margin, which should be protected when thinning takes place. Some of these woodlands can also be extended or developed to enhance the continuity of semi-natural habitats along the length of the site, through the planting of appropriate native tree and shrub species. The impact of this proposed management upon the quantity of Ivy present within the Local Nature Reserve, needs to be considered (as potential habitat for the RDB1 ladybird *Clitosthetus arcuatus*). However, it is likely that good amounts of Ivy are present in woodlands that will not be managed in this way and mature trees elsewhere within the Local Nature Reserve.

In some areas where good linear habitat already exists, thinning of recent plantations can be very extensive, retaining only a fraction of the 'more interesting' trees. This will effectively convert these stands back to open grassland with scattered 'parkland' tree specimens. A suitable location is an area of plantation beside the Hogsmill River within compartment 6, where specimens of Lime, Pear, Hornbeam and possibly some riverside Willows could be retained as specimen trees. .

Some areas of recent plantation would also benefit from a diversification of their fringes, through scalloping and planting of shrub species such as Hawthorn and Blackthorn. Where mature, established, native trees exist within plantation areas, the surrounding canopy should be thinned to 'release' them.

Areas of plantation woodland in the extreme east of the Hogsmill LNR lie very close to a number of fine old maiden Oak trees and indeed their canopies are starting to touch. Thinning of these woodlands should include 'halo release' of any trees that impinge on the canopy of these mature trees.

The more mature woodlands will also benefit from the thinning of non-native species in favour of native ones. The creation of glades will improve structural diversity. Natural regeneration can be enhanced through supplementary planting with site-native stock. The structural diversity of woodland and existing glade margins (e.g. Riverview Copse) can again be improved by scalloping the edges and encouraging a denser shrub layer in these areas. Again, any impact on the quantity of Ivy needs to be considered.

Within Riverview Copse, the secondary scrub-woodland is to be encouraged to develop as woodland. The Hawthorn should be thinned and natural regeneration of native broadleaved species to create future canopy and understorey should be promoted. Supplementary planting can be carried out if necessary.

Although at the time of writing this management plan, the impact of Ash Die Back and the Oak Processionary Moth is unknown, liaison with the Forestry Commission should continue to ensure EEBC can respond accordingly.

#### **2.6.4 Scrub and Scrub Margins**

The importance of scrub to the overall habitat corridor has already been highlighted. The two main priorities are to manage existing scrub to improve its nature conservation value and to improve habitat continuity.

Many stands of scrub remain are rather uniform and overgrown in character and would benefit from rotational cutting to improve age and structural diversity for the benefit of animals such as birds. Frequent amenity mowing has often produced an abrupt edge to existing stands of scrub. The nature conservation value of this marginal habitat can be enhanced by the continued 'scalloping' of the edges to improve age and structural diversity. Under the previous plan sections of scrub in the following compartments were managed; 2, 6, 9, 11, 12, 13, 14 and 16 which should be continued.

Measures to maintain habitat continuity could involve the planting of new areas of scrub and trees. Areas to consider would be the margins of the site. If the EA approved works to clear scrub along the river channel take place, care needs to be taken to maintain habitat continuity of scrub habitats. .

An existing stand of plantation woodland in compartment 6 to the rear of houses on Pam's Way might be more effectively adopted as the 'nucleus' of new scrub/woodland, by thinning around 75% of the non-native tree canopy and re-planting with native trees and shrubs.

On the southern side of Ruxley Lane, a length of new hedgerow was planted in 2006 and is now managed using traditional techniques. It was laid for the first time by volunteers during the winter of 2015 and will be repeated every 7-10 yrs. A section of hedgerow was also planted along the boundary of the service road behind the houses of Eastcroft Rd in 2007 which will need future maintenance, possibly by laying.

There is a large area of scrub currently not within the boundary of the Local Nature Reserve, located to the South West of the site. It is bounded by compartment 12 of the LNR, the back gardens of houses along Northcroft Road and the allotment gardens. It is a large area of developing scrub and should be managed as such to prevent it progressing in to woodland. An aspiration of this management plan will be to incorporate this area in to the Local Nature Reserve and manage as an area of rotational scrub.

### **2.6.5 Grasslands**

Grassland is a major habitat component of the site and given its important amenity value, the major focus will need to be upon regular mowing of swards for this type of land use. The smaller areas of rough grassland, mainly around the periphery of the site (and their associated nettle-dominated vegetation), form an important element of the linear habitat corridor. Their tall structure and tussocky growth pattern represents a valuable potential invertebrate habitat (few invertebrates are able to withstand regular destruction of their habitat through mowing). In particular, ant-hills have developed in some areas of rough grassland, for example in the Stepping Stones meadow (compartment 11) and they are especially frequent within the grass fringe around Riverview Copse (compartment 2). Nettles are a food plant for several common species of butterfly, whilst thistles represent an important nectar source for many flying invertebrates.

There is a great opportunity to make an increase in the extent of rough grassland by leaving wider, un-mown fringes beside some of the amenity grassland areas e.g. beside the watercourses and around and between the existing small tree plantations. These areas are shown in map 5. However, to maintain the maximum range of structural habitat conditions, areas of rough grassland will benefit from periodic, small-scale rotational mowing, again to encourage invertebrates.

Botanical diversity of the intensively-managed amenity swards is generally very limited. However, there are local areas where species diversity seems somewhat better. It would be possible to develop one such area, in what is a relatively 'quiet' part of the site, into a wild flower meadow, by cutting much less frequently than the current regime. This is the area next to Riverview Copse,

now known as Riverview Meadow. The spoil from creating the backwater and new meander in March 2006 was deposited here and then seeded with wildflowers. Any perception that management of the site is being 'cut-back', can be countered by the educational opportunity that this will provide to see the flower sward develop (Common Knapweed and Common Bird's-foot Trefoil already occur in this area). Monitoring of the sward will be undertaken to follow any changes that occur in its composition and structure. See map 5 for grassland management regime.

Traditionally, much of the land beside the Hogsmill would have been managed as either permanent pasture or as hay meadow. As a demonstration of the latter management technique, it was an aim of the last plan for part of the area known as Chamber Mead (compartment 12), which had not been cut for some time, to be developed as a wildflower meadow by annual cutting and clearing of the arisings. In 2014 the area was cut and cleared for the first time by the Council's GM Team. Chamber Mead provides an opportunity for the monitoring of impact upon plants and invertebrate populations under an annual cut and clear regime. Following years of management as amenity grassland there were concerns about public reaction to grass being allowed to grow long but to date the public have been accepting. The Council's GM team cut a wide four to five metre swath around the edges which affords somewhere for dogs and children to exercise. It should be noted that in 2016 EEBC and the SERT put forward a plan to the Hogsmill Catchment partnership that involves diverting the Green Lanes stream across Chamber Mead to join the Hogsmill just upstream of the stepping stones. This has the effect of creating a wetland within Chamber Mead and several hundred metres of Chalk Stream by moving the Hogsmill River/Green Lanes stream confluence downstream. This is discussed in more detail in section 2.6.6 below.

## **2.6.6 Watercourses, Water Margin and other Wetland Habitat**

A major feature of the two watercourses as they stand at present is their extensive modification through a process of channelisation. Although a great deal of progress has been made to naturalise the watercourses over the lifetime of the last plan, the channel is often constrained to a pre-defined course by artificial banks, whereas originally, it would have meandered naturally across the floodplain area and its margins would have supported areas of marginal and swamp vegetation. A natural mosaic of habitats such as this is able to 'absorb' excess water at times of high flow, which helps to reduce the extent of flooding. The creation of artificial, straightened water channels, generally lacking in marginal vegetation, greatly increases the risk of flash flooding, as the river system has no capacity to contain rising water levels.

In the light of this, a major objective of this management plan is to build on the progress made during the last plan and continue to work in partnership with the Environment Agency, South East Rivers Trust, Royal Borough of Kingston upon Thames, Surrey County Council and the Lower Mole Partnership, to find ways of restoring more natural channel dynamics and river marginal habitat to the two watercourses. The Environment Agency is the key partner

as the responsibility of managing the two watercourses and their banks ultimately rests with them. The Bonesgate Stream lies along the boundary between Epsom and Ewell and the Royal Borough of Kingston upon Thames and is owned in part by both local authorities, highlighting a need for close liaison with this stakeholder. Surrey County Council is responsible for the Green Lane Stream which is a key tributary of the Hogsmill therefore liaison with them is essential. The South East Rivers Trust and Lower Mole Partnership are vital partners in actually organising and carrying out practical work.

The South East Rivers Trust (SERT) has carried out significant improvements to the Hogsmill River over the last few years and act as 'Catchment Partnership Hosts' a key role in delivering the European Water Framework Directive that aims to improve the water quality of rivers across Europe. The continuation of partnership working and facilitating the work of SERT will play a key role in delivering this plan.

There are several proposed projects aimed at improving both water quality and biodiversity within the boundary of the reserve. These include the following:

- The creation of a wetland at Chamber Mead by diverting the Green Lanes stream through Chamber Mead, extending the chalk stream section of the Hogsmill River by several hundred metres and creating a wetland which will improve water quality, habitats, and also have flood risk benefits.

- Habitat improvement works are proposed for the section of the Hogsmill River, up stream of the Green Lanes Confluence, to immediately upstream of Ruxley Lane. The work aims to improve habitat diversity and abundance. Measures are to include: removal of stone banks and toe boarding, softening and naturalising banks; channel narrowing to restore natural flow velocity; large woody material and gravel introduction to create flow sinuosity; planting with native aquatic species. This would complement the fish passage project. It is hoped these measures will allow for the reintroduction of Brown Trout to the Hogsmill River in the future. Ideally this will be carried out, preferably in phases, along the entire length of the river.

As mentioned previously, the EA owns the Hogsmill River and banks and therefore has the ultimate say over the management of them. However, working in partnership, EEBC staff & volunteers are helping to manage sections of bank on a regular basis. Recent volunteer tasks have involved opening up the banks to allow more light to encourage the bank side vegetation to flourish. This in turn will improve the habitat for invertebrates, providing more food for fish and birds. Volunteers from SERT and LMP have also been carrying out similar vegetation management, also including the creation of burms to improve water flow.

An important area of management cooperation with the EA involves the back-water (wildlife refuge) between compartment 2 and 14 that was created by the EA in 2006. By realigning the river running alongside the Watersedge Estate to a more natural line a new meander was created, leaving the old channel as back water, providing refuge in times of high flow. The shallow bank of the

meander was planted up with native flowers and grasses and has developed well. Over the 10 yrs since it was created, the vegetation now in the middle of the river has become quite scrubby and should be managed to ensure it doesn't get too overgrown. The back-water itself is also silting up and should be monitored to ensure it continues to provide the function it was designed for.

Via the Hogsmill Catchment Partnership SERT has been working with Thames Water, the EA, ZSL and the local community to investigate how often the Epsom and Ewell Storm Tanks overflow. Depending on the outcome the data obtained will assist in building a case for measures to be put in place to prevent overflows of raw sewage in to the Hogsmill River and Green Lane Stream. Currently the work carried out by volunteers includes mapping and monitoring the outfalls and also sampling the invertebrates near outfalls. This volunteer effort is coordinated by SERT and ZSL and should continue to be supported and facilitated by EEBC.

A section of former Hogsmill River channel pre the 1960 channelisation remains close to the Ewell Storm Tanks. This bypassed section still fills with water in wet conditions. This feature now supports one of the most extensive surviving fragments of water marginal habitat within the site; although it is currently very over shaded by adjoining trees and would benefit from thinning the canopy to allow more light to reach the water. Ultimately it may be possible to restore it as part of the river channel network, even if the present course is also retained as the main flow and there is also potential for a wetland that would assist with both flood prevention and biodiversity. The EA and SERT have shown interest and the idea has been put forward as a possible project at the Hogsmill Catchment Partnership. Additional survey work is required to measure land levels along the various channels in this area to help with establishing the feasibility of such a proposal. Where possible we would support other projects involving reconnecting the river to its floodplain due to the ecological and flood risk benefits.

Whilst the foregoing focuses upon possible ways of restoring more natural channel dynamics to the two watercourses, potential impacts on existing habitat features have also to be considered as part of this process. As an example, further evidence of the existence of the former Hogsmill river channel can be seen in the form of the veteran, lapsed pollard White Willow trees that appear to lie along the edge of an earlier river channel (but now some distance from where the river now runs). These trees are of such ecological significance that their conservation should take precedence over any proposed river realignment near to them. Environment Agency standards of tree maintenance would be incompatible with maintaining the current levels of decaying timber on these trees and any realignment here should be engineered to keep these trees a safe distance away.

The boundary of the Nature Reserve at its eastern end is currently the railway running between Meadow Walk and Station Avenue. However, the area known as the Upper Mill and the Lower Mill contains ponds and the beginnings of the Hogsmill River which are fed by chalk springs, making the water courses here internationally important. This area also contains valuable woodland and there



is an opportunity, working with partners, to improve it ecologically and create flood alleviation benefits. There is potential to reconnect the river to its paleochannel and rechannel it to provide fish passage past the mill ponds and create wet woodland habitat. It is proposed that over the next 10 years, the Nature Reserve boundary is extended to include the Upper and Lower Mill, up to Chessington Rd. It is already part of the SNCI so would make a valuable addition to the mosaic of habitats contained within the Nature Reserve.

A further important issue regarding the management of water-margin habitat is its potential value as habitat for Water Voles (see Section 2.6.9).

The stand of fen-swamp vegetation within compartment 11 lies in a small depression, hydrologically unconnected with the main river channel, at the extreme south-eastern margin of the Hogsmill Open Space. The developing scrub and trees should be closely monitored and thinned out when necessary.

### **2.6.7 Non-native/Invasive Species**

The most extensive invasive species is Himalayan Balsam. Over the lifetime of the last plan a great deal of work has been carried by volunteers hand weeding the plant along the entire length of the Bonesgate Stream and area short section of the Hogsmill River at the confluence with the Bonesgate Stream. This work has been successful in preventing the spread of Himalayan Balsam upstream along the Hogsmill river and whilst still present and prone to outbreaks along the Bonesgate Stream Himalayan Balsam could now be considered to be under control. There remains a difficult to access infestation in the upper reaches of the stream well to the north of the reserve and until eradicated is likely to lead to infestations re-appearing. The South East Rivers Trust and Lower Mole Partnership are working to solve the problem.

Complete eradication of Himalayan Balsam is impractical, so the main focus of management should be to discourage its spread to new areas, especially along the Hogsmill upstream of the Bonesgate confluence and maintain the annual hand weeding volunteer sessions to keep the plant at a low level. Chemical treatment is an option, close proximity to the watercourse requires an application to be made to the Environment Agency to give consent. Continued monitoring is required to identify new colonies as they develop to prevent the plant from spreading elsewhere.

There are scattered colonies of Japanese Knotweed on the Bonesgate Stream. The plant is infertile in Britain and only spreads vegetatively. Therefore, the risk of progressive spread along the watercourse is lower than a viable seed-producing plant like Himalayan Balsam. All locations have been treated with most areas successfully eradicated but several remain and are being monitored prior to further chemical treatment.

It should be noted that physical control of Japanese Knotweed is also possible (Coleshaw 1999, 2001), such as regular cutting or digging up the rhizomes, although these activities pose the risk of spreading the plant accidentally (and

the plant can re-grow from a single remaining fragment). As it is an offence to cause the plant to grow in the wild, all cut material and any excavated rhizomes should either be carefully collected and disposed of on site (e.g. burning), or taken to an appropriately licensed landfill site. Cutting in particular may take many years to be effective, as the rhizomes are very long-lived, whilst excavating rhizomes is also a very labour intensive process, further suggesting that herbicide may be the best option. As with Himalayan Balsam, continued monitoring of the occurrence of Japanese Knotweed will be required to ensure that existing colonies are being effectively treated and to look out for any new infestations before they take a hold.

A single small stand of Goat's Rue exists near to Cox Lane and has been hand pulled to keep under control and is currently minimal in extent.

More recently Mink (*Neovison vison*) have been recorded in the catchment area, in nearby Horton Country Park LNR and Epsom Common LNR indicating their likely presence as the reserve is downstream of both sites and Mink are likely to have moved upstream to reach them. A survey should be carried out to decide if Mink are present within the reserve and consideration given to their removal.

There have also been sightings (2016) of Signal Crayfish (*Pacifastacus leniusculus*), another invasive species. Considering that the native crayfish is not present, Signal Crayfish do not present an immediate problem; however, numbers should be monitored.

#### **2.6.8 Ornithological Interest**

The main value of the Local Nature Reserve for birds is the habitat they provide for a range of common residents. The proposed management of the mosaic of habitats present should further enhance their ornithological value. The fact that birds are easily seen and recognised has meant that they are the best-recorded group of fauna within the reserve, and ideally suited, at this level to volunteer recording, which will continue to be encouraged and supported. The only species where a particular focus is required at present, is the Kingfisher, where a detailed survey to establish nesting sites along the Hogsmill River and Bonesgate Stream is required. Again, this could probably be undertaken by volunteers. The results of this and other bird survey data and on-going monitoring could then be used to inform subsequent habitat management.

#### **2.6.9 Fish**

Ongoing monitoring of fish numbers is carried out by the Environment Agency and is supported by the work of SERT. To improve the river for fish SERT have recently, c2013-16, removed obstacles to fish passage (Weirs) and carried out in channel habitat improvements. Fish are known to be responding to these improvements and the fish populations released in to the Hogsmill River by the EA c2007 now have the opportunity to move both up and downstream. The

latest surveys indicate that populations of bullhead and minnow have been able to repopulate upstream to Chambermead, where they were absent before. The ultimate indicator of success is generally accepted to be the return of Brown Trout to the upper reaches of the Hogsmill River, although this will probably require translocation as opposed to natural repopulation. The regular sightings of King Fisher point to a healthy population of smaller fish species in both the Hogsmill River and Bonesgate Streams. In the latest EA fisheries survey (2016) at Chamber Mead, Oakland Way and Worcester Park Road, Bullhead, Minnow, European Eel, 3-Spined Stickleback, Chub, Rudd, Dace, Gudgeon and Roach were recorded.

#### **2.6.10 Reptiles and Amphibians**

Currently there are no records indicating the urgent need for a baseline survey carried out in suitable locations across the reserve.

#### **2.6.11 Water Voles**

Water Voles (*Arvicola terrestris*) are a “Species of Principal Importance” under Section 41 of the Natural Environment and Rural Communities Act. The species has suffered dramatic declines in recent decades and Water Vole “places of shelter” are afforded protection under Schedule 5 of the 1981 Wildlife and Countryside Act. In recent years the lack of findings has suggested that Water voles should now be considered extinct in Surrey, however, efforts are being made and consideration is being given to their reintroduction. However, this requires both the control of Mink and management of suitable habitat.

In view of the high conservation priority attached to Water Voles both watercourses should be managed as potential habitat for this species. The main habitat requirements include a well-developed marginal vegetation fringe, with a low level of tree shading, and fairly constant water levels. Achievements made during the 2006-16 plan and future plans to re-naturalise the banks of the river should accommodate this requirement here, although achieving more constant water levels presents the greatest challenge due to the high rate of runoff from the surrounding urban areas. Nevertheless records suggest that Water Voles were present along the Hogsmill until relatively recently suggesting they can cope with fluctuating water levels. In addition, reducing tree cover along the section of the old Hogsmill River Channel margins will encourage more prolific marginal vegetation growth in currently shaded areas. On-going monitoring will establish whether any of this and other management aimed at encouraging the species has been successful.

#### **2.6.12 Other Mammals**

Bat surveys (Bailey 2005, Howarth & Cocker 2015 and 2016, and Fure & Simmons 2015) have revealed that the Hogsmill LNR is important as a foraging area and clearly has high potential for foraging and roosting bats especially for the 45 khz Pipistrelle. It also forms part of a flyway for bats linking surrounding

populations (with records indicating that a total of eight species occur within range of the site – Bailey 2005).

On this evidence there is a clear need to perform bat surveys across the site as a whole and to assess the potential value of all other mature trees as potential bat roosts. This is especially important prior to any proposed tree works.

Managing and enhancing the site as a linear habitat corridor, especially with a continuity of mature trees along the watercourses, will enhance its value as a bat flyway. Thus, planting new trees and scrub to enhance this habitat feature will be of benefit to bats. Strategic planting of trees can also be used to screen artificial lighting from the site.

Where possible, old and mature trees should be retained as they provide foraging areas and potential roost sites. Surveys need to identify those trees that are the most likely to be of importance to bats so that this can be taken account of in their management. Whilst the safety of the public is an overriding concern, over-zealous pruning of decaying branches restricts the potential value of a tree as a bat roost. Therefore only the minimum amount should be removed in order to make the tree safe, whilst retaining standing stumps, split trunks, ivy growth or reduced limbs. Such work should be undertaken by an arboriculturalist with experience of managing trees to encourage bats.

Finally, plans to restore more natural channel characteristics to the watercourses should enhance the diversity and number of aquatic invertebrates and increase the value of these habitats as foraging areas for bats. This along with the many other planned nature enhancements highlights the need to monitor bats as a possible indicator of success. It is recommended that, towards the end of the first 10-year period of this plan, bat surveys need to be repeated.

Currently there are no formal records regarding small mammals, badgers, foxes or deer although anecdotally we know they are present. Baseline surveys should be carried out to inform the site's management.

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### **2.6.13 Invertebrates**

The most notable invertebrate discovered to date is the RDB1 ladybird *Clitosthetus arcuatus*, which was found at the site during 2005; one of several recordings that year of the species in Surrey, where it appears to be preferentially associated with Ivy. At present, the exact habitat requirements are unclear and therefore the most appropriate action is to conserve the presence of Ivy on trees, probably in well-lit situations (for example through consideration during clearance/thinning of invasive tree species) and undertake monitoring of the species at the site.

As a result of introducing regular monitoring for butterflies using a transect method, the number of recorded butterfly species has increased from 15 to 26 species. This surveying carried out by volunteers and staff should continue to

be supported. One of the more notable sightings has been the Brown Hairstreak. This butterfly lays its eggs on young Blackthorn highlighting the need to manage to ensure a good age range of Blackthorn within the reserve. A good management technique is to scallop edges, ensuring there is always young blackthorn present but not to the exclusion of middle aged and mature blackthorn, which is important for the ornithological interest of the site.

A butterfly of principal concern in Surrey is the white letter hairstreak whose larval food plant is Elm. This butterfly was recorded on site during 2016. It is important to continue with the monitoring of this species and the Elm population on the site.

As with birds, the site is likely to support a range of common invertebrates associated with the habitats present. Most recording to date has been on a casual/voluntary basis and this approach could contribute significantly to baseline surveys of groups such as Dragonflies/Damselflies as it has done with the Butterfly surveying. In recent years Stag Beetles have been discovered alongside the Bonesgate Stream and with Surrey being part of a national and global stronghold for this species it is recommended that a decaying wood resource is maintained within the reserve. Given the presence of a small veteran tree population, especially the old lapsed pollard White Willows, there is a need for targeted surveys of these features to look at their invertebrate fauna (especially beetles). Invertebrate surveys could also play a role in monitoring the impacts of various forms of grassland management, such as the creation of a wildflower area at Chamber Mead.

The knowledge of aquatic invertebrates is fairly low. Although there is some monitoring being done through the work that ZSL are carrying out with the river fly monitoring, the animals are only recorded to genus level and it is carried out to monitor the water quality. It is recommended that a more thorough aquatic invertebrate survey should be carried out during the first ten year period of this plan.

#### **2.6.14 Botanical Interest**

During the last SNCI survey carried out in 2013, a reasonably comprehensive species list was recorded across the site, including some of the bankside vegetation which was excluded from the surveying carried out for the last plan. There is a need to survey the bankside vegetation more thoroughly and it is recommended that the Environment Agency are encouraged to support further survey work .

The EEBC Hogsmill LNR homepage could be used to help to promote voluntary botanical recording. On-going monitoring is also required to establish the effectiveness of certain proposed forms of management. For example, this might include the wildflower meadow grassland areas, and water margin vegetation beside the two watercourses.

A survey of the Bryophytes found on site was carried out in 2015 (Peter Howarth) and a nationally scarce species was found *Hennediella macrophylla*. It is recommended that a further survey is carried out towards the end of the first 10 year period of this plan.

Baseline surveys of the Fungi and Lichen populations should also be carried out within the first ten year period of this plan as there are currently no formal records.

### **2.6.15 Public Access and Recreation**

Given the urbanised surroundings, the Local Nature Reserve represents an important and well-used recreational facility. Consequently the management of public access is very important. For example, maintaining paths and regular mowing of areas of open grassland play a crucial role in allowing the public to continue to enjoy the reserve all year round.

Following on from the major improvements to public access over the lifetime of the last plan as mentioned in section 1.5.3.3, there remain further opportunities to improve public access. For example, there is a short section of well used path that becomes very muddy in wet conditions. It is located in the east of the site in compartment 11, where the path runs along the north side of the river, opposite the Hogsmill River/Green Lanes Stream confluence. It would be a significant enhancement if this section could be surfaced. All path surfaces and EEBC owned bridges should be maintained to provide good public access, including the drainage of existing routes. There are many drainage pipes that have been installed which should be regularly checked and cleared of any debris to ensure they are allowed to flow freely to prevent path erosion.

During the last plan, the path alongside the Bonesgate Stream from Chessington Rd to the A240 entrance was upgraded to a Public Footpath. The possibility of having the rest of the surfaced routes designated as official Public Rights of Way (bridleways to allow both pedestrians and cyclists) will be pursued, in order to give further recognition to the value of these routes within the reserve.

Access to the stepping stones across the Hogsmill River should be improved by the refurbishment of the steps that run up the banksides from the stepping stones including repair of the considerable erosion caused by dogs.

In a number of localities areas of scrub adjoining some of the main paths have developed to such an extent that the route of access has been reduced to a narrow, shaded corridor. During the 2006-16 plan, work has begun on thinning this scrub to restore a more open access paths, following the general principles of scrub management outlined for improving its nature conservation value. These sections now need to be managed on rotation.

To enhance Gatley Green, the surrounding grassy area should be cut more frequently to allow visitors to use it for picnics etc. Note that maintenance of

playgrounds and grass cutting regime within the site are the responsibility of a separate EEBC department, so good communication with the grounds maintenance team is essential.

Within the Local Nature Reserve a number of new benches have been provided, allowing visitors to appreciate the enhancements to the site's visual environment. Additional bins have also been provided, which will further improve the site for people's enjoyment. This site furniture will require on-going maintenance.

In addition on one bank of the new meander in compartment 2, a shallow gradient was constructed to allow easy access to the river. The vegetation here should be regularly maintained to allow easy access. Another similar location was created at Gatley Green.

Land on Royal Borough of Kingston upon Thames (RBK) side of the Bonesgate Stream is for the most part situated within the Tolworth Court Meadows LNR. As the two sites effectively form part of a single 'green corridor', it is important that effective liaison is maintained with RBK over their management.

Access to the easternmost part of the Hogsmill Open Space from the Lower Mill to Mill Pond section of the Hogsmill river corridor is via a wooden footway passing beneath the Epsom to Ewell railway line. This structure is owned and maintained by Epsom and Ewell Borough Council.

## **Dog Control**

There are a range of ecological, visual, and visitor safety/enjoyment issues relating to dogs and their owners which are negatively impacting the reserve and which pose a significant management challenge. Before identifying the key issues it is important to realise that dog owners can play a very positive role in helping to manage the reserve, in many cases they are the most frequent visitors to the site and therefore an invaluable set of 'eyes and ears' Below the issue are described.

- **Dogs off lead:-** There is little doubt that dogs off the lead that are allowed free reign across the reserve cause disturbance to other visitors and wildlife, especially if allowed to enter the river/stream. Along path edges there is evidence of long term impacts to vegetation through both constant trampling and nutrient enrichment from defecation. The river and stream in particular are a magnet for dogs with owners not realising that their dogs seemingly innocent swim is one of many taking place every day, year in year out. Disturbance to the bed of the water courses and the consequent turbid water impacts the invertebrate life, bird life is disturbed and there can even be serious erosion problems where dogs regularly enter the river/stream. In 2012 a sum of £20,000 had to be found to repair the dam to Great Pond on nearby Epsom Common, where erosion caused by dogs was threatening the integrity of the dam. In places on the reserve eroded trenches are being created that are threatening the future integrity of the river side path

- Multiple dog walking:- The problems outlined above are often compounded by owners who bring more than one dog, bringing control issues which can be very distressing to other visitors, dog owners, and cyclists.
- Commercial dog walkers:- Again the problems outlined above are compounded but with an additional aspect where businesses are being run that impact the site but make NO contribution to the management of the site and control of the issues identified.
- Dog fouling:- Whilst dog fouling is still an issue with potential long term impacts regarding nutrient enrichment there has been a significant improvement in recent years on most public open spaces in the Borough. It is now more generally accepted that owners pick up after their dogs and there is a peer pressure to conform. Bins are placed at the main entrances for owners to use.

Identifying and understanding the issues are one aspect of the problem the other is the challenge of practical solutions that involves and does not exclude dog owners who form a very significant part of the community. Below are some potential approaches that could/should be investigated/implemented under this plan.

- Dogs off lead:- It is possible via 'Dog Control Orders'/'Environmental Improvement Orders' to insist that dog owners keep their dogs on the lead and in some places in particular where ground nesting birds are an issue this approach has been implemented. For the Hogsmill LNR there are two major issues set against the general feeling of dog walker's preference for letting their dogs off the lead. These are that the disturbance caused by dogs entering the river/stream and the impact on other visitors of dogs off leads. In addition the level of presence on the site would make enforcing a 'Dogs on Lead Control Order' very problematic. For this reason it is recommended that implementing a policy of educating dog walkers about the long term need to reduce disturbance is the only practical approach and holds out the prospect/advantage of working with dog owners rather than against them.
- Multiple dog walking:- Again it is possible to go down the 'Dog Control Order' route and in this case it might be slightly more straightforward to enforce because a lot of dog walkers would be likely to agree with some form of control. As with dogs off leads it is possible to take an educational approach but the control issues associated with multiple dog walking do seem to warrant some kind of limit. A suggested upper limit of 3 dogs per person would seem reasonable. Again however, a crucial factor will be the assessment of whether there is the ability to enforce such a rule?
- Commercial dog walkers:- There is little doubt that serious consideration should be given to charging a licence fee to commercial dog walkers and their numbers and frequency of visits limited to a sustainable level. That said Dog owner's in general but commercial dog walkers in particular, represent a possible opportunity to significantly improve the



level of organised presence on our open spaces and could play a role in policing dog walkers in general.

Dog fouling:- Whilst as described there have been noticeable improvements in the behaviour of dog owners and improved measures put in place there is still room for improvement. Aside from the unpleasant nature of dog faeces the two key concerns are public health and the long term chemical impact on soils. A continuing programme of highlighting the issues should be maintained using noticeboards and press articles, with recourse to prosecution if necessary for a persistent offender.

#### **2.6.16 Landscape**

The landscape and aesthetic qualities of the Local Nature Reserve is important to the public enjoyment and feeling of well-being that visitors gain from experiencing the site. Therefore, it is important to take into account the impact that habitat management can have upon landscape quality. Thus, mowing of grassland creates an open feel to the central corridor, whilst the margins of scrub and woodland help to screen the adjoining urban landscape, create a feeling of seclusion and reduce noise pollution.

The planting of new marginal areas of scrub and trees could further enhance this feeling by helping to reduce the extent to which urban intrusions are visible from the site. A good example of this has been the screening of Ruxley Lane from the site, by a new hedgerow. The planting of new parkland trees will help to break-up some of the more extensive and uniform areas of open grassland and add interest to the visual landscape.

#### **2.6.17 Inappropriate Use and Site Boundary Security**

In recent years, the dumping of garden (and other waste) in parts of the site has become a problem. This activity tends to be most noticeable where there are private gardens bordering directly onto the site and to some extent, it occurs on the margins of the two watercourses as well. More locally, there have been small direct physical encroachments onto the Local Nature Reserve by adjacent owners. As well as detracting from the site's aesthetic qualities and potentially introducing invasive plants, the mere presence of such waste might encourage the problem to become worse. It can also encourage acts of vandalism and other abuses that can make the site seem neglected and hostile and thereby discourage visitors.

The EEBC is keen to make improvements to the visual environment of all its Open Spaces and aims to discourage the tipping of garden waste and other refuse onto the site. As described in 15.3.3 in 2010 using a grant of £25,000 a trial project removed 250 tons of rubbish in the hope of creating an 8 to 10 metre cleared swathe that could be maintained to highlight dumping, give easier access to clear any dumping and to create a community space to improve

neighbourliness. Whilst maintaining this strip has proved problematic internally it has worked to some extent and it is recommended that consideration is given to a long-term approach of clearing along the reserve boundary, which has both biodiversity, aesthetic and community benefits to offer. Where dumping remains a problem it is recommended that EEBC should write to the owners of adjacent properties asking them to cease such infringements (letters were issued for the Bonesgate part of the reserve during 2005). Increased levels of on-site presence would also help in addressing this problem and ideally this could be achieved through the creation of a new permanent position within the Council. As a last resort, action is to be taken against persistent offenders through the use of penalty fines.

If the site is clear of waste, this enhances the visual perception of its value, making it more likely that people will want to keep it clean and tidy. Therefore, further litter-picking days will be encouraged and the possibility of clearing some areas of dense vegetation along property boundaries, where this might help to discourage the tipping of garden waste, will be investigated.

Maintenance of site boundaries is largely the responsibility of adjoining private owners and for the most part these appear well-maintained. Some owners seem to prefer to have a dense, scrub-like 'buffer zone' fronting their boundary, whilst others seem to like a more open aspect that provides a view of the site. In some parts of the Hogsmill, the boundary runs beside public roads and there is no physical barrier as such. However, most site entrances have barriers to prevent inappropriate access (e.g. by vehicles) and these will require on-going maintenance.

### **2.6.18 Promoting an Understanding of the Site's Value**

The new interpretation boards at all main entrances provide an opportunity to promote a greater understanding about the value of the site. These will all need on-going maintenance. A further way of encouraging greater appreciation would be through conducting further guided walks in addition to the annual one led by The Countryside Team, looking at themes such as aspects of the site's wildlife or its history. There is an opportunity to encourage greater volunteer action, which could include activities such as biological recording and practical management work. In addition, people showing an interest in volunteering on the site, can be encouraged to become involved with partner organisations such as the Lower Mole Partnership and SERT as well as the EEBC Countryside Team volunteers.

A site leaflet is currently produced covering the site's history and natural history. This will continue to be produced but the need for paper leaflets will be reviewed in the light of new media.

The web pages on the EEBC website should be maintained and updated when necessary. Consideration should be given to using EEBC's Facebook and

Twitter accounts to further promote the sites' value to the public and encourage volunteer involvement.

## 2.7 Identification of Operational Objectives and Outline Prescriptions

Operational Objective	Outline Prescription
Manage the site as an important wildlife corridor and green infrastructure asset within the Borough	<ul style="list-style-type: none"> <li>• Continue to work with partners (Environment Agency, South East Rivers Trust, Lower Mole Countryside Partnership, Royal Borough of Kingston upon Thames, Thames Water and Surrey County Council), to facilitate habitat and wildlife enhancements of the LNR and river catchment.</li> </ul>
Maintain and enhance the mature and veteran tree population	<ul style="list-style-type: none"> <li>• Protect vulnerable trees from vandalism</li> <li>• Thin surrounding woodland canopy where appropriate (e.g. to release mature Ash specimens in Gunpowder Copse and around maiden Oak trees behind Eastcroft Road and in Riverview Copse)</li> <li>• Prevent soil compaction around the roots of veteran trees</li> <li>• Commission assessment of veteran trees with a view to surgery to prolong life where necessary and ensure public safety</li> <li>• Continue to work with and encourage the Environment Agency to manage riverside avenues of Willow trees (coppice/pollard and undertake some supplementary planting)</li> <li>• Plant new specimen trees from appropriate native stock at specified locations (including Oaks grown from acorns of existing veteran specimens)</li> <li>• Protect veteran White Willow pollards in any future realignment of the Hogsmill River</li> </ul>
Maintain and enhance the broadleaved woodland habitat	<ul style="list-style-type: none"> <li>• Thin plantation woodlands to diversify structure, concentrating upon invasive canopy species. Plant hazel to improve understorey, (conserve veteran Elder in compartment 6)</li> <li>• To maintain a good age structure, consider planting new native stock in appropriate areas to supplement natural regeneration</li> <li>• Create and maintain woodland glades for example in Riverview Copse and in compartment 9</li> <li>• Scallop woodland edges and plant scrub fringes to improve structural diversity of edge habitat e.g. with Hawthorn, Blackthorn</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• Thin some stands to leave only a handful of 'specimen' trees Thin Hawthorn at Riverview copse and promote natural regeneration of native broadleaved species to create future canopy and understorey. Plant if necessary.</li> <li>• Liaise with Forestry Commission over Ash Dieback and the Oak Processionary Moth.</li> </ul>
Maintain and enhance the scrub and scrub-margin habitat	<ul style="list-style-type: none"> <li>• Continue rotational cutting of some mature stands to improve structural diversity (Compartments 2, 5, 6, 9, 11, 12, 13, 14, 15, 16)</li> <li>• Scallop scrub edges to increase structural diversity and to encourage younger blackthorn for the benefit of the Brown Hairstreak butterfly.</li> <li>• Plant/allow new areas of scrub and trees to develop to ensure continuity of semi-natural habitat corridor where appropriate (primarily along site margins, but other areas as well).</li> <li>• Maintain new hedgerow along Ruxley Lane and along the boundary of the service road running behind the houses of Eastcroft Rd.</li> <li>• Propose incorporating the area of scrub in between the Northcroft Rd allotments and the Hogsmill Open Space in to the LNR.</li> <li>• Continue working with EA/SERT to manage the scrub over shading the river to manage light levels in the river channel.</li> </ul>
Maintain and enhance the grassland habitat	<ul style="list-style-type: none"> <li>• Allow areas of infrequently managed grassland to develop along woodland/scrub edges and between stands of trees/copses. These areas should be rotationally cut and cleared on a 1-3 yr basis in compartments 2, 5, 6, 11, 13, 14, 16</li> <li>• Manage wild flower meadow next to Riverview Copse by cutting and clearing annually</li> <li>• Continue to manage stepping stones meadow as rough grassland by cutting and clearing on a 3-5 yr rotation</li> <li>• Continue annual cut and clear of Chamber Mead to encourage a wildflower meadow. This meadow area may be reduced if the wetland creation takes place as planned.</li> <li>• Continue regular mowing of main amenity grassland areas</li> </ul>
Maintain and enhance watercourses, water margin and other wetland habitats	<ul style="list-style-type: none"> <li>• Work in partnership with The South East Rivers Trust, Environment Agency and Royal Borough of Kingston upon Thames, Surrey County Council, Thames Water and Lower Mole Partnership to</li> </ul>

Operational Objective	Outline Prescription
	<p>explore further opportunities to restore more natural channel dynamics and marginal wetland vegetation to the watercourses</p> <ul style="list-style-type: none"> <li>• Work with partners to create a new wetland and extend chalk stream, by diverting the Green Lane Stream to meet the Hogsmill River just upstream of the stepping stones.</li> <li>• Continue to support and facilitate through partnership working the removal of stone banks and toe boarding, softening and renaturalising banks; channel narrowing to restore natural flow velocity; large woody material and gravel introduction to create flow sinuosity; planting with native aquatic species.</li> <li>• Via the Hogsmill Catchment Partnership continue to support the investigation in to how often the Epsom and Ewell storm tanks flow, to build a case for their upgrade, if this is necessary. We will support and assist with facilitating a solution.</li> <li>• Continue to support the monitoring of pollution levels within the river in cooperation with SERT and Zoological Society London (ZSL)</li> <li>• Support and facilitate a possible project to reconnect the short section of the original Hogsmill channel to the existing channel, close to the Clinker Bridge. This project also includes the possibility of a wetland to help slow flows and remove pollution from both the Hogsmill River and Ewell Court Stream.</li> <li>• Monitor developing scrub and shading trees from fen swamp area and thin when necessary</li> <li>• Work with SERT and EA to manage the backwater channel as an aquatic wildlife refuge in times of high flow</li> <li>• Propose that over the next 10 years, the Nature Reserve boundary is extended to include the Upper and Lower Mill, up to Chessington Rd.</li> </ul>
Monitor and control the spread of invasive species	<ul style="list-style-type: none"> <li>• Continue to control invasive species e.g. Japanese Knotweed, Goat's Rue, Himalayan Balsam, Mink and Signal Crayfish</li> <li>• Monitor populations of these species</li> </ul>
Maintain and enhance the ornithological interest	<ul style="list-style-type: none"> <li>• Monitor breeding and winter bird populations</li> <li>• Carry out a Kingfisher nesting survey</li> </ul>
Encourage Water Voles	<ul style="list-style-type: none"> <li>• Carry out periodic Water Vole surveys</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• Continue to work with SERT and EA to encourage development of marginal aquatic vegetation</li> <li>• Continue to work with the EA to manage canopy of riverside trees to prevent excessive shading</li> </ul>
Maintain and enhance populations of other mammals	<ul style="list-style-type: none"> <li>• Carry out baseline bat surveys to inform management</li> <li>• Further tree surveys to identify potential bat roost sites both alongside and away from the river channel</li> <li>• Retain and prolong life of mature and veteran trees through sympathetic management</li> <li>• Repeat survey in yr 10 to establish effectiveness of management</li> <li>• Carry out baseline small mammal survey</li> <li>• Monitor badger, fox and deer populations</li> </ul>
Maintain and enhance invertebrate interest	<ul style="list-style-type: none"> <li>• Undertake baseline surveys (e.g. Moths; Odonata; fauna associated with veteran trees)</li> <li>• Continue to support volunteers carrying out annual butterfly transect walk and ensure the records are sent to Butterfly Conservation</li> <li>• Conserve adequate growth of epiphytic Ivy when clearing/thinning invasive trees (as potential habitat for the ladybird <i>Clitosthetus arcuatus</i>)</li> <li>• Monitor populations of <i>Clitosthetus arcuatus</i></li> <li>• Monitor impacts of grassland management regimes</li> <li>• Ensure good age structure of blackthorn to promote the Brown Hairstreak</li> <li>• Monitor Elm population and pay particular attention to the large elm in section 12 with regard to the White Letter Hairstreak</li> <li>• Carry out/liaise with and encourage the EA, ZSL and SERT to carry out regular surveys of aquatic invertebrates.</li> <li>• Map locations of Stag Beetle sightings and create stag beetle loggeries where appropriate</li> </ul>
Maintain and enhance the botanical interest	<ul style="list-style-type: none"> <li>• Carry out/liaise with and encourage the EA and SERT to carry out regular surveys of bankside and aquatic vegetation</li> <li>• Maintain botanical recording and monitoring to inform subsequent habitat management</li> </ul>
Maintain and enhance public access and recreational use	<ul style="list-style-type: none"> <li>• Maintain path surfaces, bridges (where EEBC responsibility) and drainage of existing routes</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• Fix broken land drain to the rear of houses along South Mead.</li> <li>• Surface the muddy and poorly drained section of footpath near confluence of the Green Lane Stream</li> <li>• Continue to thin scrub edge beside some of main paths</li> <li>• Encourage EA to repair bankside erosion immediately adjacent to steps leading to the stepping-stone crossing</li> <li>• Maintain access to river via shallow bank gradients by mowing vegetation in specific areas.</li> <li>• Work with the EA to control erosion caused by dogs entering and exiting the river (NB impact on riverside path and wildlife)</li> <li>• Ensure that Public Rights of Way are open and accessible at all times, including bridges</li> <li>• Investigate possibility of securing PROW status for all main routes within the Local Nature Reserve</li> <li>• Maintain all site furniture including gates, benches, signs bins etc, and install new when and where appropriate</li> <li>• Liaise with Royal Borough of Kingston upon Thames over the management of the bridge near the confluence of the Hogsmill River, Tolworth Court Meadows LNR, and other land adjoining the Bonesgate Stream</li> </ul>
Maintain the landscape qualities of the LNR	<ul style="list-style-type: none"> <li>• Take advantage of opportunities to enhance landscape character when planning habitat management (e.g. planting of 'parkland' trees and maintain visual screen beside Ruxley Lane)</li> <li>• Clear rubbish and other encroachments</li> </ul>
Control inappropriate use of the site and maintain boundary security	<ul style="list-style-type: none"> <li>• Enforcement and action against encroachments through programme of letters to householders and other literature</li> <li>• Continue to discourage dumping along the boundaries of the reserve. If resources permit, clear and maintain an 8-10m grassland swathe, to allow easier access for the removal of dumped material, creation of edge habitat and a community space.</li> <li>• If resources permit, seek to increase levels of on-site presence (ideally through the funding of a site specific post post)</li> </ul>

Operational Objective	Outline Prescription
	<ul style="list-style-type: none"> <li>• Maintain entrance barriers and other structures at site boundaries/entrances</li> </ul>
<p>Promote and encourage an understanding and respect for the wildlife, landscape and historical value of the site</p>	<ul style="list-style-type: none"> <li>• Maintain 7 interpretation boards</li> <li>• Encourage volunteer action (e.g. through 'The Friends' group), to include biological recording and practical management work</li> <li>• Programme of guided walks</li> <li>• Maintain site leaflet but review the need for them in light of new media</li> <li>• Maintain web pages on EEBC website</li> <li>• Investigate using EEBC's Facebook and Twitter accounts to further promote the Hogsmill LNR</li> </ul>



### STAGE THREE - PRESCRIPTION

The following tables outline management proposals across the Hogsmill LNR during the period 2017 to 2027. The format follows that given by Crowther and Groome (2005).

The various adopted management compartments are shown on Map 4.

Prescriptions are defined under the heading “proposed work”.

Outline costs are given for each year of the management plan. Year 1 relates to the 2017/18 tax-year, year 2 to 2018/19 etc. Costs have been calculated, during the first five years, and then during the second five-year period, on the following basis. Where ‘No Cost’ is recorded it should be noted that this is where the value of wood products or hay exceeds the operational cost of the contractor, or volunteer costs are not applicable, or volunteer work negates cost or work is included in the in house grounds maintenance schedule (GM) or Operation Services waste management (OPSER) or Ranger Service (RSER), or is the responsibility of the Environment Agency (EA):

	<b>First five years</b>	<b>Second five years</b>
Contractors	£170/person/day	£200/person/day
Volunteers	£5/person/day	£6/person/day
Ecological Consultants	£250/person/day	£275/person/day
Arboricultural Contractors	£250/person/day	£275/person/day

#### Notes:

Volunteers: In addition, use of volunteer machinery (e.g. chainsaw/brush cutters) is £50/day and the hire of heavier equipment (e.g. mini excavator/dumper) is approx. £100/day.

Where the term volunteer/contractors is used, the deciding factor will be availability of volunteers, who would normally be the first choice. In all such cases, costings have therefore been based throughout on the preferential use of volunteers.

Cpt		Proposed Work	Outline Costs (£)										Workforce	
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10		
Manage the site as an important wildlife corridor and green infrastructure asset within the Borough: - all prescriptions covered under other stated objectives														
Maintain and enhance the mature and veteran tree population:														
Whole site		Protect vulnerable trees from vandalism	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/ volunteer	
2, 10, 13		Thin surrounding woodland canopy where appropriate (e.g. to release mature Ash specimen in compartment 2 and around maiden Oak trees behind Eastcroft Road and in Riverview Copse)		£1000				£1200					Contractor/Volunteer	
Whole site		Prevent soil compaction around the roots of veteran trees	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Contractors	
Whole site		Commission assessment of veteran trees and undertake any necessary remedial work to prolong tree life	£2000	£2000	£2000			£2000	£2000				Arboricultural contractor/Tree Officer/ EEBC Staff	
3, 11		Continue to work with and encourage EA to manage riverside avenues of Willow trees (coppice/pollard and some supplementary planting).	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Arboricultural contractor	

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
2, 6, 9, 13	Plant new specimen trees from appropriate native stock (including Oaks grown from acorns of existing veteran specimens) and provide with adequate protection and aftercare (see Map 6 for locations)	£50	£50			£50	£60			£60	£60	Volunteer
11, 12	Protect veteran White Willow pollards in any future realignment of the Hogsmill River	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
<b>Maintain and enhance the broadleaved woodland habitat:</b>												
6, 9 11, 13	Thin plantation woodlands to diversify structure, concentrating upon non-native canopy species. Plant Hazel to improve understorey (conserve veteran Elder in compartment 6)		£2000		£2000		£2000					Contractor/Volunteer
6, 9 11, 13	To maintain a good age structure, consider planting new native stock in appropriate areas to supplement natural regeneration		£200		£200		£200					Volunteer
2, 11,12	Create and maintain woodland glades e.g. in Riverview Copse (Cpt 2) and in Cpt 9		No cost		No cost		No cost		£1200		No cost	Volunteer/Contractor

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
6, 11, 13	Scallop woodland edges and plant scrub fringes to improve structural diversity of edge habitat e.g. with Hawthorn and Blackthorn			£200		£200		£225		£225		Volunteer
6	Thin plantation woodland to leave only a handful of more 'interesting' specimen trees of Lime, Pear, Hornbeam and riverside Willows (i.e. create parkland feel).						£1500					Contractor
2	Thin hawthorn at Riverview Copse to promote natural regeneration of native broadleaved species to create future canopy and understorey. Supplementary plant if necessary	£500										Volunteer
<b>Maintain and enhance the scrub and scrub-margin habitat:</b>												
2, 5, 6, 9, 11, 12, 13, 14, 15, 16,	Continue rotational cutting of some mature stands to improve structural diversity	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
2, 5, 6, 9, 11, 12, 13, 14, 15, 16	Scallop scrub edges to increase structural diversity	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
2, 3, 6, 16	Plant/allow new areas of scrub and trees to develop to ensure continuity of semi-natural habitat corridor, where appropriate (primarily site margins but other areas as well)			£100			£100			£100		Volunteer

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
5, 13	Maintain new hedgerow along Ruxley Lane and along the boundary of the service road running behind the houses of Eastcroft Rd	£100						£250				Volunteer
Adjacent to 12	Propose incorporating the area of scrub in between the Northcroft Rd allotments and the Hogsmill Open Space in to the LNR. Subsequently manage the scrub mosaic.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Staff/Volunteer
Whole site	Continue working with SERT to manage the scrub over shading the river to manage the light levels in the river channel.	£250	£250	£250	£250	£250	£275	£275	£275	£275	£275	Volunteer
<b>Maintain and enhance the grassland habitat:</b>												
2, 5, 6, 11, 13, 14, 16	Allow areas of infrequently managed grassland to develop along woodland/scrub edges and between stands of copses. These areas should be rotationally cut and cleared on a 1-3 yr basis	£100	£100	£100	£100	£100	£120	£120	£120	£120	£120	EEBC GM
2	Manage wild flower meadow next to Riverview Copse by cutting and clearing annually	£50	£50	£50	£50	£50	£55	£55	£55	£55	£55	EEBC GM
11	Continue to manage stepping stones meadow as rough grassland by cutting and clearing on a 3-5 yr rotation	No cost			No cost			No cost			No cost	Volunteers

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
12	Continue to cut and clear Chamber Mead annually to encourage a wildflower meadow. This meadow area may be reduced if the wetland creation takes place as planned	£100	£100	£100	£100	£100	£120	£120	£120	£120	£120	EEBC GM
2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 16	Continue regular mowing of main amenity grassland areas (covered by GM budget)	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	For cost refer to EEBC GM	EEBC GM
<b>Maintain and enhance the watercourses and water-margin habitat:</b>												
Whole site	Work in partnership with Environment Agency, South East Rivers Trust, Royal Borough of Kingston upon Thames upon Thames upon Thames and Surrey Country Council, to explore further opportunities to restore more natural channel dynamics and marginal wetland vegetation to the watercourses.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
12	Work with partners to create a new wetland and extend chalk stream, by diverting the Green Lane Stream to meet the Hogsmill River just upstream of the stepping stones	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EA/SERT/SCC/EEBC

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
11	Via the Hogsmill Catchment Partnership, continue to support the investigation in to how often the Epsom and Ewell storm tanks flow, to build a case for their upgrade, if this is necessary.	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	Thames Water/EA/SERT/EEBC
Whole site	Continue to support the monitoring of pollution levels within the river in cooperation with EA, SERT and Zoological Society London (ZSL)	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	No Cost	Partner organisations/Vollunteers
11	Work with partners to support and facilitate a possible project to reconnect the short section of the original Hogsmill channel to the existing channel, close to the clinker bridge. This project also includes the possibility of a wetland to help slow flows and remove pollution from both the Hogsmill River and Ewell Court Stream	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EA/SERT/EEBC/Thames Water
	Propose that over the next 10 years, the Nature Reserve boundary is extended to include the Upper and Lower Mill, up to Chessington Rd.											

Cpt		Proposed Work	Outline Costs (£)										Workforce
			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Maintain and enhance the fen-swamp habitat:													
11		Monitor developing scrub and shading trees from fen swamp area and thin when necessary	No cost			No cost			No cost			No cost	Volunteer/EEBC Staff
2		Work with EA and SERT to manage the backwater channel as an aquatic wildlife refuge in times of high flow	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EEBC staff/EA/SERT
Monitor and control the spread of invasive species:													
Whole site		Monitor extent of Japanese Knotweed	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
15, 16		Continue to control stands of Japanese Knotweed preferably using appropriate herbicide	For cost refer to EEBC GM		For cost refer to EEBC GM		For cost refer to EEBC GM		For cost refer to EEBC GM		For cost refer to EEBC GM		EEBC GM/Contractor
Whole site		Monitor extent of Goat's Rue	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
14, 15		Continue to control Goat's Rue by hand weeding	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
Whole site		Monitor extent of Himalayan Balsam	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
14, 15, 16		Continue to control spread of Himalayan Balsam to new parts of the site by hand-weeding (especially Hogsmill upstream of Bonesgate confluence)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
Whole site		Survey for the presence of Mink and control if necessary	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EA/SERT/EEBC staff/Volunteers

ANNE



Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Whole site	Survey for the presence of Signal Crayfish and control if necessary	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EA/SERT/Volunteers
<b>Undertake appropriate surveys and monitoring of wildlife and habitats:</b>												
Whole site	Monitor breeding bird populations	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteer
Whole site	Monitor winter bird populations	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteer
Whole site	Conduct Kingfisher nesting survey	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteer
Whole site	Liaise with and encourage the EA and SERT to carry out regular fish surveys	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EA/SERT
Whole Site	Carry out a baseline survey of Reptiles and Amphibians and then monitor their population	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/volunteers
Whole site	Liaise with and encourage the EA and SERT to carry out periodic Water Vole surveys	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EA/SERT
Whole site	Conduct baseline bat activity survey			TBA								EEBC staff/Consultant
Whole site	Carry out further surveys of mature trees to identify potential bat roost sites both alongside and away from the river channel			TBA								EEBC staff/EA/Consultant
Whole site	Repeat bat survey to establish effectiveness of management										TBA	EEBC staff/Consultant
Whole site	Carry out baseline small mammal survey					TBA		TBA		TBA		EEBC staff/volunteers/consultant

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Whole site	Monitor and record badger, fox, and deer activity	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteers
Whole site	Monitor populations of <i>Clitosthetus arcuatus</i>	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/volunteers
Whole site	Undertake baseline invertebrate surveys (e.g. Moths; Odonata; fauna associated with veteran trees)	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EEBC staff/ volunteers ZSL/EA/SERT/ Consultant
As appropriate	Carry out a baseline survey of invertebrates associated with grassland and subsequently monitor impacts of grassland management regimes upon their populations			£1500						£1750		Consultant
5, 6, 7, 8, 9, 11, 12, 13	Continue to support volunteers carrying out annual butterfly transect and ensure the records are sent to Butterfly Conservation	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteers
Whole site	Monitor the blackthorn resource to ensure a good age structure and ensure presence of young blackthorn for the Brown Hairstreak Butterfly.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
Whole site	Monitor Elm population and pay particular attention to the large elm in section 12 with regard to the White Letter Hairstreak butterfly.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
Whole site	Carry out/liase with and encourage the EA, ZSL and SERT to carry out regular surveys of aquatic invertebrates.	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EEBC/EA/SERT/ZSL
As appropriate	Map locations of Stag Beetle sightings and create stag beetle loggeries where appropriate	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteers
As appropriate	Carry out/liase with and encourage the EA, and SERT to carry out regular surveys of bankside and aquatic vegetation	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EEBC/EA/SERT/Consultant
Whole site	Continue regular botanical recording and monitoring to inform subsequent habitat management	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff/Volunteers
Whole site	Continue to monitor bryophytes					TBA						EEBC staff/Consultant
Whole site	Carry out a baseline survey of fungi				£1000							Consultant/Volunteers
Whole site	Carry out baseline survey of lichens						£1000					Consultant/Volunteers
<b>Manage public access and recreational use:</b>												
Whole site	Maintain path surfaces, bridges (where EEBC responsibility) and drainage of existing routes	£2000	£2000	£2000	£2000	£2000	£2400	£2400	£2400	£2400	£2400	Contractor
11	Surface the muddy and poorly drained section of footpath near the confluence of the Green Lane Stream			£10000								Contractor/Volunteers

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
11	Fix broken land drain to the rear of houses along South Mead	£1000										Contractor
6,8,11,14, 16	Continue to thin scrub edge beside some of main paths	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	Volunteers
11, 12	Encourage EA to repair bankside erosion immediately adjacent to steps leading to the stepping-stone crossing			TBA								EA/Contractor
2, 16	Maintain access to river via shallow bank gradients by mowing vegetation.	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC GM
As appropriate	Work with EA to control erosion caused by dogs entering and exiting the river (NB impact on riverside path)	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EA/EEBC staff
Whole site	Ensure that public rights of way are open and accessible at all times, including bridges	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
Whole site	Investigate possibility of securing PROW status for all main routes within the Local Nature Reserve	No cost	No cost									EEBC staff
As appropriate	Maintain all site furniture including gates, benches, signs, bins, information boards etc, and install new ones when and where appropriate	£2000		£2000		£2000		£2000		£2000		EEBC staff

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
N/A	Liaise with Royal Borough of Kingston upon Thames upon Thames upon Thames over the management of the bridge near the confluence of the Hogsmill River, Tolworth Court Meadows LNR, and other land adjoining the Bonesgate Stream	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
<b>Maintain the landscape qualities of the Open Space:</b>												
Whole site	Take account of landscape character when planning habitat management (e.g. planting of 'parkland' trees and maintain visual screen beside Ruxley Lane)	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
As appropriate	Clear rubbish and other encroachments	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	EEBC staff/ volunteer
<b>Control inappropriate use of the site and maintain boundary security:</b>												
N/A	Enforcement of policy on illegal tipping through programme of letters to householders and other literature, backed up with a last resort of fines	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
As appropriate	Take action against 'gardening' encroachments	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
14	Continue to discourage dumping along the boundaries of the reserve. If resources permit, clear and maintain an 8-10m grassland swathe, to allow easier access for the removal of dumped material, creation of edge habitat and a community space.	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	Contractor/EEBC GM
N/A	If resources permit, seek to increase levels of on-site presence (ideally through the funding of a site specific post post)	£25000	£25000	£25000	£25000	£25000	£27500	£27500	£27500	£27500	£27500	EEBC staff
<b>Promote and encourage an understanding and respect for the wildlife, landscape and historical value of the site:</b>												
N/A	Conduct programme of guided walks	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
As appropriate	Maintain 7 interpretation boards			£1200			£1200			£1200		Contractor
Whole site	Encourage volunteer action (e.g. through 'The Friends' group), to include biological recording and practical management work	£250	£250	£250	£250	£250	£250	£250	£250	£250	£250	EEBC staff/volunteer
	Maintain site leaflet but review the need for them in light of new media		£500				£500				£500	EEBC staff/contractor
	Maintain web pages on EEBC website	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff
	Investigate using EEBC's Facebook and Twitter accounts to further promote the Hogsmill LNR	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	No cost	EEBC staff

Cpt	Proposed Work	Outline Costs (£)										Workforce
		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	
	<b>TOTAL ANNUAL COSTS</b> (inc. all estimates and averaged annual costs). N.B. does not include costs of grass cutting under grounds maintenance contract.	£33400	£33500	£44750	£30950	£30000	£40480	£35195	£31920	£36055	£31280	

## **MAPS**

Map 1 – Hogsmill LNR Boundary

Map 2 – Hogsmill LNR Summary Habitats

Map 3 a, b, c, d – Hogsmill LNR Watercourses and Access

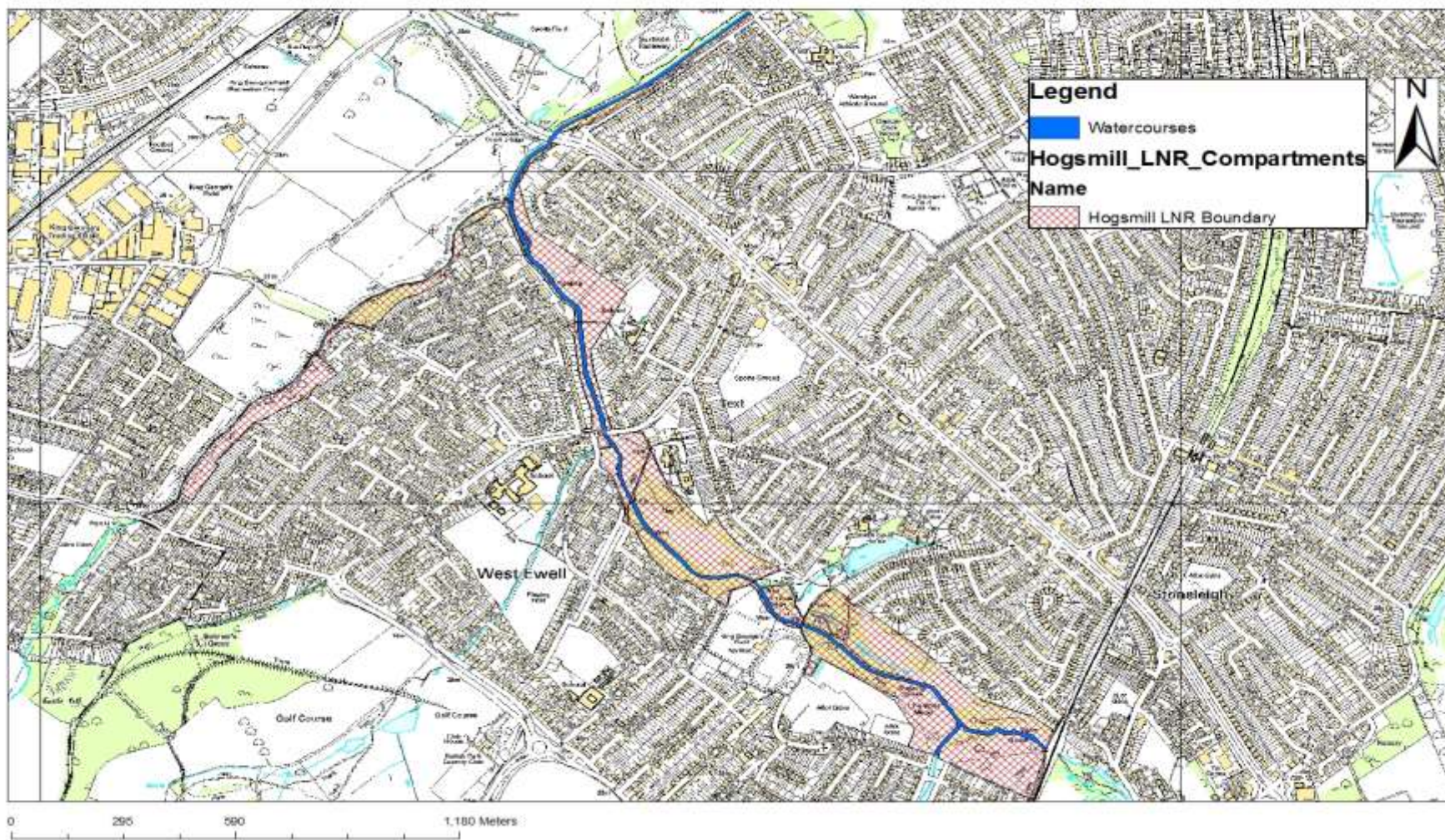
Map 4 – Hogsmill LNR Management Compartments

Map 5 a, b, c, d – Hogsmill Grassland Management

Map 6 a, b, c, d, e – Hogsmill LNR Proposed Habitat Management

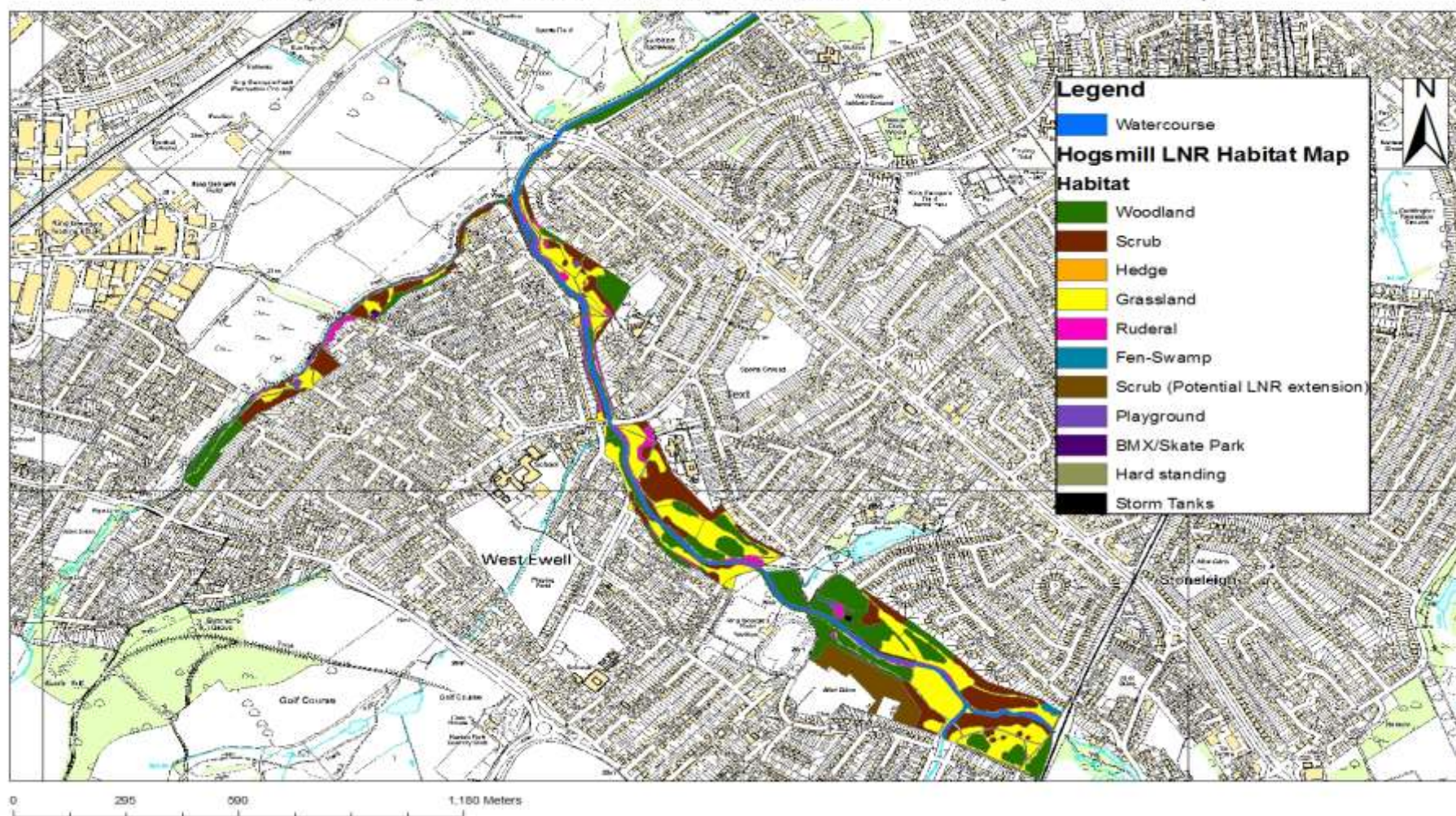


Map 1 Hogsmill Local Nature Reserve Boundary

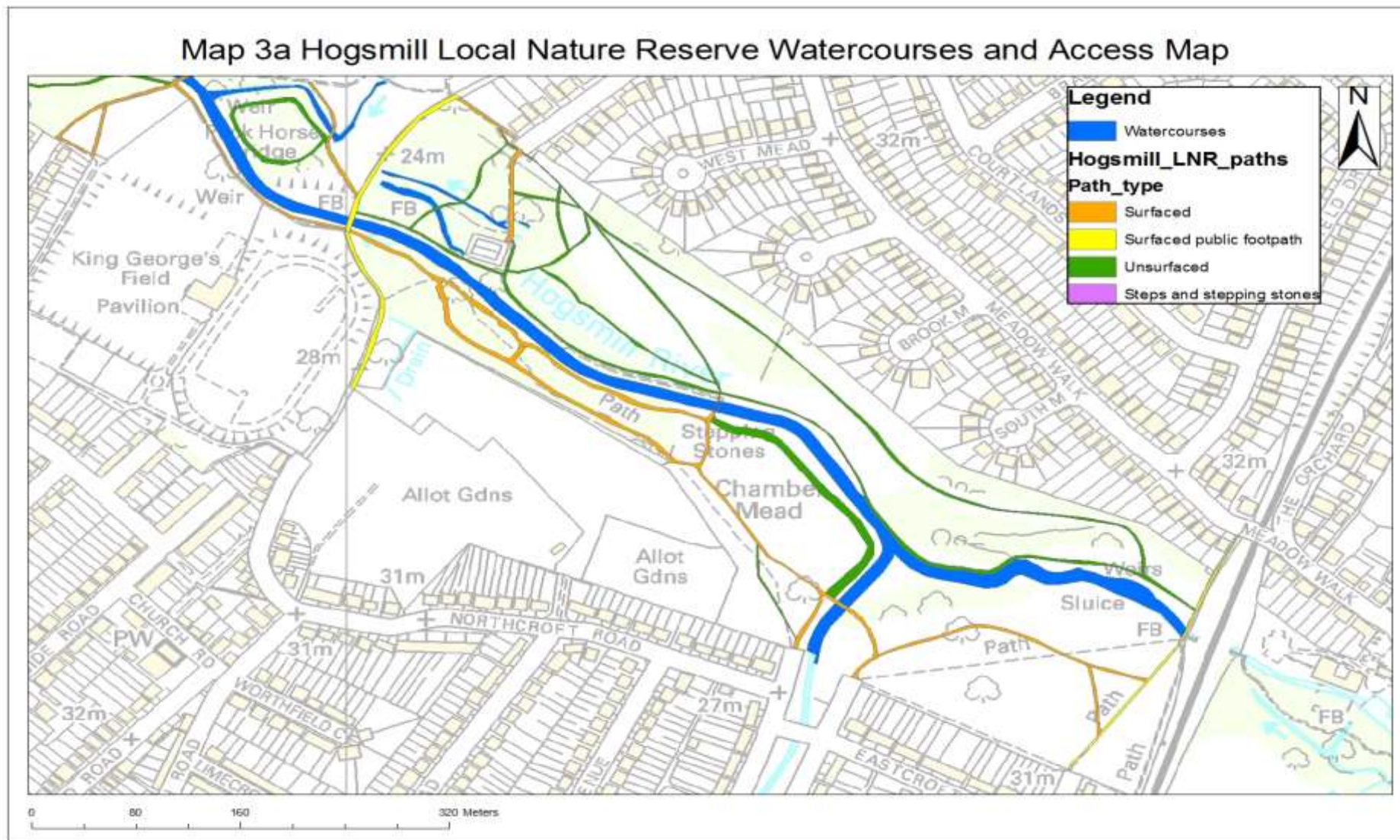




## Map 2 Hogsmill Local Nature Reserve Summary Habitat Map

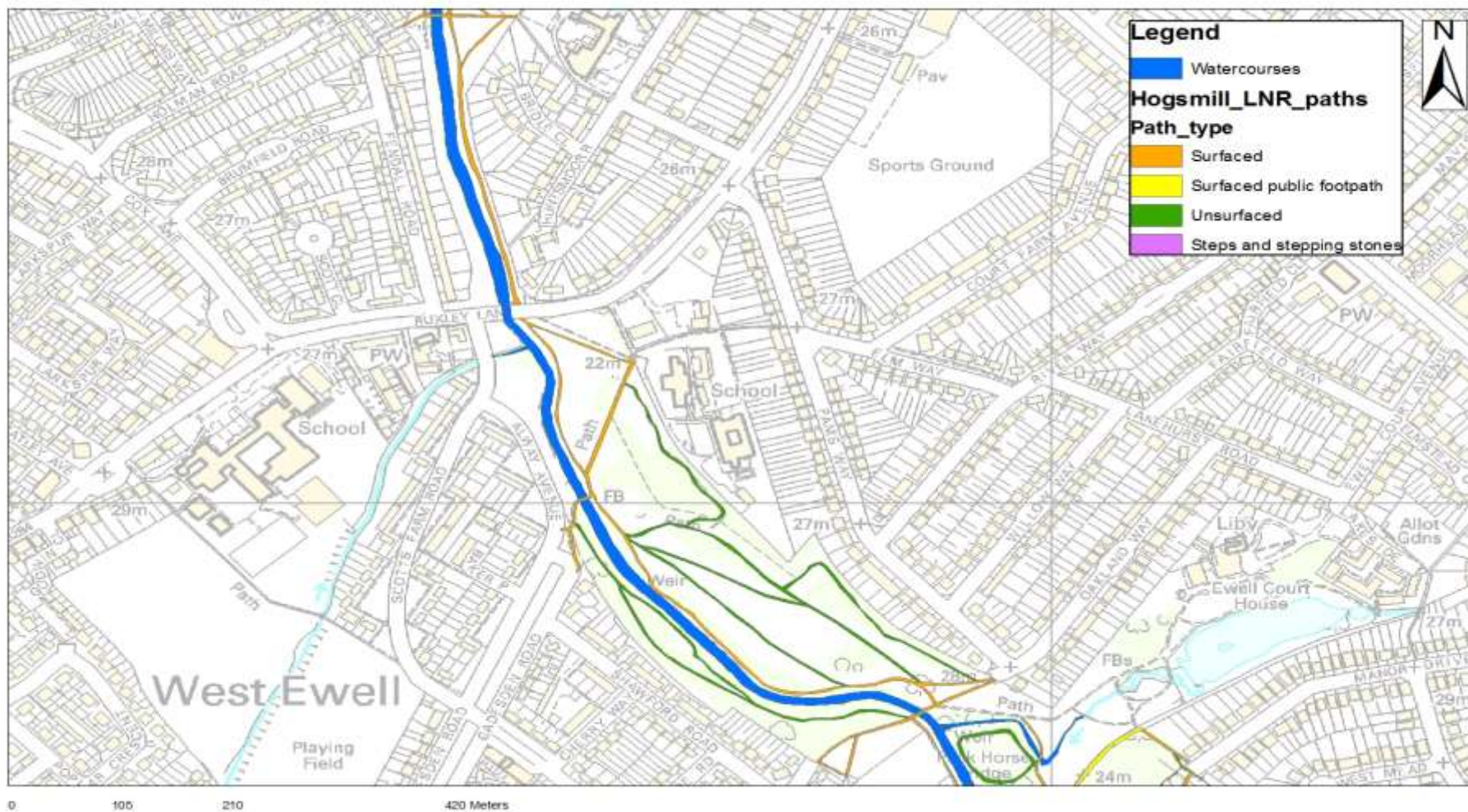






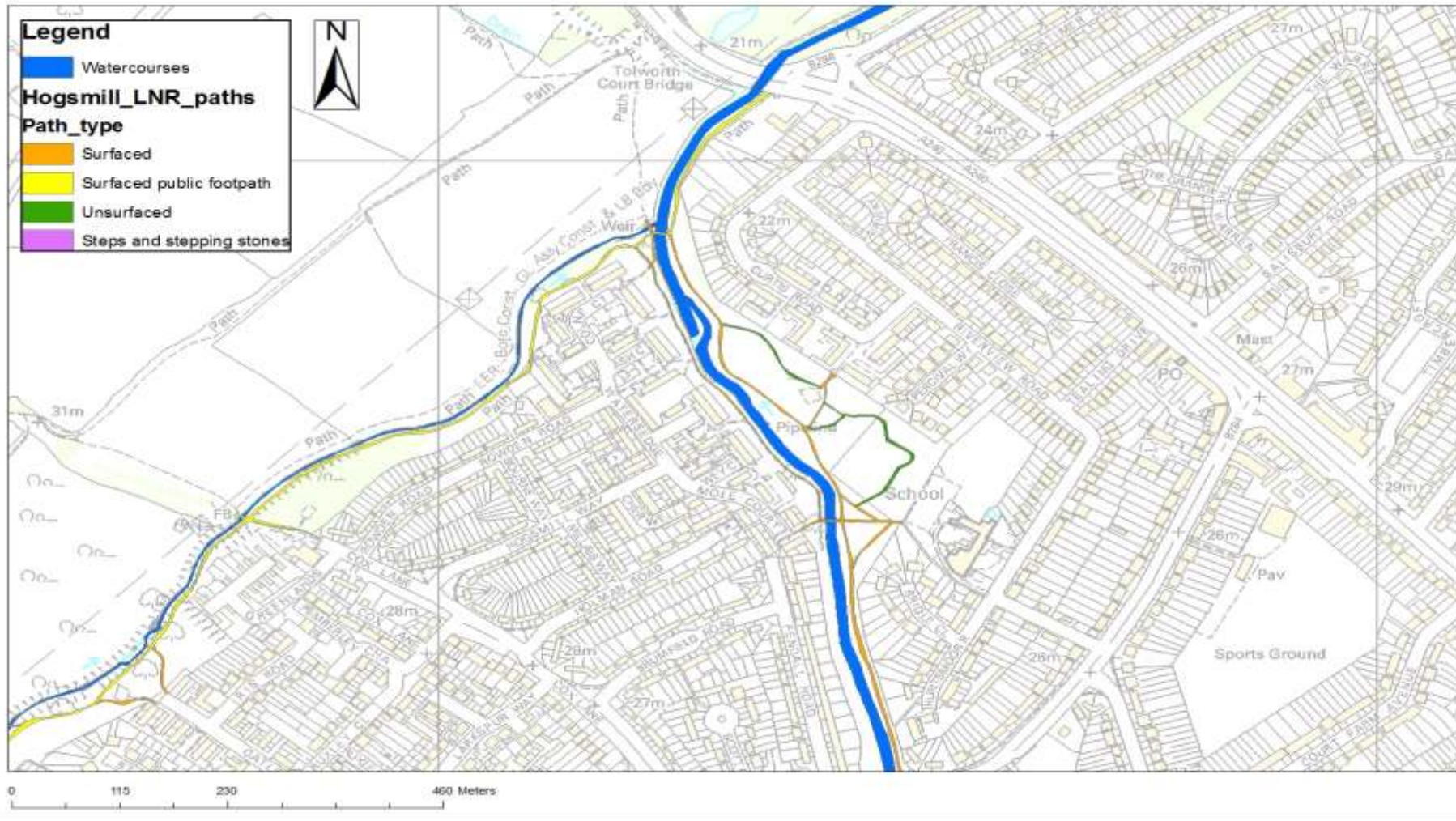


Map 3b Hogsmill Local Nature Reserve Watercourses and Access Map





Map 3c Hogsmill Local Nature Reserve Watercourses and Access Map

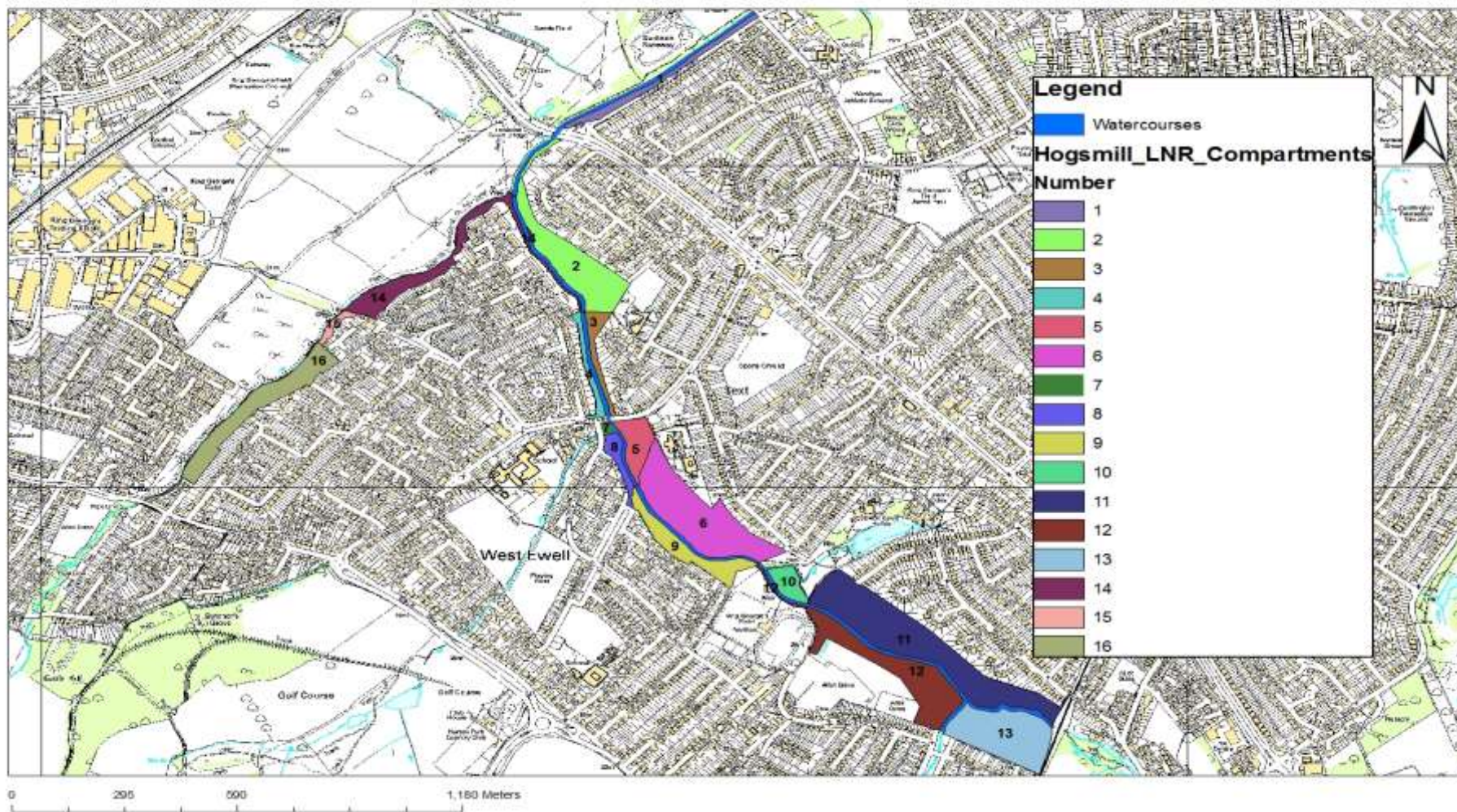






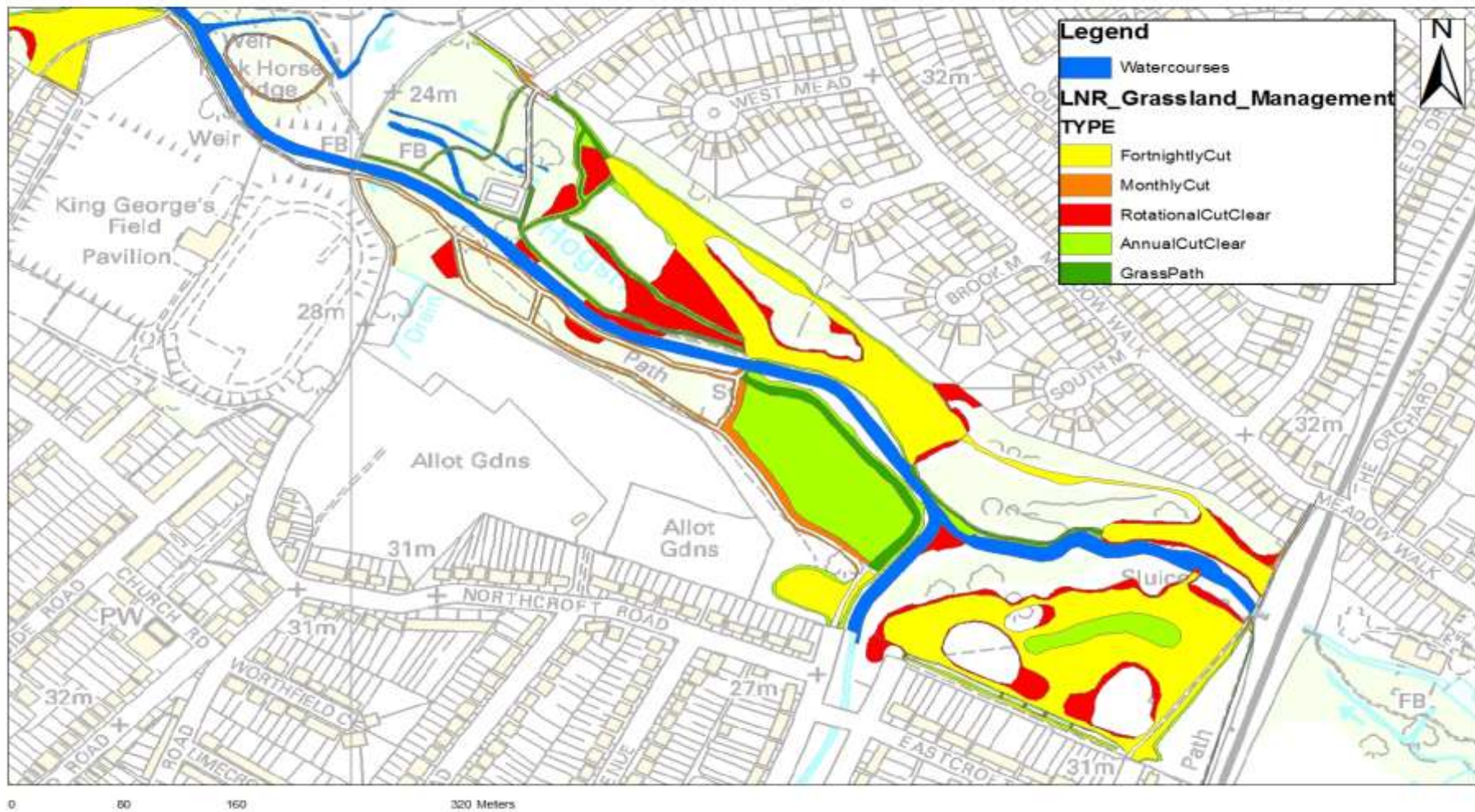


Map 4 Hogsmill Local Nature Reserve Management Compartments

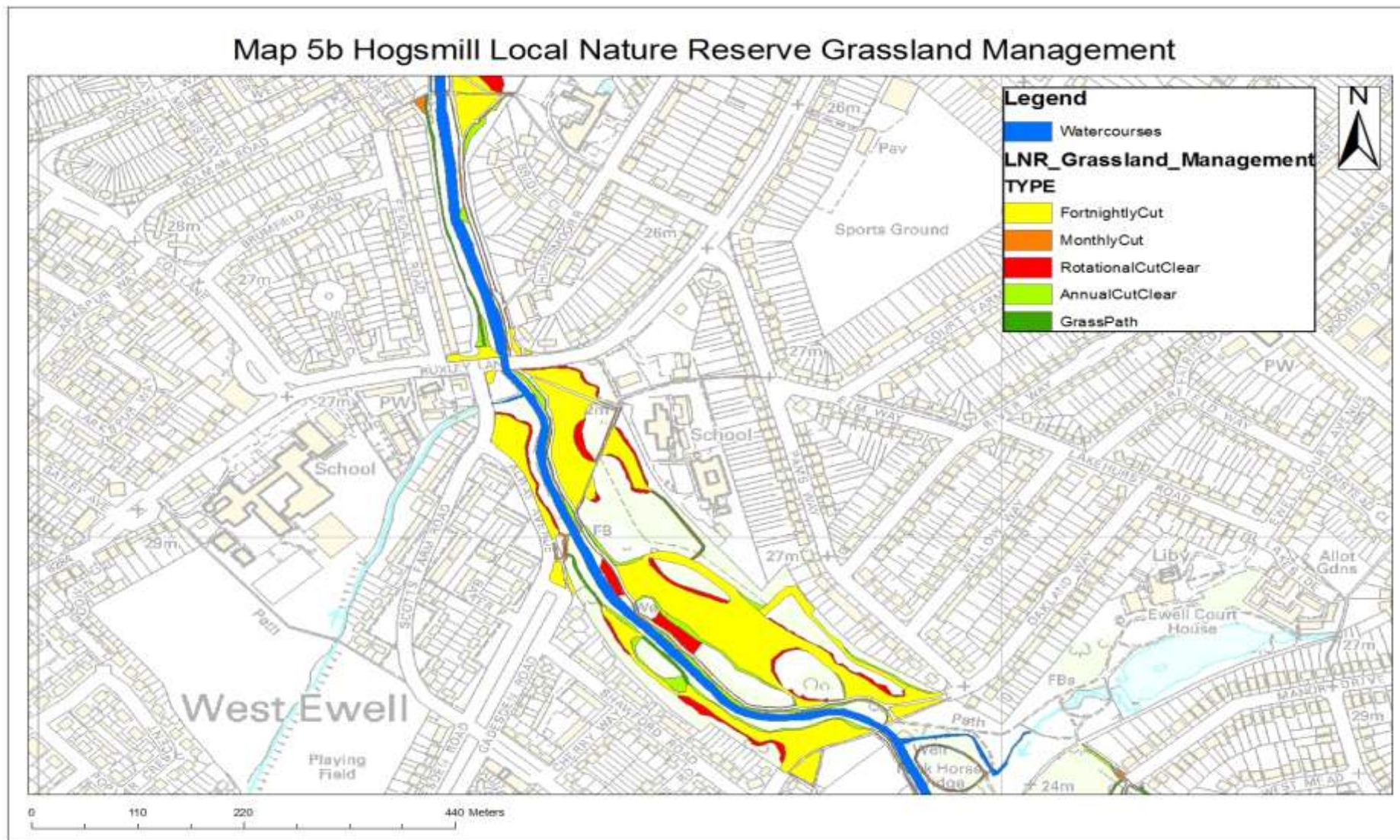




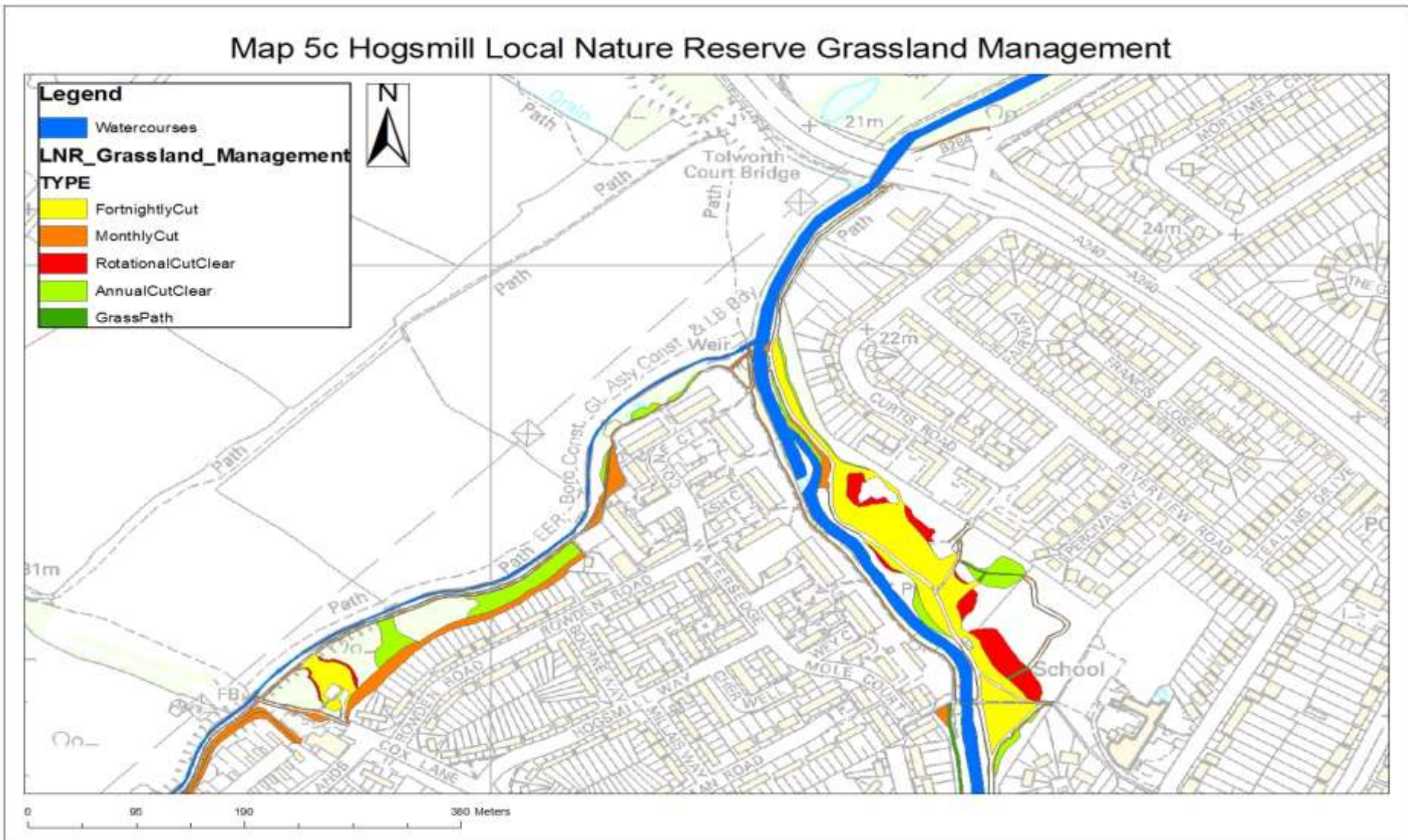
Map 5a Hogsmill Local Nature Reserve Grassland Management



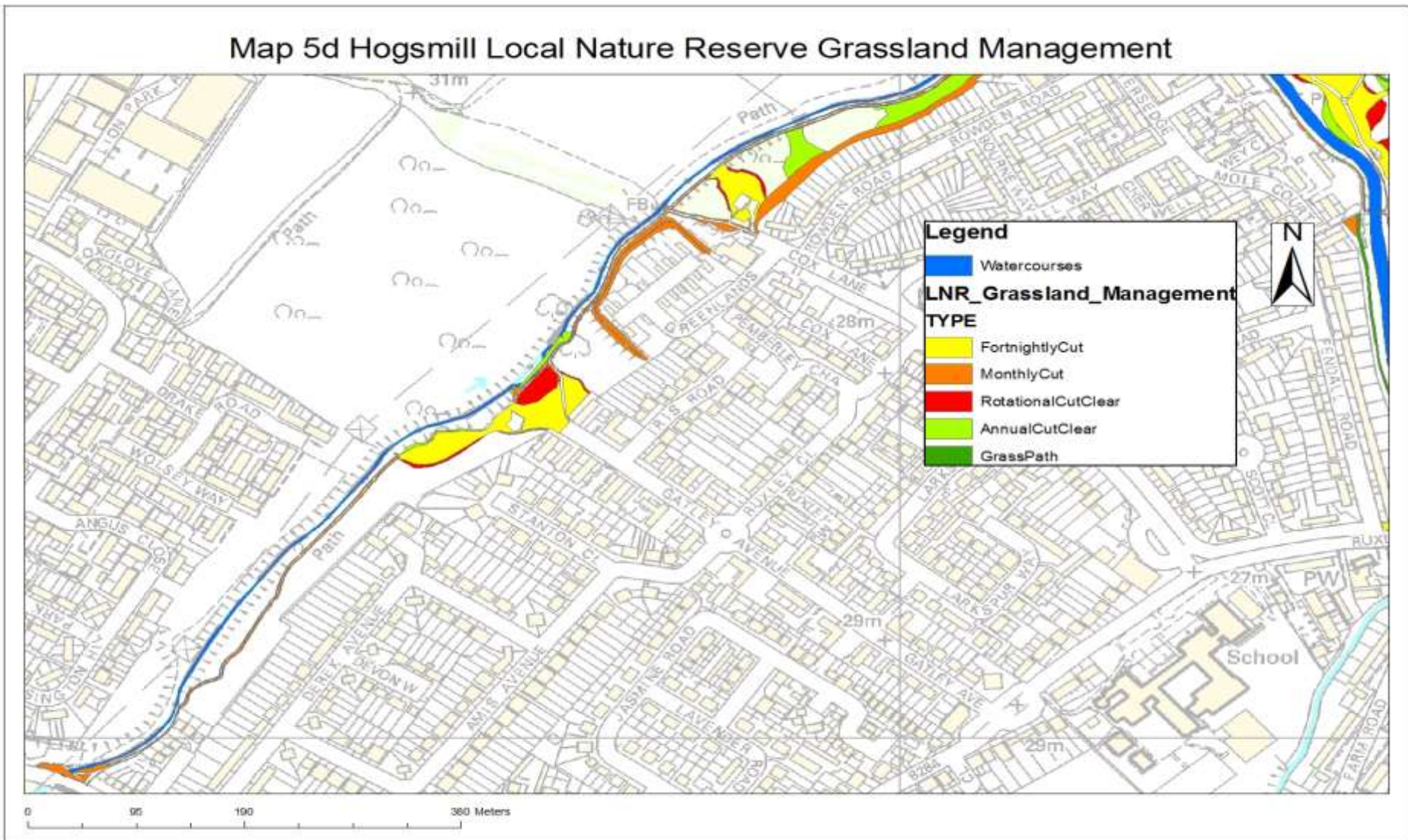




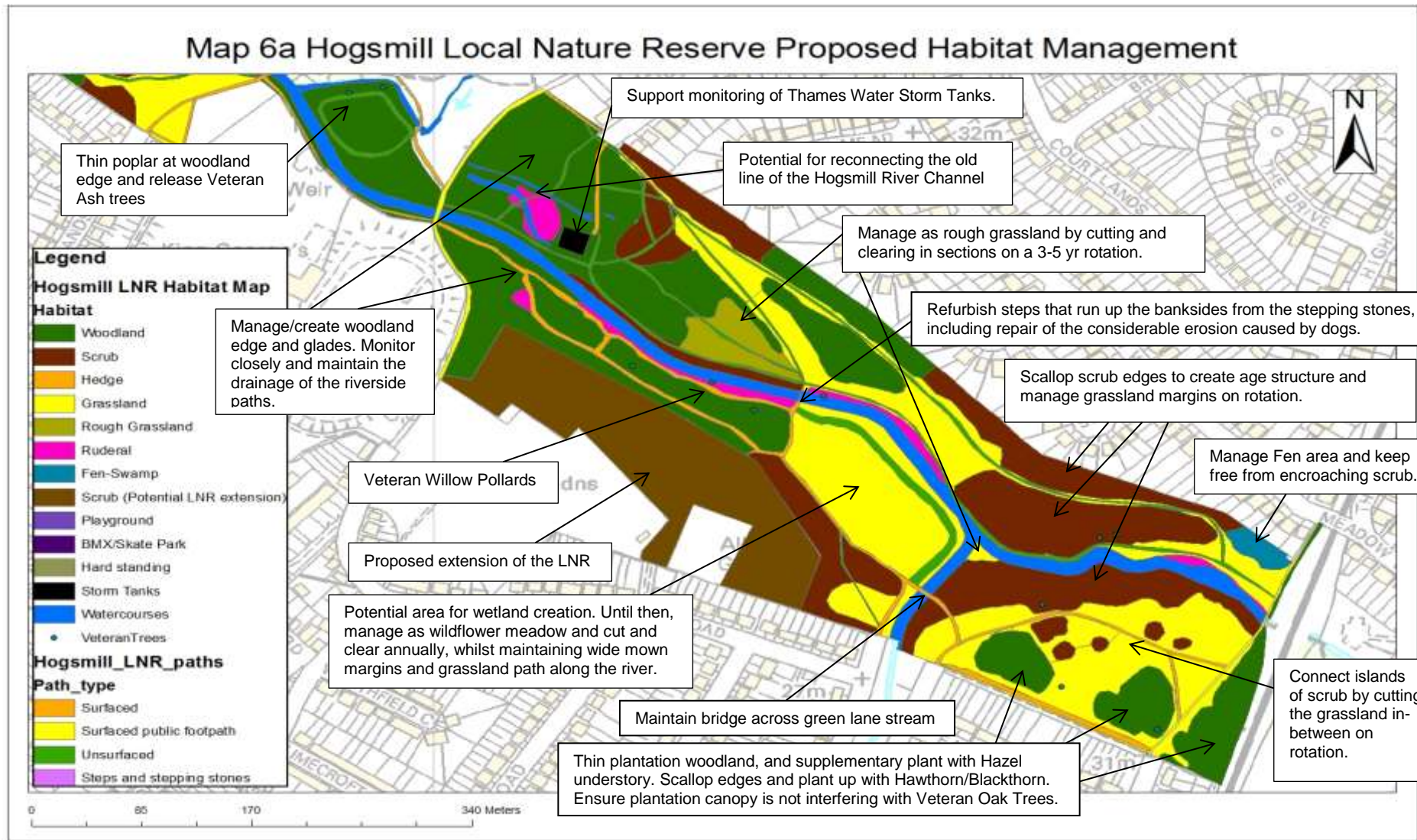


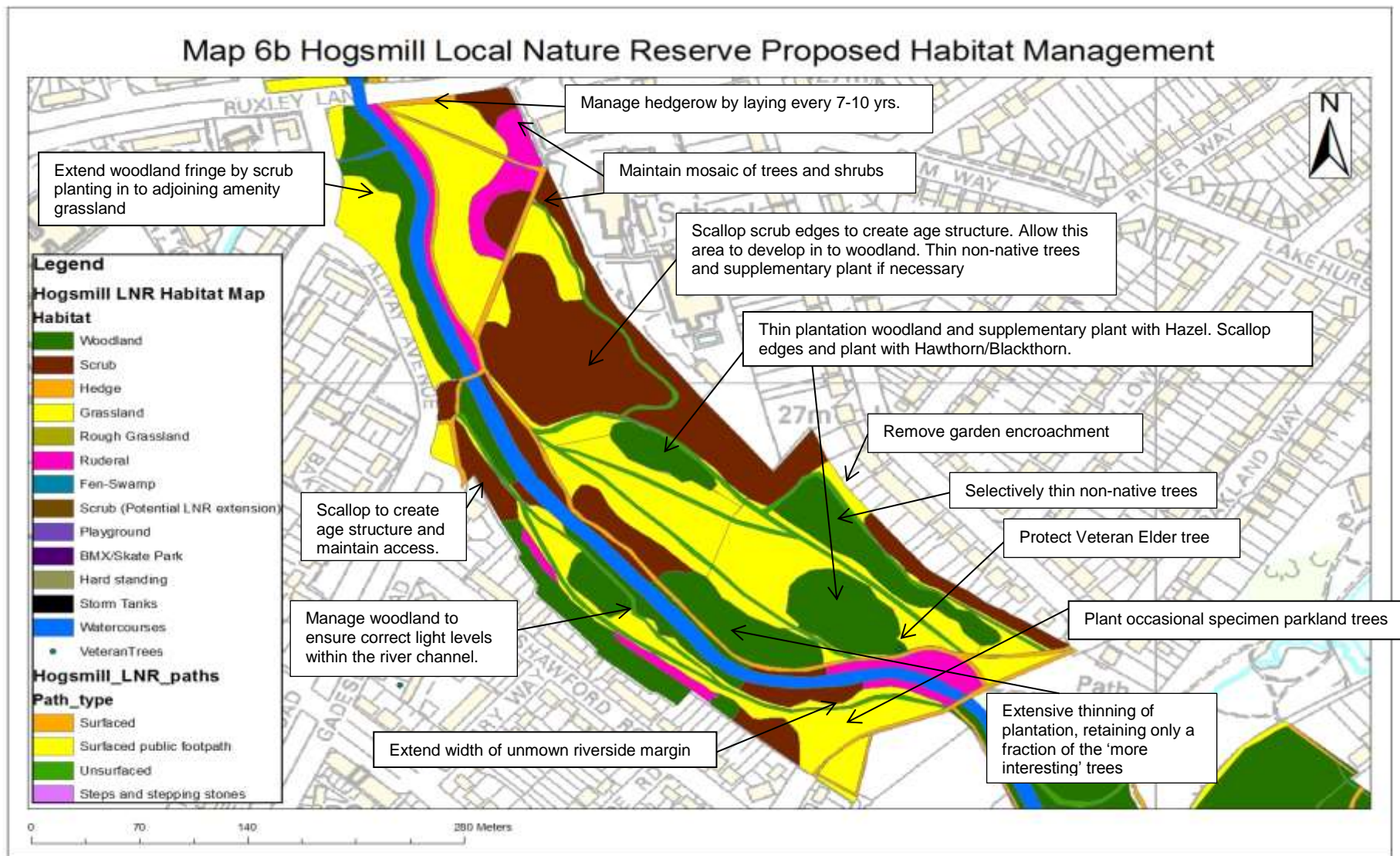




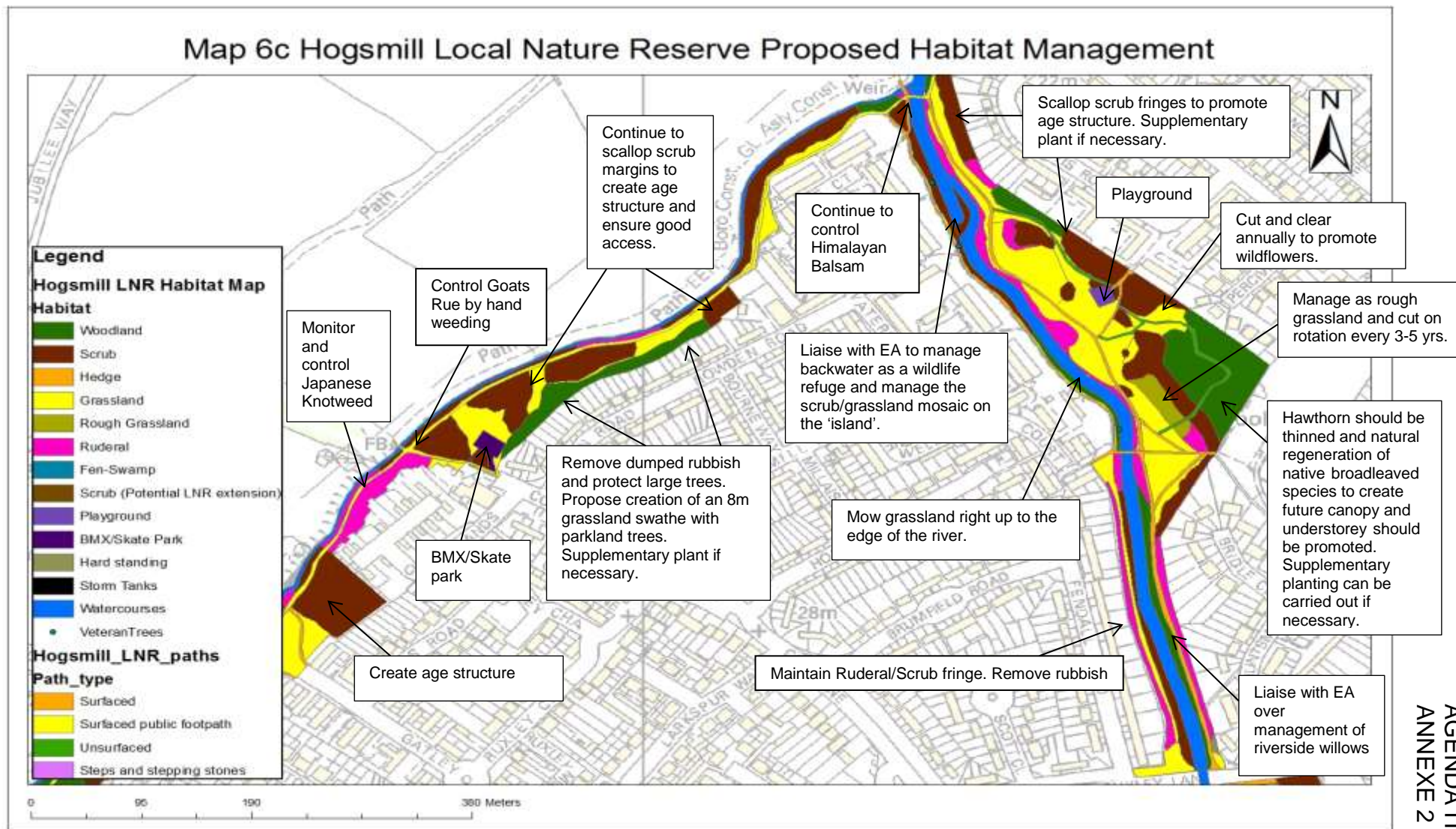


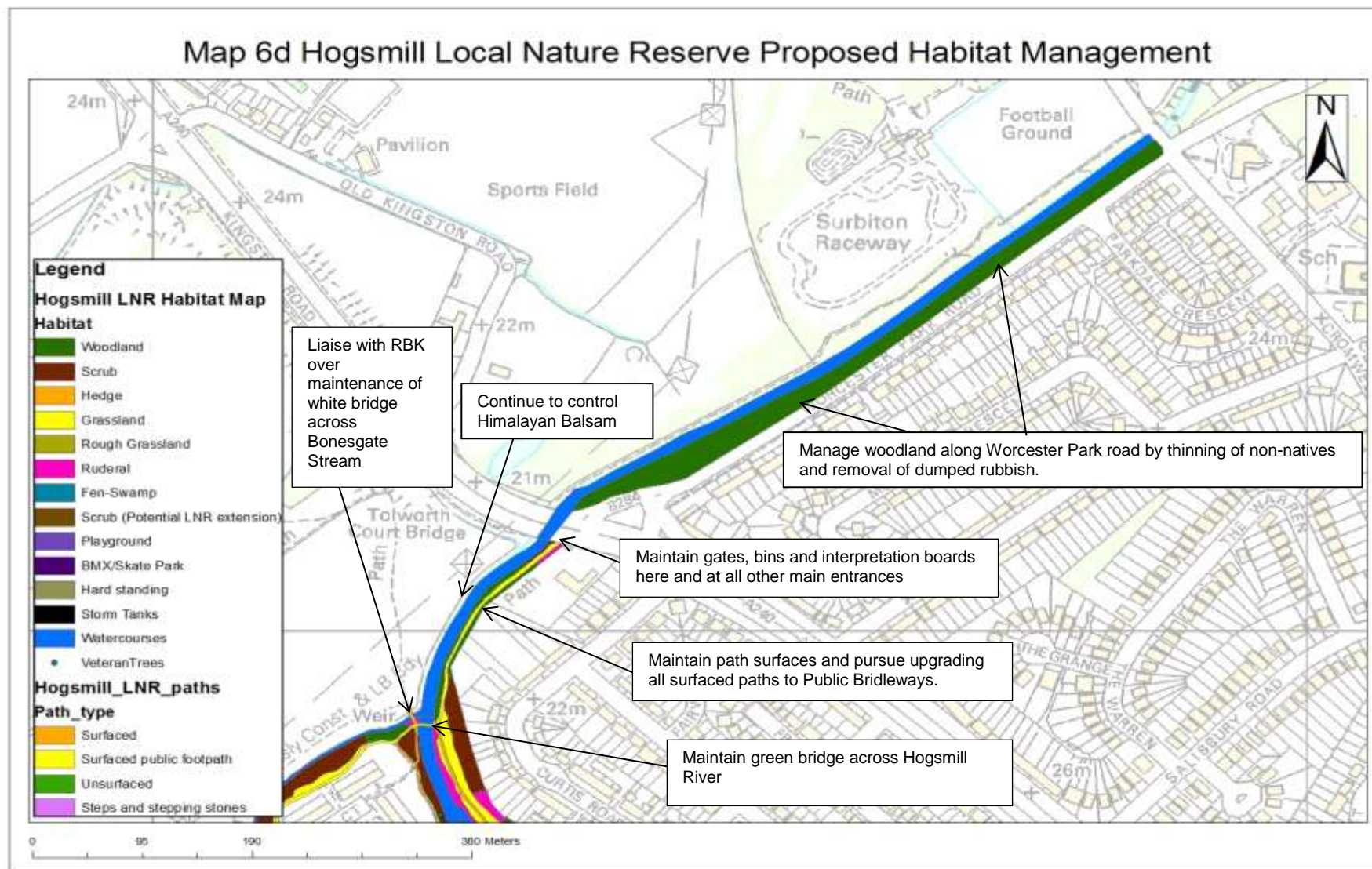




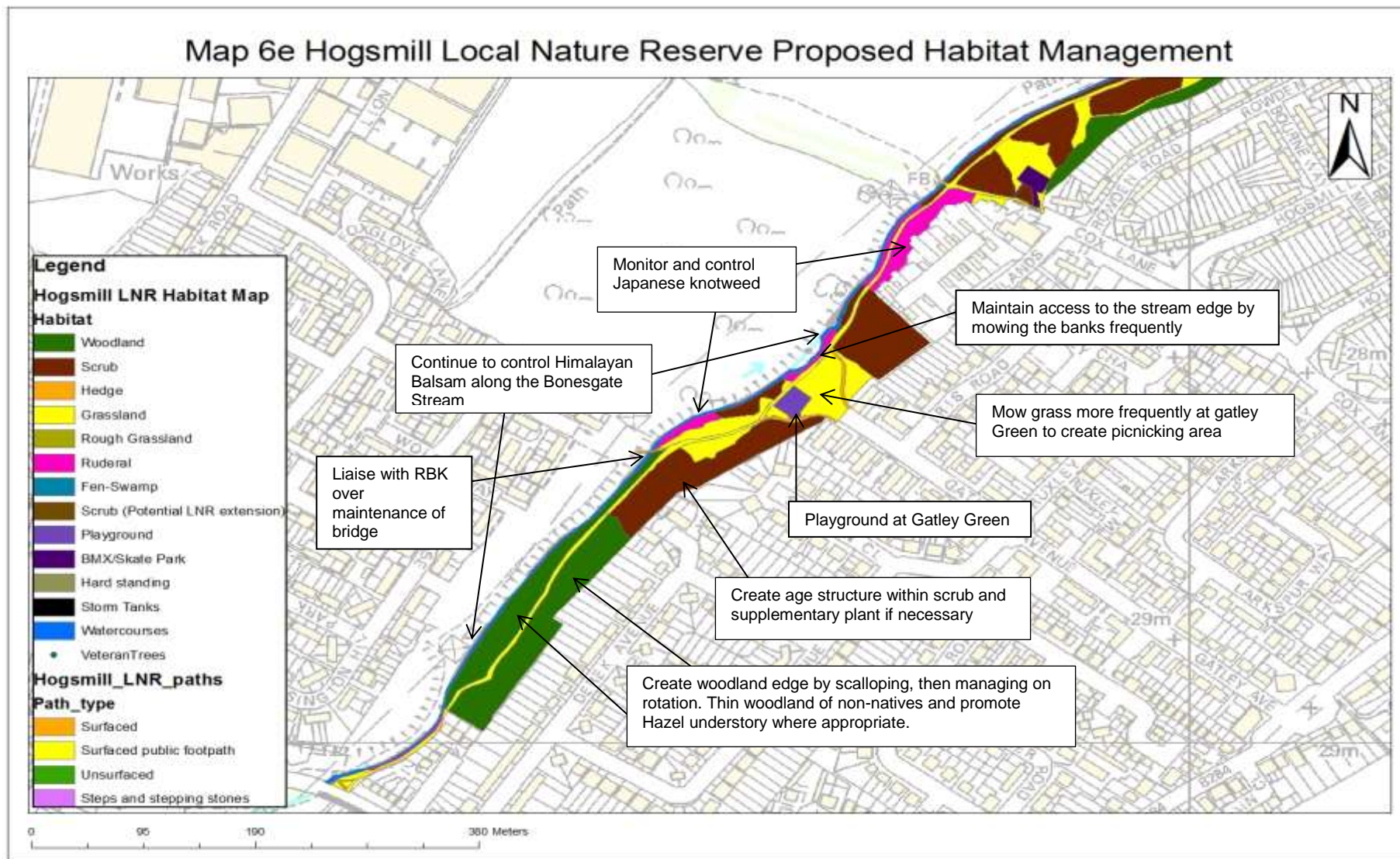














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## APPENDICES

### Appendix I – 2013 SSCI Survey Description and map

The Hogsmill Local Nature Reserve (LNR) incorporates the former Hogsmill and Bonesgate Open Spaces. The site is linear in character and comprises a mosaic of habitats that includes woodland of varying maturity and composition, a range of grassland and a number of scrub types. Also there are a number of veteran trees found on the site including Oak and Willow.

There is open public access to the whole site. The Hogsmill River is a tributary of the River Thames. Upstream of Green Lane the water feeding in to the river originates from springs arising from the North Downs chalk aquifer, downstream from this point the water runs off clay substrates. The site lies over London Clay river alluvium and unclassified terrace gravels.

Previous reasons for selection:

Valuable part of an ecological unit joining areas of similar habitats, through the Hogsmill Corridor to Royal Borough of Kingston upon Thames upon Thames where it becomes a site of Borough Importance in Kingston. Also the Kingston area supports water voles and there is the potential for these to move into the site.

Reasons for selection:

Veteran trees, across the site there are a number of veteran trees. Chalk stream, (chalk springs at the base of the North Downs escarpment are the source of the upper reaches of the Hogsmill River). As the river continues the inflowing tributaries run from clay areas reducing the calcareous nature of the water. Birds, the site supports Kingfishers and Little Egrets a species on the list of species of conservation concern in Surrey. They have been recorded regularly for the last 5 years. Access to nature, the site provides access to nature in an urbanised area of the borough, with few other opportunities to access nature locally.

Habitat description:

Abundance is based on the DAFOR scale and refers to the specific section of the site. The overall abundance across the site is provided in the Species List DAFOR ratings for certain species, notably annual, can change throughout the year. The DAFOR scale uses the following key: -Dominant; Abundant; Frequent; Occasional; Rare Nomenclature follows Stace (2010) for vascular plants.

Target note 1:- Stream vegetation. Along the Hogsmill the aquatic vegetation is limited to some extent by the concrete banks and in places stream base. In other stretches aquatic vegetation has developed. This includes Watercress, Fool's Watercress, Branched bur-reed, Reed canary grass, Reed Sweet Grass, Curled Pondweed, Common water Plantain and Common Water Starwort. Also found here was the aquatic moss *Leptodictyum riparium*.

Target Note 2:- Swamp Vegetation, there is one area of this habitat, dominated by Reed Canary Grass, with frequent Meadowsweet and occasional Greater Willowherb and Bulrush.

Target note 3:- Tall ruderals. There are a number of areas dominated by Nettle, Common Reed, Greater Willowherb and Rosebay Willowherb). A number of these areas are found alongside the stream channel. In these areas alongside the stream are occasional trees such as Elder and Hawthorn. Generally the epiphytic bryophytes are poorly represented with the occasional *Orthotrichum affine* and *Frullania dilatata*.

Target note 4:- Amenity grassland, these areas are dominated by Perennial Rye-grass, with White Clover, Greater Plantain, Dandelions, Daisy, Wall Barley and Ribwort Plantain.

Target Note 5:- Amenity Grassland, this area was close mown and was composed of Perennial Rye Grass, Greater and Ribwort plantain. However around the edges were longer grasses including Meadow Barley.

Target note 6:- Mesotrophic rank grasslands, these are dominated by False Oat grass with some Cocksfoot, Common Couch and Tall fescue. They are generally species poor, with Nettle, Cleavers and Field Bindweed. Some of the areas have within them ant hills.

Target note 7:- Hawthorn dominated scrub found with occasional Elder and Elm. In some area White Bryony was found trailing through the scrub.

Target note 8:- Blackthorn dominated scrub with occasional trees including Ash, Elder and Hawthorn. Other plants in this area particularly along the path edges were Black Horehound, Cocksfoot, Common Couch, Creeping Thistle, False Oat Grass, Greater Plantain, Ground Ivy and Hogweed. In some of the areas of Blackthorn scrub, eggs of the Brown Hairstreak butterfly were found.

Target note 9:- Bramble dominated scrub often found with Common Nettle, Field Bindweed, Hedge Bindweed and Common cleavers.

Target note 10:- Broadleaved semi natural woodland composed of Ash, Pedunculate oak, Sycamore and Crack Willow. Along the path edges near the stream channel were found the mosses *Barbula convolute*, *Barbula unguiculata*, *Bryum dictomum* and *Hennediella macrophylla*. The latter is an alien moss (probably originally from New Zealand) not recorded in Surrey until the 1960's. Since then it has spread down the River Thames and the River Mole and has now reached the banks of the Hogsmill.

Target note 11:- Semi natural broadleaved woodland. The canopy was composed of Ash, Aspen, Pedunculate Oak, Sycamore and Wild Cherry. The shrub layer was composed of Dogwood, Hazel including by the stream some coppice stools and Hawthorn. The herb layer was patchy with areas of abundant Ivy and Cow Parsley with occasional Enchanters Nightshade and Pendulous sedge. There was also rare Giant Fescue, Wood Avens and Garlic

mustard. Along the river bank was frequent Winter Heliotrope. Found in this area were some invasive plants including bamboo and Snowberry.

Target note 12:- Plantation woodland of varying ages.

Target note 13:- Veteran trees. Along part of the old Hogsmill river channel are a number of veteran lapsed pollarded White Willows. In addition there is an avenue of old White Willows that follow the course of the river. There are a number of old Pedunculate Oaks including a group alongside the Bonesgate. The largest occurs in the south of the Hogsmill LNR and has a diameter at breast height of 1.75m

Target Note 14:- A line of White Willow, some pollarded. There was an s shrub layer dominated by Elder with occasional Hawthorn. The herb layer was dominated by Common Nettle, Ivy, with occasional Cow Parsley, Clustered Dock and White Dead Nettle. The stream here is very shaded with little vegetation other than rare Brooklime and Pendulous Sedge.

Target Note 15:- An area of tall ruderal vegetation dominated by Common Nettle and Bramble with occasional Burdock, Cocksfoot and Tall Fescue. In places by the stream were large Elders, these had few epiphytes dominated by the pollution tolerant moss, *Orthothrichum diaphanum*

Target Note 16:- The stream here is clear and fish such as Dace are regularly seen along with Kingfishers.

Target Note 17:- Mesotrophic grassland , there is abundant Perennial Rye Grass here but also a variety of other grasses including Timothy, Cocksfoot, False Oat Grass and Tall Fescue. Herbs found include Ribwort Plantain, Creeping Buttercup, Red Clover and Broadleaved Dock. The grassland also contains a number of old anthills.

Target Note 18:- Scrub, composed of abundant Blackthorn with occasional Elder and Hawthorn. In this area, still the only epiphytic bryophyte was *Orthothrichum diaphanum*. Found on the Blackthorn have been the eggs of the Brown Hairstreak butterfly

Target Note 19. Semi-natural broadleaved woodland, this is a thin strip that runs between the Hogsmill River and Worcester Park Road. The canopy is composed of Ash, Horse Chestnut and Sycamore with the occasional Pedunculate Oak. Most of the trees are young with the occasional older tree generally close the road. The scrub layer was sparse with the occasional Elder and Hawthorn, in place there was abundant Ash saplings. The herb layer was dominated by Ivy with occasional areas with dense Bramble. Other herbs included Wood Avens and Common Cleaver. The bank of the stream is steep and shady so has little vegetation, plants found include False Brome, Hogweed and the moss *Fissidens Taxifolius*. The woodland strip had large amounts of dead wood both standing and fallen.

Target Note 20:- Along the stream the bank tops are by Himalayan Balsam with occasional Meadowsweet, Nettle and rare Hemlock. The banks themselves are very steep and mostly devoid of vegetation.

Target note 21:- Broadleaved secondary woodland. The woodland in this small area is dominated by even aged young Ash with the occasional Crack Willow... The shrub layer was sparse composed of Hawthorn. The herb layer was in places dominated by Ivy, with occasional Cow Parsley and Nettle and rare Lords and Ladies and Wood Aven.

Target note 22:- Scrub. This was composed of frequent Hawthorn, occasional Elder and Dog Rose. There was also frequent bramble throughout the area. Also found along the edges of the scrub was Common Chickweed, Wood Aven, Common Couch and False Oat Grass.

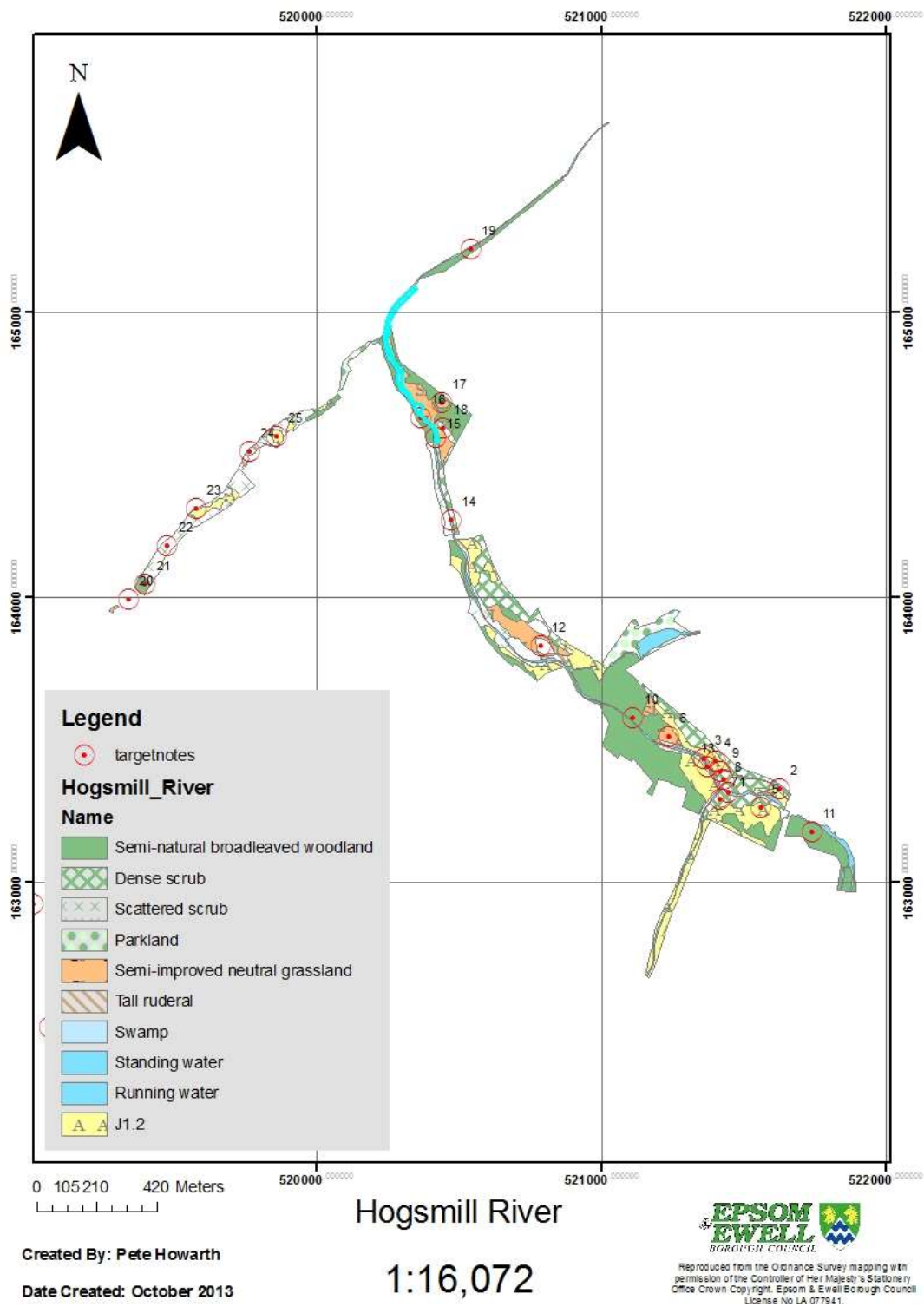
Target note 23:- A small area of Japanese Knotweed was found between the path and the stream.

Target note 24:- Ruderal area alongside stream. This area is dominated by Bramble and Nettles along with some scrub, occasional trees and grassy areas.

Target note 25:- Amenity grassland composed of abundant Perennial Rye Grass.

#### NVC types present

S28 Phalaris arundinacea tall herb fen community  
OV 24 Urtica dioica-Galium aparine community,  
OV 25 Urtica dioica-Cirsium arvense community  
OV 26 Epilobium hirsutum community  
OV 27 Epilobium angustifolium community  
MG7 Lolium perenne leys  
MG1a Arrhenatheretum elatioris grassland, Festuca rubra sub-community  
W21 Crataegus monogyna-Hedera helix scrub  
W22 Prunus spinosa-Rubus fruticosus scrub  
W24 Rubus fruticosus-Holcus lanatus underscrub





## **Appendix II – 2004 Habitat/NVC Survey Results**

### **Methods for habitat survey**

The habitat survey was conducted over several visits during the period August to September 2004. The site was separated into 'compartments' of largely homogeneous land cover as identified on a series of orthorectified aerial photographs. Mapping was done directly onto photographs in the field and these boundaries were then transferred into GIS (MapInfo). The vegetation in each 'compartment' (GIS polygon) was assigned wherever possible into vegetation communities recognised within the National Vegetation Classification (NVC – Rodwell, 1991-2000). Very often, more than one community type was present and so the percentage of total ground cover made up by each individual community was recorded, and appropriate descriptive target notes compiled. These figures were then entered into an Excel spreadsheet, together with abbreviated notes (maximum of 250 characters). This spreadsheet was subsequently imported into the GIS database and was thus linked to the relevant polygons.

The area covered by the habitat survey excludes several areas that are now covered under this management plan. This includes the watercourses themselves, in addition to areas of land near to Ewell Court, beside the Bonesgate Stream adjacent to the Watersedge Estate and 'River View Copse', the area formerly leased to Surrey County Council. For the sake of completeness, habitats for these areas have been based upon the interpretation of aerial photography in conjunction with the relevant few brief notes made during site visits. However, the composition of these areas is not included within the following account.

### **Description of habitats and vegetation communities**

Numbers with 'P' prefixes relate to the GIS polygon numbers

#### **Woodlands and individual trees**

Woodland communities of the Hogsmill and Bonesgate Open Space are somewhat variable and poorly-defined, and do not correlate with the NVC communities. Broadly speaking, there are three main types. At the most recent end of the spectrum are a series of woodlands that were clearly planted around 30 years ago, often upon what was originally grassland habitat. Also present is a suite of older-established and broadly 'semi-natural' woodlands, although even these tend to support a proportion of planted species. Finally, there are also discrete areas of older plantation woodland, generally occurring as small stands within the 'semi-natural' types. Many areas of woodland are disturbed, often scrub-like and patchy in their characteristics, with a generally poor representation of ground flora species.

Of the more-established, broadly 'semi-natural' woodlands, the most widespread species are Ash (*Fraxinus excelsior*), Oak (*Quercus robur*) and Sycamore (*Acer pseudoplatanus*). However, due to the variability of stand types, even these can vary in frequency from being dominant (in the case of Ash) or frequent (in the case of oak and Sycamore), but all being rare in other areas. Alder (*Alnus glutinosa*) occurs occasionally in some wet areas.

A wide range of other, often planted trees occur within the canopy, either as infrequently scattered individuals or small stands of long-established plantation. Planted (and frequently self-sown) tree species include Ornamental Cherries/Plums (*Prunus* spp.), Norway Maple (*Acer platanoides*), Narrow-leaved ash (*Fraxinus angustifolia*), Willows (*Salix* spp.), Lime (*Tilia* sp.), Horse Chestnut (*Aesculus hippocastanum*), London Plane (*Platanus x hispanica*), Turkey Oak (*Quercus cerris*), False-acacia (*Robinia pseudoacacia*), Poplars (*Populus* spp.), Beech (*Fagus sylvatica*) and Scots Pine (*Pinus sylvestris*).

The most common shrub species across the site are Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) (one of the plantation woodland areas contains a multi-stemmed, veteran Elder tree). Elm (*Ulmus* spp.) and Blackthorn (*Prunus spinosa*) are locally common. Widely occurring field layer associates include Bramble, Ivy (*Hedera helix*), False-brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*), Cow Parsley (*Anthriscus sylvestris*), Common Nettle and Cleavers (*Galium aparine*). A number of woodland stands have been disturbed by playing children, and there are varying amounts of litter and dumped rubbish, including garden refuse.

Broadleaved woodland planted in recent times occupies significant areas within the Hogsmill Open Space and largely comprises discrete copses planted-up on what was formerly grassland habitat. Mowing of surrounding amenity grasslands has created a very abrupt edge to these woodlands. A wide range of tree species are present and include Hornbeam (*Carpinus betulus*), Ash (*Fraxinus excelsior*), Narrow-leaved Ash (*Fraxinus angustifolia*), Limes (*Tilia* spp.), Birches (*Betula* spp.), Horse Chestnut (*Aesculus hippocastanum*), Ornamental Plum/Cherry (*Prunus* spp.) and Pear (*Pyrus* sp.), plus Grey/White Poplar (*Populus canescens/alba*). The field layer is generally extremely sparse.

Away from woodlands, there are a number of much older, larger trees present. Notable examples include are a number of fine old Pedunculate Oak trees. The largest such specimen (T5), in the south of the Hogsmill Open Space, has a diameter at breast height (DBH) of 1.75m, whilst a second tree nearby (T2) has a DBH of 1.3m. In between these lie a further two somewhat smaller Pedunculate Oak trees (T3, T4). There are also a number of larger Oak Trees to be found within the Bonesgate Open Space (up to around 0.9m DBH); many of these oak trees were noted to support 'spangle galls'.

An area of the Hogsmill Open Space contains a total seven of veteran, lapsed pollarded White Willows (*Salix alba*) (P-70), which appear to be aligned along the course of the former river channel (one of these trees toppled during the winter of 2003-04). Two further significant features take the form of established

riverside avenues of White Willow trees beside the Hogsmill (P-72, 93). Effectively, these form a continuous canopy, but have not been mapped as woodland, as they really are narrow, linear features and lack a woodland feel to them (e.g. no woodland shrub or field layer present).

In addition to the planted woodlands described above, there are more local areas of sparsely-planted trees within grassland habitat. The most extensive example (P – 52) includes trees of Spindle (*Euonymus europaeus*), Italian Alder (*Alnus cordata*), Limes, Scots Pine and Willows.

One further individual standing tree was mapped as a 'point feature', this being a large Horse Chestnut tree on the Hogsmill (T1).

Other individual trees include Ash, Narrow-leaved Ash, Poplars, Limes, Field Maple, Hornbeam, Sycamore and Crack Willow (*Salix fragilis*). Interestingly, this last-mentioned tree is uncommon on the Hogsmill, but seems more abundant on the Bonesgate than White Willow. Hybrids are of course likely to also be present.

## **Scrub**

Scrub of all types occupies approximately 35% of the site, although in places, it is difficult to make a clear separation between scrub and woodland habitats. Of all the habitat polygons mapped during the survey (144 in total), scrub making up more than 5% of the area within, occurred in 85 (i.e. 59%) of polygons. As with many of the other habitats, scrub tends to occur in narrow strips, reflecting the linear character of the site. The three most frequent and extensive scrub types are as follows:

### **W21 *Crataegus monogyna* – *Hedera helix* scrub**

Hawthorn (*Crataegus monogyna*)-dominated scrub was found to be the second-most frequently-occurring type, being mapped at more than 5% in a total of 41 polygons (28%). Other species present include Elder (*Sambucus nigra*) and Elm (*Ulmus* spp.) in particular, plus Roses (*Rosa* spp.), occasionally with a scattering of mature trees, especially of Oak and Ash, so the composition can be locally quite varied. Scattered Hawthorn scrub as a component of other habitats has also been included within this category (and in such cases, therefore, represents only a small proportion of the habitat within these polygons).

### **W22 *Prunus spinosa* – *Rubus fruticosus* scrub**

This type of scrub was the third most frequent, occurring at more than 5% cover in 13 polygons (9%). It tends to be overwhelmingly dominated by dense thickets of Blackthorn, with other species poorly-represented. This scrub is much less extensive than the W21 type and stands generally tend to be small. However, there is one large area of scrub beside the Hogsmill where Blackthorn is the predominant species (P – 80).

### **W24 *Rubus fruticosus* – *Holcus lanatus* underscrub**

Bramble-dominated scrub represents the most frequent and extensive type of scrub present, being recorded at more than 5% cover in a total of 61 polygons (42%). Frequent associates include Common Nettle, Field Bindweed, Hedge Bindweed and Cleavers.

### **Non-referable scrub types**

A number of stands of scrub could not easily be assigned to the NVC. Although some Hawthorn and Blackthorn were often present, neither was sufficiently constant to suggest either the **W21** or **W22** communities. A range of separate mapping categories have been provided to denote scrub types dominated individually by either Elms, Ornamental Plum/Cherry, Field Maple (*Acer campestre*) and Goat Willow (*Salix caprea*). Of these, the most frequently-encountered were Elm-dominated stands (5 polygons in total), with just three examples of Field Maple, plus one each of Ornamental Plum/Cherry and Goat Willow.

Beyond these non-referable scrub-types with an obvious dominant species, there are further examples with no clear dominant (6 polygons). In addition to Hawthorn and Blackthorn, other shrub (and tree) constituents include Willows, Elder, Blackthorn, Elm, Roses, Sycamore, Hazel, Oak, Ash and Birch. The largest area assigned to this category is to be found in the western section of the Bonesgate (P – 140). A further mapping category was used to denote scattered bushes of Elder that occurred within other habitats (being mapped on only two occasions).

Mature trees, especially of Oak and Ash, are occasionally present throughout scrub-dominated habitats, enhancing structural diversity. As with woodlands, scrub can be quite disturbed as a result of trampling by children and the dumping of litter and other rubbish, including garden refuse along the site margins.

### **Hedgerow Features**

Only a single section of hedgerow was noted, on a verge beside the B284. This comprises a short, free-standing and recently planted 'feature', presumably placed here for 'demonstration' purposes. Trees noted were Hazel, Hawthorn, Plum/Cherry, Field Maple, Norway Maple (*Acer platanoides*) and Crab Apple (*Malus sylvestris*). There were signs of this having being carefully 'pruned' at some point.

### **Grasslands**

Grasslands as a whole form one of the most extensive and frequently-occurring habitat types within the site, much of this taking the form of the regularly-mown amenity grassland areas that typify the Open Space, along the Hogsmill in particular. Of all mapped polygons, grassland comprising more than 5% of the area, occurs in 75, or 52% of the total, making grassland the second-most frequently mapped habitat type (after scrub). The main grassland types are as follows:

#### **MG1 – *Arrhenatherum elatius* grassland**

Coarse, rank, un-mown grassland characterised by grasses such as False Oat-grass (*Arrhenatherum elatius*) and Common Couch (*Elytrigia repens*) tends to occur in narrow, marginal strips around the fringes of the main areas of mown amenity grassland (see below). The major part is consistent with the **MG1a *Festuca rubra* sub-community**. Often this vegetation is very species-poor, with false oat-grass overwhelmingly dominant. Other common and frequent associates include Cock's-foot (*Dactylis glomerata*), Field Bindweed (*Convolvulus arvensis*), Cleavers (*Galium aparine*), Creeping Thistle (*Cirsium vulgare*) and Tall Fescue (*Festuca arundinacea*). In smaller areas, where such vegetation is accompanied by frequent Common Nettle (*Urtica dioica*) and occasionally, Hogweed (*Heracleum sphondylium*), this represents areas of the **MG1b *Urtica dioica* sub-community**.

#### **MG6 *Lolium perenne* – *Cynosurus cristatus* grassland**

Vegetation attributable to this category was noted in only a handful of situations. In some respects, it fits within a 'middle ground' between the frequently managed and species-poor amenity grassland swards dominated by Perennial Rye-grass (MG7 – see below) and the rank MG1-type swards. Apart from the dominant grass species, the main difference lies in the higher relative species diversity. Thus, the dominant grass tends to be Creeping Bent (*Agrostis stolonifera*), with varying frequency of Perennial Rye-grass (*Lolium perenne*). Other common grasses include Red Fescue (*Festuca rubra*), Timothy (*Phleum pratense*), Yorkshire Fog (*Holcus lanatus*), Meadow Barley (*Hordeum secalinum*) and Cock's-foot (*Dactylis glomerata*). Other frequent associates include Red Clover (*Trifolium pratense*), Greater Plantain (*Plantago major*), Trailing Tormentil (*Potentilla reptans*), Autumn Hawkbit (*Leontodon autumnalis*), Yarrow (*Achillea millefolium*) and Dandelion (*Taraxacum officinale* agg.).

All three observed stands occur in somewhat different situations. The first instance (P-42) relates to part of a grassland area within the Hogsmill that has been planted-up with trees (the predominant grassland type here is MG1a). Occasional ant-hills were also noted within the sward. The second instance (P-71 also within the Hogsmill) relates to a fairly large area of un-mown grassland (apart from occasional marginal paths). Hairy Sedge (*Carex hirta*), Creeping Buttercup (*Ranunculus repens*) and Creeping Thistle (*Cirsium arvense*) were also present here. Unusually, the final area occurs within a mown amenity grassland area within the Bonesgate (P-133). However, grasslands along this section appear to be less-frequently mown than along the Hogsmill. Species of

note from here include Ox-eye Daisy (*Leucanthemum vulgare*) and Cranesbills – including Dove's-foot Cranesbill (*Geranium molle*) and possibly also Small-flowered Cranesbill (*Geranium pusillum*).

Within the Hogsmill, there were several rather localised areas within the main mown amenity grassland swards (see MG7 below), where there were indications of an MG6-type sward. This occurs within Polygon 104, where several more marginal areas of the sward were seen to support species such as Bird's-foot Trefoil (*Lotus corniculatus*) along with Common Knapweed (*Centaurea nigra*), Common Sorrel (*Rumex acetosa*) and Tall Fescue (*Festuca arundinacea*).

### **MG7 Lolium Perenne leys and related grasslands**

Grassland of this type is indicated by the often almost complete dominance of Perennial Rye-grass within a generally species-poor sward. This is the most extensive grassland type, occupying large areas, especially along the Hogsmill, comprising regularly-mown amenity grassland swards. In addition to mowing, the development of such vegetation is also due to the effects of eutrophication from dogs. Common associates include White Clover (*Trifolium repens*), Dandelions, Greater Plantain, Ribwort Plantain (*Plantago lanceolata*), Daisy (*Bellis perennis*) and Wall Barley (*Hordeum murinum*). A variant of this vegetation has been identified, representing areas where Tall Fescue also occurs as a component of the sward along the Hogsmill (P – 1, 8, 22).

Very locally, there are indications of a somewhat more diverse sward with, in particular, the presence of Common Knapweed (*Centaurea nigra*) (P-120). This represents one of a suite of grasslands occupying the 'open space' of the Bonesgate, that appear to be less-frequently-mown than those of the Hogsmill. Owing to the general dominance of Perennial Rye-grass, these have been predominantly been placed within the MG7 category (note P-133 above), although they are somewhat longer and less clearly-defined than those along the Hogsmill. In places (P-134), the sward appears quite rank and weedy, supporting species such as Chickweed (*Stellaria media*), Creeping buttercup, Smooth Hawk's-beard (*Crepis capillaris*), Dandelion, Cow Parsley (*Anthriscus sylvestris*), White Dead-nettle (*Lamium album*), Broad-leaved Dock (*Rumex obtusifolius*) and Hogweed (*Heracleum sphondylium*).

### **Weed and ruderal Communities**

The NVC recognises a suite of communities associated with weedy/ruderal/open/disturbed habitats. Extensive stands occur within the site, with a total of 62 (i.e. 43%) of mapped polygons supporting 5% or more cover of weed/ruderal-dominated vegetation of some kind.

### **OV24/25 *Urtica dioica* – *Galium aparine* community and *Urtica dioica* – *Cirsium arvense* community**

There is considerable overlap between the characteristic forms of these two communities and they have therefore been grouped together. Both in effect, are Common Nettle-dominated vegetation. **OV24** has Common Nettle as the overwhelming dominant in a species-poor sward, where Cleavers (*Galium aparine*) is the only constant associate. **OV25** has a more patchy, open cover of Nettles and is thus more diverse, with other associates present, including Thistles (*Cirsium* spp.) in particular. Other common associates of these two communities include Hedge Bindweed (*Calystegia sepium*), Field Bindweed, Hogweed and Bramble (*Rubus fruticosus* agg.). Noted occasionally were Black Horehound (*Ballota nigra*), Russian Comfrey (*Symphytum x uplandicum*), Burdock (*Arctium* sp.), Greater Willowherb (*Epilobium hirsutum*) and White Dead-nettle (*Lamium album*).

Extensive stands of these communities occur especially along the unmanaged fringes of the site, including beside the two watercourses. One further, frequent and locally abundant associate, beside the Bonesgate Stream within stands of Common Nettle, is Himalayan Balsam (*Impatiens glandulifera*). The plant also occurs along the Hogsmill River downstream of where it is joined by the Bonesgate Stream, but is not present on the Hogsmill upstream of this point.

Of the 62 polygons supporting weed/ruderal vegetation at more than 5% cover, all but one contain either **OV24** or **OV25**, thus making Common Nettle-dominated vegetation by far the most frequently-occurring weed/ruderal community within the site.

#### **OV26 *Epilobium hirsutum* community**

Whilst Greater Willowherb was found as a component of the **OV24/25** stands, in several small areas (in just 3 polygons) it was found to occur as discrete stands, representing the **OV26 *Epilobium hirsutum* community**.

#### **OV27 *Epilobium angustifolium* community**

Just one small stand of Rose-bay Willow-herb (*Chamerion angustifolium*) was recorded.

#### **Non-referable weed/ruderal communities**

Some stands of weed-dominated vegetation could not be assigned to NVC types. One of the main examples was found on the banks of the Hogsmill river, where there had been recent ground disturbance as a result of reconstructing the road bridge over the B284 (P – 3, 15, 93, 143). A further example is located along recently-constructed earth bunds beside a gravelled path crossing the Bonesgate (P – 127) This vegetation is characterised by an abundance of Oraches (*Atriplex* spp.) and Goosefoots (*Chenopodium* spp.). Other associates noted (not necessarily at both locations) include, Mugwort (*Artemisia vulgaris*), Scentless Mayweed (*Tripleurospermum inodorum*), Smooth Sow-thistle (*Sonchus oleraceus*), Knotgrass (*Polygonum aviculare*), Burdocks, Creeping Thistle, Nipplewort (*Lapsana communis*), Poppies (*Papaver* sp.), Prickly Lettuce (*Lactuca serriola*), Bristly Ox-tongue (*Picris echioides*), Russian

Comfrey, and Shepherd's Purse (*Capsella bursa-pastoris*). Noted specifically in the Bonesgate example were Goat's Rue (*Galega officinalis*) and Hoary Mustard (*Hirschfeldia incana*).

The final example of vegetation under this heading relates to several small stands of Japanese Knotweed (*Fallopia japonica*) found beside the Bonesgate Stream (2 polygons, i.e. P – 128, 135).

### **Swamp Communities**

Examples of this type of vegetation are of extremely limited occurrence.

#### **S28 *Phalaris arundinacea* tall-herb fen**

A single small area of this vegetation, overwhelmingly dominated by Reed Canary-grass (*Phalaris arundinacea*) was found at the margin of the Hogsmill Open Space (P – 63). Other associates include locally frequent Meadowsweet (*Filipendula ulmaria*) and Hairy Sedge (*Carex hirta*), occasional/frequent Greater Willowherb, locally occasional Creeping Thistle, plus rare Water Figwort (*Scrophularia auriculata*) and Pendulous Sedge (*Carex pendula*). A wet area within this vegetation also includes Bulrush (*Typha latifolia*) and Watercress (*Rorippa nasturtium-aquaticum*).

A further small area of swamp/marginal aquatic vegetation was found along a short section of the original course of the Hogsmill River (P – 50). Dense marginal vegetation growth made this feature largely impossible to examine. However, those sections that could be viewed were found to support locally abundant (*Glyceria maxima*), with Common Duckweed (*Lemna minor*) and Fool's Watercress (*Apium nodiflorum*) also being noted. At the time of field surveys, it was understood that all other watercourses did not form part of the site and they were therefore excluded.



### Appendix III – Hogsmill Local Nature Reserve Species Lists

The following lists have been extracted from various sources, including species recorded during summer 2004 by Karl Crowther, the SNCI surveys from 1998 and 2003. An old botanical record from the Hogsmill (see below) has been made available by A. Sankey, the BSBI Vice County recorder for Surrey. A record for one additional species has also been provided by the Environmental Report of the Hogsmill River Rehabilitation Project (Anon, 2005). Several records have been derived from a survey done by Alison Fure (shown as AF) as part of Culvert Strengthening on the Moor Lane Bridge over the Bonesgate Stream (Fure, 2004). Part of the area covered by this survey lies outside the EEBC Bonesgate Open Space. Records have been taken from the 2016 fisheries survey carried out by the EA. Over the lifetime of the 2006-16 management plan, further bat surveys and botanical surveys have taken place all of which are included in the list below.

These lists are intended to bring together all known information sources. They do not represent a full inventory of all taxa occurring at the Local Nature Reserve (indeed, such an undertaking would be impossible for any site). Therefore, these lists should be viewed as incomplete, but representing the fullest information about the site at the present time.

#### Vascular Plants, Bryophytes and Lichens

Latin Name	Common Name	Type
<i>Equisetum arvense</i> L.	Field Horsetail	horsetail
<i>Cedrus</i> Trew	Cedrus	conifer
<i>Pinus</i> L.	Pine	conifer
<i>Pinus sylvestris</i> L.	Scots Pine	conifer
<i>Taxus baccata</i> L.	Yew	conifer
<i>Arum maculatum</i> L.	Lords-and-Ladies	flowering plant
<i>Lemna minor</i> L.	Common Duckweed	flowering plant
<i>Potamogeton crispus</i> L.	Curled Pondweed	flowering plant
<i>Dioscorea communis</i> (L.) Caddick & Wilkin	Black Bryony	flowering plant
<i>Iris foetidissima</i> L.	Stinking Iris	flowering plant
<i>Iris pseudacorus</i> L.	Yellow Iris	flowering plant
<i>Sparganium erectum</i> L.	Branched Bur-reed	flowering plant
<i>Typha latifolia</i> L.	Bulrush	flowering plant
<i>Juncus effusus</i> L.	Soft-rush	flowering plant
<i>Juncus inflexus</i> L.	Hard Rush	flowering plant
<i>Carex hirta</i> L.	Hairy Sedge	flowering plant
<i>Carex pendula</i> Huds.	Pendulous Sedge	flowering plant
<i>Carex sylvatica</i> Huds.	Wood-sedge	flowering plant
<i>Lolium perenne</i> L.	Perennial Rye-grass	flowering plant
<i>Festuca arundinacea</i> Schreb.	Tall Fescue	flowering plant

<i>Festuca gigantea</i> (L.) Vill.	Giant Fescue	flowering plant
<i>Festuca rubra</i> L.	Red Fescue	flowering plant
<i>Cynosurus cristatus</i> L.	Crested Dog's-tail	flowering plant
<i>Poa annua</i> L.	Annual Meadow-grass	flowering plant
<i>Poa pratensis</i> L.	Smooth Meadow-grass	flowering plant
<i>Poa trivialis</i> L.	Rough Meadow-grass	flowering plant
<i>Dactylis glomerata</i> L.	Cock's-foot	flowering plant
<i>Arrhenatherum elatius</i> (L.) P. Beauv. ex J. Presl & C. Presl	False Oat-grass	flowering plant
<i>Holcus lanatus</i> L.	Yorkshire-fog	flowering plant
<i>Holcus mollis</i> L.	Creeping Soft-grass	flowering plant
<i>Phalaris arundinacea</i> L.	Reed Canary-grass	flowering plant
<i>Agrostis capillaris</i> L.	Common Bent	flowering plant
<i>Agrostis stolonifera</i> L.	Creeping Bent	flowering plant
<i>Alopecurus pratensis</i> L.	Meadow Foxtail	flowering plant
<i>Phleum bertolonii</i> DC.	Smaller Cat's-tail	flowering plant
<i>Phleum pratense</i> L.	Timothy	flowering plant
<i>Glyceria fluitans</i> (L.) R. Br.	Floating Sweet-grass	flowering plant
<i>Glyceria maxima</i> (Hartm.) Holmb.	Reed Sweet-grass	flowering plant
<i>Bromus hordeaceus</i> L.	Lesser Soft-Brome	flowering plant
<i>Bromopsis ramosa</i> (Huds.) Holub	Hairy-brome	flowering plant
<i>Brachypodium sylvaticum</i> (Huds.) P. Beauv.	False-brome	flowering plant
<i>Elymus caninus</i> (L.) L.	Bearded Couch	flowering plant
<i>Elytrigia repens</i> (L.) Desv. ex Nevski	Common Couch	flowering plant
<i>Hordeum murinum</i> L.	Wall Barley	flowering plant
<i>Hordeum secalinum</i> Schreb.	Meadow Barley	flowering plant
<i>Triticum</i> L.	Triticum	flowering plant
<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	Common Reed	flowering plant
<i>Papaver</i> L.	Poppy	flowering plant
<i>Clematis vitalba</i> L.	Traveller's-joy	flowering plant
<i>Ranunculus acris</i> L.	Meadow Buttercup	flowering plant
<i>Ranunculus bulbosus</i> L.	Bulbous Buttercup	flowering plant
<i>Ranunculus ficaria</i> L.	Lesser Celandine	flowering plant
<i>Ranunculus repens</i> L.	Creeping Buttercup	flowering plant
<i>Ranunculus reptans</i> L.	Creeping Spearwort	flowering plant

<i>Ranunculus sceleratus</i> L.	Celery-leaved Buttercup	flowering plant
<i>Platanus occidentalis</i> x <i>orientalis</i> = <i>P.</i> x <i>hispanica</i> Mill. ex Münchh.	London Plane	flowering plant
<i>Paeonia officinalis</i> L.	Garden Peony	flowering plant
<i>Galega officinalis</i> L.	Goat's-rue	flowering plant
<i>Lotus corniculatus</i> L.	Common Bird's-foot-trefoil	flowering plant
<i>Vicia sativa</i> L.	Common Vetch	flowering plant
<i>Vicia sepium</i> L.	Bush Vetch	flowering plant
<i>Lathyrus pratensis</i> L.	Meadow Vetchling	flowering plant
<i>Medicago lupulina</i> L.	Black Medick	flowering plant
<i>Trifolium campestre</i> Schreb.	Hop Trefoil	flowering plant
<i>Trifolium pratense</i> L.	Red Clover	flowering plant
<i>Trifolium repens</i> L.	White Clover	flowering plant
<i>Prunus</i> L.	Planted Cherry	flowering plant
<i>Prunus avium</i> (L.) L.	Wild Cherry	flowering plant
<i>Prunus laurocerasus</i> L.	Cherry Laurel	flowering plant
<i>Prunus spinosa</i> L.	Blackthorn	flowering plant
<i>Pyrus</i> L.	Pyrus Species	flowering plant
<i>Malus</i> Mill.	Apple	flowering plant
<i>Malus sylvestris</i> (L.) Mill.	Crab Apple	flowering plant
<i>Sorbus aucuparia</i> L.	Rowan	flowering plant
<i>Crataegus</i> L.	Crataegus	flowering plant
<i>Crataegus monogyna</i> Jacq.	Hawthorn	flowering plant
<i>Filipendula ulmaria</i> (L.) Maxim.	Meadowsweet	flowering plant
<i>Rubus</i> L.	Bramble	flowering plant
<i>Rubus fruticosus</i> agg.	Bramble	flowering plant
<i>Potentilla anserina</i> L.	Silverweed	flowering plant
<i>Potentilla reptans</i> L.	Creeping Cinquefoil	flowering plant
<i>Geum urbanum</i> L.	Wood Avens	flowering plant
<i>Agrimonia eupatoria</i> L.	Agrimony	flowering plant
<i>Rosa</i> L.	Rose	flowering plant
<i>Rosa arvensis</i> Huds.	Field-rose	flowering plant
<i>Rosa canina</i> L.	Dog-rose	flowering plant
<i>Ulmus</i> L.	Elm	flowering plant
<i>Ulmus glabra</i> Huds.	Wych Elm	flowering plant
<i>Ulmus procera</i> Salisb.	English Elm	flowering plant
<i>Humulus lupulus</i> L.	Hop	flowering plant
<i>Urtica dioica</i> L.	Common Nettle	flowering plant
<i>Fagus sylvatica</i> L.	Beech	flowering plant
<i>Castanea sativa</i> Mill.	Sweet Chestnut	flowering plant

<i>Quercus cerris</i> L.	Turkey Oak	flowering plant
<i>Quercus ilex</i> L.	Evergreen Oak	flowering plant
<i>Quercus robur</i> L.	Pedunculate Oak	flowering plant
<i>Quercus rubra</i> L.	Red Oak	flowering plant
<i>Juglans regia</i> L.	Walnut	flowering plant
<i>Betula pendula</i> Roth	Silver Birch	flowering plant
<i>Betula pubescens</i> Ehrh.	Downy Birch	flowering plant
<i>Alnus cordata</i> (Loisel.) Duby	Italian Alder	flowering plant
<i>Alnus glutinosa</i> (L.) Gaertn.	Alder	flowering plant
<i>Alnus incana</i> (L.) Moench	Grey Alder	flowering plant
<i>Carpinus betulus</i> L.	Hornbeam	flowering plant
<i>Corylus avellana</i> L.	Hazel	flowering plant
<i>Euphorbia peplus</i> L.	Petty Spurge	flowering plant
<i>Populus</i> L.	Poplar	flowering plant
<i>Populus alba</i> L.	White Poplar	flowering plant
<i>Populus alba</i> x <i>tremula</i> = <i>P. x canescens</i> (Aiton) Sm.	Grey Poplar	flowering plant
<i>Populus nigra</i> x <i>deltoides</i> = <i>P. x canadensis</i> Moench	Hybrid Black-poplar	flowering plant
<i>Populus tremula</i> L.	Aspen	flowering plant
<i>Salix alba</i> L.	White Willow	flowering plant
<i>Salix alba</i> x <i>babylonica</i> = <i>S. x sepulcralis</i> Simonk.	Weeping Willow	flowering plant
<i>Salix caprea</i> L.	Goat Willow	flowering plant
<i>Salix cinerea</i> L.	Common Sallow	flowering plant
<i>Salix fragilis</i> L.	Crack-willow	flowering plant
<i>Viola</i> L.	Violet	flowering plant
<i>Hypericum perforatum</i> L.	Perforate St John's-wort	flowering plant
<i>Geranium</i> L.	Crane's-Bill	flowering plant
<i>Geranium dissectum</i> L.	Cut-leaved Crane's-bill	flowering plant
<i>Geranium molle</i> L.	Dove's-foot Crane's-bill	flowering plant
<i>Geranium pyrenaicum</i> Burm. f.	Hedgerow Crane's-bill	flowering plant
<i>Geranium robertianum</i> L.	Herb-Robert	flowering plant
<i>Epilobium hirsutum</i> L.	Great Willowherb	flowering plant
<i>Chamerion angustifolium</i> (L.) Holub	Rosebay Willowherb	flowering plant
<i>Circaea lutetiana</i> L.	Enchanter's-nightshade	flowering plant
<i>Rhus typhina</i> L.	Stag's-horn Sumach	flowering plant
<i>Aesculus hippocastanum</i> L.	Horse-chestnut	flowering plant

<i>Acer campestre</i> L.	Field Maple	flowering plant
<i>Acer platanoides</i> L.	Norway Maple	flowering plant
<i>Acer pseudoplatanus</i> L.	Sycamore	flowering plant
<i>Malva sylvestris</i> L.	Common Mallow	flowering plant
<i>Tilia</i> L.	Lime	flowering plant
<i>Tilia platyphyllos</i> x <i>cordata</i> = <i>T. x europaea</i> L.	Lime	flowering plant
<i>Capsella bursa-pastoris</i> (L.) Medik.	Shepherd's-purse	flowering plant
<i>Rorippa nasturtium-</i> <i>aquaticum</i> (L.) Hayek	Water-cress	flowering plant
<i>Armoracia rusticana</i> P. Gaertn., B. Mey. & Scherb.	Horse-radish	flowering plant
<i>Cardamine hirsuta</i> L.	Hairy Bitter-cress	flowering plant
<i>Cardamine pratensis</i> L.	Cuckooflower	flowering plant
<i>Lunaria annua</i> L.	Honesty	flowering plant
<i>Sisymbrium officinale</i> (L.) Scop.	Hedge Mustard	flowering plant
<i>Alliaria petiolata</i> (M. Bieb.) Cavara & Grande	Garlic Mustard	flowering plant
<i>Persicaria amphibia</i> (L.) Delarbre	Amphibious Bistort	flowering plant
<i>Persicaria maculosa</i> Gray	Redshank	flowering plant
<i>Polygonum aviculare</i> L.	Knotgrass	flowering plant
<i>Fallopia baldschuanica</i> (Regel) Holub	Russian-vine	flowering plant
<i>Fallopia convolvulus</i> (L.) Á. Löve	Black-bindweed	flowering plant
<i>Fallopia japonica</i> (Houtt.) Ronse Decr.	Japanese Knotweed	flowering plant
<i>Rumex acetosa</i> L.	Common Sorrel	flowering plant
<i>Rumex conglomeratus</i> Murray	Clustered Dock	flowering plant
<i>Rumex crispus</i> L.	Curled Dock	flowering plant
<i>Rumex obtusifolius</i> L.	Broad-leaved Dock	flowering plant
<i>Rumex sanguineus</i> L.	Wood Dock	flowering plant
<i>Stellaria holostea</i> L.	Greater Stitchwort	flowering plant
<i>Stellaria media</i> (L.) Vill.	Common Chickweed	flowering plant
<i>Cerastium fontanum</i> Baumg.	Common Mouse-ear	flowering plant
<i>Silene dioica</i> (L.) Clairv.	Red Campion	flowering plant
<i>Silene latifolia</i> Poir.	White Campion	flowering plant
<i>Chenopodium album</i> L.	Fat-hen	flowering plant

<i>Chenopodium polyspermum</i> L.	Many-seeded Goosefoot	flowering plant
<i>Atriplex</i> L.	Orache	flowering plant
<i>Atriplex prostrata</i> Boucher ex DC.	Spear-leaved Orache	flowering plant
<i>Cornus sanguinea</i> L.	Dogwood	flowering plant
<i>Impatiens glandulifera</i> Royle	Indian Balsam	flowering plant
<i>Galium aparine</i> L.	Cleavers	flowering plant
<i>Galium mollugo</i> L.	Hedge Bedstraw	flowering plant
<i>Convolvulus arvensis</i> L.	Field Bindweed	flowering plant
<i>Calystegia sepium</i> (L.) R. Br.	Hedge Bindweed	flowering plant
<i>Calystegia silvatica</i> (Kit.) Griseb.	Large Bindweed	flowering plant
<i>Solanum dulcamara</i> L.	Bittersweet	flowering plant
<i>Fraxinus excelsior</i> L.	Ash	flowering plant
<i>Ligustrum ovalifolium</i> Hassk.	Garden Privet	flowering plant
<i>Ligustrum vulgare</i> L.	Wild Privet	flowering plant
<i>Veronica anagallis-aquatica</i> L.	Blue Water-Speedwell	flowering plant
<i>Veronica beccabunga</i> L.	Brooklime	flowering plant
<i>Veronica chamaedrys</i> L.	Germander Speedwell	flowering plant
<i>Veronica montana</i> L.	Wood Speedwell	flowering plant
<i>Cymbalaria muralis</i> P. Gaertn., B. Mey. & Scherb.	Ivy-leaved Toadflax	flowering plant
<i>Linaria vulgaris</i> Mill.	Common Toadflax	flowering plant
<i>Plantago lanceolata</i> L.	Ribwort Plantain	flowering plant
<i>Plantago major</i> L.	Greater Plantain	flowering plant
<i>Hippuris vulgaris</i> L.	Mare's-tail	flowering plant
<i>Callitriche</i> L.	Water-Starwort	flowering plant
<i>Scrophularia auriculata</i> L.	Water Figwort	flowering plant
<i>Scrophularia nodosa</i> L.	Common Figwort	flowering plant
<i>Buddleja davidii</i> Franch.	Butterfly-bush	flowering plant
<i>Stachys palustris</i> L.	Marsh Woundwort	flowering plant
<i>Stachys sylvatica</i> L.	Hedge Woundwort	flowering plant
<i>Ballota nigra</i> L.	Black Horehound	flowering plant
<i>Lamium album</i> L.	White Dead-nettle	flowering plant
<i>Lamium purpureum</i> L.	Red Dead-nettle	flowering plant
<i>Ajuga reptans</i> L.	Bugle	flowering plant
<i>Glechoma hederacea</i> L.	Ground-ivy	flowering plant
<i>Odontites vernus</i> (Bellardi) Dumort.	Red Bartsia	flowering plant

<i>Ilex aquifolium</i> L.	Holly	flowering plant
<i>Arctium</i> L.	Burdock	flowering plant
<i>Arctium lappa</i> L.	Greater Burdock	flowering plant
<i>Arctium minus</i> (Hill) Bernh.	Lesser Burdock	flowering plant
<i>Cirsium arvense</i> (L.) Scop.	Creeping Thistle	flowering plant
<i>Cirsium palustre</i> (L.) Scop.	Marsh Thistle	flowering plant
<i>Cirsium vulgare</i> (Savi) Ten.	Spear Thistle	flowering plant
<i>Centaurea nigra</i> L.	Common Knapweed	flowering plant
<i>Lapsana communis</i> L.	Nipplewort	flowering plant
<i>Hypochaeris radicata</i> L.	Cat's-ear	flowering plant
<i>Leontodon autumnalis</i> L.	Autumn Hawkbit	flowering plant
<i>Leontodon hispidus</i> L.	Rough Hawkbit	flowering plant
<i>Picris echioides</i> L.	Bristly Oxtongue	flowering plant
<i>Sonchus arvensis</i> L.	Perennial Sow-thistle	flowering plant
<i>Sonchus asper</i> (L.) Hill	Prickly Sow-thistle	flowering plant
<i>Sonchus oleraceus</i> L.	Smooth Sow-thistle	flowering plant
<i>Lactuca serriola</i> L.	Prickly Lettuce	flowering plant
<i>Mycelis muralis</i> (L.) Dumort.	Wall Lettuce	flowering plant
<i>Taraxacum</i> F.H. Wigg.	Dandelion Agg.	flowering plant
<i>Taraxacum officinale</i> agg.	Dandelion	flowering plant
<i>Crepis capillaris</i> (L.) Wallr.	Smooth Hawk's-beard	flowering plant
<i>Aster novi-belgii</i> L.	Confused Michaelmas-daisy	flowering plant
<i>Bellis perennis</i> L.	Daisy	flowering plant
<i>Tanacetum vulgare</i> L.	Tansy	flowering plant
<i>Artemisia vulgaris</i> L.	Mugwort	flowering plant
<i>Achillea millefolium</i> L.	Yarrow	flowering plant
<i>Leucanthemum vulgare</i> Lam.	Oxeye Daisy	flowering plant
<i>Matricaria discoidea</i> DC.	Pineappleweed	flowering plant
<i>Tripleurospermum inodorum</i> (L.) Sch. Bip.	Scentless Mayweed	flowering plant
<i>Senecio erucifolius</i> L.	Hoary Ragwort	flowering plant
<i>Senecio jacobaea</i> L.	Common Ragwort	flowering plant
<i>Petasites hybridus</i> (L.) P. Gaertn., B. Mey. & Scherb.	Butterbur	flowering plant
<i>Sambucus nigra</i> L.	Elder	flowering plant
<i>Symphoricarpos albus</i> (L.) S.F. Blake	Snowberry	flowering plant

<i>Lonicera periclymenum</i> L.	Honeysuckle	flowering plant
<i>Hedera helix</i> L.	Ivy	flowering plant
<i>Anthriscus sylvestris</i> (L.) Hoffm.	Cow Parsley	flowering plant
<i>Aegopodium podagraria</i> L.	Ground-elder	flowering plant
<i>Oenanthe crocata</i> L.	Hemlock Water-dropwort	flowering plant
<i>Conium maculatum</i> L.	Hemlock	flowering plant
<i>Apium nodiflorum</i> (L.) Lag.	Fool's-water-cress	flowering plant
<i>Heracleum sphondylium</i> L.	Hogweed	flowering plant
<i>Torilis japonica</i> (Houtt.) DC.	Upright Hedge-parsley	flowering plant
<i>Daucus carota</i> L.	Carrot	flowering plant
<i>Symphytum officinale</i> x <i>asperum</i> = <i>S. x uplandicum</i> Nyman	Russian Comfrey	flowering plant
<i>Pentaglottis sempervirens</i> (L.) Tausch ex L.H. Bailey	Green Alkanet	flowering plant
<i>Myosotis scorpioides</i> L.	Water Forget-me-not	flowering plant
<i>Metzgeria furcata</i> (L.) Dumort.	Forked Veilwort	liverwort
<i>Schistidium crassipilum</i> H.H.Blom	Thickpoint Grimmia	moss
<i>Grimmia pulvinata</i> (Hedw.) Sm.	Grey-cushioned Grimmia	moss
<i>Fissidens taxifolius</i> Hedw.	Common Pocket-moss	moss
<i>Barbula convoluta</i> Hedw.	Lesser Bird's-claw Beard-moss	moss
<i>Barbula unguiculata</i> Hedw.	Bird's-claw Beard-moss	moss
<i>Didymodon nicholsonii</i> Culm.	Nicholson's Beard-moss	moss
<i>Tortula marginata</i> (Bruch & Schimp.) Spruce	Bordered Screw-moss	moss
<i>Tortula muralis</i> Hedw.	Wall Screw-moss	moss
<i>Tortula truncata</i> (Hedw.) Mitt.	Common Pottia	moss
<i>Hennediella stanfordensis</i> (Steere) Blockeel	Stanford Screw-moss	moss
<i>Syntrichia intermedia</i> Brid.	Intermediate Screw-moss	moss



<i>Zygodon viridissimus</i> (Dicks.) Brid.	Green Yoke-moss	moss
<i>Orthotrichum affine</i> Brid.	Wood Bristle-moss	moss
<i>Orthotrichum diaphanum</i> Brid.	White-tipped Bristle-moss	moss
<i>Bryum argenteum</i> Hedw.	Silver-moss	moss
<i>Bryum capillare</i> Hedw.	Capillary Thread-moss	moss
<i>Amblystegium serpens</i> (Hedw.) Bruch, Schimp. & W.Guembel	Creeping Feather-moss	moss
<i>Amblystegium varium</i> (Hedw.) Lindb.	Willow Feather-moss	moss
<i>Leptodictyum riparium</i> (Hedw.) Warnst.	Kneiff's Feather-moss	moss
<i>Eurhynchium</i> <i>praelongum</i> (Hedw.) Bruch, Schimp. & W.Guembel	Common Feather-moss	moss
<i>Rhynchostegium</i> <i>confertum</i> (Dicks.) Bruch, Schimp. & W.Guembel	Clustered Feather-moss	moss
<i>Rhynchostegiella tenella</i> (Dicks.) Limpr.	Tender Feather-moss	moss
<i>Oxyrrhynchium hians</i> (Hedw.) Loeske	Swartz's Feather-moss	moss
<i>Brachythecium albicans</i> (Hedw.) Bruch, Schimp. & W.Guembel	Whitish Feather-moss	moss
<i>Brachythecium</i> <i>rutabulum</i> (Hedw.) Bruch, Schimp. & W.Guembel	Rough-stalked Feather-moss	moss
<i>Calliergonella cuspidata</i> (Hedw.) Loeske	Pointed Spear-moss	moss
<i>Hypnum cupressiforme</i> Hedw.	Cypress-leaved Plait-moss	moss

**Notes:**

- \*1 A planted specimen of Black Poplar (*Populus nigra*) beside the Watersedge Estate adjacent to the Bonesgate Stream, may belong to the 'native' subspecies '*betulifolia*'. However, this area of land was not examined in any detail, as it was added to the area to be covered by the management plan after field surveys has been completed. This therefore requires confirmation.

- \*2 In the same area of land as the above, a planted tree of what appears to be the '*fastigiata*' variety of *Quercus robur* was noted ('Cypress Oak' in Mitchell, 1978).

## Fauna

### Vertebrates

#### Birds

The list of birds has been compiled from sightings by Karl Crowther (KAC) during 2004 whilst undertaking the habitat survey, together with information supplied by Paul Brayshaw (PB) outlining birds noted by him along the Hogsmill during October 2004. A few additional records have been obtained from the Surrey Wildlife Trust (SWT) survey of the Hogsmill during July of 1998. A single additional record (for "Redshank") has been gleaned from the Environmental Report of the Hogsmill River Rehabilitation Project (Anon, 2005), which includes some land outside the Local Nature Reserve boundary, and so could relate to this area instead. Records from Timothy Tompkins since 2007 have been added to the list. Some records just relate to birds flying over the reserve and aren't necessarily breeding residents or common visitors.

Latin name	Common Name
<i>Cygnus olor</i>	Mute Swan
<i>Anser anser</i> (Linnaeus, 1758)	Greylag Goose
<i>Branta canadensis</i> (Linnaeus, 1758)	Canada Goose
<i>Branta bernicla</i> (Linnaeus, 1758)	Brent Goose
<i>Aix galericulata</i> (Linnaeus, 1758)	Mandarin Duck
<i>Anas penelope</i> Linnaeus, 1758	Wigeon
<i>Anas crecca</i> Linnaeus, 1758	Teal
<i>Anas platyrhynchos</i> Linnaeus, 1758	Mallard
<i>Aythya ferina</i> (Linnaeus, 1758)	Pochard
<i>Aythya fuligula</i> (Linnaeus, 1758)	Tufted Duck
<i>Oxyura jamaicensis</i> (Gmelin, 1789)	Ruddy Duck
<i>Ardea cinerea</i> Linnaeus, 1758	Grey Heron
<i>Egretta garzetta</i> (Linnaeus, 1766)	Little Egret
<i>Phasianus colchicus</i> Linnaeus, 1758	Pheasant
<i>Tachybaptus ruficollis</i> (Pallas, 1764)	Little Grebe
<i>Phalacrocorax carbo</i> (Linnaeus, 1758)	Cormorant
<i>Accipiter nisus</i> (Linnaeus, 1758)	Sparrowhawk
<i>Buteo buteo</i> (Linnaeus, 1758)	Buzzard
<i>Falco tinnunculus</i> Linnaeus, 1758	Kestrel
<i>Falco columbarius</i> Linnaeus, 1758	Merlin
<i>Falco subbuteo</i> Linnaeus, 1758	Hobby
<i>Falco peregrinus</i> Tunstall, 1771	Peregrine
<i>Rallus aquaticus</i> (Linnaeus, 1758)	Water Rail
<i>Gallinula chloropus</i> (Linnaeus, 1758)	Moorhen
<i>Fulica atra</i> Linnaeus, 1758	Coot
<i>Pluvialis apricaria</i> (Linnaeus, 1758)	Golden Plover
<i>Vanellus vanellus</i> (Linnaeus, 1758)	Lapwing

<i>Calidris alpina</i> (Linnaeus, 1758)	Dunlin
<i>Gallinago gallinago</i> (Linnaeus, 1758)	Snipe
<i>Scolopax rusticola</i> Linnaeus, 1758	Woodcock
<i>Numenius phaeopus</i> (Linnaeus, 1758)	Whimbrel
<i>Numenius arquata</i> (Linnaeus, 1758)	Curlew
<i>Tringa totanus</i> (Linnaeus, 1758)	Redshank
<i>Tringa nebularia</i> (Gunnerus, 1767)	Greenshank
<i>Tringa ochropus</i> Linnaeus, 1758	Green Sandpiper
<i>Larus melanocephalus</i> Temminck, 1820	Mediterranean Gull
<i>Larus canus</i> Linnaeus, 1758	Common Gull
<i>Larus argentatus</i> Pontoppidan, 1763	Herring Gull
<i>Rissa tridactyla</i> (Linnaeus, 1758)	Kittiwake
<i>Sterna hirundo</i> Linnaeus, 1758	Common Tern
<i>Columba oenas</i> Linnaeus, 1758	Stock Dove
<i>Columba palumbus</i> Linnaeus, 1758	Woodpigeon
<i>Streptopelia decaocto</i> (Frivaldszky, 1838)	Collared Dove
<i>Streptopelia turtur</i> (Linnaeus, 1758)	Turtle Dove
<i>Cuculus canorus</i> Linnaeus, 1758	Cuckoo
<i>Athene noctua</i> (Scopoli, 1769)	Little Owl
<i>Strix aluco</i> Linnaeus, 1758	Tawny Owl
<i>Apus apus</i> (Linnaeus, 1758)	Swift
<i>Alcedo atthis</i> (Linnaeus, 1758)	Kingfisher
<i>Picus viridis</i> Linnaeus, 1758	Green Woodpecker
<i>Dendrocopos major</i> (Linnaeus, 1758)	Great Spotted Woodpecker
<i>Dendrocopos minor</i> (Linnaeus, 1758)	Lesser Spotted Woodpecker
<i>Acrocephalus schoenobaenus</i> (Linnaeus, 1758)	Sedge Warbler
<i>Acrocephalus scirpaceus</i> (Hermann, 1804)	Reed Warbler
<i>Phylloscopus collybita</i> (Vieillot, 1817)	Chiffchaff
<i>Phylloscopus trochilus</i> (Linnaeus, 1758)	Willow Warbler
<i>Alauda arvensis</i> Linnaeus, 1758	Skylark
<i>Riparia riparia</i> (Linnaeus, 1758)	Sand Martin
<i>Hirundo rustica</i> Linnaeus, 1758	Swallow
<i>Delichon urbicum</i> (Linnaeus, 1758)	House Martin
<i>Anthus pratensis</i> (Linnaeus, 1758)	Meadow Pipit
<i>Motacilla flava</i> Linnaeus, 1758	Yellow Wagtail
<i>Motacilla cinerea</i> Tunstall, 1771	Grey Wagtail
<i>Motacilla alba</i> subsp. <i>alba</i> Linnaeus, 1758	White Wagtail

<i>Motacilla alba subsp. yarrellii</i> Gould, 1837	Pied Wagtail
<i>Troglodytes troglodytes</i> (Linnaeus, 1758)	Wren
<i>Erithacus rubecula</i> (Linnaeus, 1758)	Robin
<i>Turdus merula</i> Linnaeus, 1758	Blackbird
<i>Turdus pilaris</i> Linnaeus, 1758	Fieldfare
<i>Turdus philomelos</i> Brehm, 1831	Song Thrush
<i>Turdus iliacus</i> Linnaeus, 1766	Redwing
<i>Turdus viscivorus</i> Linnaeus, 1758	Mistle Thrush
<i>Muscicapa striata</i> (Pallas, 1764)	Spotted Flycatcher
<i>Sylvia atricapilla</i> (Linnaeus, 1758)	Blackcap
<i>Sylvia borin</i> (Boddaert, 1783)	Garden Warbler
<i>Sylvia curruca</i> (Linnaeus, 1758)	Lesser Whitethroat
<i>Sylvia communis</i> Latham, 1787	Whitethroat
<i>Regulus regulus</i> (Linnaeus, 1758)	Goldcrest
<i>Regulus ignicapilla</i> (Temminck, 1820)	Firecrest
<i>Aegithalos caudatus</i> (Linnaeus, 1758)	Long-tailed Tit
<i>Cyanistes caeruleus</i> (Linnaeus, 1758)	Blue Tit
<i>Parus major</i> Linnaeus, 1758	Great Tit
<i>Periparus ater</i> (Linnaeus, 1758)	Coal Tit
<i>Sitta europaea</i> Linnaeus, 1758	Nuthatch
<i>Certhia familiaris</i> Linnaeus, 1758	Treecreeper
<i>Garrulus glandarius</i> (Linnaeus, 1758)	Jay
<i>Pica pica</i> (Linnaeus, 1758)	Magpie
<i>Corvus monedula</i> Linnaeus, 1758	Jackdaw
<i>Corvus frugilegus</i> Linnaeus, 1758	Rook
<i>Corvus corone</i> Linnaeus, 1758	Carrion Crow
<i>Sturnus vulgaris</i> Linnaeus, 1758	Starling
<i>Passer domesticus</i> (Linnaeus, 1758)	House Sparrow
<i>Acanthis flammea</i> (Linnaeus, 1758)	Common (Mealy) Redpoll
<i>Linaria cannabina</i> (Linnaeus, 1758)	Linnet
<i>Spinus spinus</i> (Linnaeus, 1758)	Siskin
<i>Fringilla coelebs</i> Linnaeus, 1758	Chaffinch
<i>Carduelis chloris</i> (Linnaeus, 1758)	Greenfinch
<i>Carduelis carduelis</i> (Linnaeus, 1758)	Goldfinch
<i>Loxia curvirostra</i> Linnaeus, 1758	Common Crossbill
<i>Pyrrhula pyrrhula</i> (Linnaeus, 1758)	Bullfinch
<i>Emberiza schoeniclus</i> (Linnaeus, 1758)	Reed Bunting

**Note:** The record for Redshank\* may have originated through confusion with the vascular plant *Persicaria maculosa* with the same vernacular name within records held on Surrey Wildlife Trust's Recorder database.

## Mammals

Records from KAC, 2004; Watersedge Bat Survey (Steve Bailey, 2005); Dave Williams (pers. comm.) Peter Howarth and Stewart Cocker survey 2015.

### Key to status:

WCA Schedule 5 = Species listed on Schedule 5 of the Wildlife and Countryside Act, 1981

ECHD (IV) = Species listed on Annex IV of the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive')

Common name	Latin name	Conservation status	Comments
Brown Rat	<i>Rattus norvegicus</i>		(HM) (DW)
Fox	<i>Vulpes vulpes</i>		Seen occasionally (KAC) after heavy rain (few people about) (HM)
Grey Squirrel	<i>Sciurus carolinensis</i>		Fairly common (both sites) (KAC)
Badger	<i>Meles meles</i>	Protection of Badgers Act, 1992, and the Wildlife and Countryside Act, 1981	
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	WCA Schedule 5; ECHD (IV)	Frequent foraging activity at Watersedge (SB)
Noctule	<i>Nyctalus noctula</i>	WCA Schedule 5; ECHD (IV)	Site represents part of regularly-used flight line (SB)
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	WCA Schedule 5; ECHD (IV)	Foraging activity at Watersedge (SB)
Non-determined myotis bat* <sup>1</sup>	<i>Myotis</i> sp.	Not known (but all bats are WCA Schedule 5 and ECHD (IV))	Possible record of single bat in transit at Watersedge (SB)

### Notes:

\*<sup>1</sup> This is considered most likely to be Daubenton's (*Myotis daubentonii*)

## Fish

Records extracted from Environmental Report of Hogsmill River Rehabilitation Project (Anon, 2005) and EA fisheries survey at Chamber Mead, Oakland Way and Worcester Park Road (2016).

### Key to status:

ECHD (II) = Listed on an Annex II to the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').

Common name	Latin name
Bullhead	<i>Cottus gobio</i>
European Eel	<i>Anguilla anguilla</i>
3-spined Stickleback	<i>Gasterosteus aculeatus</i>
Minnow	<i>Phoxinus phoxinus</i>
Chub	<i>Squalius cephalus</i>
Rudd	<i>Scardinius erythrophthalmus</i>
Dace	<i>Leuciscus leuciscus</i>
Gudgeon	<i>Gobio gobio</i>
Roach	<i>Rutilus rutilus</i>

## Herptiles

No records known (this undoubtedly reflects a lack of records rather than an absence of herptiles).



## Invertebrates

Records come mainly from the Surrey Wildlife Trust (SWT) SNCI survey of 1998, with a few from Stewart Cocker (SC) and Karl Crowther (KAC) during 2004. In addition, a small number of records from 2005 from Martin Skipper (MS) and Ian Menzies (ISM). The butterfly transect has been walked since 2011 by volunteers including Bob and Carole Guille, Pam Harwood, Pat Lowe and Robb Reeves.

### Key to Status:

RDB = Nationally rare species, recorded in 1-15 national hectads (RDB1 = endangered; RDB2 = vulnerable; RDB3 = rare).

<b>Odonata (Dragonflies and Damselflies)</b>	
<b>Latin Name</b>	<b>Common Name</b>
<i>Calopteryx splendens</i> (Harris, 1782)	Banded Demoiselle
<i>Calopteryx virgo</i> (Linnaeus, 1758)	Beautiful Demoiselle
<i>Coenagrion puella</i> (Linnaeus, 1758)	Azure Damselfly
<i>Enallagma cyathigerum</i> (Charpentier, 1840)	Common Blue Damselfly
<i>Sympetrum striolatum</i>	Common Darter
<i>Pyrrhosoma nymphula</i>	Large Red Damselfly
<b>Coleoptera (Beetles)</b>	
<i>Lucanus cervus</i> (Linnaeus, 1758)	Stag Beetle
<i>Clitosthetus arcuatus</i>	A ladybird
<i>Coccinella 7-punctata</i>	7-spot Ladybird
<b>Lepidoptera (Butterflies and moths)</b>	
<i>Gonepteryx rhamni</i> (Linnaeus, 1758)	Brimstone
<i>Anthocharis cardamines</i> subsp. <i>britannica</i> Verity, 1908	Orange-tip
<i>Thecla betulae</i> (Linnaeus, 1758)	Brown Hairstreak
<i>Satyrrium w-album</i> (Knoch, 1782)	White-letter Hairstreak
<i>Lycaena phlaeas</i> (Linnaeus, 1761)	Small Copper
<i>Polyommatus icarus</i> (Rottemburg, 1775)	Common Blue
<i>Celastrina argiolus</i> subsp. <i>britannica</i> (Verity, 1919)	Holly Blue
<i>Vanessa atalanta</i> (Linnaeus, 1758)	Red Admiral
<i>Aglaia urticae</i> (Linnaeus, 1758)	Small Tortoiseshell
<i>Polygonia c-album</i> (Linnaeus, 1758)	Comma
<i>Pararge aegeria</i> subsp. <i>oblita</i> Harrison, 1949	Speckled Wood

<i>Maniola jurtina</i> (Linnaeus, 1758)	Meadow Brown
<i>Aphantopus hyperantus</i> (Linnaeus, 1758)	Ringlet
<i>Polygonia c-album</i>	Comma
<i>Pieris napi</i>	Green-veined white
<i>Thymelicus sylvestris</i>	Small Skipper
<i>Ochlodes sylvanus</i>	Large Skipper
<i>Thymelicus lineola</i>	Essex Skipper
<i>Pieris rapae</i>	Small White
<i>Pieris brassicae</i>	Large White
<i>Argynnis paphia</i>	Silver Washed Fritillary
<i>Limenitis camilla</i>	White Admiral
<i>Coenonympha pamphilus</i>	Small Heath
<i>Melanargia galathea</i>	Marbled White
<i>Aglais io</i>	Peacock
<i>Pyronia tithonus</i>	Gatekeeper
<b>Hemiptera (Bugs)</b>	
<i>Velia caprai</i>	Water Cricket
<b>Hymenoptera (Ants, Bees, Wasps)</b>	
<i>Vespula vulgaris</i>	Common wasp
<b>Crustaceans</b>	
<i>Gammarus pulex</i>	Freshwater Shrimp
<b>Annelids</b>	
<i>Dina lineata</i>	A leech

## Appendix IV – Byelaws

The following byelaws are for Alexandra Recreation Ground, Auriol Recreation Ground, Court Recreation Ground, Ewell Court Recreation Ground (Poole Road), Gibraltar Recreation Ground, Rosebery Park, Shadbolt Park, and the Hogsmill Open Space.

With respect to **pleasure grounds and open spaces** made under Section 164 of the Public Health Act, 1875, and Section 15 of the Open Spaces Act, 1906, by the Mayor Aldermen and Burgesses of the Borough of Epsom and Ewell acting by the Council with respect to the PLEASURE GROUNDS AND OPEN SPACES.

1. Throughout these Byelaws the expression "the Council" means the Mayor, Aldermen and Burgesses of the Borough of Epsom and Ewell acting by the Council and the expression "The pleasure ground" means except where inconsistent with the context, each of the pleasure grounds and open spaces known as Alexandra Road, Auriol, Court, Ewell Court, and Gibraltar Recreation Grounds, Rosebery Park, Shadbolt Park and Hogsmill Open Space.

2. An act necessary to the proper execution of his duty in the pleasure ground by an officer of the Council or by any person employed by the Council shall not be deemed an offence against these Byelaws.

3. A person shall not in the pleasure ground

(a) carelessly or negligently deface, injure or destroy any wall or fence in or enclosing the pleasure ground, or any building, barrier, railing, post or seat or any erection or ornament;

(b) climb any wall or fence in or enclosing the pleasure ground, or any tree, or any barrier, railing, post, or other erection;

(c) wilfully, carelessly, or negligently remove or displace any barrier, railing, post or seat, or any part of any erection or ornament, or any implement, provided for use in the laying out or maintenance of the pleasure ground.

4. A person shall not bring or cause to be brought into the pleasure ground any cattle, sheep, goats, or pigs, or any beast of draught or burden, unless, in pursuance of an agreement with the Council, or otherwise in the exercise of any lawful right or privilege, he is authorised to do so.

5.

(a) A person shall not ride any bicycle or horse in the pleasure ground.

(b) A person shall not bring or cause or be brought into the pleasure ground any barrow, truck, machine, or vehicle, unless intended for the conveyance of a child or children or an invalid.

Provided that, where the Council set apart a space in the pleasure ground for the use of vehicles, this Byelaw shall not be deemed to prohibit the driving or wheeling in or to that space of vehicles of the class for which it is set apart.

Provided also that this Byelaw shall not be deemed to prohibit the wheeling of any bicycle or other similar machine on any footpath in the pleasure ground.

**6.** A person who brings a machine or vehicle into the pleasure ground shall not wheel or station it over or upon

**(i)** any flower bed, shrub, or plant, or any ground in course of preparation as a flower bed, or for the growth of any tree, shrub, or plant;

**(ii)** any part of the pleasure ground where the Council by a notice board affixed or set up in some conspicuous position in the pleasure ground prohibit its being wheeled or stationed.

**7.** A person shall not in the pleasure ground walk, run, stand, sit, or lie upon

**(i)** any grass, turf, or other place where adequate notice to keep off such grass, turf, or other place shall be placed.

Provided that such notice shall not apply to more than one-sixth of the area of the pleasure ground.

**(ii)** any flower bed, shrub, or plant, or any ground in course of preparation as a flower bed, or for the growth of any tree, shrub or plant.

**8.** A person shall not in the pleasure ground

**(i)** remove, cut, or displace any soil, turf, or plant;

**(ii)** pluck any bud, blossom, flower, or leaf of any tree, shrub, or plant.

**9.** A person shall not in the pleasure grounds known as Ewell Court Recreation Ground, Rosebery Park, and Shadbolt Park

**(i)** bathe, or wash, in the ornamental lake, or other water;

**(ii)** wilfully, carelessly, or negligently foul or pollute any such water;

**(iii)** take, injure, or destroy, or attempt to take, injure, or destroy any fish in any such water, or wilfully disturb or worry any waterfowl; provided that this Byelaw shall not be deemed to apply in any case where a person has obtained the permission of the Council to fish in the lake in the pleasure ground known as Ewell Court Recreation Ground.

**10.** A person shall not cause or suffer any dog belonging to him or in his charge to enter or remain in the pleasure ground, unless such dog be and continue to be under proper control, and be effectually restrained from causing annoyance to any person, and from worrying or disturbing any animal or waterfowl, and from entering any ornamental water.

**11.** Where the Council set apart any such part of the pleasure ground as may be fixed by the Council, and described in a notice board affixed or set up in some conspicuous position in the pleasure ground, for the purpose of any game specified in the notice board, which by reason of the rules or manner of playing, or for the prevention of damage, danger, or discomfort to any person in the pleasure ground may necessitate, at any time during the continuance of the game, the exclusive use by the player or players of any space in such part of the pleasure ground - a person shall not in any space elsewhere in the pleasure ground play or take part in any game so specified in such a manner as to exclude persons not playing or taking part in the game from the use of such space.

**12.** A person resorting to the pleasure ground and playing or taking part in any game for which the exclusive use of any space in the pleasure ground has been set apart shall

- (i)** not play on the space any game other than the game for which it is set apart;
- (ii)** in preparing for playing and in playing, use reasonable care to prevent undue interference with the proper use of the pleasure ground by other persons;
- (iii)** when the space is already occupied by other players not begin to play thereon without their permission;
- (iv)** where the exclusive use of the space has been granted by the Council for the playing of a match, not play on that space later than a quarter of an hour before the time fixed for the beginning of the match unless he is taking part therein;
- (v)** except where the exclusive use of the space has been granted by the Council for the playing of a match in which he is taking part, not use the space for a longer time than two hours continuously, if any other player or players make known to him a wish to use the space.

**13.** A person shall not in any part of the pleasure ground which may have been set apart by the Council for any game play or take part in any game when the state of the ground or other cause makes it unfit for use and a notice is set up in some conspicuous position prohibiting play in that part of the pleasure ground.

**14.** A person shall not in the pleasure ground

- (i)** except as hereinafter provided erect any post, rail, fence, pole, tent, booth, stand, building, or other structure.

Provided that this prohibition shall not apply where upon an application to the Council they grant permission to erect any post, rail, fence, pole, tent, booth, stand, building, or other structure, upon such occasion and for such purposes as are specified in the application;

- (ii)** beat, shake, sweep, brush, or cleanse any carpet, drugget, rug, or mat, or any other fabric retaining dust or dirt;
- (iii)** hang, spread, or deposit any linen or other fabric for drying or bleaching.

**15.** A person shall not in the pleasure ground wilfully obstruct, disturb, interrupt, or annoy any other person in the proper use of the pleasure ground, or wilfully obstruct, disturb, or interrupt any officer of the Council in the proper execution of his duty, or any person or servant of any person employed by the Council in the proper execution of any work in connection with the laying out or maintenance of the pleasure ground.

**16.** Every person who shall offend against any of these Byelaws shall be liable on summary conviction to a fine not exceeding two pounds.

**17.** Every person who shall infringe any Byelaw for the regulation of the pleasure ground may be removed therefrom by any officer of the Council, or by any constable, in any one of the several cases hereinafter specified: that is to say -

- (i)** Where the infraction of the Byelaw is committed within the view of such officer or constable, and the name and residence of the person infringing the

Byelaws are unknown and cannot be readily ascertained by such officer or constable;

(ii) where the infraction of the Byelaw is committed within the view of such officer or constable, and, from the nature of such infraction, or from any other fact of which such officer or constable may have knowledge, or of which he may be credibly informed there may be reasonable ground for belief that the continuance in the pleasure ground of the person infringing the Byelaw may result in another infraction of a Byelaw, or that the removal of such person from the pleasure ground is otherwise necessary as a security for the proper use and regulation thereof.

The Common Seal of the Mayor Aldermen and Burgesses of the Borough of Epsom and Ewell was here-unto affixed in pursuance of a resolution passed at a meeting of the Council duly convened and held on the 26th day of July, 1949, in the presence of

F. TOMLIN,  
Mayor.

EDWARD MOORE,  
Town Clerk.

I hereby confirm the foregoing byelaws and fix the date upon which they are to come into operation as the 1st November, 1949.

J. CHUTER EDE,  
One of His Majesty's  
Principal Secretaries of State.  
Whitehall, 1st October, 1949

## **BYELAWS**

Made under Section 164 of the Public Health Act 1875 Section 15 of the Open Spaces Act 1906 and Section 92 and Schedule 3 of the Criminal Justice Act 1967, by the Mayor Aldermen and Burgesses of the Borough of Epsom and Ewell acting by the Council with respect to the PLEASURE GROUNDS AND OPEN SPACES.

1. In these Byelaws 'the Byelaws of 1949' means the series of Byelaws made by the Council of the Borough of Epsom and Ewell on the 26th day of July, 1949, and confirmed by the Home Secretary on the 1st day of October, 1949.
2. From and after the date upon which these Byelaws come into operation for the words 'two pounds' contained in Byelaw 16 of the Byelaws of 1949 there shall be substituted the words **'twenty pounds'**.
3. These Byelaws shall be read and construed as one with the Byelaws of 1949. THE COMMON SEAL of the Mayor Aldermen and Burgesses of the Borough of Epsom and Ewell was hereunto affixed in pursuance of A resolution passed

at a meeting of the Council duly convened and held on the 12th day of December, 1968 in the presence of

T. G. HOILAND  
Mayor.

EDWARD MOORE  
Town Clerk.

The Secretary of State this day confirmed the foregoing byelaws and fixed the date on which they are come into operation as 1st June 1969.

N. CAIRNCROSS  
An Assistant Under Secretary of State  
Home Office  
Whitehall  
29th April, 1969

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**EPSOM & EWELL LOCAL BIODIVERSITY ACTION PLAN - ANNUAL UP-DATE  
2016**

<u>Report of the:</u>	Head of Place Development
<u>Contact:</u>	Mark Berry, Stewart Cocker
Urgent Decision?(yes/no)	no
If yes, reason urgent decision required:	
<u>Annexes/Appendices</u> (attached):	<u>Annexe 1</u> - Local Biodiversity Action Plan – Annual Update 2016
<u>Other available papers</u> (not attached):	Epsom and Ewell Local Biodiversity Plan 2010-2020

**REPORT SUMMARY**

**A report on progress during 2016 in implementing the Epsom & Ewell Local Biodiversity Action Plan 2010-2020.**

**RECOMMENDATION (S)**

*Notes*

- (1) That the Committee notes progress during 2016 in implementing the Epsom and Ewell Local Biodiversity Plan.**

**1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 The Epsom & Ewell Local Biodiversity Action Plan addresses all four of the Council's Key Priorities:
- 1.1.1 "Keeping the Borough Clean and Green" – by guiding the implementation of open space management plans.
  - 1.1.2 "Supporting our Community" – by encouraging and supporting volunteers, and encouraging healthier life styles through regular access to nature.
  - 1.1.3 "Managing our Resources" – by helping to ensure the sustainable management of the Borough's environmental resources (Ecosystem Services).

- 1.1.4 “Supporting Businesses and our Local Economy” – by guiding planning policy and helping maintain a green and attractive place to live and work.

## 2 Background

- 2.1 The Borough’s first biodiversity action plan was produced by the Epsom & Ewell Local Biodiversity Action Plan Working Group and approved by the Council in 2010.
- 2.2 The plan contains 7 objectives, comprising 23 targets with 45 actions. It should be noted that the 'Working Group' has no set budget to directly assist in implementing the plan and consequently is restricted to a coordinating/prioritising role with the plan as an essential guide and tool. That said, all members of the 'Working Group' continue to be able to contribute to the implementation of the plan through the course of their normal duties.
- 2.3 The plan does have suggested dates for the achievement of actions which assists in prioritisation but does not provide a measure of success or failure, especially given the current time and resource constraints on those working to implement the plan.
- 2.4 The report attached at Annexe 1 summarises progress made during 2016 against the plan’s seven objectives.

## 3 Proposals

- 3.1 The Committee is asked to note progress during 2016 in implementing the Epsom and Ewell Local Biodiversity Plan. The report will be posted on the biodiversity pages of the Council’s website.

## 4 Financial and Manpower Implications

- 4.1 None for the purposes of this report
- 4.2 **Chief Finance Officer’s comments:** None for the purposes of this report.

## 5 Legal Implications (including implications for matters relating to equality)

- 5.1 The local authority has a duty under section 40 of the Natural Environment and Rural Communities Act 2006 to have regard when exercising its functions, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 5.2 **Monitoring Officer’s comments:** The legal issues have been addressed in the body of the report.

## 6 Sustainability Policy and Community Safety Implications

- 6.1 None for the purposes of this report

## **7 Partnerships**

- 7.1 The Working Group although not a formal partnership includes Surrey Wildlife Trust, Surrey County Council and the Lower Mole Partnership.

## **8 Risk Assessment**

- 8.1 If we do not publish progress in implementing our biodiversity action plan we could be deemed to be failing in our 'Biodiversity Duty' as a public body.

## **9 Conclusion and Recommendations**

- 9.1 Posting the report on the Epsom & Ewell Borough Council website is the most cost effective way of keeping residents informed about progress in implementing the plan and encouraging their active involvement and it is recommended that it is published on the biodiversity pages alongside the previous reports.

**WARD(S) AFFECTED: (All Wards);**

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# Epsom & Ewell

## Biodiversity Action Plan



Progress report for 2016

## **Introduction**

During 2016 the Epsom & Ewell Local Biodiversity Action Plan (LBAP) Working Group oversaw significant progress in implementing the plan which can be viewed here:

<http://www.epsom-ewell.gov.uk/EEBC/Environment/Biodiversity.htm>

## **The importance of Biodiversity:**

Biodiversity encompasses the whole variety of life on Earth. It includes all species of plants and animals, their genetic variation, and the complex ecosystems of which they are part. It is not restricted to rare or threatened species but includes the whole of the natural world from the commonplace to the critically endangered.

The intricate network of ecosystems, habitats and species comprising biodiversity provides the support systems that sustain human existence. It provides many of the essentials of life, our oxygen, water, food, clothing, health and relaxation. Consequently, humanity must adopt sustainable ways of living that ensure the protection of biodiversity.

Today we live in a world where the economic activities of an ever increasing human population threaten biodiversity which is being lost at an ever increasing rate. Britain alone is known to have lost 100 species during the twentieth century and today over 40% of priority habitats and 30% of priority species are declining nationally.

There is a broad consensus around the world that we need to act now, or risk handing our children a world we would not recognise as planet Earth!

**The 'Working Group' currently comprises the following individuals:**

Mark Berry: Head of Place Development, Epsom & Ewell Borough Council

Stewart Cocker: Countryside Manager, Epsom & Ewell Borough Council

Sarah Clift: Senior Countryside Officer, Epsom & Ewell Borough Council

Peter Howarth: Countryside Officer (Ecologist) Epsom & Ewell Borough Council

Jeremy Young: Tree Officer, Epsom & Ewell Borough Council

John Edwards: County Ecologist, Surrey County Council

Alastair Kirk: Surrey Biological Record Centre Manager, Surrey Wildlife Trust

Conor Morrow: Project Officer, Lower Mole Countryside Partnership

Kevin Morgan: Locally based ecologist and environmental consultant

The plan agreed in 2010 contains 7 objectives, comprising 23 targets with 45 actions. It should be noted that the 'Working Group' has no set budget to directly assist in implementing the plan and consequently is restricted to a coordinating/prioritising role with the plan as an essential guide and tool. That said, members of the 'Working Group' continue to be able to contribute to the implementation of the plan through the course of their normal duties

The plan does have suggested dates for the achievement of actions which assists in prioritisation but does not at this stage provide a measure of success or failure, especially given the current time and resource constraints on those working to implement the plan.

This report summarises progress made during 2016 under the plans seven objectives. Where appropriate updates from previous reports are given along with new items for 2016. **Please note activities reported on can contribute to and be relevant to more than one objective.**

TV presenter and naturalist **Chris Packham** is a wildlife expert, photographer and author with a passionate concern for conservation and the environment. In 2012 Chris agreed to write the foreword for the Epsom & Ewell Local Biodiversity Action Plan.



When you are a kid size matters and thus the magnificent male Stag Beetles emergence was an eagerly anticipated annual event. A nearby street had some monstrous oaks and a diversion from the normal route to school would pay dividends and fill my jam jars. To be fair these creatures have lost none of their allure over the years but now it's not just their size that matters, it's their importance as a flagship species - they along with the Oaks which nourish their peculiar larvae. So I'm not surprised that you have chosen them as your local heroes to champion the Biodiversity Action Plan - and you have impressive numbers of these giants too!

In simple terms any communities' biodiversity is a measure of its health and stability. The more niches that are filled the better the natural machine will function and prosper. Thus nationally, regionally and locally we have constructed plans which aim to protect and enhance the richness of life at these respective levels. All have their roles but local strategies are tremendously important because they are implicitly governed by those who live, work and influence that community - these are formulated, enacted and enjoyed by those 'on the ground'. They are about 'personal wildlife conservation'!

In these days where doom and gloom are a constant temptation, I remain optimistic about our abilities to make a difference because we have such a well-stocked armory of abilities to effectively conserve life. We have studied it, tested it, we know what we need to do. The introduction of grazing on Epsom Common has seen superb revivals in butterfly and plant diversity and even established a future for a population of the charismatic Yellowhammer. This has only been achieved by many years of tireless





volunteer endeavor - an essential component of contemporary conservation.

And ultimately this success is good for us to. We uniquely have a conscience so we have to try to do what we know is right, but also we can enjoy a better quality of life as a result, the sight of a Stag Beetle whirring across the dusk sky or the charming song of the Yellowhammer with its 'little bit of bread but no cheese' can make your day. And that's the real key here; it will make your day and not mine, because the borough of Epsom and Ewell is yours. You mend it, restore it and protect it and you can revel, be proud of and enjoy it! Superb!

**Chris Packham 2012**

## Progress during 2016

**Objective 1:** *Develop partnerships to ensure that the conservation and enhancement of biodiversity in Epsom and Ewell is maintained in the long term.*

**Update:-** During 2016 the Surrey Local Nature Partnership (SNP)-Biodiversity Working Group continued in its role of assisting the SNP board with identifying biodiversity priorities and to promote better coordination of biodiversity initiatives across the County. EEBC are represented on the Group. Priorities for the working group are how best to achieve the governments 'Biodiversity 2020' targets, formal adoption and revision of Biodiversity Opportunity Areas (BOA's), revision of criteria and formalising the process of designating Sites of Nature Conservation Importance (SNCI) and supporting volunteer recording efforts across the County. Following the production by Surrey Wildlife Trust of BOA's policy statements in 2015, the working group has been investigating ways of implementing a delivery strategy for BOA's, which in Epsom & Ewell includes woodland and a chalk grassland BOA. BOA are recognised in EEBC planning policy and the policy statements are set to play a role in defining the Boroughs forthcoming 'Green Infrastructure' policy.



Pond Wood in Horton Country Park Local Nature Reserve, designated 'Ancient Woodland', SNCI and part of a Surrey Woodland BOA

**Update:-** The proposed service level agreement (SLA) between the Surrey Biological Records Centre and Epsom & Ewell Borough Council (EEBC) has been progressed during 2016 and is set to be agreed in 2017. This builds on the 2015 no cost data exchange agreed for the Borough's Open Spaces, with all newly recorded data sent to the records centre from which it is freely accessible by EEBC. The aims of the proposed SLA are to improve knowledge and information exchange regarding all species and in particular European protected species which should assist with planning applications, Surrey BAP habitat mapping and invasive exotic species.

**Update:-** EEBC continues to strongly support local groups actively involved in conserving and enhancing biodiversity within the Borough. For example, the Epsom Common Association, Nonsuch Voles and the Lower Mole Partnership (LMP), formerly the Lower Mole Countryside Management Project. The name change reflects changes made following a review of the Surrey Countryside Management Projects. There is now one board overseeing the work of the Lower Mole, Downlands and Heathlands Partnerships with EEBC continuing to be a funding partner in the Lower Mole Partnership. The EEBC Countryside Team has continued with a weekly volunteer conservation task held on Thursdays, during 2016, 419.5 volunteer days were recorded, carrying out practical conservation work closely aligned to the LBAP which has a value of approximately £23,072 using the Heritage Lottery valuation of unskilled volunteer work at £55 per day per volunteer (Please note some work is classed as skilled and could command a higher value of £100 per day per volunteer)



Volunteers from the South East Rivers Trust  
restoring the Hogsmill River March 2016



Volunteers from the Lower Mole Partnership on  
Epsom Common LNR constructing a new gate to  
extend the Great Pasture grazing area spring 2016





Epsom Common Association ECOVOL John Turner moves charcoal made on Epsom Common LNR to the store at Horton Country Park LNR summer 2016



Countryside Team Volunteers cutting and clearing encroaching scrub to conserve calcareous grassland at Juniper Hill on Epsom Downs summer 2016



The flower rich calcareous grassland at Juniper Hill is an internationally scarce habitat

**Update:-** During 2014 the Woodland Trust purchased a very large area of land at Langley Bottom Farm to create a First World War memorial woodland. This is a major initiative for the Trust who now have a memorial wood in England, Scotland, Wales and Northern Ireland. The farm is partly in the Boroughs/Districts of Epsom & Ewell, Mole Valley and Reigate & Banstead. The initiative will protect and hopefully

enhance the biodiversity of this land in perpetuity. The Trust has held public consultation events for local residents and has consulted with EEBC and neighbouring districts. In 2015 the Trust were informed by the Forestry Commission that an Environmental Impact Assessment (EIA) was required due the scale of the tree planting proposals. Similarly an EIA has also been requested by the three district planning authorities (Epsom & Ewell, Mole Valley and Reigate & Banstead) for the car parking and visitor centre proposal. The Epsom & Ewell Biodiversity Working Group continues to support the Woodland Trust, by providing the meeting room at West Park Farm, Horton Country. In November 2016 the EEBC Countryside Team Volunteers assisted the Trust by carrying out woodland management work to clear a new path through Great Hurst Wood an Ancient Woodland. Following the successful completion of the EIA the Trust have recommenced tree planting following guidelines that ensure a balance is maintained between new woodland and areas retained as either arable fields to conserve rare arable plants and bird nesting habitat or grazed fields to conserve calcareous grassland.



Countryside Team Volunteers helping the Woodland Trust at Langley Bottom Farm to create a new woodland path autumn 2016

**Update:-** In 2014 the new Surrey Wildlife Trust (SWT) Nature Reserve and SNCI at Priest Hill was opened. This is a huge gain for biodiversity in the Borough. The reserve was set up following negotiations between the Developer, EEBC and SWT and allowed for a small number of houses to be built on 'Green Belt' whilst protecting the vast majority of the land in perpetuity through the creation of the nature reserve which

SWT have agreed to take on and manage. In January 2016 following on from 2015 the EEBC Countryside Team volunteers assisted SWT Ranger Rachael Thornley by planting a new hedge.



Countryside Team Volunteers planting a new hedge at Priest Hill Nature Reserve winter 2016

**Objective 2:** *Ensure the conservation and enhancement of habitats and species, as specified nationally and in the Surrey Habitat Action Plans*

**Update:-** During the Autumn of 2015 Horton Country Park Local Nature Reserve received a potentially very significant habitat enhancement. To assist the developers of the adjacent former West Park Hospital the Council were agreeable to the creation of two off-line balancing ponds to manage excess surface water run-off from the former hospital site that has been redeveloped for housing and is now called Nobel Park. In return the developers agreed to the creation of a new wetland using the Greenman Stream that flows through the Country Park from its source on Epsom and Ashted Commons. Both the balancing ponds and the wetland have the potential to provide a significant habitat enhancement and both will be closely monitored and managed to maximise their benefit. During 2016 nature has started to work its magic! See photos.





New wetland in Horton Country Park LNR immediately after completion November 2015 and August 2016



New balancing pond in Horton Country Park LNR just after construction January 2016 and November 2016

**Update:-** Managing public access plays a very important role in protecting fragile habitats especially on busy urban fringe sites like Epsom Common LNR and Horton Country Park LNR. The provision of good quality footpaths and bridleways is helping to protect the nationally and internationally important wildlife on the Epsom & Ashted Common Site of Special Scientific Interest as well as the rich biodiversity of Horton Country Park LNR. During 2016 volunteers dug a new ditch alongside the recently restored path on Epsom Common to help protect the new path surface and installed new land mark posts helping to bring a sense of place to this very large nature reserve. The creation of woodland edge habitat along Pepys Way also on Epsom Common has brought both ecological benefits but also made for a much more open and safer feeling

experience for walkers along this well used path. New benches alongside paths on the Hogsmill Local Nature Reserve help encourage residents to use the reserve and get closer to nature.



Work taking place to create woodland edge habitat along Pepys Way winter 2016



Hogsmill LNR, one of 4 new benches constructed and installed by Lower Mole Partnership volunteer's summer 2016



Epsom Common LNR new drainage ditch dug by Lower Mole Partnership volunteer's spring 2016



Epsom Common LNR new land mark post being installed by Lower Mole Partnership volunteer's spring 2016

**Update:-** In 2012 EEBC and the City of London paid jointly for a National Vegetation Class (NVC) survey of Epsom and Ashted Commons as a follow up to the 2001 NVC survey. The survey highlighted the progress made in diversifying habitats especially through



the re-introduction of grazing. However, the report also highlighted the continuing loss of areas of species rich grassland to scrub encroachment. To address this the Countryside Team Volunteers commenced a restoration programme during late summer 2013 which is continuing with the aim of both restoring areas and ensuring long term maintenance. This process was continued in 2016 with volunteer's returning to Churchside Meadow, Christchurch Glade, Baron's Meadow, Railway Meadow and for the first time Common Side Meadow.



Epsom Common LNR Common Side  
Meadow species rich grassland restoration  
summer 2016

**Update:-** Grazing on Epsom Common took place successfully again during 2016 with 31 cattle from early May to mid-September. The herd comprised of Belted Galloway and Dexter crosses. 2016 also saw a significant increase in size to the largest grazing area called 'Great Pasture' with the inclusion of 'West Heath'. Volunteers played a vital role again during what was a very wet early summer 2016, carrying out daily checking and maintaining the grazing area to ensure the continued success of the Borough's flagship habitat conservation and enhancement initiative. The nature conservation benefits of grazing

continue to surprise and delight all those involved. Of particular note are the significant increases in butterfly populations and flowering plant species and strong indications that grazing is benefiting the reptile population in particular Adders.



Epsom Common LNR summer 2016, cattle grazing on West Heath (part of the 2016 extension), very wet and boggy conditions along the fence line and a volunteer maintaining the fence line

**Update:-** Work to restore and protect veteran trees on Epsom Common LNR and Horton Country Park LNR took place again during winter 2014/2015 with canopy reduction work carried out on veteran trees on Epsom Common and Horton Country Park. This twenty year programme of works is carried using funds secured through the Environmental Stewardship Higher Level Scheme 2010-2020.

**New:-** In 2015 veteran trees were identified as 'Heritage Assets'. Development proposals that involve or have an impact upon an



identified Heritage Asset, or its wider setting, will be required to provide an assessment of the Asset, the potential impacts on the Asset and any appropriate mitigation measures that will be required. In 2016 a process of mapping veteran trees across the Borough was commenced that aims to provide a comprehensive inventory of veteran trees to help ensure their retention as 'Heritage Assets'.



Epsom Common LNR veteran tree survey work autumn 2014



Veteran Oak Pollard adjacent to a residential area in Manor Park, Epsom

**Update:-** Woodland management at Horton Country Park LNR under the Environmental Stewardship Higher Level Scheme continued during 2015/2016 with volunteers playing a vital role planting hundreds of hazel trees and erecting deer fencing following felling work carried out by themselves and contractors.



Horton Country Park LNR contractor clearing brush in Hendon Grove winter 2016





Horton Country Park LNR volunteer using a billhook to shave a point on to a deer fencing stake in Godbold Copse winter 2016



Horton Country Park LNR volunteer planting future Sweet Chestnut coppice in Godbold Copse winter 2016

In 2015 for the first time since Lower Mole Partnership volunteer's recommenced restorative coppicing in Butcher's Grove in 1983, coppicing was carried out by a woodsman at no cost to EEBC. After 30 years of volunteer effort the value of the coppiced Hazel is now high enough to cover the woodsman's cost of coppicing, however it should be noted that the cost of deer fencing to ensure future coppice has to be covered by grant aid and installed by volunteers. Coppicing took place again during winter 2015/16.



Woodsman John Sinclair processing coppiced Hazel winter 2014/15

**Update:-** Since the 1960's more than 90% of orchards have been lost in England. During 2012/2013 EEBC worked with the London Orchard Trust to restore two orchards in Horton Country Park LNR both formerly within the Long Grove Hospital Grounds. During 2016 work has continued with volunteer effort focused on clearing encroaching scrub from some of the old apple and pear trees in Lambert's Orchard.



Horton Country Park LNR Countryside team volunteer's clearing encroaching scrub from around old apple trees in Lambert's Orchard autumn 2016

**Update:-** Work to conserve and enhance rough grassland has been taking place since 2008 using a rotational approach which prevents the grassland disappearing under encroaching scrub. 2016 saw the continuation of this vital habitat maintenance work carried out by both volunteers in the most sensitive areas (Ant Hills) and by an EEBC tractor using a hired flail collector.



Hogsmill LNR Countryside Team volunteers clearing rough grassland and encroaching scrub at Riverview Copse summer 2016



At Horton Country Park LNR a hay crop continues to be taken in cooperation with the Equus Equestrian Centre. Flower rich meadows have declined by 97% since the 1930's making the hay meadows in the Country Park an unusual and special sight.



Epsom Common LNR tractor with flail collector cutting and clearing Stew Pond Meadow late summer 2016



Horton Country Park LNR hay making in Little Westcotts summer 2014

**Update:-** During 2016 work was again carried out to help conserve a very species rich area of Chalk grassland (internationally scarce) at Juniper Hill on Epsom & Walton Downs. The Downs Keeper's have been trying to keep scrub from encroaching for many years and volunteer's assisted again clearing both grass and encroaching scrub.



Juniper Hill, Epsom Downs chalk grassland management summer 2016

**Update:-** During 2016 further work to conserve the Small Blue Butterfly was carried out by volunteers from the Lower Mole Countryside Partnership with the creation of further scrapes on Epsom Downs.



Howell Hill Nature Reserve, Small Blue Butterfly laying an egg  
on Kidney Vetch

Creating scrapes involves using a small excavator to remove top soil and expose the less fertile chalky substrate which encourages the growth of Kidney Vetch, the larval food plant for the butterfly. In addition at their new Priest Hill nature Reserve, Surrey Wildlife Trust have also been creating suitable habitat by removing the tarmac from former tennis courts and spreading Kidney Vetch seed from nearby Howell Hill Nature Reserve on the exposed chalk. With known breeding populations identified at Warren Farm, Howell Hill Nature Reserve and Epsom Downs it was hoped that the Small Blue would colonise the Priest Hill scrapes. During the summer of 2015 Small Blue were discovered on the reserve. **SUCCESS!**

**Update:-** As part of the creation and development of the new Priest Hill Nature Reserve by Surrey Wildlife Trust several rare in Surrey, wild plants (Broad leaved cudweed, Cut leaved germander, ) were successfully planted on to the chalk scrapes that were former tennis courts in 2015. In 2016 rare poppies and night-flowering catchfly were planted and one of the chalk scrapes has been rotovated and seeded with rare chalk loving arable plant seed. The hope is that this population will be self-sustaining with annual or biennial rotovation, mimicking the traditional tillage used on arable crops. In addition conservation grazing is now established helping to conserve and enhance the chalk grassland and its rare flora and fauna.

**Objective 3:** *Ensure opportunities for the conservation and enhancement of the whole biodiversity resource in Epsom and Ewell are identified considered and acted upon*

**Update:-** In 2015 the EEBC Countryside Team began to take on a new role of scrutinising and advising on the ecological aspects of planning applications in the Borough, making better use of the available in house expertise. In addition the Council published its new Development Management Policies Document including DM 4 Biodiversity and New Development (See below). During 2016 the new role and policy have continued to prove effective with advice given for numerous applications which have been significantly improved with regard to biodiversity. This consolidates a key aim of the LBAP, Target 3.1 'Ensure conservation and/or enhancement of biodiversity become a key part of the decision making process within the planning function of Epsom and Ewell Borough Council'.

#### **DM 4 Biodiversity and Nature Conservation**

2.16 The term 'biodiversity' encompasses the whole variety of life on Earth. It includes all species of plants and animals, their genetic variation, and the complex ecosystems of which they are part. It is not restricted to rare or threatened species but includes the whole of the natural world from the commonplace to the critically endangered. Maintaining biodiversity helps to promote the stability, sustainability and resilience of ecosystems, is an important national objective and a 'Duty' for all public bodies as defined by the Natural Environment & Rural Communities Act 2006. The Borough's location on the edge of the countryside is strategically important, with the Green Belt and the many green spaces within the built up areas acting as reservoirs for flora and fauna.

2.17 Conserving and enhancing biodiversity are important objectives in meeting the Borough's aim of achieving no net loss of biodiversity, in line with Paragraph 118 of the National Planning Policy Framework. Development that fragments existing habitats will be avoided and, where possible, opportunities to create links (green corridors) to those habitats that are already isolated will be identified and realised. We will actively



seek opportunities to increase biodiversity within the Borough, which will include, where possible, the creation of new habitats. For example, within the Hogsmill Local Nature Reserve a number of stretches of the River Hogsmill have been identified in the South London River Restoration Strategy as potential sites for river enhancement or restoration.

2.18 In cases where there is no alternative location for the proposed development, the applicant must provide evidence that a sequential approach has been applied and that there will be no net loss of biodiversity. We consider reasons of overriding public interest as being related to human health, public safety and the beneficial consequences of primary importance for the environment.

2.19 The Council has adopted a document entitled “Biodiversity and Planning in Epsom and Ewell” for development management purposes. The guide assists in the process of identifying when and where biodiversity in Epsom and Ewell will need to be protected by the planning system, as well as assisting in identifying opportunities to deliver biodiversity enhancements.

***Policy DM4: Biodiversity and New development***

Development affecting existing or proposed nature conservation sites and habitats of international, national or local importance will only be permitted if:

- (i) The development would enhance the nature conservation potential of the site or is proven to be necessary for the conservation management of the site; or
- (ii) there is no alternative location for the development and there would be no harm to the nature conservation potential of the site; or
- (iii) there are imperative reasons of overriding public interest for the development

Elsewhere in the Borough:

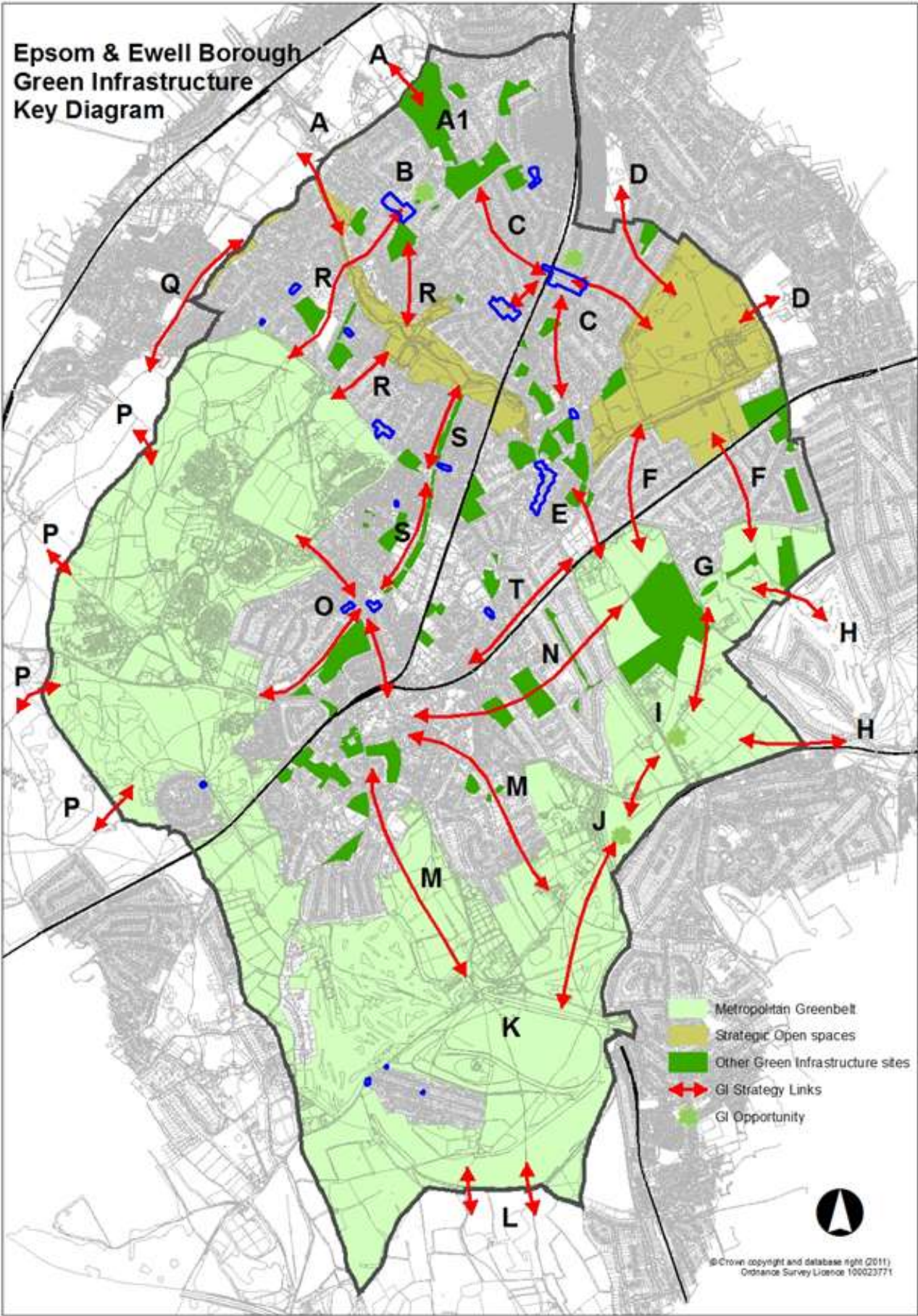
Development affecting any site or building that supports species protected by Law, including their habitats, will only be permitted if

appropriate mitigation and compensatory measures are agreed to facilitate the survival of the identified species, keep disturbance to a minimum and provide adequate alternative habitats to ensure no net loss of biodiversity.

Mitigation and compensatory measures will be secured through planning obligations or conditions, with priority for such measures to be provided within the development.

Whether or not there are any species or habitats that enjoy statutory protection, every opportunity should be taken to secure net benefit to the Borough's biodiversity. To this end, an assessment of the existing nature conservation assets on a development site should be undertaken at the application stage and suitable biodiversity enhancements proposed.

**Update:-** The forthcoming Green Infrastructure policy was delayed during 2016 and it is hoped that progress can be made during 2017. The Green Infrastructure policy will identifies potential green corridors across the Borough and links to neighbouring boroughs and Greater London. (See Map below)





**Update:-** In 2016 the Borough still has the highest proportion of Sites of Nature Conservation Importance (SNCI) in active management in Surrey. The government's 'Single Data Set' uses the measure of SNCI in active conservation management to monitor the current condition of the nation's biodiversity. The Borough currently has 13 SNCI with 10 currently under active conservation management giving Epsom & Ewell the highest score in Surrey, 77% (Average 44%). During 2015 the "Local Sites" committee designated two new SNCI in Epsom & Ewell. These are the small Thames Water covered reservoir site on Epsom Downs where a site visit in summer 2014 discovered the presence of the Small Blue Butterfly, along with several species of orchid. Langley Bottom Farm now owned by the Woodland Trust was also designated with approximately one third of the farm located in Epsom & Ewell. The farm is of particular note for its arable plants and also includes 'Ancient' Woodland.



Pyramidal Orchids at the Thames Water  
site with Queens Stand in the background  
summer 2014

**Update:-** Site management plans continue to play a crucial role in coordinating work across our open spaces and helping to secure funding. During 2016 updated plans for Horton Country Park LNR, Hogsmill LNR and Epsom Downs Golf Course were prepared for approval during 2017. Management Plans ensure a consistent and planned approach to the management of biodiversity in the Boroughs open spaces. The current Epsom Common plan 2016-2026 is of particular note as it is the first management plan for an open space in Epsom & Ewell that has an agreed **100 year** approach, emphasising the need to take a very long term approach to managing biodiversity.



Epsom Common LNR. Guided by the site management plan a pasture woodland landscape has been created by the reintroduction of grazing, resulting in the appearance of Marbled White butterflies summer 2016

**New:** During 2015 the South East Rivers Trust (SERT) became the hosts for the Hogsmill Catchment Partnership, facilitated by both DEFRA and the Environment Agency. The partnership aims to work with stakeholder's, including EEBC to influence the management of the water

environment and to coordinate projects, partnership working and funds more effectively to realise multiple benefits (for example, biodiversity, flood risk management, local amenity, enhancing health and wellbeing)

The Trust has already held several stakeholder workshops to identify what stakeholders value and like about the Hogsmill that can be fed in to for example the partnerships response to the Environment Agencies Water Framework Directive River Basin Management Plan (RBMP)

During 2016 as a catchment partnership priority SERT worked with the Environment agency and Thames water to monitor both the Epsom and Ewell 'Storm tanks' which are designed to manage raw sewage during periods of high rainfall. The monitoring indicated that discharges of raw sewage in to the Hogsmill River are quite frequent and the Catchment Partnership have indicated a desire to work towards a long term solution that reduces or ideally prevents any raw sewage being discharged. The Hogsmill Catchment Partnership also identified and prioritised a potential project to create a wetland at Chamber Mead in the Hogsmill Local Nature Reserve and it is hoped that funds can be secured during 2017 for what would be a major biodiversity enhancement that would build on the projects of recent years such as weir removal.



Hogsmill LNR former location of weir just after removal summer 2013



Hogsmill LNR former location of weir summer 2015



**Objective 4:** *Raise awareness, appreciation and involvement in the conservation and enhancement of biodiversity in Epsom and Ewell*

**Update:-** During 2016 there was a wide range of biodiversity related articles in the Borough Magazine 'Insight' which goes to all households in the Borough. These included a feature on 'Biodiversity and our community' which highlighted the work of nature conservation volunteers in the Borough as well as the importance of biodiversity (see photo below). Other articles that helped to promote biodiversity included the Green Flag Award, Countryside Guided Walks and the 20 mile "Hike & Bike" events using a signed route linking the Boroughs five main open spaces. The Council also published its Corporate Plan with a key priority being the quality and maintenance of its open spaces and protecting the green belt. All helping to raise awareness of the Boroughs natural environment and the opportunities to get actively involved.



Article published in the Boroughs Insight magazine summer 2016

**Update:-** In 2014 this report highlighted the need to protect the ecology of a pond in Horton Country Park LNR from constant daily disturbance by dogs. The pond which is used for pond dipping had become a shadow of its former self with very few aquatic species able to tolerate the constant daily disturbance. Using a small grant from a local County Councillor the pond was fenced by the Lower Mole Partnership volunteers and a new notice was placed on the gate leading to the pond, explaining the need for dog owners to stop their pets entering the pond. During the summers of 2015 and 2016 a pond dip for a local Beaver Group discovered an astonishing recovery with the return and much greater abundance of aquatic life. The notice is still in place after a two years which is very positive and an indication that visitors are willing to help address the issue of long term incremental damage to habitats on nature reserves due to public access.



Horton Country Park LNR Field Pond surveying for Great Crested Newts spring 2016



Horton Country Park LNR Field Pond new gate and fence  
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**Update:-** EEBC continues to raise awareness by encouraging active participation in site management. This is achieved through walks, talks, leaflets, the web site, regular weekly conservation tasks, through working with 'Friends Groups', local youth groups and support for the Lower Mole Countryside Partnership.



Countryside Team Volunteers taking a well-earned rest from helping the Woodland Trust at Langley Bottom Farm autumn 2016



Annual Epsom & Ashted Common Joint Task BBQ January 2016



Horton Country Park LNR Countryside Officer Sarah Clift investigating mini beasts with local children summer 2016



Horton Country Park LNR Cyclists taking part in the Round the Borough Bike event May 2016

**Objective 5:** *Provide on-going monitoring of biodiversity in Epsom and Ewell*

**Update:-** The Countryside Team is continuing to develop and improve its monitoring role within the Boroughs three local nature reserves and has also started to record the Borough more widely with the assistance

of volunteers and local experts. During 2016, 83 volunteer days of biological monitoring was provided valued at approx. £4,500.

**Update:-** In 2014 and 2015 moth surveys were carried out on Epsom Common LNR which is a nationally important site for invertebrates especially those associated with veteran trees which are of international importance. During summer 2016 a moth survey was carried out on Horton Country Park LNR which revealed an abundance of moth species present including two nationally scarce species the Dotted Fan Foot (*macrochilo cribrumalis*) and (*Elegia Similella*. Some spectacular moths from 2016 are pictured below. Further surveys are planned for 2017.



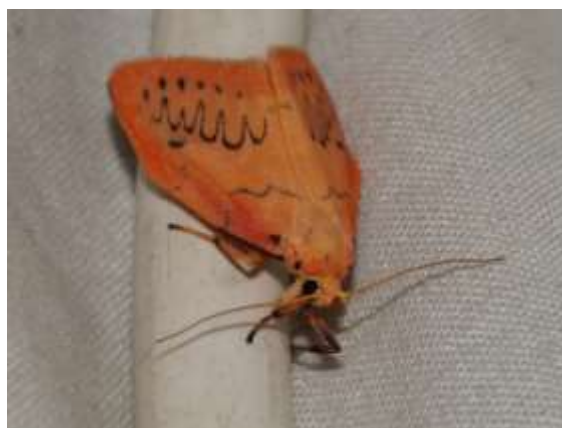
Epsom Common LNR, Buff Arches moth  
(*Habrosyne pyritoides*) summer 2016



Epsom Common LNR, Blotched Emerald  
moth (*Comibaena bajularia*) summer 2016



Epsom Common LNR, Peach Blossom moth  
(*Thyatira batis*) summer 2016



Epsom Common LNR, Rosy Footman Moth  
(*Mitochrista miniata*) summer 2016



**Update:-** The project to monitor reptiles on Epsom Common Local Nature Reserve set up between the Countryside Team and the Surrey Amphibian and Reptile Group (SARG) continued during 2016. Results again confirm that Epsom Common is a very important site for Adders and there is a very widespread distribution of Grass Snakes.



Checking a refuge on Epsom Common LNR



Adder on Epsom Common LNR

**Update:-** The Countryside Team and volunteers continued to monitor butterflies on a weekly basis over the summer using agreed transects and submitting records to the national database for our three Local Nature Reserves. 2016 has turned out to be a below average year with a cool and very wet start to summer following by a warm dry end. Butterfly



Epsom Common LNR Marbled White butterfly in  
Great Pasture summer 2016  
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numbers were significantly down compared to 2015. For example, in 2015 recorders had 940 sightings of 24 species, whilst in 2016 there were only 473 sightings of 25 species. On a more positive note Marbled Whites were recorded again in Horton Country Park LNR and also Epsom Common LNR. A Butterfly Conservation course which focused on the White Letter Hairstreak was held during summer 2016 for staff and volunteers and this resulted in a volunteer discovering a large disease free English Elm on the Hogsmill LNR that had White Letter Hairstreak butterflies flying in the canopy (see photo below). The magnificent Purple Emperor was spotted again in 2016 on Epsom Common LNR and volunteers have spotted Brown Hairstreak eggs laid on young Blackthorn stems in a number of locations in Horton Country Park and Hogsmill Local Nature Reserves.



A very difficult to photograph White Letter Hairstreak butterfly resting in the canopy of a large English Elm in the Hogsmill LNR summer 2016



Tiny (size of a pin head) Brown Hairstreak butterfly egg laid on young Blackthorn Stem in Horton Country Park LNR

**Update:-** Work to produce draft priority habitat and species of principle importance maps for Epsom & Ewell, with assistance from the Surrey Biological Records Centre is still planned but continues to be delayed. To assist with the process of mapping species of principle importance as defined by the Natural Environment and Rural Communities Act 2006, Countryside Officer Pete Howarth identified 53 species during 2015 and the total has increased to 58 during 2016.

**Update:-** Monitoring for Dormice described previously has continued during 2016 with results proving negative with no Dormice found in any



boxes or tubes on Epsom Common or Horton Country Park. However signs of activity were found in a box on Epsom Common LNR. It is hoped that with a relatively small number of boxes and tubes in place that future years will continue to record their presence. The discovery of Dormice is informing the future management of woodland and means further survey work is required to map the distribution of Dormice across our nature reserves.



The Dormouse found on Epsom Common LNR  
february 2012



Volunteers positioning Dormouse boxes on  
Epsom Common LNR winter 2013/14

**Update:-** EEBC Countryside Officer and expert ecologist Pete Howarth has continued surveying ponds for Great Crested Newts with Blakes Pond on Epsom Common LNR once again revealing a healthy population.



Countryside Officer Pete Howarth and  
volunteer recorder Judith McNickle  
retrieving a bottle trap contain several  
Great Crested Newts spring 2016



Photo taken at Blakes Pond on Epsom  
common LNR shows the difference in size  
between the Smooth Newt and the Great  
Crested Newt spring 2016

In addition during 2016 Pete has received and input bat records from the Surrey Bat Group, planning applications and local nature reserves surveys using the EEBC Recorder database. The work aims to gain a clearer understanding of the location of bat roosts in the Borough and has already indicated the importance of data collected via planning applications.



Countryside Team Volunteers clearing overgrown vegetation from the Farmstead School bat roost in Horton Country Park LNR summer 2015

**Update:-** During 2014 the Zoological Society of London (ZSL) approached the Countryside Team and Lower Mole Partnership to ask for volunteer assistance with their “Riverfly” project which monitors aquatic invertebrates to warn of poor water quality in rivers. Subsequently a small volunteer network has been formed to help monitor water quality in the Hogsmill River and this has continued to operate successfully during 2016 as part of the Hogsmill Partnership coordinated by the Hogsmill Catchment Partnership coordinated by the South East Rivers Trust, with results helping to inform the Environment Agency about the quality of water in the river.



# The Hogsmill Needs You!

## Volunteers needed for river monitoring





The Zoological Society of London is offering training in the **River Monitoring Initiative (RMI)** sampling method. The RMI is a national scheme for monitoring the health of rivers developed by the Riverfly Partnership.

In order to be trained in the RMI you must be able to sample the river for at least 6 months. Once at the river, samples take about 20 minutes and are taken a minimum of every 2 months.

In the Training you will learn;

- The background of the RMI.
- How to kick sample a river.
- How to identify river invertebrates.
- What to do with the RMI data.

You will also meet other volunteers working up and down the Hogsmill River. Everyone involved in the scheme will have a day out at London Zoo.

The training will take place at Kingston University, Knights Park Campus on

**Saturday April 26th**  
**11am to 3pm**

To book a place or for more information please contact : [Joe.Pecorelli@zsl.org](mailto:Joe.Pecorelli@zsl.org)



Also during 2016 the Hogsmill Partnership put out a request for volunteers to carry out an Outfall Safari. This involved surveying stretches of the river and with the help of a mobile app, mapping and recording the impact of outfalls. The aim was to greatly improve the understanding of the river system and help to target sources of pollution. Volunteers from the EEBC Countryside Team and the Lower Mole Partnership took part.

## Please help Survey Outfalls on the Hogsmill River



As a result of misconnected plumbing, pollution can find its way into urban rivers via surface water outfalls (drains). **The Hogsmill Partnership** is looking for volunteers to help conduct the Hogsmill's first **Outfall Safari**. This involves surveying stretches of the river and, with the help of a mobile app, mapping and recording the impact of outfalls. This survey will greatly improve our understanding of the river system and help to target sources of pollution. The survey will take place during:

### October 2016

Once registered you will receive a full briefing on how to take part. You can choose which stretch of the river you want to survey and conduct the survey at a time that is convenient to you as long as it is within the survey period of October 2016. Where possible the survey will be conducted from the footpath by the side of the river but, in parts, it may be necessary to walk in the river where it is safe to do so. All training and equipment will be provided by ZSL.

Briefing sessions for volunteers will take place at:

**Horton Country Park, 10am on September 20th**

**Kingston University, 2pm on September 22nd**

For more information contact [Joe.Pecorelli@ZSL.org](mailto:Joe.Pecorelli@ZSL.org), 07974725557

Please register your interest to help at : [hogsmilloutfalls.eventbrite.co.uk](http://hogsmilloutfalls.eventbrite.co.uk)

Once registered more information will be sent to you about where and when the briefing sessions will take place.





**Objective 6:** *Seek to increase the funding available for the long term conservation, enhancement and monitoring of biodiversity in Epsom and Ewell*

**Update:-** Currently externally sourced funding is in place helping deliver management of biodiversity for both Epsom Common and Horton Country Park Local Nature Reserves until 2020. The key source is the 2010-2020 Environmental Stewardship Higher Level Scheme, along with the new Countryside Stewardship Basic Payments Scheme which is the successor to the European Single Farm Payments Scheme.



Tools and equipment used by the Countryside Team volunteers are paid for and maintained using externally sourced funds



The extensive annual programme of cutting and clearing rough grassland is all paid for using externally sourced funds. Burnham's Meadow Horton Country Park LNR late summer 2016

**Update:-** In 2013 and 2015 the Lower Mole Partnership volunteers successfully de-silted Lambert's Pond in Horton Country Park Local Nature Reserve, revealing a long lost arm. During 2016 nature has rapidly begun to recolonise the pond and surveys will be carried out in 2017.



Horton Country Park LNR Lambert's Pond the long lost arm of the pond de-silted by the Lower Mole Countryside Partnership volunteers autumn 2015 and autumn 2016

**Update:-** During 2016 the South East Rivers Trust (SERT) continued working with EEBC and the Environment Agency to improve the ecology of the Hogsmill River using grant aided funding. Delivering a programme of bank side and in river habitat improvements has continued during 2016. Volunteers from the EEBC Countryside Team carried out a task to provide material for a task carried out by SERT and Lower Mole Partnership volunteers in March 2016 that removed toe boarding and constructed artificial berms to help naturalise the river channel. EEBC Countryside Team volunteers continued with a programme of removing scrub along the banks of the river to allow more light to reach the river channel. The 2015 task has already allowed aquatic plant life to create a natural berm that has scoured and naturalised a short section of the river channel see photos below. The major work carried out in 2013 and 2014 to remove two large weirs from the Hogsmill River in Epsom & Ewell and remove the concrete bed and walls at the confluence where the Green Lanes Stream joins the Hogsmill River continues to naturalise and has been a great success. Further significant improvements are being discussed/planned via the Hogsmill Catchment Partnership.



Volunteers from the South East Rivers Trust using tree branches to help restore the Hogsmill





Hogsmill LNR photo taken Autumn 2016 showing natural berm that has formed following Countryside Team volunteers opening up the overgrown banks of the Hogsmill River in autumn 2015



Hogsmill LNR same location as photo opposite taken in autumn 2015 at the end of the task showing clearly what a big difference managing bankside vegetation can make!



Hogsmill LNR Countryside Team volunteers continuing with managing bank side vegetation autumn 2016



Confluence of Green Lanes Stream tributary with the Hogsmill River autumn 2016

**Update:-** The Lower Mole Partnership has continued during 2016 to manage the SSSI using funds provided by Surrey County Council. In addition the Lower Mole Partnership received funds from the developers of the Lintons Lane housing development for the maintenance of the recently created pond and buffer zone inside the allotment site and adjacent to the SSSI. The buffer zone is considered to be working and reducing the issues on the allotment, consequently future use of the allotment is being considered with the possibility that the allotment could be brought back in to use whilst at the same time providing much needed terrestrial habitat for Great Crested Newts. During 2017 it is

hoped that funds can be secured to carry out a survey of Great Crested Newt numbers that would inform plans for the allotment and also assist in liaison with Natural England and the possible need for a licence regarding the plans for the allotment.



Lower Mole Countryside Management Project volunteers planting a hedge at Stones Road Allotment in 2012 and work to construct the new pond in 2013.

**Objective 7:** *Seek to identify the wider benefits to the community of improving biodiversity*

**Update:-** Both nationally and internationally there is an increasing understanding that we need to incorporate the benefits (services) provided by biodiversity and natural processes in to our economic models. The government recently published a watershed document the 'UK Ecosystem Assessment' which shows very clearly how we undervalue our natural resources and the services they provide. The result of under valuing our natural resources is ultimately an unsustainable future. Addressing this issue demands a long term approach that recognises the delicate balance of the ecosystems that provide us with vital ecosystem services such as clean air, fresh water and fertile soils. This concept is as applicable to Epsom & Ewell as anywhere else on the planet.

It is undoubtedly a big and complex subject however it is possible to identify local issues to illustrate the challenge we are facing. For example, biodiversity on our local open spaces provides a range of vital ecosystem services and in particular a cultural ecosystem service providing residents with well recognised and significant psychological and health benefits.



Some of our open spaces in Epsom & Ewell are showing signs of strain due to high visitor numbers with woodland wildflowers and aquatic life in ponds under pressure from constant daily disturbance as described above.



Horton Country Park LNR Pond Wood, photograph shows bluebells receding from the path edge with the much loved carpet of bluebells now some distance from the path spring 2014

A recent example of the actual costs that can accrue was the need to restore Great Pond Dam on Epsom Common in 2012 as illustrated in the photos below, due to erosion caused by dogs entering the pond.



Erosion damage to the dam of Great Pond on Epsom Common LNR caused by dogs. autumn 2012 repairs cost £18500

The UK Ecosystem Assessment shows clearly that sustainable management of our open spaces today not only helps protect their

biodiversity but also ensures that wider and in some cases very costly environmental impacts are avoided.

The Surrey Nature Partnership to which EEBC is affiliated through the Surrey Nature Partnership Biodiversity Working Group is currently championing two key projects in its effort to help to achieve its vision of a healthy, green Surrey with a prospering economy.

**Valuing Surrey:-** This project focuses on developing an understanding of the value of the counties natural assets which underpin the provision of ecosystem services, 30% of which are thought to be in decline in Surrey. “The majority of us are guilty of taking the natural environment and the services we derive from it for granted. In Surrey, the continued resilience of our economy is dependent on a healthy, functioning landscape. The Valuing Surrey project aims to help develop an understanding of the natural capital of Surrey and communicate this message to a wide range of organisations and individuals. We hope the project will also inform ways of working and policy in other Local Enterprise Partnerships and Local Nature Partnerships.”

**Biodiversity Offsetting:-** The Surrey Nature Partnership has a statutory role in strategic planning matters which means it has an overview of local plans in Surrey. This enables the SNP to have a say in where development takes place.

“In cases where development is unavoidable, biodiversity offsetting is a tool that may be used by Local Authorities to compensate for biodiversity loss. This is where conservation activities – which will deliver a clear and measurable benefit to biodiversity – take place in compensation for damage caused by developments. This project will explore the possibility of Local Authorities using biodiversity offsetting in Surrey.”

Ecosystem Services are very relevant to the development of the Epsom & Ewell Green Infrastructure Policy and the implementation of the ‘Community Infrastructure Levy’ that has replaced Section 106 funding for new development.

## Conclusion:

2016 has seen further progress in implementing the plan which continues to play a significant role in coordinating and guiding efforts to conserve and enhance biodiversity in the Borough . **A BIG THANK YOU from the Working Group to all the volunteers who have helped conserve and enhance biodiversity in the Borough during 2016 in all weathers!**



Epsom Common LNR Countryside Team volunteer Sue Martin enjoying the summer 2016 weather!

If you have any questions or you would like to find out more about the implementation of the Epsom & Ewell Local Biodiversity Action Plan please call 01372 732000 and ask to speak to the Countryside Team or email [countryside@epsom-Ewell.gov.uk](mailto:countryside@epsom-Ewell.gov.uk)

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## **PARK MANAGEMENT PLANS**

<u>Report of the:</u>	Head of Operational Services
<u>Contact:</u>	Samantha Whitehead
<u>Urgent Decision?(yes/no)</u>	No
<u>If yes, reason urgent decision required:</u>	
<u>Annexes/Appendices (attached):</u>	<u>Annexe 1</u> – Alexandra Recreation Ground Visitor Survey <u>Annexe 2</u> – Auriol Park Visitor Survey <u>Annexe 3</u> – Auriol Park Management Plan 2017-2021 <u>Annexe 4</u> – Alexandra Recreation Ground Management Plan 2017-2021

Other available papers (not attached):

### **REPORT SUMMARY**

**This report presents the Committee with five-year park management plans for Auriol Park and Alexandra Recreation Ground, and the results of recent visitor surveys to both parks.**

### **RECOMMENDATION (S)**

- (1) That the Committee approves the 2017- 2021 park management plans for Auriol Park and Alexandra Recreation Ground.**

*Notes*

## **1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 This report links directly to the Council's key priority of keeping our Borough clean and green by providing quality parks, nature reserves and other public spaces that are safe, pleasant and well maintained.
- 1.2 The Community and Wellbeing Committee has a target to approve park management plans for Alexandra Recreation Ground and Auriol Park.

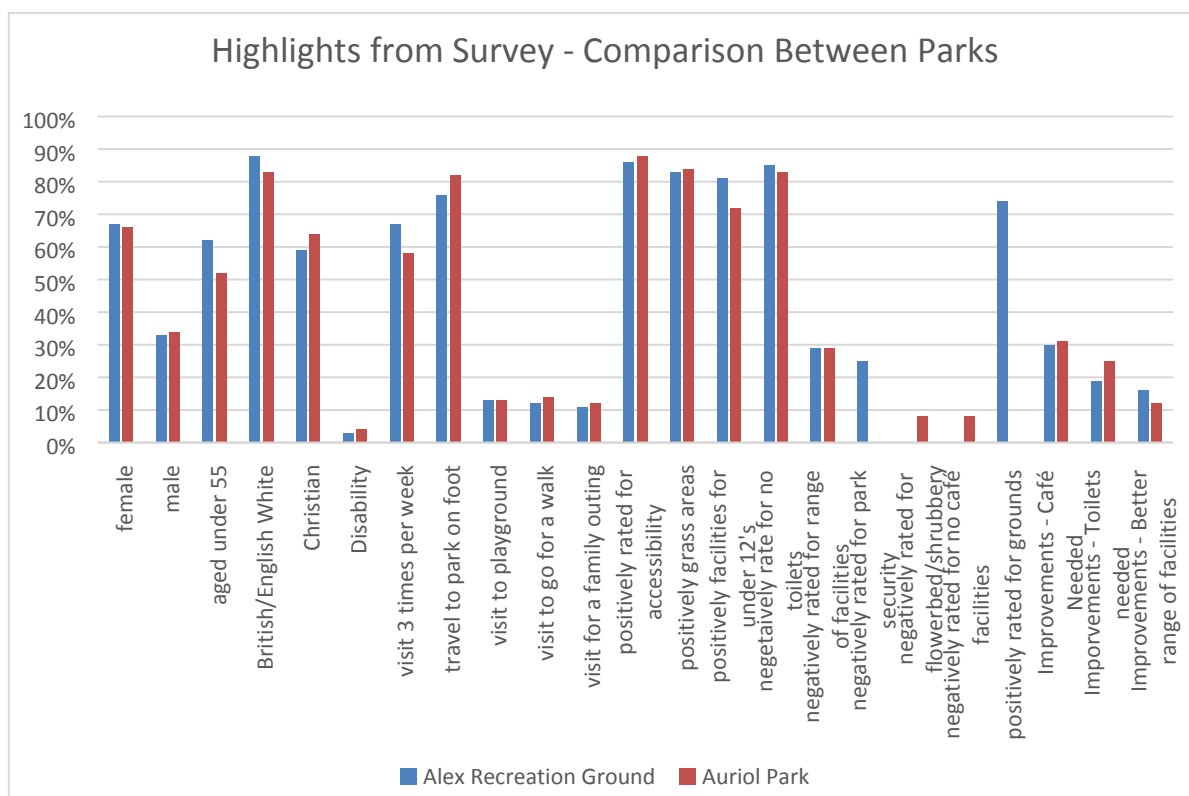
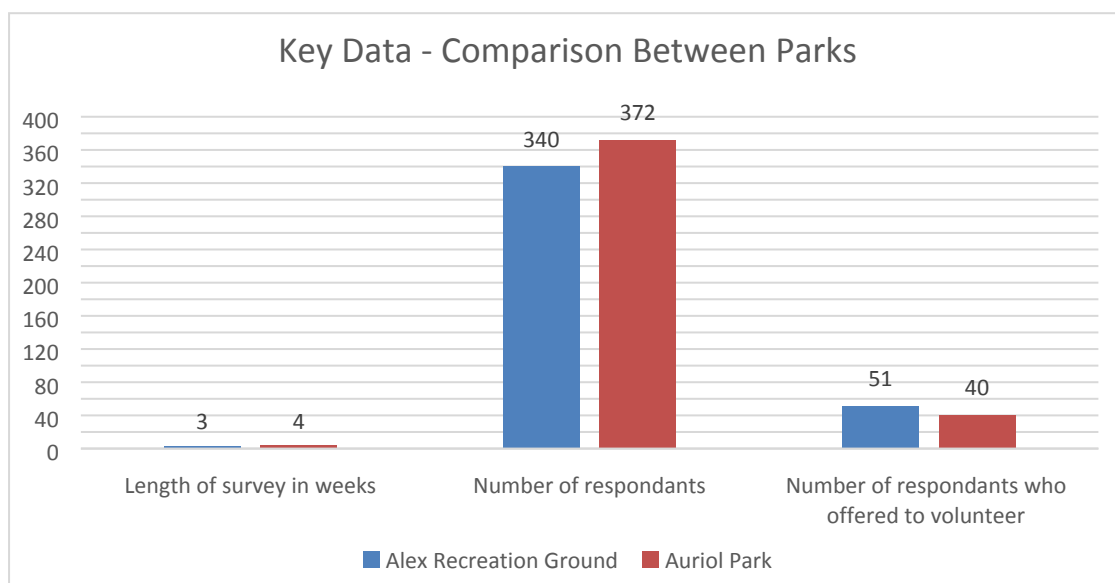
## **2 Background**

- 2.1 Although Epsom Common Nature Reserve has held Green Flag status since 2007, it was not until 2012 that we made the decision to apply for Green Flag Awards for Ewell Court Park and Nonsuch, followed by Alexandra Recreation Ground and Rosebery Park in 2013.
- 2.2 In 2016, the Nonsuch Park Joint Management Committee took the decision to switch from the Green Flag Award to the South & South East in Bloom Award.
- 2.3 The objective of the Green Flag Award scheme is to encourage the provision of good quality public parks and green spaces managed in environmentally sustainable ways.
- 2.4 Due to financial and manpower constraints not all parks are entered in to external award schemes. However, it is our intention that all major parks will have a management plan and benefit from the same standard of maintenance as those that hold the award.
- 2.5 At the heart of any application for a Green Flag Award is a management plan. As well as documenting the balance between all the priorities and policies that apply to a particular site and a time-scale for putting them into practice (an Action Plan), it identifies the contribution the green space is making towards the Council's wider strategic aims.
- 2.6 For the purposes of the Green Flag Award the park management plans run for a period of five years before they are updated.
- 2.7 Our methodology for creating the plans starts with conducting a visitor survey so that we can obtain feedback from both users and non-users of the park.
- 2.8 Non-user feedback helps determine what stops people from the using the park and can provide ideas for encouraging certain groups to visit parks in the Borough.

## **3 The Visitor Survey**

- 3.1 The visitor survey for Alexandra Recreation Ground was conducted in October 2015 (see Annexe 1). The visitor survey for Auriol Park took place in November/December 2016 (see Annexe 2).

- 3.2 When we launch a park visitor survey, the survey is available to complete over a period of three or four weeks. Throughout this duration, the Rangers distribute post-card size fliers that invite people to take part in the survey online. The fliers are hand delivered to strategic locations near each park, such as libraries, schools etc. In addition, paper copies of the survey are hand delivered to approximately 1000 households near each park.
- 3.3 At the end of the survey period, our Consultations Team analyse the responses and produce an overview of results. Charts showing comparisons between Auriol and Alex are shown below:



- 3.4 The results of the survey directly link to the update of the management plan and help define a set of actions for each park.
- 3.5 The Streetcare Manager would like to thank the Ranger Service and the Consultations Team for their hard work in preparing, distributing and analysing the results of the visitor surveys.

#### 4 The Park Management Plans

- 4.1 We have produced park management plans for Auriol Park (see Annexe 3) and Alexandra Recreation Ground (see Annexe 4).
- 4.2 An Executive Summary is included at the front of each document to enable navigation of the main plan and appendixes.
- 4.3 The park management plans also include a set of actions, which include items raised in feedback from the Green Flag judges (where applicable), observations from the Ranger team and most importantly from the most requested themes from the visitor survey.
- 4.4 The action plans cover a five-year period with yearly written updates. This ensures effective management and helps to ensure that objectives stay on track.
- 4.5 Some of the items on the action plans are aspirational and require significant capital or external investment. We feel that it is important to include these ideas so that they can be considered for funding opportunities that become available.
- 4.6 The action plans also explain why some actions are not achievable. A good example of this is the provision of toilet facilities in parks. This request always features highly on visitor surveys and feedback from Green Flag judges, but is costly to provide. However, on occasions it may be possible to re-open toilets that already exist in the park if this is linked to the provision of a café facility, which will take on the responsibility.

#### 5 Financial and Manpower Implications

- 5.1 All actions stated in the park management plans include an awareness of current funding constraints.
- 5.2 Where items cannot be completed due to manpower resources or funding, this is explained.
- 5.3 There is a significant amount of officer time dedicated to producing, distributing and analysing the visitor surveys and in the production and updating of the park management plans.
- 5.4 **Chief Finance Officer's comments:** Annual revenue budgets include provision for ad hoc and planned maintenance in the parks. Funding would need to be identified before any further works could be actioned.

**6 Legal Implications (including implications for matters relating to equality)**

- 6.1 ***Monitoring Officer's comments:*** There are no legal implications from this report.

**7 Partnerships**

- 7.1 We work closely with Friends Groups and other interested parties for all of our parks and open spaces.

**8 Risk Assessment**

- 8.1 There is risk of not being able to complete tasks set out in the action plan section of the parks management plan. However, yearly updates are provided to ensure that tasks are monitored and solutions can be found where possible to keep on track.

**9 Conclusion and Recommendations**

- 9.1 The Committee is requested to receive and approve the 2017- 2021 park management plans and the actions set out for both Auriol Park and Alexandra Recreation Ground.

**WARD(S) AFFECTED: (All Wards);**

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# Alexandra Recreational Ground Visitor Survey 2015



Report prepared for:  
Operations Management Team

Date: December 2015

Please contact the Epsom & Ewell Borough  
Council's Consultation and Communication  
Team should you require any information on  
the Alexandra Recreational Ground Visitor  
Survey 2015  
Email: [contactus@epsom-ewell.gov.uk](mailto:contactus@epsom-ewell.gov.uk)

## Alexandra Recreational Ground Visitor Survey 2015

### Summary of main findings:

- The survey ran from 12 to 30 October 2015 - a period of three weeks. The survey was available in both paper and electronic formats. A total of 340 survey responses were received.
- The majority of respondents were female (67%, n=204) and 33% (n=102) were male. Almost two thirds of respondents (62%, n=199) were under 55 years old. When asked about ethnicity, the majority of respondents (88%, n=280) described themselves as British white or English white. The majority of respondents (59%, n=187) said they were Christian.
- Of those that responded, 3% (n=10) indicated they had a disability according to the Equalities Act of 2010.
- Nearly seven in ten respondents (67%, n=226) visit the grounds a number of times per week. This comprises: 29% (n=98) visiting on a daily basis and 38% (n=128) visiting two or three times per week. 24% (n=80) visit the grounds two or three times per month and 8% (n=26) visit two or three times a year.
- Over three quarters of respondents indicated that they travel to the grounds on foot (76%, n=302), whilst 13% (n=52) travel by car, and 11% (n=42) by bicycle.
- The most popular reason for visiting the grounds was to 'Use the playground' (13%, n=90). This was followed by 'Go for a walk' (12%, n=81) and 'Children/family outing' (11%, n=79). Looking at the age profile of respondents; most respondents between 35-44yrs said they 'Use the playground' and use the grounds for a 'Children/family outing'. Younger respondents aged between 16-24yrs tend to use the grounds to 'Play other sports', whilst a broad age group of respondents between 45yrs and 84yrs use the grounds to 'Go for a walk'.
- The ground's top three positively rated aspects were:
  1. 'Accessibility' (86%, n=273)
  2. 'Grass areas' (83%, n=271 )
  3. 'Facilities for 12's and under' (81%, n=232).
- The ground's top three negatively rated aspects were:
  1. 'Toilets' (85%, n=189)
  2. 'Range of visitor facilities' (29%, n=83)
  3. 'Park security' (25%, n=127).



- Regarding 'the park in general'; the majority of respondents (74%, n=244) rated the grounds positively, 22% (n=73) rated the grounds fair, and 3% (n=11) rated the grounds negatively.
- The three most prevalent reasons amongst respondents who ticked 'Poor' or 'Very poor' include:
  - 'Toilets needed' (36%, n=143)
  - 'Security/ Anti-social behaviour' (8%, n=33)
  - 'Pathway improvements' (8%, n=30) and 'Flowerbed/ shrubbery improvements' (8%, n=30).
- When considering improving the visitor experience, the three most prevalent suggestions for using the recreational grounds more often or staying for longer include:
  - Café needed (30%, n=107)
  - Toilets needed (19%, n=69)
  - Better range of facilities (16%, n=57).
- Of the respondents that took part in this survey, 51 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.



## Objectives and methodology:

Alexandra Recreation Ground was amongst five green spaces in the Borough this year that was awarded the Green Flag Award for the fourth year. The grounds are situated in Alexandra Road about a quarter of a mile from Epsom town centre. Facilities include a multi-use games area, basketball court, bowling green, cricket pitch, three full sized and two mini football pitches, three tennis courts, a children's playground and a teenage play area.

The survey was conducted by Epsom & Ewell Borough Council on behalf of its Operations Management Team. The Team is responsible for ensuring the grounds meet the needs of local residents, visitors and develops in a sustainable way. As the ground's current management plan is now five years old and requires rewriting, this survey seeks to inform the new plan and how to make the park even better.

### Questionnaire Development:

The questions were developed in liaison with the Head of Operational Services and the Patrol Ranger. Subject areas include:

- Frequency of visiting the grounds
- Method of travel to the grounds
- Reasons for visiting the grounds
- Opinions on various aspects of the grounds
- Improving visitor experience and encouraging more use of the grounds, or staying for longer
- Volunteering opportunities.

### Methodology:

The survey ran for a period of three weeks (12 to 30 October 2015). A total of 880 paper surveys were distributed via the following methods:

- 660 were mail-dropped to residents who lived in close proximity to the grounds
- 140 were left at local schools and at Bourne Hall
- 80 given out in the park.

Links to the electronic version of the survey were promoted via:

- Council website ([www.epsom-ewell.gov.uk](http://www.epsom-ewell.gov.uk))
- e-Borough Insight (Issue 21: October 2015) (<http://insight.epsom-ewell.gov.uk>)
- Twitter ([@EpsomEwellBC](https://twitter.com/EpsomEwellBC))
- Facebook ([www.facebook.com/EpsomEwellBC](https://www.facebook.com/EpsomEwellBC)).

A total of 340 survey responses were received. Responses to the electronic questionnaires were automatically imported into the survey design and analysis package (SNAP v11). The paper returns were sent to an outside agency for data

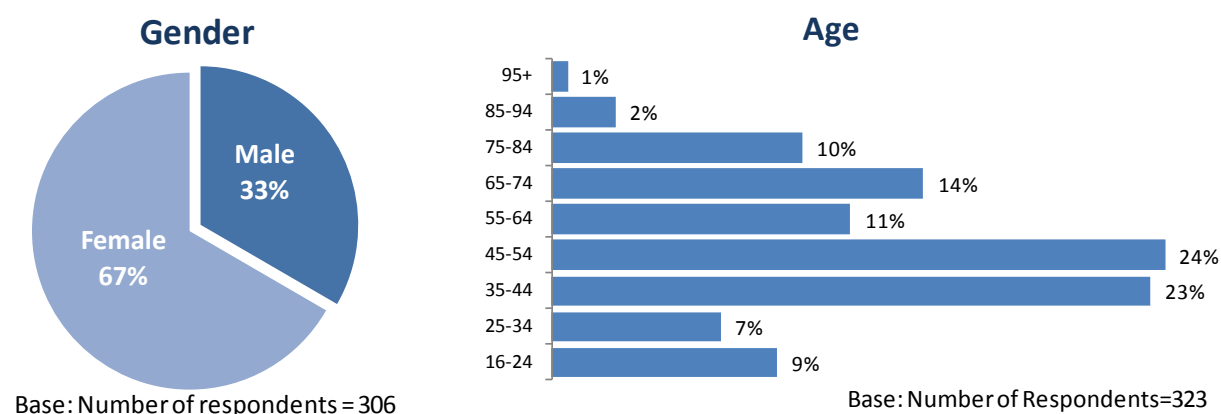
inputting, then merged with the online version. The results were analysed by the Council's Consultation and Communication Team.

The figures in this report are calculated as a proportion of respondents who answered each question – excluding No Reply responses. Percentages in a particular chart might not always add up to 100% due to rounding, or because a respondent is allowed to give more than one answer to the question.

## Respondent Profile and Equalities Monitoring:

### Age and gender:

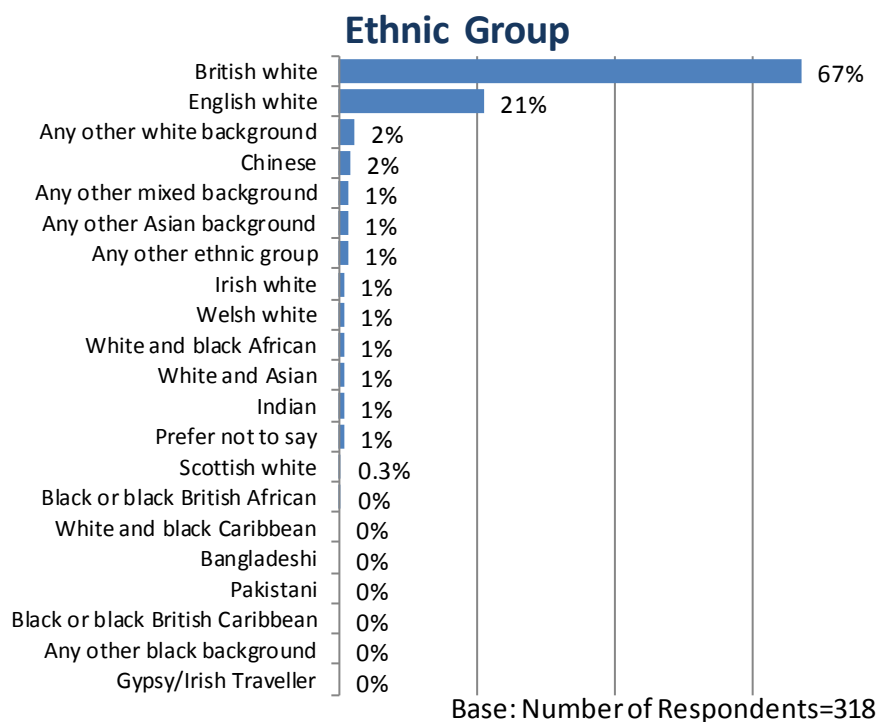
Respondents were asked their gender and which age group they fit into. The majority of respondents were female (67%, n=204) and 33% (n=102) were male. Based on age groupings; almost two thirds of respondents (62%, n=199) were under 55 years old, whilst 38% (n=124) were 55yrs and older. The highest number of respondents were people aged between 45 & 54yrs (24%, n=76) and between 35 & 44yrs (23%, n=74). It should be noted that 9% (n=28) of respondents were from the youngest age group - between 16 & 24yrs old.



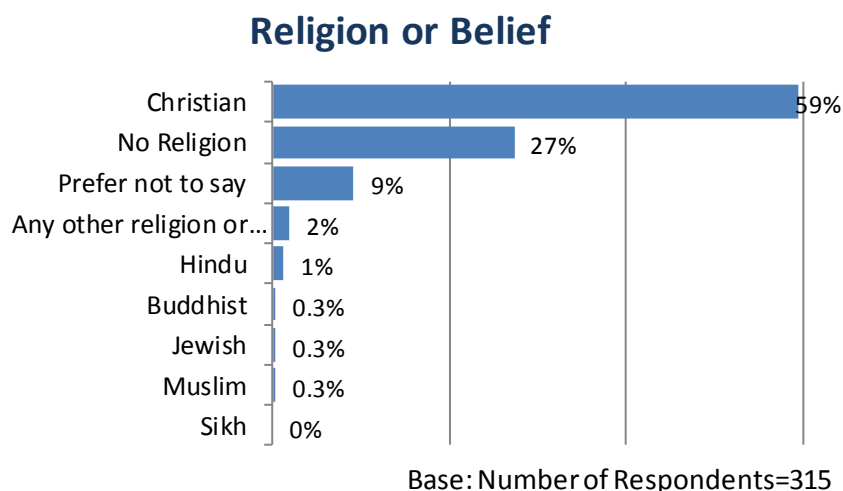
### Other demographics:

Three percent (n=10) of respondents indicated they have a disability according to the Equalities Act of 2010. A person has a disability for the purposes of the Act if he/she has a physical or mental impairment which has a substantial and long term adverse effect on his/her ability to carry out normal day-to-day activities.

When asked about ethnicity, the majority of residents (88%, n=280) described themselves as British white or English white.

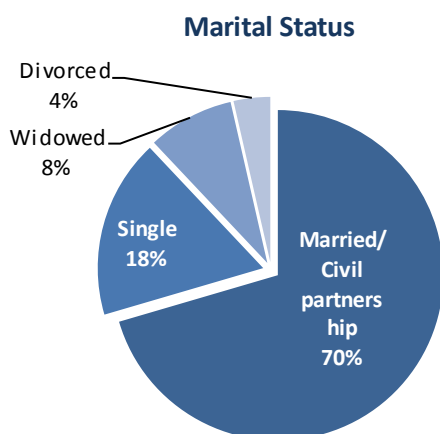


In terms of religious beliefs; almost six in ten (59%, n=187) said they were Christian and 27% (n=86) said they were not religious.



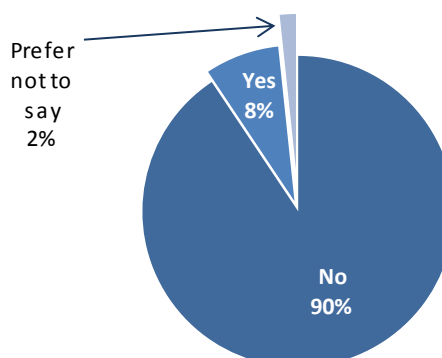
When asked about sexual orientation, 93% (n=281) said they were heterosexual, whilst 9% (n=20) preferred not to say. One person said 'Other' (0.33%) and one person said 'Gay woman/lesbian' (0.33%).

When asked about marital status, 71% (n=217) said they were married or in a civil partnership, 18% (n=54) were single, 8% (n=26) widowed, and 4% (n=11) divorced. Eight per cent of respondents (n=23) said they had been pregnant or on maternity leave in the last two years, whilst 2% (n=5) preferred not to say.



Base: All respondents=308

**Have you been pregnant and/or on maternity leave in the last two years?**



Base: All respondents=299

## Analysis of results:

### Frequency of visiting Alexandra Recreational Ground:

Over two thirds of respondents (67%, n=226) visit the grounds a number of times per week. This comprises: 29% (n=98) visiting on a daily basis and 38% (n=128) visiting two or three times per week. 24% (n=80) visit the grounds two or three times per month and 8% (n=26) visit two or three times a year. One respondent (0.3%, n=1) indicated they visit less than once per year and four said 'never' (1%, n=4).

### Q1: How often do you visit Alexandra Recreational Ground?



← More often

Less often →

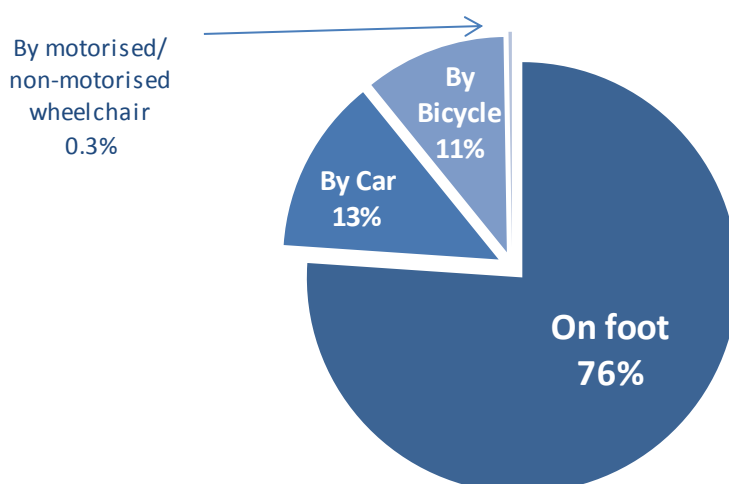
Never, 1%  
Less than one a year, 0.3%

Base: Number of respondents=337

### Method of travelling to Alexandra Recreational Ground:

Over three quarters of respondents indicated they travel to the grounds on foot (76%, n=302), whilst 13% (n=52) travel by car, and 11% (n=42) by bicycle. One respondent (0.3%) reported they travel to the park by wheelchair (motorised or non-motorised).

## Q2: How do you normally travel to the grounds?



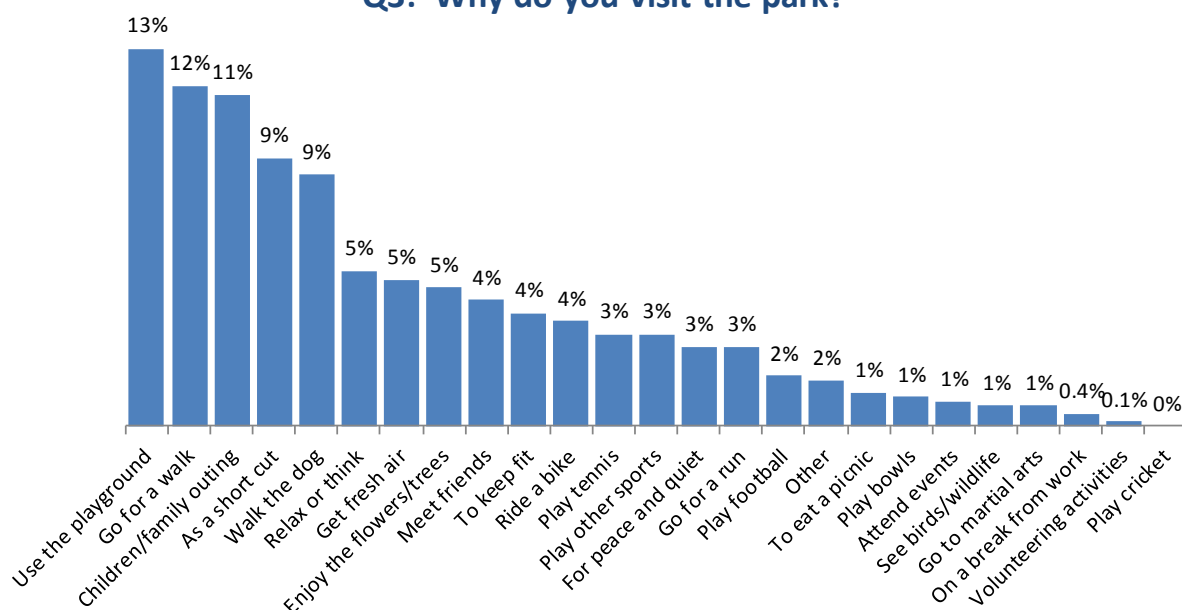
Base: Number of respondents=397

## Reasons for visiting Alexandra Recreational Ground:

This section looks at the reasons for visiting the grounds (respondents were asked to choose up to three reasons). The most popular reason for visiting the grounds was to 'Use the playground' (13%, n=90). This was followed by 'Go for a walk' (12%, n=81) and 'Children/family outing' (11%, n=79). Additional reasons for visiting the grounds include:

- Walk the dog (9%, n=60)
- Relax or think (5%, n=37)
- Get fresh air (5%, n=35)
- Enjoy the flowers/trees (5%, n=33)
- Meet friends (4%, n=30)
- To keep fit (4%, n=27)
- Ride a bike (4%, n=25)
- Play tennis (3%, n=22)
- Play other sports (3%, n=22)
- For peace and quiet (3%, n=19)
- Go for a run (3%, n=19)
- Play football (2%, n=12)
- Other (2%, n=11)
- To eat a picnic (1%, n=8)
- Play bowls (1%, n=7)
- Attend events (1%, n=6)
- See birds/wildlife (1%, n=5)
- Go to martial arts (1%, n=5)
- On a break from work (0.4%, n=3)
- Volunteering activities (0.1%, n=1).

### Q3: Why do you visit the park?

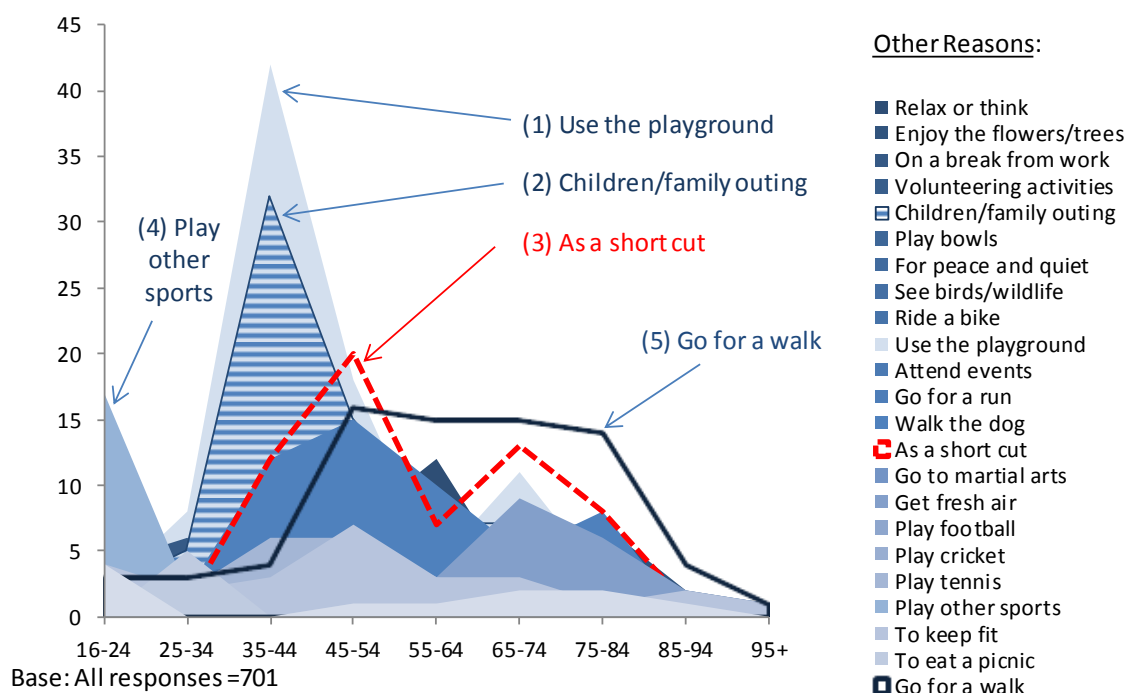


Base: All responses =701

Looking at the age profile of respondents; most respondents aged between 35-44yrs said they 'Use the playground' and use the grounds for a 'Children/family outing'. Younger respondents aged between 16-24yrs tend to use the grounds to 'Play other sports', whilst a broad range of respondents aged between 45yrs and 84yrs use the grounds to 'Go for a walk'. A broad range of respondents also use the grounds as a shortcut.

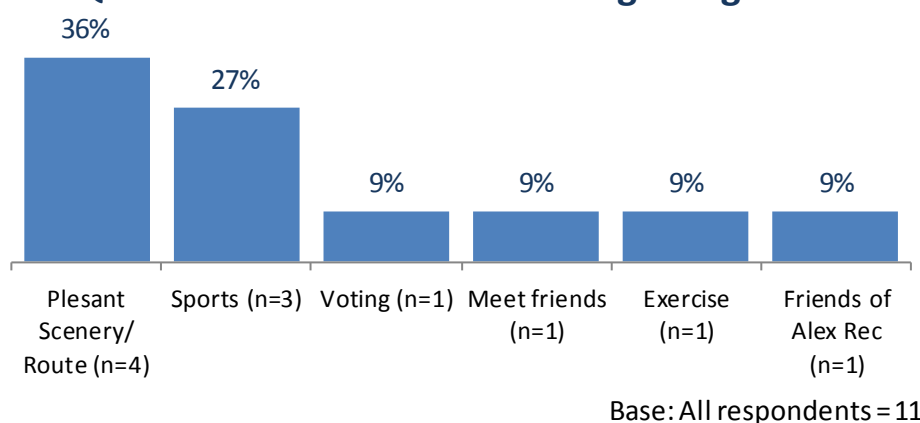
The graph below illustrates the age profiling and reasons for visiting the grounds:

### Top 5 Age Profiling for visiting the grounds



The graph below illustrates 'Other' reasons for visiting the grounds:

### Q3a: 'Other' reasons for visiting the grounds:

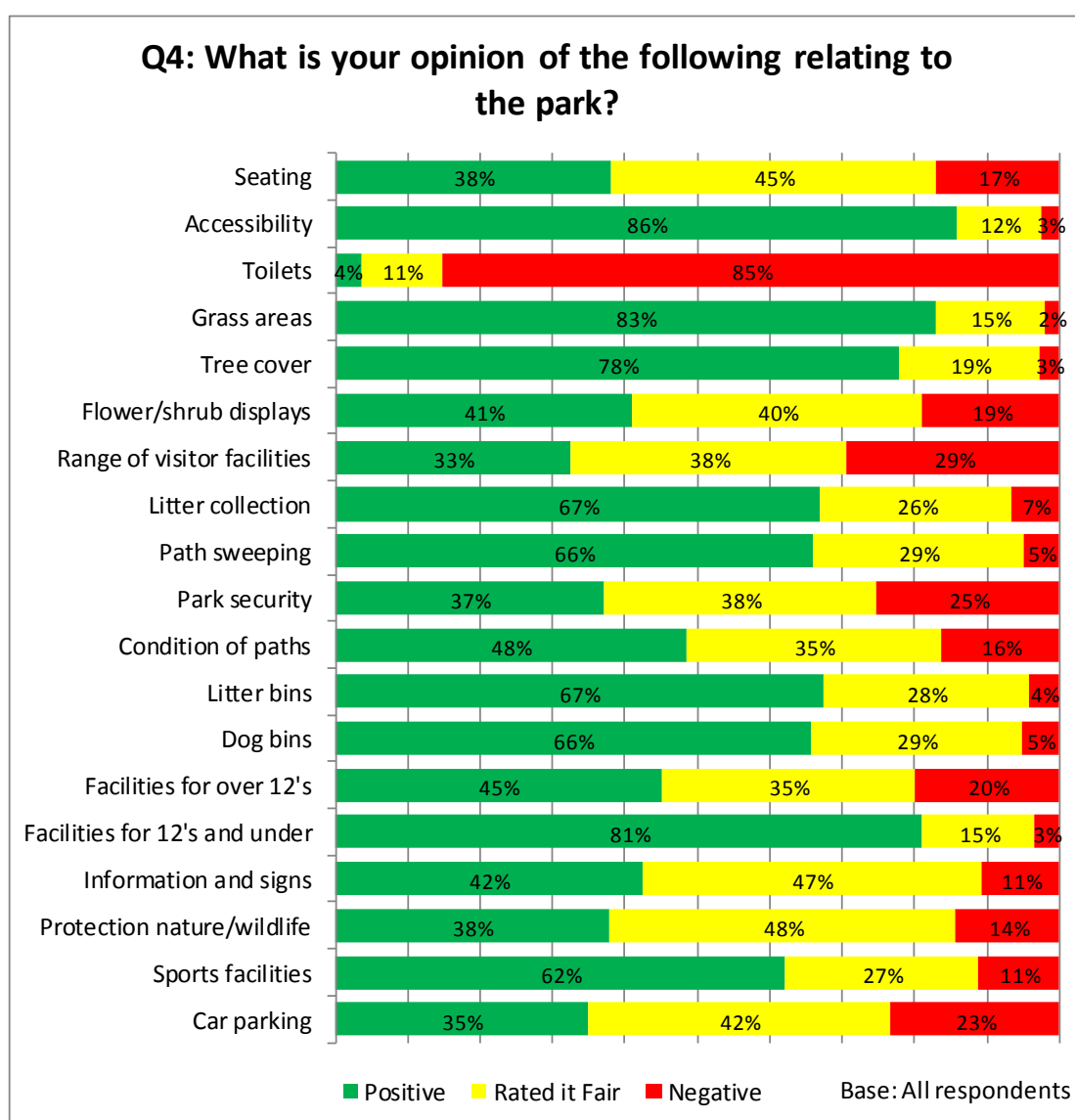




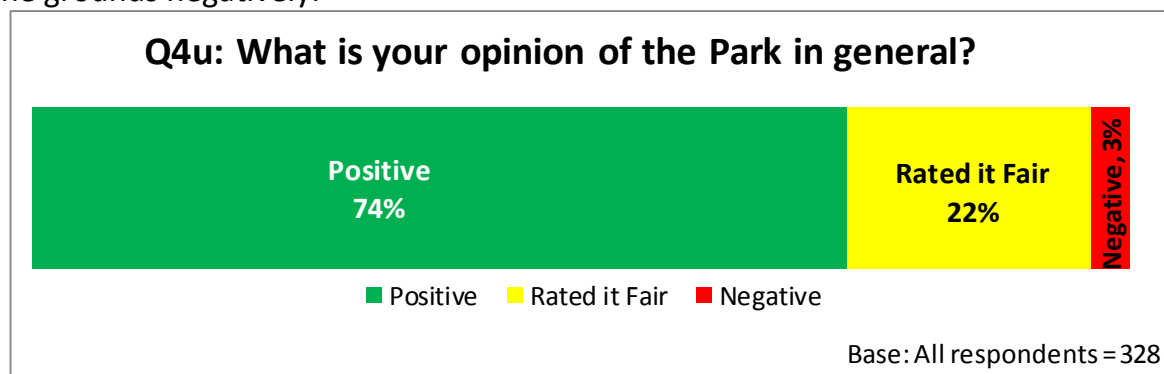
## Opinion of aspects of the Grounds:

This section looks at peoples' opinions relating to various aspects of the grounds.

- The ground's top three positively rated aspects were:
  - 'Accessibility' (86%, n=273)
  - 'Grass areas' (83%, n=271 )
  - 'Facilities for 12's and under' (81%, n=232).
- The ground's top three negatively rated aspects were:
  - 'Toilets' (85%, n=189)
  - 'Range of visitor facilities' (29%, n=83)
  - 'Park security' (25%, n=127).



When asked about 'the park in general', the majority of respondents (74%, n=244) rated the grounds positively, 22% (n=73) rated the grounds fair, and 3% (n=11) rated the grounds negatively.

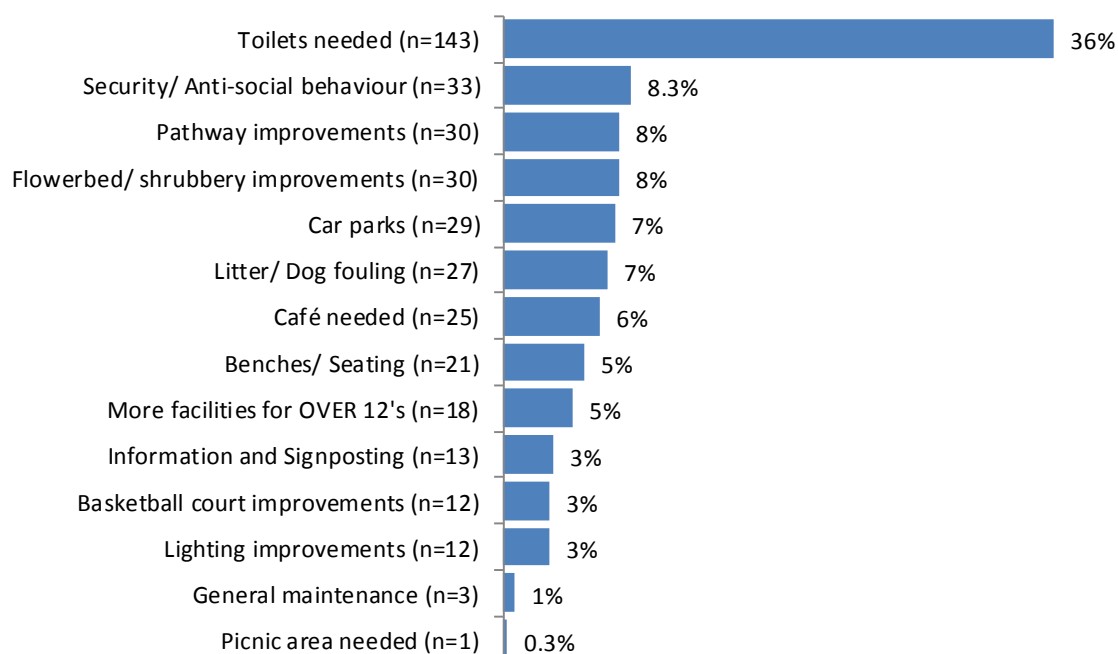


Respondents who ticked 'Poor' or 'Very Poor' for any of the aforementioned questions were asked to provide reasons for their answer. The three most prevalent reasons for 'Poor' or 'Very poor' responses include:

- 'Toilets needed' (36%, n=143)
- 'Security/ Anti-social behaviour' (8%, n=33)
- 'Pathway improvements' (8%, n=30) and 'Flowerbed/ shrubbery improvements' (8%, n=30) - tie.

The table below illustrates the frequency of common themes:

**Q5: If you ticked 'Poor' or 'Very Poor', on any of the options, please give your reasons below:.**



Base: Number of respondents=397

A more detailed analysis of the literal responses is listed below:

Q5: If you ticked 'Poor' or 'Very Poor' on any of the above options, please give your reasons below: (Base: All respondents=397)	
Theme:	Examples:
1. Toilets needed	<ul style="list-style-type: none"> <li>• A large community park which is also used by the children of three local schools needs to offer easy access toilet facilities during daylight hours to enable families to utilise the park more fully without the need to rush off home to use a toilet.</li> <li>• We desperately need toilets! The lack of toilet facilities is appalling and means children have to use the bushes.</li> <li>• No toilet facilities is a real problem for such a popular park (especially for small kids).</li> <li>• Alexandra Park would be vastly improved by toilet facilities.</li> <li>• No toilet facilities.</li> <li>• Toilets would be really helpful!</li> </ul>
2. Security/ Anti-social behaviour	<ul style="list-style-type: none"> <li>• Little evidence of any security.</li> <li>• No night security and many teenagers on an evening's night drinking come back through the park and behave antisocially with foul language and noise disturbance.</li> <li>• A degree of anti-social behaviour has crept into the park in recent years, particularly at night.</li> </ul>
3. Pathway improvements	<ul style="list-style-type: none"> <li>• The path from Wallace Fields into the park is in a very poor condition with lots of trip hazards.</li> <li>• Path at top of park that leads from Alexandra Road to Wallace Fields is awful. Generally paths are not that friendly to buggies.</li> <li>• Paths not adequately maintained.</li> </ul>
4. Flowerbed/ shrubbery improvements	<ul style="list-style-type: none"> <li>• Flowers/shrubs displays - large section of the park which is currently fenced off, would be nice to see something other than brambles and nettles in there.</li> <li>• The gardens are not very beautiful.</li> <li>• Flower and shrubs displays non-existent.</li> </ul>
5. Car parks	<ul style="list-style-type: none"> <li>• Limited parking.</li> <li>• Very little parking causing problems on local roads.</li> <li>• Car parking is very limited.</li> </ul>
6. Litter/ Dog fouling	<ul style="list-style-type: none"> <li>• The dog litter is appalling. There are still many people who walk their dogs in the park but do not pick up their dog's poo! This is especially prevalent on the paths. Also, there are numerous people who allow their dogs to wander off their leads, this is extremely unnerving to young children, especially when the dogs come running</li> </ul>

	<p>towards them.</p> <ul style="list-style-type: none"> <li>• The bins are disgusting because some of them are too full.</li> </ul>
7. Café needed	<ul style="list-style-type: none"> <li>• This is a very well used park and there must be a market for café/shop.</li> <li>• Some sort of refreshment stop it café would be very welcome. Many mums in the area would be happy to run it!</li> </ul>
8. Benches/ Seating	<ul style="list-style-type: none"> <li>• Not enough seating for parents and visitors.</li> <li>• There should be more seating spaced out around the park.</li> <li>• Not enough benches.</li> </ul>
9. More facilities for over 12's	<ul style="list-style-type: none"> <li>• Very poor facilities for over the 12s.</li> <li>• Nothing for over 12s.</li> <li>• The playground is very small, best suited for the under 5s. There is not enough to entertain older children, they therefore overtake the playground and can intimidate younger children.</li> </ul>
10. Information and Signposting	<ul style="list-style-type: none"> <li>• More signage required.</li> <li>• Inadequate signage.</li> <li>• No significant signs.</li> </ul>
11. Basketball court improvements	<ul style="list-style-type: none"> <li>• Basketball court is in a very poor condition, especially the backboards.</li> <li>• The basketball court is in a very poor condition.</li> <li>• The basketball court needs re-doing because the hoops don't look stable and are worn out and the floor needs resurfacing.</li> </ul>
12. Lighting improvements	<ul style="list-style-type: none"> <li>• Needs more lighting in the evening, sometimes doesn't feel safe because of poor visibility.</li> <li>• I feel scared when dark as inadequate lighting.</li> </ul>
13. General maintenance	<ul style="list-style-type: none"> <li>• Tennis courts were resurfaced to a very poor quality and are rubbish.</li> <li>• Not very well maintained in general.</li> </ul>
14. Picnic area needed	<ul style="list-style-type: none"> <li>• No picnic facilities.</li> </ul>

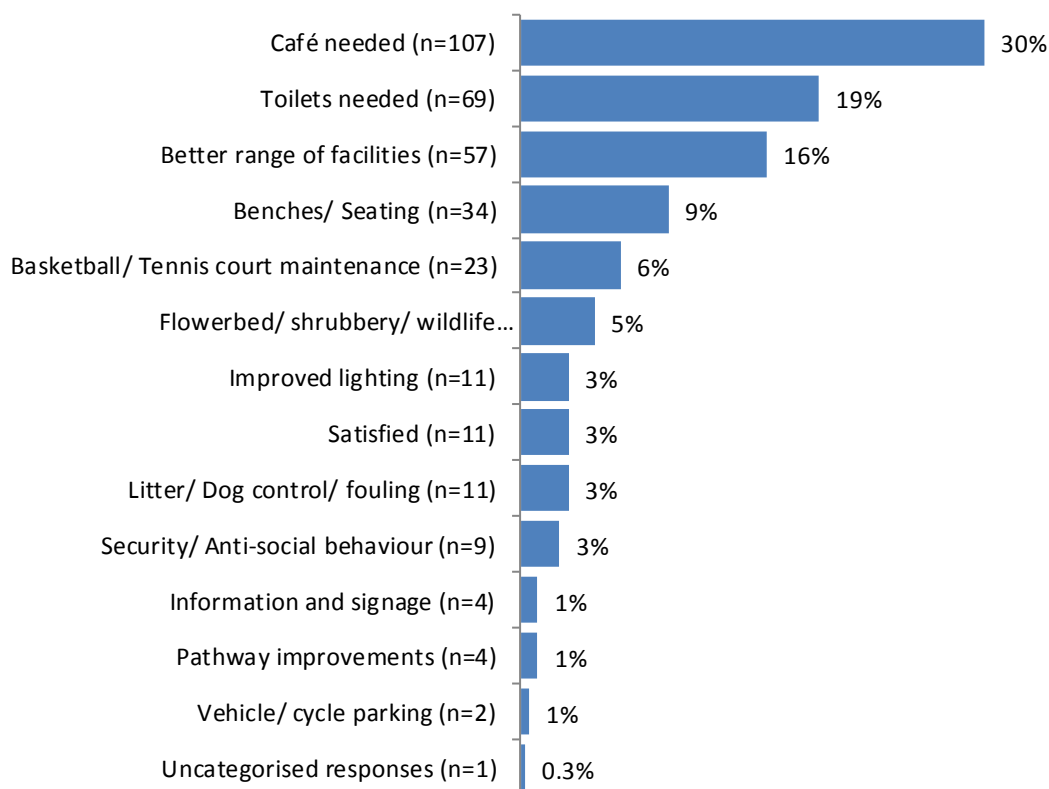
## Improving visitor experience and encouraging more use of the grounds or staying for longer:

This section looks at the visitor experience and suggestions for using Alexandra Recreational Grounds more often or to stay for longer. When considering improving the visitor experience, the three most prevalent suggestions for using the recreational grounds more often or staying for longer include:

- Café needed (30%, n=107)
- Toilets needed (19%, n=69)
- Better range of facilities (16%, n=57).

The graph below illustrates common themes:

**Q6: Can you think of one thing that would encourage you to use Alexandra Recreation Ground more often or to stay for longer?**



Base: All respondents=360

A more detailed analysis of the literal responses is listed below:

Q6: Can you think of one thing that would encourage you to use Alexandra Recreation Ground more often or to stay for longer? (Base: All respondents=360)	
Theme:	Examples:
1. Café needed	<ul style="list-style-type: none"> <li>• A little café selling tea and cake. Nothing huge, just a little outlet</li> <li>• A lovely café like Reigate and Banstead park - they are first class cafe and would encourage people to stay longer. It's long overdue for this park.</li> <li>• A café like Cheam Park would be brilliant, don't even have to sell a wide variety of things. ...ice creams in the summer and tea and coffee throughout the year.</li> <li>• The addition of a small tearoom would be ideal for</li> </ul>

	<p>visitors.</p> <ul style="list-style-type: none"> <li>• Somewhere to get food and drink.</li> <li>• Tea &amp; cake/snacks stall.</li> <li>• Yes, a cafe next to the playground.</li> <li>• A simple cafe facility.</li> <li>• Café or mobile coffee van.</li> </ul>
2. Toilets needed	<ul style="list-style-type: none"> <li>• Toilets! It is just crazy that such a lovely facility cannot provide toilets for visitors. There have been endless occasions we have had to leave early!</li> <li>• Toilet facilities would enable me to stay longer with children.</li> <li>• Toilets - we often have to go home for this reason.</li> <li>• Access to a public lavatory.</li> <li>• Provision of toilet facilities.</li> <li>• Loos!</li> </ul>
3. Better range of facilities	<ul style="list-style-type: none"> <li>• Other things to do like adventure golf for example.</li> <li>• More facilities for children &amp; adults.</li> <li>• More extensive play equipment.</li> <li>• Put in some new play equipment for the under 12 play area, it hasn't changed in at least 8 years. Would be nice to have a few new things, one of those trampolines would be great.</li> <li>• Fitness circuit around the park with exercise stations.</li> <li>• Outdoor gym equipment.</li> </ul>
4. Benches/ Seating	<ul style="list-style-type: none"> <li>• More benches.</li> <li>• Nice seating areas.</li> <li>• Benches and seats surrounded by trees and flowers (but in the 'sun').</li> <li>• More seats at the top end of the park.</li> <li>• A few more seats.</li> </ul>
5. Basketball/ Tennis court maintenance	<ul style="list-style-type: none"> <li>• Fixing the basketball court will definitely encourage me and many other people to come and play at the park as there are many people who play basketball on a regular basis.</li> <li>• If the basketball courts closest to the bowling green where fixed up, because neither hoops have nets, plus the furthest hoop has a broken back board and seems to have been set alight.</li> <li>• Refurbish the basketball court.</li> <li>• It would be great to have the tennis courts resurfaced as they are very bumpy.</li> </ul>

6. Flowerbed/ shrubbery/ wildlife improvements	<ul style="list-style-type: none"> <li>• It would be pleasant to have more flowers/bedding areas. If more wildlife could be encouraged in some way, beehives, bat/bird boxes, etc.</li> <li>• More trees/plants to encourage wildlife.</li> <li>• More flowers.</li> <li>• Seasonal flower gardens.</li> </ul>
7. Improved lighting	<ul style="list-style-type: none"> <li>• Lighting could be a lot better.</li> <li>• More street lighting, it is very dark in some places.</li> <li>• Better lighting around pathways.</li> </ul>
8. Satisfied	<ul style="list-style-type: none"> <li>• It suits my needs very well.</li> <li>• We love Alexandra Park, it's a fantastic park, well used by local residents.</li> <li>• Very satisfactory as it is!</li> </ul>
9. Litter/ Dog control/ fouling	<ul style="list-style-type: none"> <li>• Litter clearance, as often as possible.</li> <li>• Please fine people who don't pick up their dog's mess.</li> <li>• Less dogs.</li> <li>• There should be some restrictions so dog owners have to keep their dogs under control more.</li> </ul>
10. Security/ Anti- social behaviour	<ul style="list-style-type: none"> <li>• Park keeper patrolling it.</li> <li>• Stop the drugs.</li> <li>• Better security.</li> </ul>
11. Information and signage	<ul style="list-style-type: none"> <li>• Better information about facilities and scheduled activities.</li> <li>• Better information about when the organised sporting events will be. There is nothing more annoying than turning up to walk the dog but not being able to as there is an organised match being played. If the times / dates were advertised I would avoid these times.</li> <li>• Sometimes I would like to play tennis but I am not sure if the court is taken. Maybe an app. that tells you if the court is free?</li> </ul>
12. Pathway improvements	<ul style="list-style-type: none"> <li>• Better walking pavements - not great for disabled people to access.</li> <li>• Better paths in park and along top of park as there are too many holes and bumps, children always fall over.</li> <li>• Improving paths for children.</li> </ul>
13. Vehicle/ cycle parking	<ul style="list-style-type: none"> <li>• More parking.</li> <li>• Cycle parking provision.</li> </ul>
14. Uncategorised responses	<ul style="list-style-type: none"> <li>• The weather!</li> </ul>

## Volunteering opportunities:

In response to the question on getting involved in volunteering activities, 51 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.

## Conclusion:

The results of the survey show that people visit the grounds on a regular basis – with over two thirds of respondents visiting the grounds a number of times per week. Over three quarters of respondents indicated they travel to the grounds on foot - which would suggest they live nearby, or in close proximity to the grounds. The three most popular reasons for visiting the grounds was to use the playgrounds, followed by going for a walk, and for a children/family outing. Looking at the age profile of respondents, most respondents aged between 35-44yrs use the playground and use the grounds for a children/family outing. Whilst a broad range of respondents aged between 45yrs and 84yrs said they use the grounds to go for a walk, most younger respondents aged between 16-24yrs tend to use the grounds to play other sports.

The ground's most positively rated aspects were its accessibility, together with grass areas and the facilities for 12's and under. Whilst the vast majority of respondents' opinion of the park in general was positive, the ground's three most negatively rated aspects were the lack of toilets, its limited range of visitor facilities, and park security. When asking respondents to provide reasons for scoring any aspect of the park 'poor' or 'very poor', a number of respondents cited the lack of toilet facilities – with some people saying they have to leave early because of this.

The most popular suggestion to encourage people to use Alexandra Recreation Ground more often or to stay for longer was the need for a Café. This was followed by the need for toilets – and a number of respondents cited both (i.e. a café with toilets). Other suggestions included the need for a better range of facilities, more benches/seating in the grounds, and better maintenance of the basketball and tennis courts.

As a result of the survey, 51 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.

Overall, visitor responses were very positive with a few developmental areas identified.





## Auriol Park Visitor Survey - 2016



Report prepared for:  
Operations Management Team

Date: January 2017

Please contact the Epsom & Ewell Borough Council's Consultation and Communication Team should you require any information on the Auriol Park Visitor Survey 2016  
Email: [contactus@epsom-ewell.gov.uk](mailto:contactus@epsom-ewell.gov.uk)

## Auriol Park Visitor Survey 2016

### Summary of main findings:

- The survey ran from 07 November to 02 December 2016 - a period of four weeks. The survey was available in paper and electronic formats. The electronic version was featured on the Council's main webpage and via our social media platforms Twitter and Facebook - all containing links to the online survey. Postcard-size fliers were also distributed to:
  - Mead Infant School
  - Auriol Junior School
  - Cuddington Primary School.
- In total, 372 survey responses were received; of which 316 were paper-based (85%, n=316/372) and 56 were online submissions (15%, n=56/372).
- Respondent profile:
  - The majority of respondents were female (66%, n=206/312) and 34% (n=105/312) were male.
  - Based on age groupings: 52% (n=178/340) were over 55 years old and 48% (n=162/340) were under 55 years old.
  - When asked about ethnicity, the majority of respondents (83%, n=274/330) described themselves as British white or English white.
  - The majority of respondents (64%, n=209/329) said they were Christian.
  - Four per cent (n=14/315) of respondents indicated they had a disability according to the Equalities Act of 2010.
- Nearly six in ten respondents (58%, n=210/364) visit the park multiple times weekly; this comprises 19% (n=69/364) visiting daily and 39% (n=141/364) visiting two or three times weekly. A further 27% (n=98/364) visit the park two or three times monthly and 12% (n=45/364) visit the park two or three times a year. Only 1.4% (n=5/364) visit less than once a year.
- Over eight in ten respondents travel to the park on foot (82%, n=341/414), whilst 13% (n=52/414) travel by car and 5% (n=20/414) by bicycle.
- Overall, the most popular reason for visiting the park was to 'go for a walk' (14%, n=90/657). This was followed by 'use the playground' (13%, n=87/657) and 'children/family outing' (12%, n=82/657).

- Looking at the age profile, most respondents between:
  - 35-44yrs 'use the playground' (49%, n=41/84) and use the park for a 'children/family outing' (42%, n=32/77)
  - 45-54yrs use the park to 'walk the dog' (28%, n=15/53)
  - 55-64yrs use the park to 'walk the dog' (30%, n=16/53)
  - 65-74yrs use the park to 'go for a walk' (37%, n=30/81) or use it 'as a short cut' (47%, n=18/38).
- The top three positively rated aspects of the park were:
  1. 'Accessibility' (88%, n=300/340)
  2. 'Grass areas' (84%, n=295/350)
  3. 'Facilities for 12's and under' (72%, n=204/283).
- The top three negatively rated aspects of the park were:
  1. 'Toilets' [lack of] (83%, n=186/225)
  2. 'Range of visitor facilities' (29%, n=86/298)
  3. 'Flower/shrub displays' and 'Facilities for over 12's' (tie: 23%; n=76/335, n=57/252; respectively).
- Overall, 74% (n=275/352) of respondents rated 'the park in general' positively, 20% (n=70/352) rated the grounds fair and 2% (n=7/352) rated the grounds negatively.
- Respondents who gave a negative response to an opinion relating to the park were also asked to provide reasons for their answer. The three most prevalent reasons were:
  1. 'Toilets needed' (40%, n=152/379)
  2. 'Benches/ seating' (10%, n=39/379)
  3. 'Café needed' and 'Flowerbed/ shrubbery improvements' (tie: 8%, n=32/379).
- When considering improving the visitor experience, the three most prevalent suggestions for using the park more often or staying for longer include:
  1. Café needed (31%, n=107/342)
  2. Toilets needed (25%, n=87/342)
  3. Better range of facilities (12%, n=42/342).
- Of the respondents that took part in this survey, 40 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.

## Objectives and methodology:

Auriol Park is amongst five green spaces in the Borough and is situated in Ewell, Surrey. It is managed by Epsom and Ewell Borough Council and facilities include: football pitches, tennis courts, children's playground, bowling green, and pavilion.

The survey was conducted by the Council on behalf of its Operations Management Team. The team is responsible for ensuring the park meets the needs of local residents, visitors and develops in a sustainable way.

### Questionnaire development:

The questions were developed in liaison with the Head of Operational Services and the Patrol Ranger. Areas include:

- Frequency of visiting the park
- Method of travel to the park
- Reasons for visiting the park
- Opinions on various aspects of the park
- Improving visitor experience and encouraging more use of the park, or staying for longer
- Volunteering opportunities.

### Methodology:

The survey ran from 07 November to 02 December 2016 - a period of four weeks. The survey was available in paper and electronic formats. Of the 1,000 paper surveys, 906 were posted to properties in the surrounding roads and the remaining 94 were distributed to:

- Bowlers
- Park users
- Footballers using park at the weekend.

A5 postcard-size fliers were distributed to:

- Mead Infant School
- Auriol Junior School
- Cuddington Primary School.

Links to the electronic survey were promoted via:

- Council website  
([www.epsom-ewell.gov.uk](http://www.epsom-ewell.gov.uk))
- Twitter  
([www.twitter.com/@EpsomEwellBC](https://www.twitter.com/@EpsomEwellBC))
- Facebook  
([www.Facebook.com/EpsomEwellBC](https://www.Facebook.com/EpsomEwellBC)).

**Of the 1,000 paper copies  
distributed, 316 were  
returned - resulting in a  
paper-copy response rate  
of 32%**



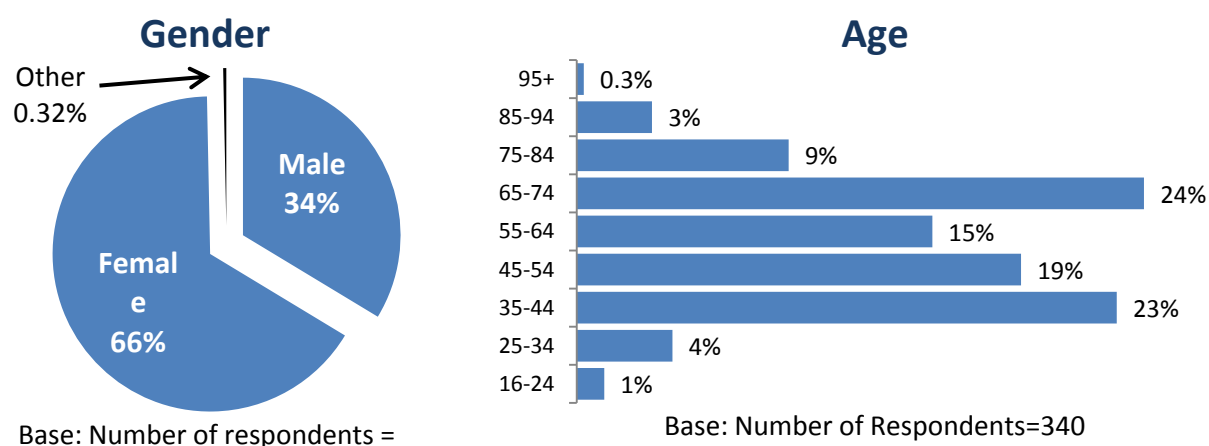
In total, 372 survey responses were received. Responses to the electronic questionnaires were automatically imported into the survey design and analysis package (SNAP v11). The paper returns were sent to SnapSurveys for data inputting, then merged with the online version. Of the 1,000 paper copies distributed, 316 were returned - resulting in a paper-copy response rate of 32% (n=316/1,000). Overall, 85% (n=316/372) of responses were paper-based, whilst 15% (n=56/372) were online submissions. The results were analysed by the Council's Consultation and Communication Team.

The figures in this report are calculated as a proportion of respondents who answered each question – excluding 'No Reply' or 'No Opinion' responses. Percentages in a particular chart might not always add up to 100% due to rounding, or because a respondent was allowed to give more than one answer to the question.

## Respondent profile and equalities monitoring:

### Age and gender:

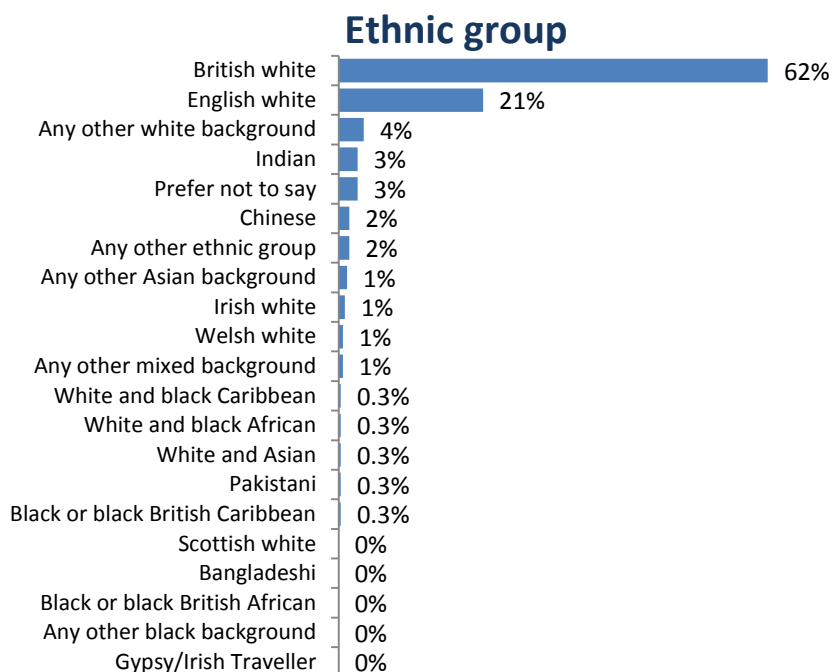
Respondents were asked their gender and which age group they fit into. The majority of respondents were female (66%, n=206/312) and 34% (n=105/312) were male. Based on age groupings: 52% (n=178/340) were over 55 years old and 48% (n=162/340) were under 55 years old. The highest number of respondents were people aged between 65 & 74yrs (24%, n=83/340) followed by those aged between 35 & 44yrs (23%, n=79/340).



### Other demographics:

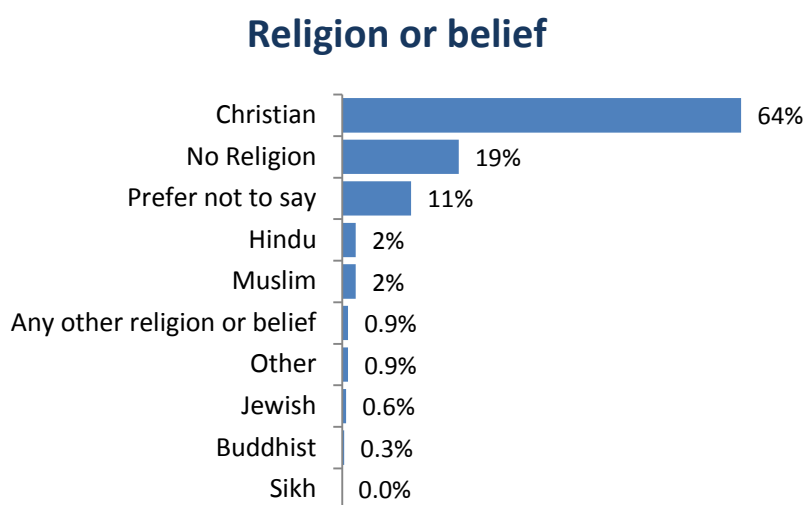
Four per cent (n=14/315) of respondents indicated they have a disability according to the Equalities Act of 2010. A person has a disability for the purposes of the Act if they have a physical or mental impairment which has a substantial and long term adverse effect on his/her ability to carry out normal day-to-day activities.

When asked about ethnicity, the majority of residents (83%, n=274/330) described themselves as British white or English white.



Base: Number of Respondents=330

In terms of religious beliefs; over six in ten (64%, n=209/329) said they were Christian and 19% (n=61/239) said they were not religious.

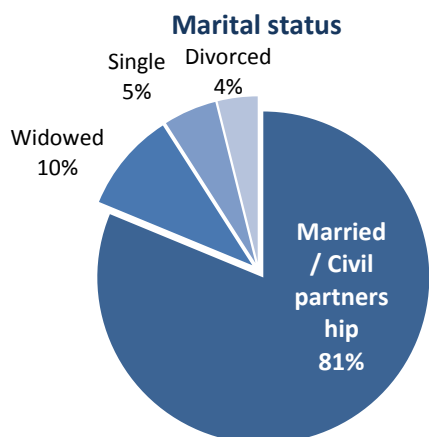


Base: Number of Respondents=329

When asked about sexual orientation, 92% (n=275/298) said they were heterosexual whilst 6% (n=18/298) preferred not to say. Five respondents said either 'Gay man/woman/lesbian' (1%, n=3/298) or 'Other' (0.67%, n=2/298). 4% (n=11/311) said their gender identity was different from their sex assigned at birth.

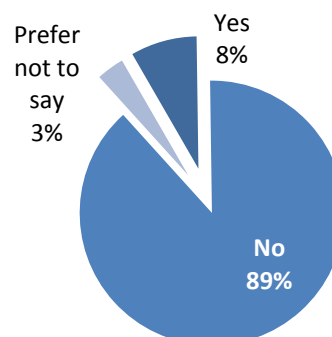
When asked about marital status, 79% (n=251/317) said they were married or in a civil partnership, 10% (n=30/317) were widowed, 5% (n=16/317) single and 4% (n=12/317) divorced. Eight per cent of respondents (n=24/296) said they had been

pregnant or on maternity leave in the last two years, whilst 3% (n=10/296) preferred not to say.



Base: All respondents=317

**Have you been pregnant and/or on maternity leave in the last two years?**



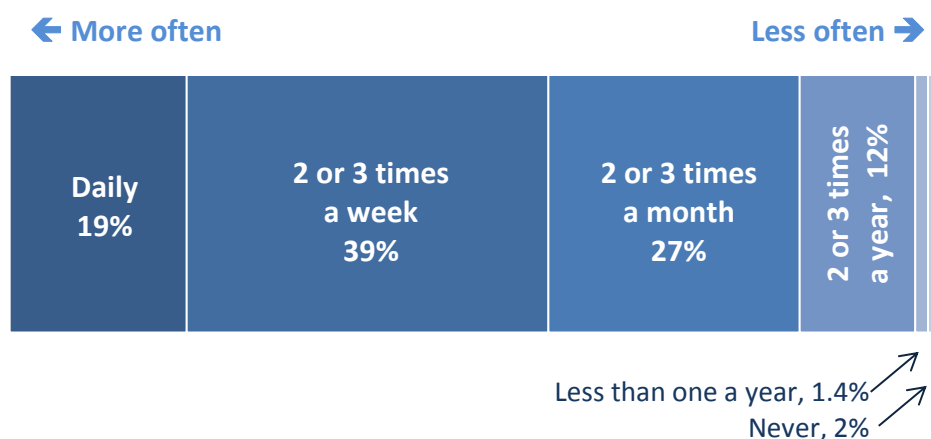
Base: All respondents=296

## Analysis of results:

### Frequency of visiting Auriol Park:

Nearly six in ten respondents (58%, n=210/364) visit the park multiple times weekly; this comprises 19% (n=69/364) visiting daily and 39% (n=141/364) visiting two or three times weekly. A further 27% (n=98/364) visit the park two or three times monthly and 12% (n=45/364) visit the park two or three times a year. Only 1.4% (n=5/364) visit less than once a year and six people said 'never' (2%, n=6/364).

### How often do you visit Auriol Park?

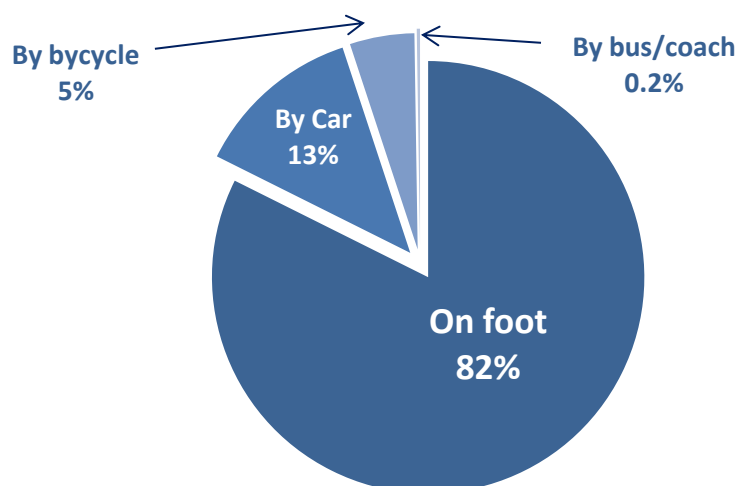


Base: Number of respondents=364

## Method of travelling to Auriol Park:

Over eight in ten respondents travel to the park on foot (82%, n=341/414), whilst 13% (n=52/414) travel by car and 5% (n=20/414) by bicycle. One respondent said they travel by bus/coach (0.2%, n=1/414).

### How do you normally travel to the park?



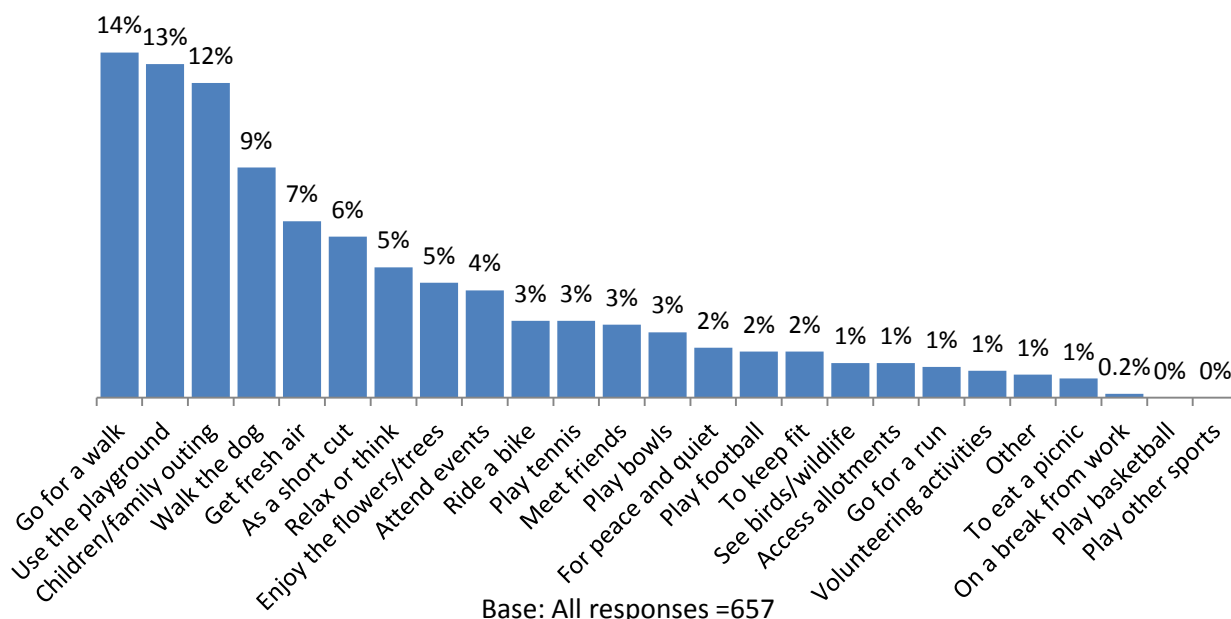
Base: Number of responses=414

## Reasons for visiting Auriol Park:

This section looks at the reasons for visiting the park (respondents were asked to choose up to three reasons). The most popular reason for visiting the park was to 'go for a walk' (14%, n=90/657). This was followed by 'use the playground' (13%, n=87/657) and 'children/family outing' (12%, n=82/657).

Additional reasons for visiting the grounds include:

### Why do you visit the park?



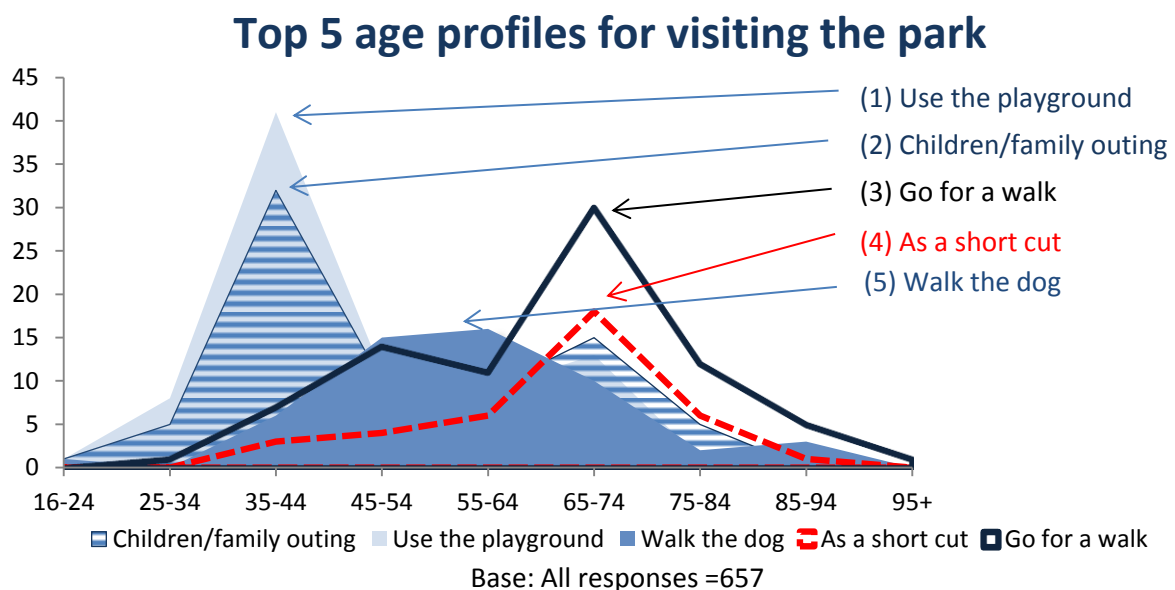
Base: All responses =657



Looking at the age profile, most respondents between:

- 35-44yrs 'use the playground' (49%, n=41/84) and use the park for a 'children/family outing' (42%, n=32/77)
- 45-54yrs use the park to 'walk the dog' (28%, n=15/53)
- 55-64yrs use the park to 'walk the dog' (30%, n=16/53)
- 65-74yrs use the park to 'go for a walk' (37%, n=30/81) or use it 'as a short cut' (47%, n=18/38).

The graph below illustrates the top five age profiles for visiting the park:



'Other' reasons for visiting the park include:

- Trifest event
- Ride bikes
- Walk through
- Catch the setting sun!

## Opinion of aspects of the park:

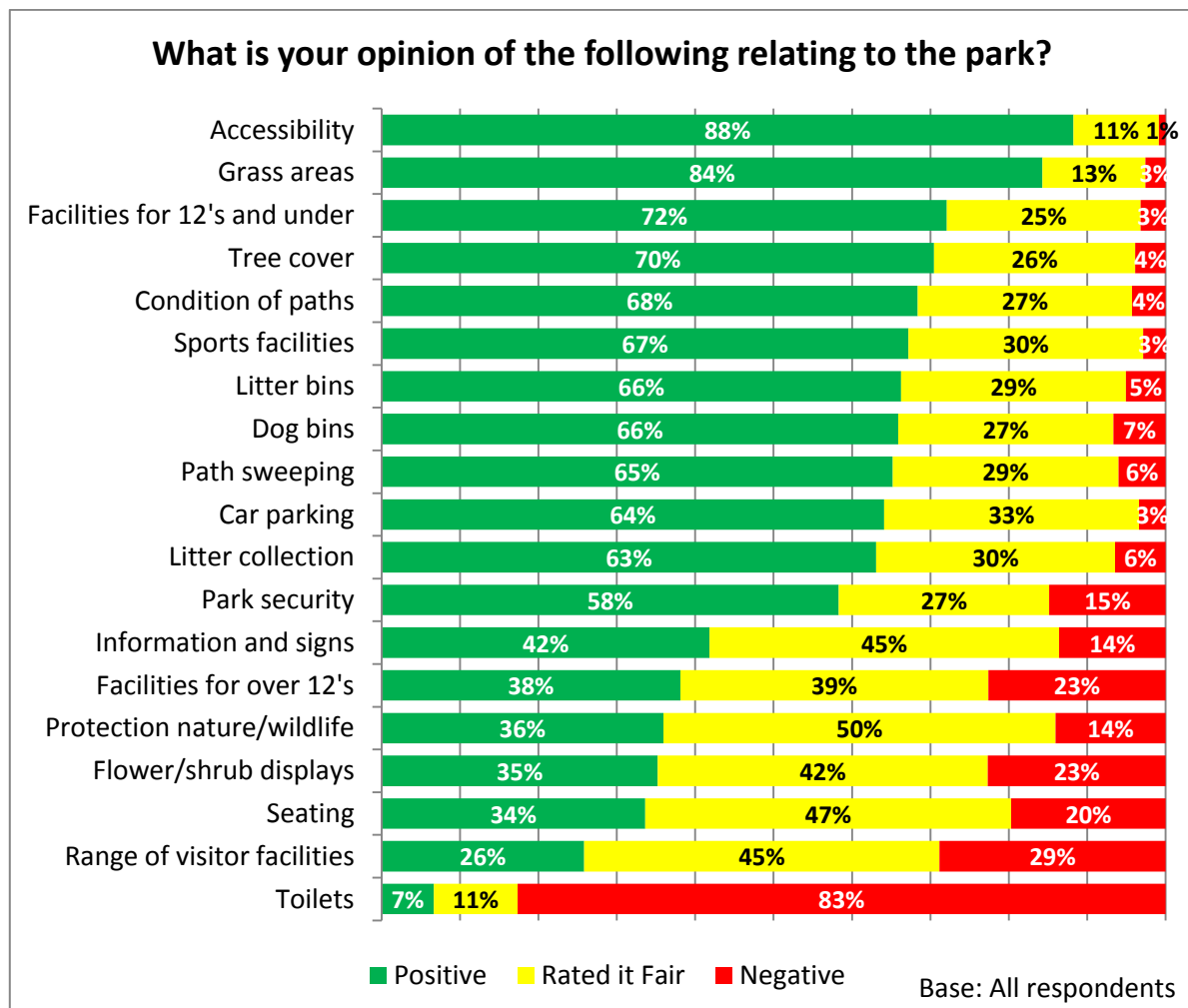
This section looks at peoples' opinions relating to various aspects of the park.

The top three positively rated aspects of the park were:

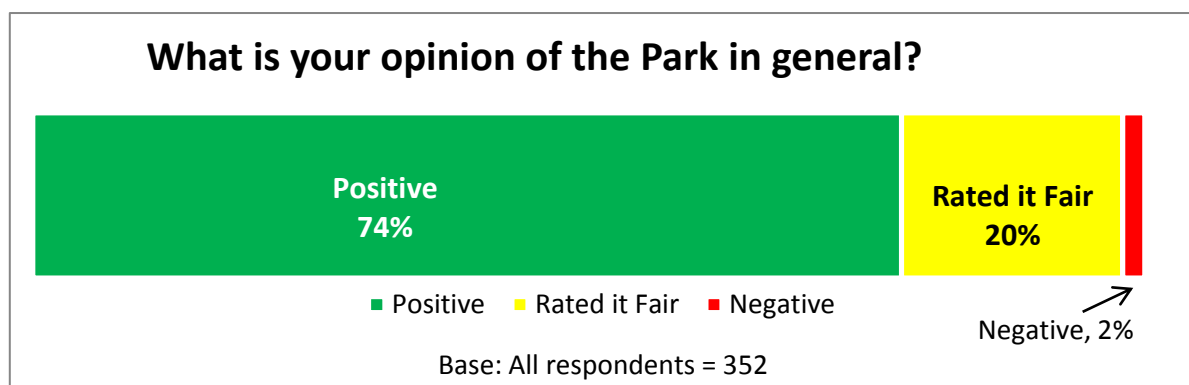
1. 'Accessibility' (88%, n=300/340)
2. 'Grass areas' (84%, n=295/350)
3. 'Facilities for 12's and under' (72%, n=204/283).

The top three negatively rated aspects of the park were:

1. 'Toilets' [lack of] (83%, n=186/225)
2. 'Range of visitor facilities' (29%, n=86/298)
3. 'Flower/shrub displays' and 'Facilities for over 12's' (tie: 23%; n=76/335, n=57/252, respectively).



Overall, 74% (n=275/352) of respondents rated 'the park in general' positively, 20% (n=70/352) rated the grounds fair and 2% (n=7/352) rated the grounds negatively.

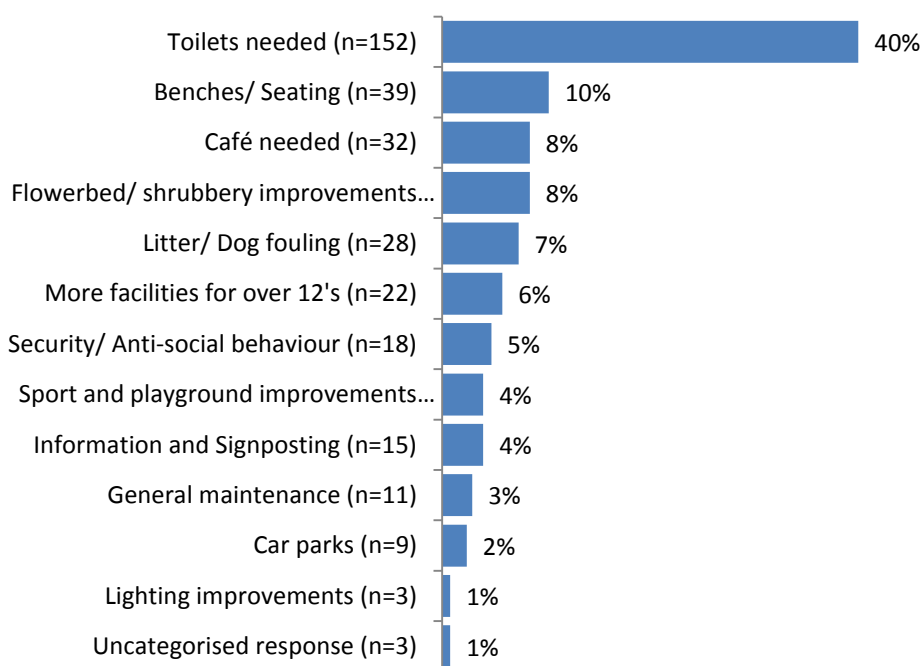


Respondents who gave a negative response to an opinion relating to the park were also asked to provide reasons for their answer. The three most prevalent reasons were:

1. 'Toilets needed' (40%, n=152/379)
2. 'Benches/ seating' (10%, n=39/379)
3. 'Café needed' and 'Flowerbed/ shrubbery improvements' (tie: 8%, n=32/379).

The table below illustrates additional reasons:

**If you ticked 'Poor' or 'Very Poor' on any of the options,  
please give your reasons below:**



Base: Number of responses=379

Examples of literal responses include:

Q5: If you ticked 'Poor' or 'Very Poor' on any of the above options, please give your reasons below: (Base: All responses=379)	
Theme:	Examples:
1. Toilets needed	<ul style="list-style-type: none"> <li>• No toilets!!! Very well used park by young families who need more than bushes when caught short!</li> <li>• There are no toilets in the park which puts me off taking the children there more regularly.</li> <li>• No toilet facilities, numerous times the park visit is cut short to go home to use a toilet.</li> </ul>
2. Benches/ Seating	<ul style="list-style-type: none"> <li>• Very limited seating - would be better if more benches were dotted around.</li> <li>• Not sufficient seating.</li> <li>• Not many seats in the park.</li> </ul>
3. Café needed	<ul style="list-style-type: none"> <li>• Could do with a cafe to encourage people to stay a while.</li> <li>• A small refreshments shop selling water/juices and nibbles would be a great addition.</li> <li>• It would be great to have a cafe or even a kiosk selling basic refreshments.</li> </ul>
4. Flowerbed/ shrubbery improvements	<ul style="list-style-type: none"> <li>• Flower shrub displays - no formal flower beds, park lacks colour in summer.</li> <li>• No flower beds maintained well.</li> <li>• It would be lovely to see more flower displays in the Spring as when they finish the colour goes.</li> </ul>
5. Litter/ Dog fouling	<ul style="list-style-type: none"> <li>• Dog walkers don't care about using bins which doesn't make it pleasant for other users.</li> <li>• Dog owners need monitoring to pick up their dog mess.</li> <li>• Sometimes a lot of dog mess and litter left in the park.</li> <li>• The whole area needs action on litter.</li> </ul>
6. More facilities for over 12's	<ul style="list-style-type: none"> <li>• Nothing for older kids.</li> <li>• Nothing specific for the over 12's</li> <li>• There are no facilities for teenagers which is critically needed!</li> </ul>

Q5: If you ticked 'Poor' or 'Very Poor' on any of the above options, please give your reasons below: (Base: All responses=379)	
Theme:	Examples:
7. Security/ Anti-social behaviour	<ul style="list-style-type: none"> <li>There is no presence of any security and at times older children abuse the playground and monopolise the children's equipment.</li> <li>Security is poor as there are often kids with footballs and motorised skateboards on the new tennis courts.</li> <li>Security - we saw youths acting suspiciously but could not see any security onsite.</li> </ul>
8. Sport and playground improvements	<ul style="list-style-type: none"> <li>None of the equipment in the children's playground is suitable for 3 to 5 year olds. You removed the old slides and replaced them with slides that children cannot climb.</li> <li>Needs a better playground/areas for children.</li> <li>I feel the playground needs updating a bit.</li> </ul>
9. Information and signposting	<ul style="list-style-type: none"> <li>Info and signs - very poor at moment.</li> <li>Signage is illegible and inadequate.</li> <li>Park signs are worn and out of date.</li> </ul>
10. General maintenance	<ul style="list-style-type: none"> <li>The park is in a general state of disrepair and isn't maintained to a high standard.</li> <li>The park required more regular maintenance of paths, shrubs, weeds.</li> <li>Paths in need of maintenance.</li> </ul>
11. Car parks	<ul style="list-style-type: none"> <li>Although car parking is limited I think it is a good idea not to have too much parking on site.</li> <li>Car parking is a problem on a Sunday.</li> <li>The car park should be better fenced off from the rest of the park. It is too exposed to children and dogs.</li> </ul>
12. Lighting improvements	<ul style="list-style-type: none"> <li>There is very poor lighting in the evenings/winter.</li> <li>Please utilise solar energy and install more lighting in the park. Make it brighter and more cheerful.</li> <li>Better lighting.</li> </ul>

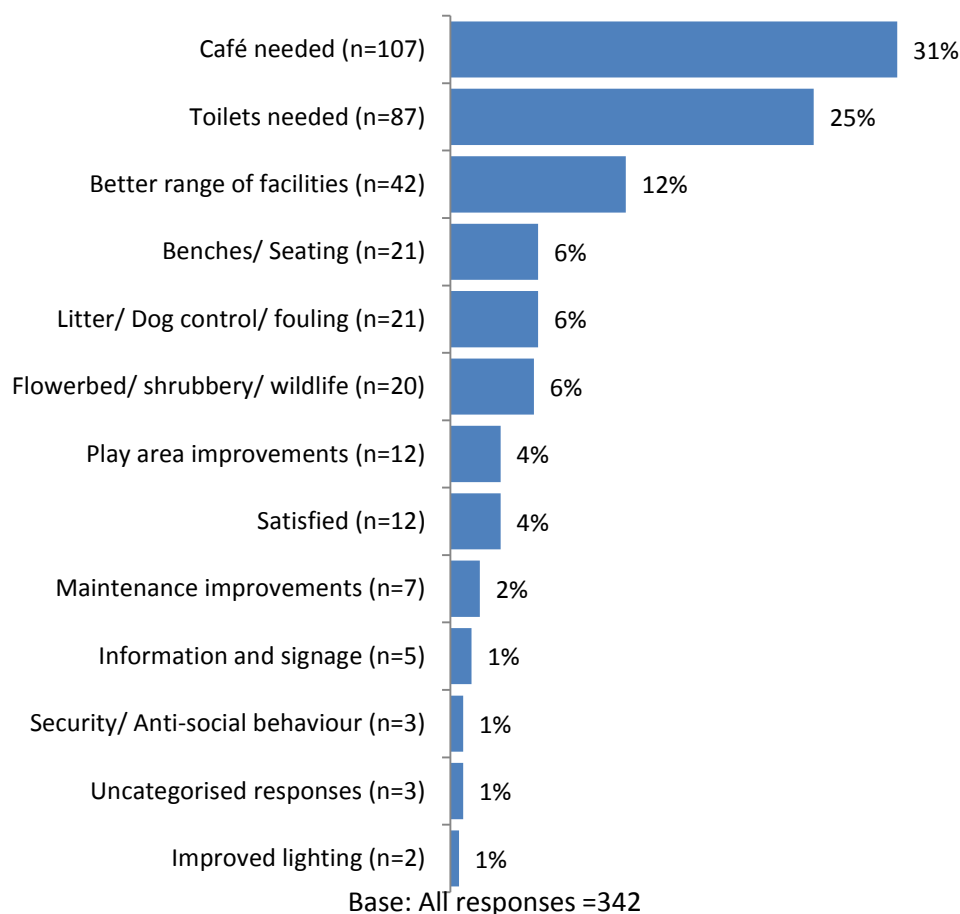
## Improving visitor experience and encouraging more use of the park or staying for longer:

This section looks at the visitor experience and suggestions for using Auriol Park more often or to stay for longer. When considering improving the visitor experience, the three most prevalent suggestions include:

- Café needed (31%, n=107/342)
- Toilets needed (25%, n=87/342)
- Better range of facilities (12%, n=42/342).

The graph below illustrates common suggestions:

**Can you think of one thing that would encourage you to use Auriol Park more often or to stay for longer?**



Examples of literal responses include:

Q6: Can you think of one thing that would encourage you to use Auriol Park more often or to stay for longer? (Base: All responses=342)	
Theme:	Examples:
1. Café needed	<ul style="list-style-type: none"> <li>Some kind of refreshment area. Hot drink in the winter, ice creams, etc. in the summer.</li> <li>A cafe - it would be great to be able to sit and have a coffee.</li> <li>If there was a cafeteria for people to meet and spend longer in the park.</li> </ul>
2. Toilets needed	<ul style="list-style-type: none"> <li>If there were toilets. Having a child they would be a benefit.</li> <li>Toilets, children can't hold themselves!</li> <li>Toilet facilities are a must if you want parents with young kids to stay longer.</li> </ul>

Q6: Can you think of one thing that would encourage you to use Auriol Park more often or to stay for longer? (Base: All responses=342)	
Theme:	Examples:
3. Better range of facilities	<ul style="list-style-type: none"> <li>• More activities for children...perhaps an outdoor gym?</li> <li>• I would stay for longer if there were things like exercise activities there as I could enjoy it more as well.</li> <li>• Organised runs (Park Run?) for families. Teen play equipment. Better tennis courts.</li> </ul>
4. Benches/ Seating	<ul style="list-style-type: none"> <li>• More places to sit and relax.</li> <li>• More seating.</li> <li>• Picnic benches, somewhere for parents to socialise whilst children play.</li> </ul>
5. Litter/ Dog control/ fouling	<ul style="list-style-type: none"> <li>• Less dog litter.</li> <li>• If people took control of their dogs and did not assume that everyone is okay with a dog "wanting to play" with them!</li> <li>• No dogs waste on the grass.</li> </ul>
6. Flowerbed/ shrubbery/ wildlife	<ul style="list-style-type: none"> <li>• Natural nature reserve area.</li> <li>• More wildlife.</li> <li>• Better flower displays.</li> </ul>
7. Play area improvements	<ul style="list-style-type: none"> <li>• More exciting play area.</li> <li>• Bigger playground with more variety.</li> <li>• A better playground for children. Current one is looking quite tired.</li> </ul>
8. Satisfied	<ul style="list-style-type: none"> <li>• Overall we are very happy with it.</li> <li>• Auriol is a lovely, safe park and I feel very fortunate to live so close to be able to enjoy it several times a day.</li> <li>• I love Auriol Park. Great for families and friends and good to relax.</li> </ul>
9. Maintenance improvements	<ul style="list-style-type: none"> <li>• If it were less muddy in winter!</li> <li>• Parts of the park are hazardous to dogs, oil filled/slick puddles.</li> <li>• Better drainage on the fields in the autumn/winter.</li> </ul>
10. Information and signage	<ul style="list-style-type: none"> <li>• Clearer opening and closing times.</li> <li>• How do you get to us the courts? I can't find any information.</li> </ul>
11. Security/ Anti-social behaviour	<ul style="list-style-type: none"> <li>• Some type of security would be reassuring.</li> <li>• There are often large groups..., which can be intimidating whenever I have visited.</li> </ul>
12. Uncategorised responses	<ul style="list-style-type: none"> <li>• Waiting for the children to start playing sport but they are too young at the moment.</li> </ul>
13. Improved lighting	<ul style="list-style-type: none"> <li>• Lighting in the park for when it is dark.</li> </ul>

## Volunteering opportunities:

In response to the question “Would you be interested in participating in volunteer activities in the park”, 40 people kindly provided their names and contact information. This information will be passed onto the management team for future volunteering opportunities.

## Conclusion:

The results of the survey show that people visit the park on a regular basis – nearly six in ten respondents (58%, n=210/364) visit the park multiple times weekly. Over eight in ten respondents travel to the park on foot (82%, n=341/414) - which would suggest they live nearby or in close proximity to the park.

Overall, the most popular reason for visiting the park was to ‘go for a walk’ (14%, n=90/657). This was followed by ‘use the playground’ (13%, n=87/657) and ‘children/family outing’ (12%, n=82/657). Most respondents between 35-44yrs ‘use the playground’ (49%, n=41/84) and use the park for a ‘children/family outing’ (42%, n=32/77), whilst most respondents between 45-54yrs and 55—64yrs use the park to ‘walk the dog’ (28%, n=15/53 and 30%, n=16/53; respectively). Most respondents between 65-74yrs use the park to ‘go for a walk’ (37%, n=30/81) or use it ‘as a short cut’ (47%, n=18/38).

The top three positively rated aspects of the park were its ‘accessibility’ (88%, n=300/340), followed by ‘grass areas’ (84%, n=295/350) and ‘facilities for 12's and under’ (72%, n=204/283). Whilst over seven in ten respondents rated the ‘park in general’ positively (74%, n=275/352), the top three negatively rated aspects were the lack of ‘toilets’ (83%, n=186/225) followed by ‘range of visitor facilities’ (29%, n=86/298), and ‘flower/shrub displays’ and ‘facilities for over 12's’ (tie: 23%; n=76/335, n=57/252; respectively).

When asking respondents to provide reasons for scoring any aspect of the park ‘poor’ or ‘very poor’, a number of respondents cited the lack of toilet facilities – with some people saying they have to leave early because of this.

The most popular suggestion to encourage people to use the park more often or to stay for longer was the need for a Café (31%, n=107/342). This was followed by the need for toilets (25%, n=87/342) – with a number of respondents citing both (ie. a café with toilets).

As a result of the survey, 40 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.

Overall, visitor responses were very positive with a few developmental areas identified.





**AURIOL PARK**  
**MANAGEMENT PLAN 2017 - 2021**



**Prepared By**  
**Epsom & Ewell Borough Council**



## 1 EXECUTIVE SUMMARY

This Executive Summary enables readers to understand the main ideas of the management plan. The summary follows the guidance provided by the Green Flag Award desktop assessment. The aims and objectives of the management plan follow the Green Flag Award judging criteria. The executive summary, together with the main plan and the appendices provide details of the management of the park.

The Auriol Park Management Plan covers a five year period from 2017 – 2021.

Parts 2 – 4 explain the purpose of the plan, an overview of how we manage and maintain the park, and records the key features of the past and present.

Part 5 addresses the key criteria set by the Green Flag Award

5.1 – A Welcoming Place, states information relating to access, signs and facilities.

5.2 – Healthy, Safe and Secure, gives details of our Health & Safety Policies, the Ranger Service, emergency procedures and contacts, park security including CCTV. This section also discusses the steps we take to curtail irresponsible dog ownership. We discuss how we work with the Police and outlines the byelaws that apply to Auriol Park.

5.3 – Clean and Well Maintained, in this section we look at how the maintenance work is scheduled and carried out by the Streetcare department and how the quality of work is monitored. There is particular reference to litter, graffiti, and grounds maintenance. This section also focuses on the maintenance of the pavilion and arboriculture maintenance, both of which are provided by other departments of the Council.

5.4 - Sustainability relates to environmental sustainability and details our aims in relation to use of organic material and recycling. In this section, we detail how we use pesticides and our policy not to use peat. In general, we take our guidance from the Epsom & Ewell Borough Council Environmental Policy.

5.5 – Conservation and Heritage, looks at Agenda 21 and Epsom & Ewell's Biodiversity/Sustainability Plans. We also reference the Council's Green Spaces Strategy and the Green Infrastructure. This section also explains the steps we take to protect and encourage ecology and wildlife in Auriol Park.

5.6 – Community Involvement is an area in which we are exceptionally lucky to have the support of a hands-on Friends Group. Auriol Park Friends provide an additional resource that helps maintain and enhance the park for the enjoyment of the entire community. This section also discusses our relationships with our external partners such as the Football Federation and the Bowling Club. Community Involvement also extends to Events in the Park and Auriol Park is the venue for a large annual community event held by the local Resident's Association.

5.7 – Marketing, although we do not 'market' the park in the commercial sense, we do find out what people want from this space by canvassing their opinions via a Visitor Survey. The point of the survey is to find out what people think about the current state of park and what they would like to see in the future. This important piece of consultation is vital in helping us plan for the next five years and the results feed into Action Plan, found in Appendix A.

Appendix A – The Auriol Park Action Plan is possibly the most important part of the plan as it details how we would like to manage the park over the next five years. Although some of the items detailed in the Action Plan are aspirational and will require specific funding to achieve, we feel it is important to include all items so that we can investigate suitable funding options as they become available.

Appendix B – Provides a copy of the Green Spaces Strategy.

## 2 INTRODUCTION

Auriol Park is a designated King George V Playing Field situated in Worcester Park, in the Northern end of the borough within the Auriol Ward. It is approximately 14.5 acres in size and has vehicle access off of Salisbury Road but it also has gated access from Thorndon Gardens and Chestnut Avenue. The land was previously owned by Auriol Barker and he sold it to Epsom & Ewell Council on 8<sup>th</sup> November 1934 and is currently managed by their team of park rangers.

The plan will identify how Auriol Park is managed using the green flag assessment criteria. The management plan addresses the good practices and recommendations suggested by the Green Flag judges over the past eight years along with further opportunities. Auriol Park has never been entered or awarded Green Flag but by producing a management plan that reflects the standard for Green Flag awards, this means that Auriol Park could be entered for the award in the future.

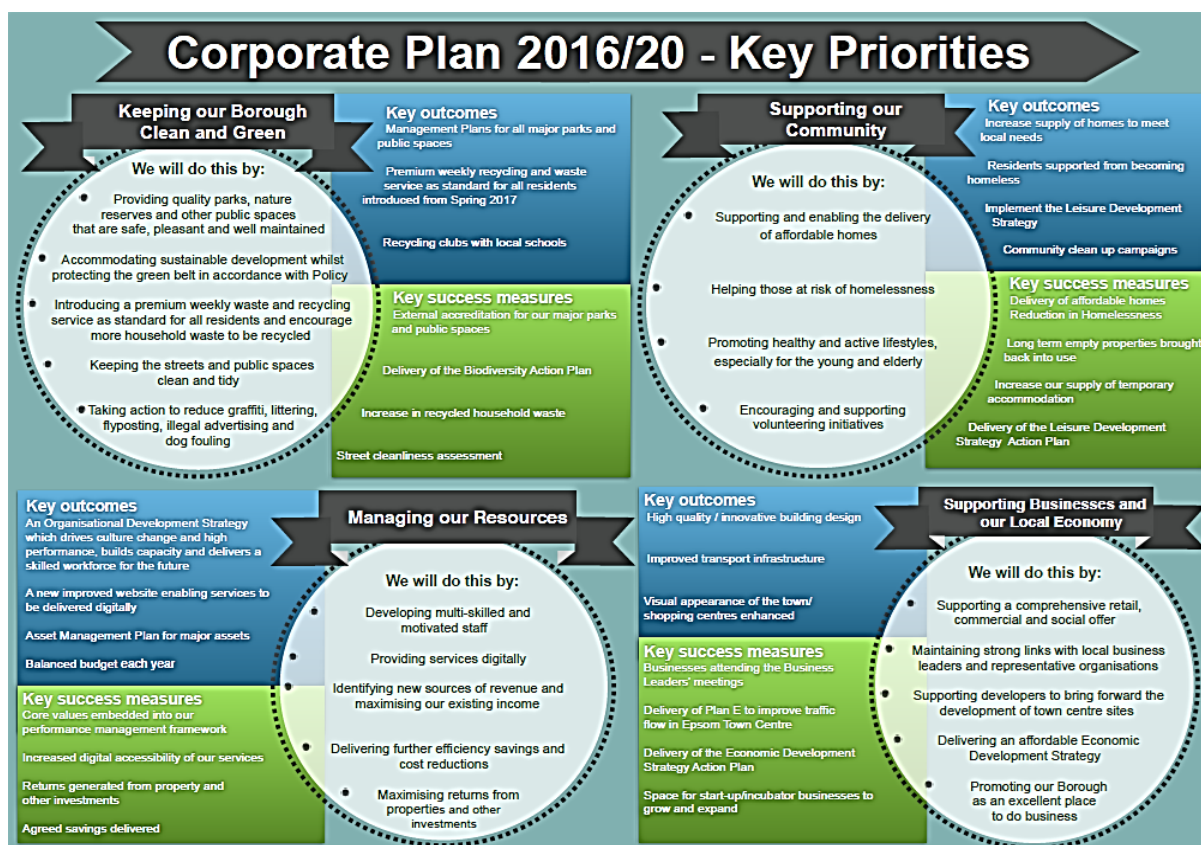
### 2.1 STATEMENT OF PURPOSE

The purpose of the management plan is to:

- Ensure that the objectives of management and maintenance are documented
- To identify the resources required to manage and maintain the park
- To assess priorities and challenges for future action
- To encourage and support community involvement
- To promote and market the park
- To monitor and review changes that occur in the park

The management plan has been written to cover a 5-year period. It is a working document that brings together all information relating to Auriol Park. It will be updated, and revised on an annual basis as part of the Green Flag award scheme process. The plan will serve as a benchmark against which delivery and performance objectives can be measured.

## 2.2 EPSOM & EWELL BOROUGH COUNCILS KEY PRIORITIES



## 2.3 THE VISION FOR AURIOL PARK

'Provide a safe, attractive and sustainable environment for the benefit of all park users now and in the future'

To achieve this vision we have incorporated the key criteria set out in the Green Flag award scheme as a national benchmark for quality standards for public parks.

## 2.4 KEY OBJECTIVES

- To ensure the effective implementation of both financial and staffing resources to deliver a high level of quality management.
- Positively welcome people into the park, in terms of both physical and social access.
- Ensure a healthy, safe and secure experience for park users.
- Provide a well maintained and clean park.
- Improve the environmental quality and sustainability of practices carried out in the park.
- Maintain the restored historic landscape character, whilst ensuring provision for contemporary users.
- Provide opportunities to increase community use and involvement, particularly through events, education and interpretation.
- Ensure effective promotion of the park as a community resource.

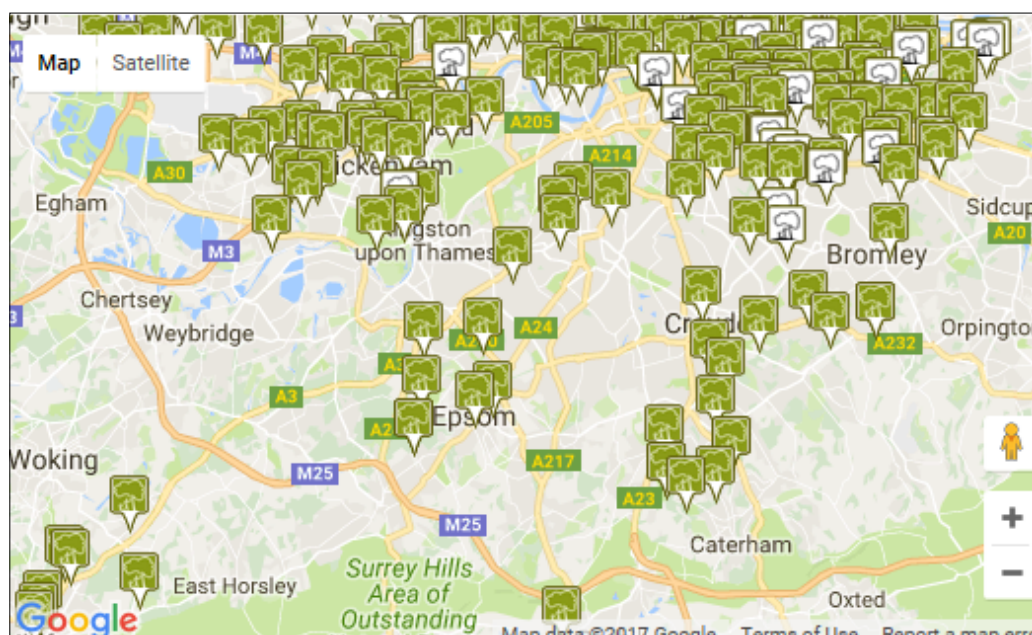


Figure 1 Distribution of Green Flag parks in the South East region

## 2.5 OBJECTIVES OF THE MANAGEMENT PLAN

Epsom & Ewell Borough Council work to an annual maintenance schedule involving the grounds maintenance team, street cleansing team and ranger service. These three teams work in unison to provide a safe, clean and enjoyable environment for all who wish to use Auriol Park. Epsom & Ewell Borough Council have strived to ensure its parks and facilities are open to all who wish to use them. In Auriol Park there is good disabled access throughout. To ensure work is completed to council specification there are policies in place for any issues that arise. When working on public areas such as parks and open spaces these issues tend to be litter (including drug paraphernalia), dog fouling, graffiti and vandalism of equipment. These policies ensure that the council can continue to keep its parks and open spaces as clean and safe as possible for its users. Regular meetings with the Friends Of Auriol Park ensure open communication channels are maintained, allowing the council to respond to any problems that may arise but more importantly to try and prevent these problems arising in the future.



2.6 LOCATION OF AURIOL PARK



Figure 2 Location of Auriol Park and the surrounding roads

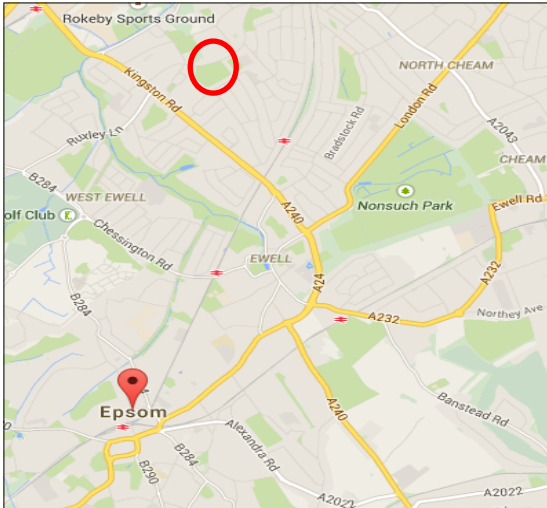


Figure 3 Location of Auriol Park in relation to Epsom Town Centre



Figure 4 Location of Epsom in relation to London

### 3 BACKGROUND INFORMATION

#### 3.1 SITE OVERVIEW

##### **Address**

Auriol Park  
Salisbury Road  
Worcester Park  
Surrey  
KT4 7DD

##### **Size**

14.5 Hectares

##### **Access**

Salisbury Road  
Thorndon Gardens  
Chestnut Avenue

##### **Ownership**

Epsom & Ewell Borough Council

##### **Management & Maintenance**

Epsom & Ewell Borough Council

##### **Facilities**

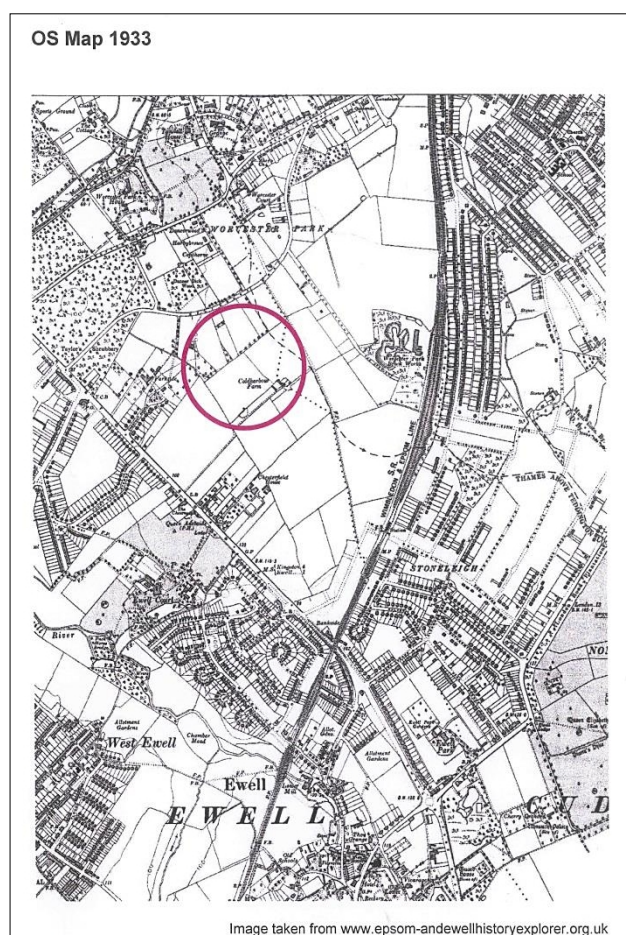
Multiuse games area (MUGA)  
Bowling Green  
Pavillion  
Under 12's children's playground  
2 Full-sized and 2 mini football pitches  
Sports changing facilities  
Rooms for hire  
Tennis courts (hard surfaced)

### 3.2 HISTORIC CONTEXT

Auriol Park is situated in Stoneleigh; a residential area of Epsom & Ewell that is centred around Stoneleigh railway station and Stoneleigh Broadway. Much of the area was just open fields prior to the 1930's when most of the estate was developed.

In the 17<sup>th</sup> Century, the area where Stoneleigh now lies was part of the Great Park of Nonsuch Palace. The park stretched from the palace itself to the edge of the modern border of the area. In 1731 the Nonsuch estate was sold off and the Great Park, by then known as Worcester Park, was divided into farmland.

The area which is now Auriol Park was sold in 1870 as plots for “substantial housing” but these were never built. Auriol Barker was a solicitor who moved to the rapidly growing suburb of Worcester Park in the 1890s. He threw himself into the sporting interests there and founded the Worcester Park Polo Club. He continued to play for the club over the next thirty years and Auriol Park was the field on which he kept the polo ponies. In 1934, when he was 85 and getting ready to slow down a little, he sold the land to the District Council on 8 November for the price of £5,197; approx. £324,034 in today's money (*Parks in the Past, Bourne Hall*). The land was initially used as storage by the local coal merchant and then as allotments during the Second World War.



Between the world wars, demand for houses on commuter routes into London meant that this area of the borough was built up rapidly. The extent of urbanisation can be seen in figure 5. This was not going to be the fate for this Auriol Park as it was one of the 471 open spaces in England to be dedicated as a King George V Playing Field. While plans were being drawn up for a park, the 14.5 acres were grazed by a local firm who also agreed to roll and harrow the land and the playing field was opened in 1958.

The new park was laid out for sports with three cricket pitches, three football pitches, eight hard tennis courts, a bowling green, and an eighteen-hole putting green, together with a children's playground, a central pavilion and a lodge for the Keeper – all at an estimated cost of £17,000. In the 1960s a groundsman's lodge and garages were added, and the pavilion and children's playground were renewed (*Parks in the Past, Bourne Hall*).

**Figure 5 OS map from 1933 showing the location of Auriol Park and the surrounding urbanisation**



### 3.2.2 KING GEORGE'S FIELDS FOUNDATION



On 30 January 1936 upon the death of King George V, the then Lord Mayor of the City of London set up a committee to consider what form a national memorial to the King should take. In March 1936, the committee decided that there should be a statue in London and a philanthropic scheme of specific character that would benefit the whole country and be associated with King George V's name. As a result in the November of that year, the King George's Fields Foundation was constituted by Trust Deed to give effect to the scheme.

The aim of the Foundation was "to promote and to assist in the establishment throughout the United Kingdom of Great Britain and Northern Ireland of playing fields for the use and enjoyment of the people every such playing field to be styled 'King George's Field' and to be distinguished by heraldic panels or other appropriate tablet medallion or inscription commemorative of His Late Majesty and of a design approved by the Administrative Council."

The trust deed defined a 'Playing Field' as "any open space used for the purpose of outdoor games, sports and pastimes."



The project was to be a flexible one, focusing on urban areas, but not exclusively so, and carried out in each locality according to its requirements. Each field would have a distinctive uniform tablet as an appropriate visible commemoration of George V.

This was considered to be as the King would have wished, particularly in the service rendered to youth through providing for them an environment and opportunity for open air exercise, for the benefit of individual well-being and the general welfare of the nation (*Fields In Trust.org*).

Auriol park was one of the initial 471 parks across England, Scotland, Wales and Ireland made a King George playing field and the plaques can be found on the entrance at Thorndon gardens.

**Figure 6 The lion and unicorn plaques found on King George Playing Fields**

### 3.2.3 AURIOL PARK TODAY

Today, the general layout of the park remains the same but there have been many changes. There is no longer a cricket pitch or putting green; instead there is a bowling green and five football pitches of various sizes, suitable for junior as well as senior teams. Funding from the National Lottery paid for a new multi-use games area and in late 2014 the tennis courts were completely refurbished after having been in an unusable condition for a few years. The improved pavilion, which in addition to all the usual facilities has a separate room that can be hired

for private functions. The park is the home ground for the Auriol Bowling Club, the Auriol Park Bowling Club (Ladies) and Epsom Eagles Football Club. Auriol is a recreational park rather than an ornamental garden; it has some beautiful trees and shrubs but no flower beds (*Parks in the Past, Bourne Hall*). The section of the park that has the pavilion and children's playground has a much higher elevation to the rest of the park, and as such has a view towards the west that is clear from tall buildings and can treat park users to some beautiful sunsets.



Figure 7 Sunset in Auriol Park, March 2014

4 MANAGEMENT

Epsom and Ewell Borough Council is responsible for the maintenance of all public grounds in the Borough. The In-house Operational Services Streetcare department provides grounds maintenance, public realm maintenance, graffiti removal and cleansing operations to all public parks and open spaces. Whilst the Ranger Service are responsible for patrolling and managing these sites.

The work included within Auriol Park covers grass cutting, pruning and planting and also clearance of litter, building and infrastructure maintenance, security, events and other aspects of park management. Maintenance functions are output based as far as possible – this means that work is carried out to a specified standard, rather than the way in which the service is to be provided.

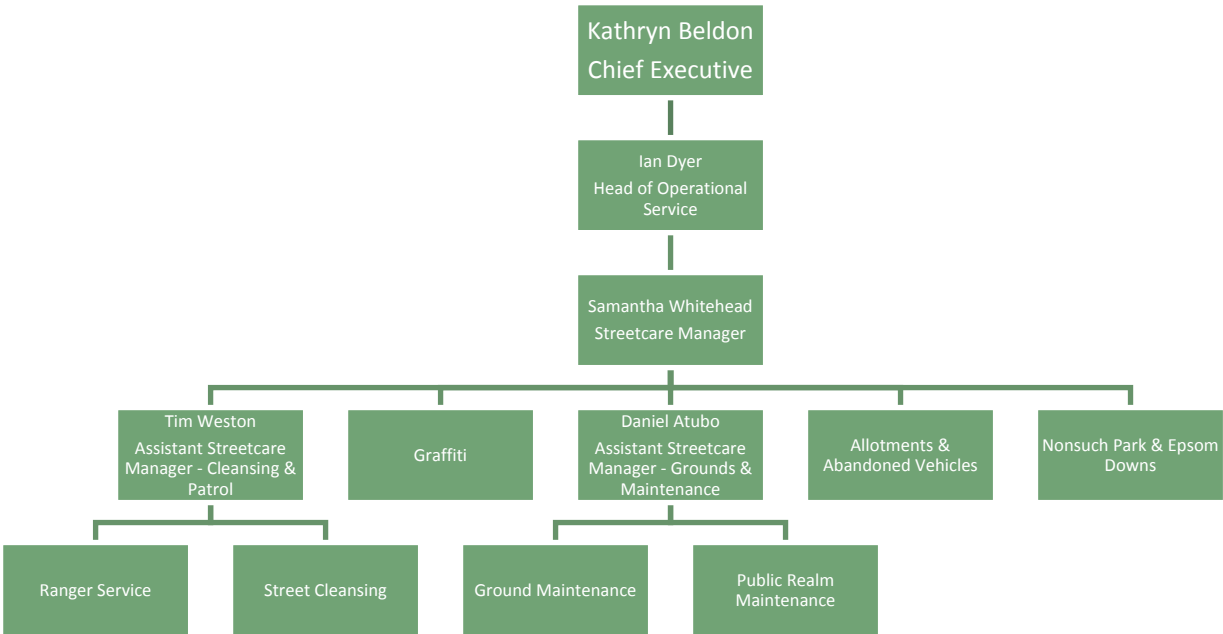


Figure 8 Streetcare Organisational Chart

## 5 AURIOL PARK IN RELATION TO GREEN FLAG CRITERIA

### 5.1 A WELCOMING PLACE

#### 5.1.1 ACCESS

Auriol Park is located within an urban area and is served by the nearby Stoneleigh railway station and a number of local bus routes that stop off of Salisbury Road.

There are four entrances to Auriol Park with two that can be considered main entrances. The first is off of Salisbury Road and is vehicle friendly with a large carpark that can facilitate a high volume of vehicles; there is also parking by the pavilion for those who require better access. This entrance provides an open and welcoming feeling when entering the park with brick pillars and a clear open view of the park, as can be seen in figure 10. The other main entrance is located off of Thorndon Gardens and can be seen in figure 11. The brick pillars bare the plaques of the Lion and Unicorn in memorial of King George V. Although this entrance appears to be vehicle friendly, it is for emergency access only. The last two entrances are pedestrian only and are located off of Salisbury Road and Chestnut Avenue. The combination of these entrances give access to the park from all sides as can be seen in figure 12. Due to the layout and location of the gates there is very little possibility for shrubbery to overtake the entrances and wherever possible it is cut back as the council understands that shrubbery provides excellent cover for people who wish to do harm to park users.



Figure 8 Main entrance to Auriol Park (Google Maps)





Figure 9 Entrance from Thorndon Gardens displaying the King George V memorial plaques

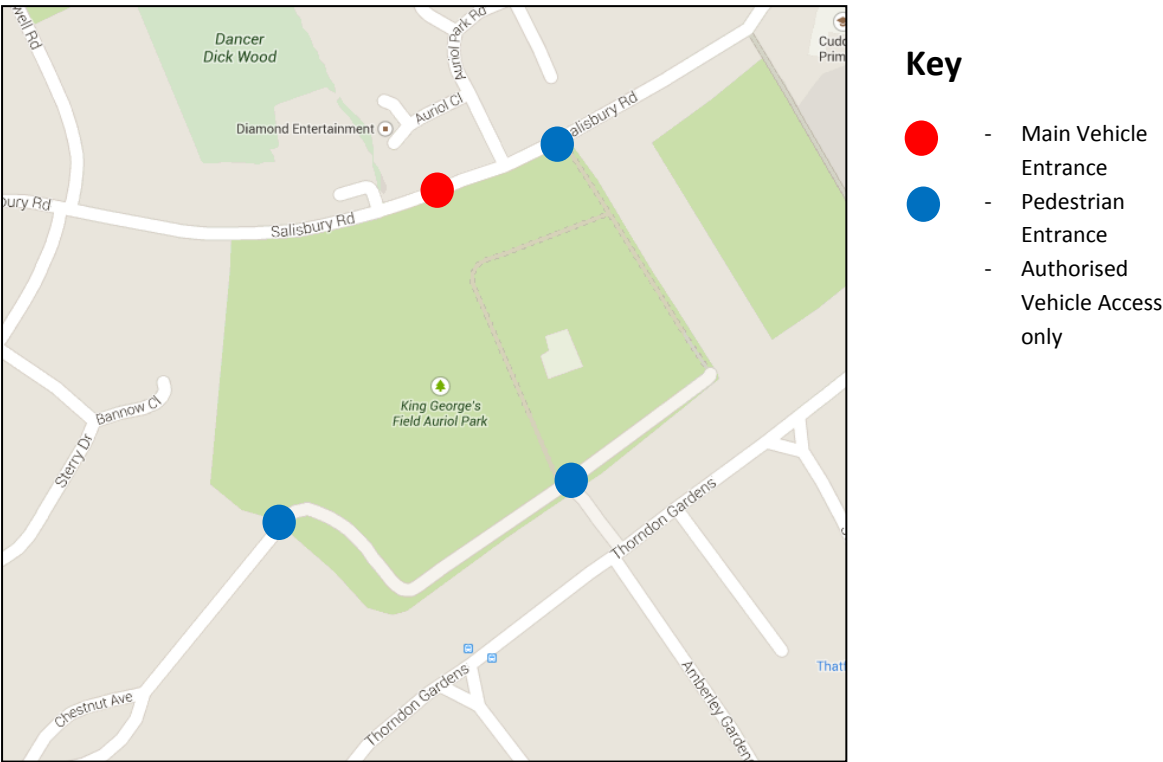


Figure 10 Map Showing the Location of the Four Entrances to Auriol Park

### 5.1.2 SIGNAGE

Throughout the Borough, extensive work is carried out to keep all signs clean and legible. The most common problems faced by the maintenance team is graffiti. There is a team dedicated solely to working on the graffiti in the borough. It has been found that it was more beneficial to use signs with Perspex fronts. By using Perspex fronts on signs and noticeboards it is easier to clean away graffiti.

The types of signs that can be found in Auriol are dog fouling signs asking all dog walkers to pick up after their dog. These signs are found on nearly all of the lampposts and also stencilled on to the pavements. In the same context there are also signs asking the public to dispose of their litter in the litterbins provided. The bowlers have a dedicated sign at the main vehicle entrance directing the public to the pavilion and bowling green.

There are two main information boards, one at each entrance that can accommodate vehicles. They show a map of the ground, highlighting the entrances/exits, toilets and other facilities. As can be seen from figure 13 the boards have weathered over the years and are not up to date. After successful installation of new notice boards in Nonsuch Park, funding was secured in 2015 for a project to replace the uninformative notice boards in the main parks and replace them with engaging and informative boards.

The first two parks to receive these new boards were Rosebery Park and Alexandra Recreation Ground. The boards consist of a map showing the layout of the park and key features such as the playground and also 'you are here' points to help people new to the park orientate themselves to get around. The maps have been done in a cartoon style using bright colours and stylised images and was designed by Mary Gorton, an external graphic designer. As well as the map, there is a brief history of the park and the Councils 'Do's and Don'ts' whilst in the park which covers etiquettes around cycling and dog walking. Alongside the map is a locking pin board for Council use and if the 'Friends Of' wish to advertise their group or events. Figure 14 shows one of the boards from Rosebery Park and the boards for Auriol are due to be installed in Spring 2017.



Figure 11 Information Board by the Main Vehicle Entrance



Figure 14 Rosebery noticeboard and map in situ by Ashley Road

### 5.1.3 FACILITIES

As the list of facilities below would suggest, Auriol Park prides itself on the extensive facilities it provides to the community. The Council is continually working on 'providing something for everyone'.

Auriol Park is home to:

- 1 Multiuse games area (MUGA)
- 1 Bowling Green
- Pavilion
- Under 12's children's playground
- 2 Full-sized and 2 mini football pitches
- Sports changing facilities
- Rooms for hire
- 2 Tennis courts (hard surfaced)

#### **Sports**

The park is the home ground for the Auriol Bowling Club and the Auriol Park Bowling Club (Ladies), the club regularly holds open days where members of the public can try their hand at bowls. It is also the home ground for Stoneleigh Athletic Football Club; formed in 1972 they were one of the founding clubs in the Epsom and Ewell Youth League. As a Charter Standard Club all teams have a qualified coach and the teams range from Under 8 to Under 17 and seek to provide an opportunity for players of all abilities to play in a team, having several teams in some age groups, they also encourage girls to join the teams and have since had several girls playing in mixed teams and welcome all children who want to play football (*Stoneleigh Athletic FC*). Although it would be financially beneficial to try to get more teams using the pitches mid-week, it would compromise the quality of the pitches for those already contracted to use them. It is important that the grounds maintenance team continually provide a safe and enjoyable playing surface.

The tennis courts became in a state of disrepair and had to be closed to the public. Funding was secured and the tennis courts were completely regenerated in late 2014 and have once again become a great asset to the park as can be seen in figure 15. As the park is locked up at dark it was not necessary to provide lighting.

For the groups that have booked the use of the pavilion, most commonly it is the sporting teams. There are changing rooms for both home and away teams, shower facilities, toilets, a telephone, first aid kit, a function room, kitchen and fire safety equipment.

For a ground with limited size it hosts a remarkable amount of sporting and recreational facilities for the whole family.

#### **Playground and Multi Use Games Area (MUGA)**

The Childrens playground was refurbished in 2006 and the equipment was sourced from two suppliers: Hags Play Ltd and Sutcliffe Play and was installed by an external company: Playground Services. The MUGA was installed two years later in 2008 to replace the old basketball court, it was one of 5 projects in the borough that benefitted from £200,000 of National Lottery funding. The MUGA facilitates many sports including basketball, football and cricket.

#### **Pavilion**

The pavilion has several toilets which are accessible to the public if a Ranger is in the park. Due to graffiti and vandalism problems with public toilets in the area, it is not possible to leave them open full-time. During the



summer months when the park is at its busiest, the Ranger service regularly patrols the park. When they are in the park, any member of the public can request they open a toilet for them. There is also a first aid kit in the pavilion.



Figure 12 Hard Surfaced Tennis Court



Figure 13 Pictures showing main pavilion with access compliant with the disability discrimination act 1995





Figure 14 The multi-use games area (MUGA)



Figure 15 Children's Playground

## 5.2 HEALTHY, SAFE AND SECURE

### 5.2.1 HEALTH AND SAFETY POLICIES

Training is issued when using new machinery and to new members of staff (in conjunction with the health and safety at work act 1974). This applies to the Ranger team and the Grounds Maintenance team. Training is always available throughout the year for anyone who feels it will benefit them. Risk assessments are carried out on all tools and tasks conducted by the services. Risk assessments are encouraged even if it is felt the risk is manageable.

Situated in the council depot there are three fire officers, two health and safety officers and there is a health and safety committee. The health and safety committee meets to discuss the Council health and safety policies to ensure they are up-to-date and relevant to the staff they are placed upon. The system that was used to report accidents in the workplace was updated in 2012. It was originally a paper based reporting system but it was felt the paper trail was too long, leading to a longer time frame from when the accident was reported to it being logged. A new database has been put in place to reduce the amount of time and the paper being used in reporting accidents. By computerising all reports on a spreadsheet, everyone has access to them at all times. This enables results to be analysed at ease. Analysis allows the council to identify patterns and accidents which aids the development of new policies and suitable training for specific areas where accidents occur.

Epsom and Ewell Borough Council have a playground safety check system in place called 'Playsafe'. These playground safety checks are carried out using a mobile phone application that links directly with an online 'Playsafe' database. All ranger staff members who carry out these checks are RoSPA (The Royal Society for the prevention of accidents) trained to level 1 – Routine Inspections. Visual checks are carried out by Ranger team members on a weekly basis, however other teams that are in there daily, carry out visual inspections and any problems are reported.

By logging any faults found on the 'Playsafe' handheld devices, it firstly eliminates the need for paper which can get lost or the information written down fails to get passed on to the relevant people, and secondly it provides the maintenance ranger with direct access to the findings and they can see photos, the risk and then prioritise repairs accordingly.

Quarterly checks are carried out by the maintenance ranger who is trained to RoSPA level 2 as an Operational Inspector. This is a thorough check of all fixtures, nuts, bolts etc and findings are also logged on to the 'Playsafe' computerised checklist. Annually an independent company who are recognised by RoSPA carry out an through inspection and report back to the council with their findings and with improvements that need to be made.

The football pitches get a lot of use and as a result weekly checks are made on the goalposts when the rangers check the other facilities in the park, therefore any problems can be rectified swiftly.

### 5.2.2 RANGER SERVICE

The Ranger service not only patrol the parks and open spaces, they also carry out minor maintenance work on amenity infrastructures such as the park signs, benches, bins and playground equipment. The park rangers and a dedicated street care team operate with a 'find a fault and fix it' approach and a separate graffiti team are also on constant call out to solve any issues immediately. Repairs are carried out as soon as possible, if the item in question is considered a risk to health it will be cordoned off with an appropriate sign put in place warning of its danger. If the fix is out of the capabilities of the ranger service it is passed on to the dedicated maintenance ranger who patrols in a vehicle already stocked with tools. By carrying tools in the vehicle it allows a number of repairs to be carried out immediately when the problem is identified.

The ranger service are a team of 8, working on a 7 day rota and the shifts are worked out so there are rangers on duty from 8am to 11pm. Once the rangers have finished their shift at 11pm their duty phone is diverted so any issues that arise in the night will be dealt with by the duty officer. So effectively if someone has a problem in a park they can reach someone 24 hours a day, seven days a week.

Due to the Ranger services job profile it is important to provide a wide spectrum of training, this may include:

- Handling conflict
- Awareness and enforcement of bye-laws
- Dealing with anti-social behaviour
- Emergency first aid
- Playground inspections
- Carrying out patrolling and inspection duties
- Knowledge of green flag, what work is being carried out to achieve green flag status and the overall management plan

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#### 5.2.3 EMERGENCY PROCEDURES

All facilities at Auriol Park comply with the statutory fire and safety regulations. In addition to this all staff are advised and trained on a regular basis. All Ranger vans carry a First Aid Kit and are First Aid at Work trained.

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#### 5.2.4 EMERGENCY CONTACT

When the Ranger service is on shift they respond to emergency calls placed to the council. Rangers carry at all times the duty phone so they can respond quickly to requests, thus eliminating the need to return to the office. When the Rangers are not on shift, the ranger duty phone is diverted to a duty officer who takes all out of office hours calls. When Rangers are called out to an emergency all correct paperwork procedures are completed in compliance with council policy. All parks and recreation grounds in the borough have signage with the relevant information for contacting the Ranger service or the out of office call out service.

If the emergency services are needed the Ranger service do not hesitate to get in contact and also encourage the public to contact the emergency services if the rangers are not on site. The rangers are familiar with working with the emergency services, assisting them on any incidents that occur on council land. There are times when the Ranger service will be contacted by the emergency services when they are not familiar with certain parts of council land.

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#### 5.2.5 SECURITY

The park itself is completely surrounded by fencing. The majority of the fencing is green palisade fencing made of hot and cold rolled steel sections and is 1.8m in height. Auriol Park is also one of eleven sites in the borough that get locked up overnight. All the gates are locked by the ranger service and this is done in such a way that avoids any members of the public getting locked in. Should a member of the public get locked in, they can call the number displayed in the park and will be let out. The park is locked as early as half an hour before sunset so the locking up times vary throughout the year and it is dependent on the sunset times. As part of the lock up procedure the pavilion is locked and alarmed. Should the alarm go off over night, the duty officer will be alerted and can take the necessary procedures to investigate.



## 5.2.6 CLOSED-CIRCUIT TELEVISION

There is CCTV that is active in Auriol Park with several cameras facing towards different parts of the park and car park. The main CCTV hub with monitor can be found inside the pavilion in the alarm room, therefore very few people have access to it. Auriol is no longer considered a crime hot spot so the CCTV is very rarely called upon by the Council or Police. The last time the Police requested to see it was in 2014 to see if the cameras had picked up a crime that had happened outside of the park.

CCTV is also restricted to where it is pointing to however in 2017 the rangers will be supplied with new vehicles which will come equipped with CCTV. Should rangers be on site and witness any criminal behaviour, it can be recorded and used as evidence if needed.

## 5.2.7 DOG ENFORCEMENT

All of the parks in the borough are extremely popular with dog walkers which in turn lead to the problem of dog fouling. It is an issue that is a high priority for the council. If a dog walker finds themselves in a need of a bag, Rangers carry bags on them at all times. There are notices up all over the park instructing people to pick up after their dog. These include stickers and bin posters, a type of which can be seen in figure 19, stencilling on the ground as can be seen in figure 20 and good dog ownership posters displayed in the bins. It is important to encourage the public to pick up after their dog as the health impacts of dog mess when making contact with eyes is well documented. Toxocariasis occurs when toxocara worm eggs in dog mess come into contact with the eyes. This can lead to partial and/or complete blindness.

Over the course of the last few years there has been an increase in the concern over multiple dog walkers. This ranges from members of the public who own more than two dogs to people who run dog walking businesses and have been seen to have in excess of ten dogs. The concern is that as commercial dog walking is a fairly new concept, the legislation on what is acceptable is not clear. The issues range from: should there be a limit to the amount of dogs per person? Should they be on a lead? Does the walker have the necessary insurances? etc.

The Council understand that this is an issue that needs to be addressed but are also aware that this is a controversial topic that generates strong opinions from both sides. We recognise that measures put in place to control this activity will need to be fair and appropriate.



Figure 19 Poster Displayed in Litterbins on being a Responsible Dog Owner



Figure 20 Dog stencil sprayed on the pavement

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### 5.2.8 BYELAWS

Byelaws apply to all pleasure grounds and open spaces in the Borough of Epsom and Ewell. The Byelaws For Auriol Park are made under Section 164 of the Public Health Act, 1875, and Section 15 of the Open Spaces Act, 1906.

Particular byelaws have been chosen from Section 15 of the Open Spaces Act 1906 These byelaws are consistent across all areas designated as pleasure grounds and open spaces except for byelaws pertaining to dog prohibition, canine faeces and dogs on leads, which are allocated to individual named areas. Auriol Park has several 'dog prohibited' areas including the Playground, Bowling Green and Tennis Courts (Schedule 1, Part 3, Under section 15 of the Open Spaces Act 1906). Part of Auriol Park excluding the dog ban areas are covered by the canine faeces removal byelaw (Schedule 2, Part 3, Under section 15 of the Open Spaces Act 1906). The byelaw requiring that dogs must be kept on a lead (Schedule 3, Part 1, Section 164 of the Public Health Act 1875) does not apply to Auriol Park.

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### 5.2.9 POLICING IN AURIOL PARK

Auriol Park falls under the 'Epsom & Ewell North' section of the Surrey Police Safer Neighbourhood Team. Regular foot patrols of the park are carried out by the Police Community Support Officers, dealing with issues such as anti-social behaviour and other community concerns.

An arrangement existed with Rangers and PCSO's whereby joint patrols of Auriol and other borough Parks were carried out, however due to lack of resource and Auriol Park not being considered a crime hot spot these joint patrols are no longer carried out. However the Ranger service and all departments that may be in the parks, including the 'Friends Of' are encouraged to report any damage or crime to the police, as the distribution of police resources is dependent on the volume of calls/reports relating to a particular area or issue.

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## 5.3 CLEAN AND WELL MAINTAINED

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### 5.3.1 WORK SCHEDULING

Epsom and Ewell's work program is designed to ensure that each team is allocated a program of works that is defined prior to the start of each period by the management team.

To reach the required standard in our parks, the program of works is based on a schedule of need for example grass and hedge cutting, emptying of bins etc which is on a specific frequency or rotation but is responsive to seasonal changes and sporadic events which could have an impact like flooding or a large public celebration, as well as user feedback which could come in the form of a letter, telephone call or CRM case from a member of the public, Councillor or Council staff members.

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### 5.3.2 MONITORING

Monitoring of the services is undertaken at a number of levels and on an ongoing basis. The Council monitors the performance of the staff out in the field but also through an appraisal system, so operational issues are identified and responded to in a sufficient timescale. Without monitoring, problems could be ongoing for long periods of time unbeknownst to managers which could contribute to long term issues.

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#### 5.3.3 LITTER

Auriol Park has 7 litter bins placed in a number of locations along the pathways and also in the children's playground. The litter bins were replaced in 2013 to a new style which also could be used to dispose of dog waste. This meant the red dog waste bins could be removed from the park.

The bins are checked on every day by the street cleansing team and emptied. The Ranger service also provides a litter picking service when they are on patrol. In the summer when there is more activity in the park additional patrols are made to combat the increased activity which leads to a sharp rise in litter.

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#### 5.3.4 CLINICAL WASTE

Any litter such as clinical waste, syringes etc are collected by the rangers who are 'sharps' trained. Using special tools the item is inserted into a lockable 'sharps' box. The location of the 'sharps' will be recorded and when full, the box will be transported to the designated clinical waste disposal point.

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#### 5.3.5 GRAFFITI

There is a graffiti team working all year round who respond to call outs from the public and from staff members who have found graffiti while on their day to day inspections. Timescale for removal is 4-6 weeks unless the graffiti is racist or offensive in which case it is removed within 1 working day and reported to the police.

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#### 5.3.6 PAVILION MAINTENANCE

The Ranger service is in charge of keeping the pavilions locked at the required times. A company called Kier (maintenance contractor) are in charge of all internal maintenance (cleaning, fire extinguishers and electrical equipment inspections). Kier carries out monthly planned preventative maintenance (PPM) where the water temperatures and emergency lights are checked. There are other PPM tasks that come up quarterly, half yearly and annually that also get attended to. In the pavilion there are changing rooms, toilets, shower facilities and a kitchen/meeting room with complete cooking facilities.

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#### 5.3.7 GROUNDS MAINTENANCE

All grounds maintenance work is carried out (to correct horticultural practices) to a schedule to ensure particular sites do not get forgotten about or overlooked which can happen when working from memory. After each site is complete it is logged on the grounds maintenance database with the appropriate times, dates and names of the staff who were on site. The grounds maintenance team also respond to CRM (customer relationship management) notices. These may have been served via a call from a member of the public or from a staff member after visual inspections of the sites.

The work carried out is varied throughout the year. In the height of summer, the grass and shrub beds get far more attention than in the winter months as growth is at its fastest. During the autumn and winter months, leaf clearance is carried out regularly as well as preparing beds for selected bedding plans. All organic waste accumulated from grounds maintenance work is taken to a composting site until it is suitable for using on the shrub beds. All hard surface sports facilities (playgrounds, five-a-side pitches, tennis courts and basketball courts) are all spray cleaned when it is felt necessary. A build-up of dust and dirt on these hard services make them increasingly slippery underfoot. Spray cleaning using a jet power washer plate that glides along the surface removes all dust and dirt from in between the tiny crevices in the tarmac surface. All dust and dirt that has been excavated is then removed with either a hard brush or a backpack blower before it has the chance to work its way back into the tarmac.

## AGENDA ITEM 7 ANNEXE 3

1. **Weed control** - This is carried out in the parks by staff that are certified with PA1 and PA6 certificates. It is important that only trained staff use these chemicals, not only for their personal safety but when working in parks as there are animals and park users to consider. The certificate PA1 is the theory behind pesticide application. It covers legislation regarding environmental, public and personal safety and all procedures regarding health and safety. PA6 is the certificate for manual handling and application of pesticides. Epsom and Ewell Borough Council do not have a schedule for spraying in the parks. It is felt that scheduled spraying may lead to excessive spraying. When parks are inspected by the Ranger services and Grounds Maintenance, they will determine as and when spraying may need to be carried out.
2. **Litter** - Litter is collected as and when it is necessary. The Ranger service carries out litter picking when on patrol. The grounds maintenance teams also carry out litter picking as part of their duties when working in the park.
3. **Dog fouling** - When carrying out daily inspections, the Ranger service collect any dog mess found on public walkways in the parks.

Job	Carried Out By	Frequency	Additional Information
Grass	Grounds Maintenance	Summer – Weekly Winter – Dormant Spring – Monthly	Spring and Autumn are done when deemed necessary. No definitive rota
Shrubs (Mature)	Grounds Maintenance	Dependent on results of monthly inspections	Usually 1-2 cut backs during summer, one more in winter
Weeding (in beds)	Grounds Maintenance	Dependent on results of monthly inspections	Usually monthly, possible addition of pesticide application
Line Marking on Pitches	Grounds Maintenance	During football season it is done bi-weekly	During periods of rain, application will increase
Playground Inspections	Rangers	Weekly visual, Quarterly physical, plus an annual independent inspection	All results are logged on 'Playsafe' online database
Repairs (playground, benches, bins and sports equipment)	Ranger maintenance service	All faults are logged after inspection and will be repaired or removed immediately	Maintenance team also responds to complaints from the public
Arboriculture	Tree Team/Ranger Service	Annual Inspection	During adverse weather conditions, rangers inspect parks for tree damage and report to tree team



### 5.3.9 EQUIPMENT

All grounds maintenance equipment is purchased centrally with great consideration for staff safety in regards to emissions and vibration. All staff are inducted before using all machinery and equipment to ensure the equipment is used efficiently and effectively. Annual service programs are in place for all equipment and daily safety checks are carried out and recorded.

### 5.3.10 ARBORICULTURAL MANAGEMENT

Increasing public concerns about environmental and sustainability issues are focusing our attention on the importance of trees in our towns and countryside. The Borough Council manages and maintains thousands of publicly owned trees; these include 8000 street trees and over 50,000 trees distributed across our 2500 acres of public open space. Trees make a major contribution to the quality of the local environment but they also need careful management and we have a duty of care in respect of tree management to take reasonable steps to ensure that trees do not constitute a danger or a legal nuisance.

To comply with our duty of care and legal responsibility, the Council follow a tree risk management policy. It is important that the Council keep these programmes intact and adequately funded. This will help to ensure we comply with duties over public safety and nuisance as well as promoting environmental care.

As part of this policy the Council operate a comprehensive tree inspection programme every 3 years. Tree care is the responsibility of the council tree officer Jeremy Young. Jeremy oversees all inspections and work carried out and when he is not in the office the deputy tree officer takes over. The professional tree inspections are undertaken by Council officers and qualified tree inspectors. Sites are zoned in accordance with risk. The inspections involve visual tree assessments to evaluate whether there are any observable defects that constitute a danger or actionable nuisance. When defects are identified they are scheduled for work under the defect management programme. The time scales for these works are undertaken in accordance with the assessed priorities as agreed in table 2.

Priority	Target Response
Emergency	Within 24 hours
High	Within 12 weeks
Medium	Within 1 year
Low	Within 3 years or reassessed within this time frame.

**Table 2 Agreed timescales for defect tree work**

In addition to defect management, the Council operate programmes of routine tree pruning to help control tree growth. Routine tree pruning involves pruning to raise the canopy above the road, clearing phone wires and lamps etc. Access work is the removal of suckers and low branches for pedestrian footway clearance. The work is done as appropriate for subsidence management. One of our main Council priorities is to protect and enhance the environment. Therefore we will not undertake tree works which could be detrimental to natural biodiversity or the aesthetic quality of the landscape, unless absolutely necessary. Where possible trees will be allowed to grow naturally and maintenance tends to focus on higher priority public safety and nuisance factors, such as storm damage, dealing with decayed or dead trees, removing branch obstruction to the highway or pruning branches encroaching onto buildings.

The Council has awarded the tree maintenance contract to a locally based and well equipped arboricultural company called Advanced Tree Services LTD (ATS). ATS undertake the vast majority of Council tree maintenance, including emergency call out, routine pruning, tree felling, stump grinding and planting. They also assist the Council tree officers with tree inspections. There is at least one team of tree surgeons from ATS that work in the Borough full time.

During spells of adverse weather, the Ranger service will inspect the park to check for falling trees or limbs that may be a hazard to park users. This is not as big a problem on some sites like Epsom Common where many of the trees can be left where they fell, but in Auriol Park it is vital to keep the green space clear from tree debris.

## 5.4 SUSTAINABILITY

Epsom and Ewell Borough Council strives to maintain and improve its green spaces using sustainable methods. All service departments involved in the maintenance of Auriol Park are encouraged to carry out their duties using methods that are environmentally friendly. As Sustainability in definition, is the quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance (Dictionary.com), the Council understand the importance of maintaining these standards wherever possible for the long term ecological benefits to its parks and open spaces

### 5.4.1 ORGANIC MATERIAL/RECYCLING

Throughout the year, the grounds maintenance teams remove all organic waste produced from pruning and grass cutting. This green waste is taken off site to a large composting facility in the nearby Horton Country Park. When enough green waste has been collected, trained staff members use mulching equipment to compost all the green waste. The process involves shredding the waste but burning it sufficiently to kill the weed seeds. This compost is piled and left to continue decomposing. When it is sufficiently composted it can be returned to the beds in the form of mulch. This mulch provides nutrients to the beds but it can also serve another purpose. The Christmases' of 2009 and 2010 left all of Epsom and Ewell covered in snow, dealing with sub-zero temperatures. Mulch can be used to insulate the beds. Newly planted shrubs will struggle to cope with such low temperatures in comparison to established shrubs. By insulating the beds it gives the root systems a little extra help in resisting frost damage. Mulching also helps keep weed growth under control. Epsom and Ewell Borough Council work hard to ensure they do not use peat. They also try to buy their plant stock from responsible nurseries that do not use peat.

### 5.4.2 PESTICIDES

The use of pesticides is kept to a minimum, and where they are used, the most eco-friendly products are selected. All staff must be trained to PA1 or PA6 standard. The purchase, storage, usage and disposal of chemicals is carefully controlled under COSHH. A basic glyphosate is the chemical utilised within the park.

### 5.4.3 PEAT

Peat is **not** used in Auriol Park and the council uses its own recycled waste as mulch for the shrub beds.

### 5.4.4 POLLUTION REDUCTION

All chemicals are stored in secure containers that meet Health and Safety regulations. The distribution of keys is regulated to ensure chemicals are not stolen or mislaid through negligence. Pesticide spraying in the parks is only carried out when absolutely necessary. It is felt that a schedule of regular spraying may lead to excessive

spraying. It is always the prerogative to weed the beds manually, in summer months when weed growth is at its fastest, spraying is carried out more regularly. When any of the teams are working in the parks they are encouraged to park the vehicle and walk to the specific site reducing engine emissions from the vehicles.

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#### 5.4.5 WASTE MINIMISATION

Waste is not only expensive to get rid of it also has an environmental cost due to the pollution caused by the disposal of such waste. Epsom & Ewell Borough Council identifies two ways of tackling this problem 1) reducing actual production of green waste and 2) re-using green waste after composting, with the emphasis being on the former of these. Green Waste can be reduced by avoiding unnecessary pruning, using herbicides correctly and allowing leaves to decompose naturally amongst shrubs and hedge bottoms. As much green waste as possible is recycled, however loads with a high percentage of weed content are not recycled minimising the risk of seeds spreading. Any materials that cannot be recycled are disposed of by the Council street care team.

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#### 5.4.6 POLLUTION REDUCTION, WATER EFFICIENCY AND ENERGY EFFICIENCY

The Epsom & Ewell Environmental Policy aims to reduce the amount of energy used through good management, training, and informed purchasing practices and decisions. Vehicles and machinery are maintained regularly. Vehicles are not encouraged into the park and staff empty bins by hand, taking the rubbish out to the bins where possible. The operational services team also tries to reduce dependence on mains water supplies for irrigation. Watering of plants is kept to a minimum and watering points are located away from public access. Effective training of staff, including health and safety, and following all environmental legislation relevant to the council, prevents incidents of pollution.

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#### 5.4.7 ARBORICULTURE AND WOODLAND

Newly planted trees are staked, watered well and checked on a regular basis. Dead wood should be left standing if possible, to provide an important habitat for invertebrates and other habitats. Clippings and cuttings should be composted where possible and re-used within the park environment.

The Friends Of have been given access to the water points in the park so they can actively water any newly planted shrubs and trees, especially in periods of hot weather. Stock should be bought from approved suppliers, locally if possible. Mature trees should be inspected on a cyclical basis and information stored preferably on an ICT package for future use. Dead wood should be left standing if possible, to provide an important habitat for invertebrates and other habitats. Clippings and cuttings should be composted where possible and re-used within the park environment.

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#### 5.4.8 ENERGY EFFICIENCY

Many of the pavilions and changing rooms in the borough have lighting that only comes on when a sensor is activated meaning that when there is no one in the rooms the lights go off, avoiding wasted energy. For the facilities that do not have light sensors the rangers check that all the lights are turned off when they lock them up.

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#### 5.4.9 WATER EFFICIENCY

The pavilions where possible are fitted with self-closing taps for all showers and taps. Changing facilities are notorious for wasting water, the biggest culprits being showers left on after use. Self-closing taps are the most efficient method of saving water.

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#### 5.4.10 ASSET MANAGEMENT

A centralised asset management plan exists to account for and manage all Council assets. This plan includes all assets in the Borough's parks and open spaces.

### 5.5 CONSERVATION AND HERITAGE

Biodiversity, a contraction of "biological diversity," generally refers to the variety and variability of life on Earth. One of the most widely used definitions defines it in terms of the variability within species, between species and between ecosystems. It is a measure of the variety of organisms present in different ecosystems (United Nations Environment Programme, World Conservation Monitoring Centre). However during the last century, decreases in biodiversity have been increasingly observed. In 2007, German Federal Environment Minister Sigmar Gabriel cited estimates that up to 30% of all species will be extinct by 2050 (*BBC News*). As biodiversity contributes to our very existence on this planet, we must adopt the "Think Globally, Act Locally" concept which originally began at the grassroots level, however, it is now a global concept with high importance (*Warren Heaps, International Forum*), and adopting sustainable ways of living will ensure the protection of biodiversity and our future.

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#### 5.5.1 AGENDA 21- LOCAL BIODIVERSITY

The need for biodiversity was recognised at the United Nation's 1992 Rio de Janeiro Earth Summit. Leaders recognised that a diverse environment is essential to maintain air quality, to provide valuable species for food and medicine, and to provide a varied and interesting environment for future generations. As a result the Government were asked to produce national and regional biodiversity Action Plans, which filtered down at Local Authority level through the Local Agenda 21 initiative.

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#### 5.5.2 EPSOM AND EWELL BIODIVERSITY ACTION PLAN 2010

A 'Local Biodiversity Action Plan' has been produced for Epsom & Ewell to help ensure both the long term protection and enhancement of biodiversity within the Borough. The complete Epsom & Ewell Local Biodiversity Action Plan can be found at:

**<http://www.epsom-ewell.gov.uk/EEBC/Environment/Biodiversity.htm>**

This strategy provides an over-arching review of open space in the borough and has been developed in line with current national, regional and local policy context and initiatives. The following objectives from the biodiversity action plan for Epsom & Ewell 2010 are of particular relevance in informing the Management Plan.

**Objective 1:** Develop partnerships to ensure that the conservation and enhancement of biodiversity in Epsom and Ewell is maintained in the long term.

**Objective 2:** Ensure the conservation and enhancement of habitats and species, as specified nationally and in the Surrey Habitat Action Plans.

**Objective 3:** Ensure opportunities for the conservation and enhancement of the whole biodiversity resource in Epsom and Ewell are identified considered and acted upon.

**Objective 4:** Raise awareness, appreciation and involvement in the conservation and enhancement of biodiversity in Epsom and Ewell

**Objective 5:** Provide on-going monitoring of biodiversity in Epsom and Ewell.

**Objective 6:** Seek to increase the funding available for the long-term conservation, enhancement and monitoring of biodiversity in Epsom and Ewell.

**Objective 7:** Seek to identify the wider benefits to the community of improving biodiversity

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#### 5.5.3 EPSOM AND EWELL'S SUSTAINABLE COMMUNITY STRATEGY 2011 – 2022

'A Brighter Future'

A Brighter future is Epsom and Ewell's Sustainable Community Strategy. The Strategy looks at the future for Epsom and Ewell, It sets out how the Borough's many positive aspects will be developed and how the issues and challenges faced by the Borough will be met through partnership working.

Epsom & Ewell Borough Council's ambition is:

"To maintain and develop those distinctive characteristics that make living and working in Epsom and Ewell a matter of conscious choice and, in conjunction with others, provide quality and innovative services that are based on the identified priorities of our residents"

The Local Strategic Partnership has identified the following topics as areas for future focus and partnership working:

- The visual appearance of the surroundings, both in terms of the natural and the built environment
- The impact of organisations and individuals in securing a sustainable future (recognising the need for economic health and more housing)
- The ability to get around (including the use of the existing transport and traffic infrastructure, car movements and alternative means of travel)
- The promotion of community safety and the enhancing of public confidence, recognising the formal position and responsibilities of the Borough's Community Safety Partnership
- The support for particular communities (children & young people, older people and the disabled, the disadvantaged and pockets of relative deprivation)
- Social change and the achievement of a balanced demography
- Economic prosperity
- Improving Epsom Town Centre and maintaining other local centres

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#### 5.5.4 GREEN SPACES STRATEGY

Epsom and Ewell Borough council also have a Green Spaces Strategy. The development of a green spaces strategy for the whole of the borough provides the context in which land managers, planners and recreation providers can work to provide this borough with open spaces for the use of the residents and visitors alike. The Green Spaces Strategy can be found in the appendix. With a simple strategy in place, achievable strides can be made towards improving all Green Space in the borough. With the Green Spaces Strategy in mind, the Action Plan will identify what improvements will be implemented at Auriol Park.

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#### 5.5.5 EPSOM & EWELL GREEN INFRASTRUCTURE POLICY

A Green Infrastructure Policy for the Borough was written in 2013 by the Countryside team and Head of Planning Policy. Green infrastructure (GI) is a term used to refer to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to cover benefits provided by wildlife, trees, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands. The report highlights the important role parks can play in conserving and enhancing biodiversity across the Borough. It was noted that parks and formal gardens provide a valuable community resource and are important

open spaces in urban areas. For example, Rosebery Park and Mounthill Gardens provide essential green spaces within Epsom Town Centre which are heavily frequented by residents and those employed there, as well as students from the UCA.

The main objectives of the study are to:

- Bring together existing green infrastructure evidence in Epsom & Ewell
- Identify gaps in the local plan evidence base
- Map the Borough's existing GI assets.

The study's main recommendation is to create a landscape scale Green Infrastructure Strategy that seeks to protect and enhance a Borough-wide network of green infrastructure that delivers a wide range of benefits including improvements to biodiversity, public access, health and well-being, sports provision, allotments, flood protection and air quality.

The full document can be found at:

<http://dev-epsom-ewell.pantheonsite.io/sites/default/files/documents/residents/planning/planning-policy/Green%20Infrastructure%20Study.pdf>

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#### 5.5.6 ECOLOGY/WILDLIFE AND HABITATS

Within Epsom and Ewell there are sites designated for their biodiversity value. There are four Local Nature Reserves (LNR) in the Borough including Epsom Common which is Surrey's largest LNR. The other LNR's are Horton Country Park LNR, Howell Hill LNR, and running parallel with Ewell Court Park, the Hogsmill LNR.

Along with national legislation protecting wildlife, for example the 'Wildlife and Countryside Act, the 'Greenbelt', 'Ancient Woodland', 'Protected Hedgerows, 'Tree Preservation Orders' and areas identified as 'Strategic Open Space' in Epsom and Ewell also afford biodiversity some protection by limiting and controlling development. In addition some land in the borough is owned by trusts which aim to protect and enhance biodiversity.

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#### 5.5.7 FLORA AND FAUNA

The area that is used most by sporting groups is the lower part of the park and is mainly grass. There are no shrub beds or flower beds in this part of the park except for the edges which are lined with large mature trees. The 'Friends Of' carried out some work to the tree beds near to the Thorndon Garden entrance. Here they used

large wooden sleepers to edge the tree beds in order to stop the soil encroaching on to the pathway and to control leaf drop.



The top section of the park, predominantly behind the pavilion is where the shrub beds of the park can be found and this area of the park is lined with a hedge border which is maintained only outside of bird nesting season (March – August). Any plants used are chosen by the Council or come from the Herald of Spring event that is held at Bourne Hall. A particular plant that was chosen is a shade loving ground cover plant that produces small lilac and purple flowers and helps to suppress weed growth. A mimosa tree (see figure 21) was planted a few years ago as well as cherry trees that



can be found by the allotments at the top of the park. By the single pedestrian gate on Salisbury Road it was decided that low growing shrubs should be planted so as not to impede on the houses that back on to the park. The shrub bed that is behind the children's playground was planted with hardy growing herb plants, as well as not requiring too much cultivation and maintenance it was also intended as a communal herb garden that the allotment users could have access to.

**Figure 21 Mimosa Tree**

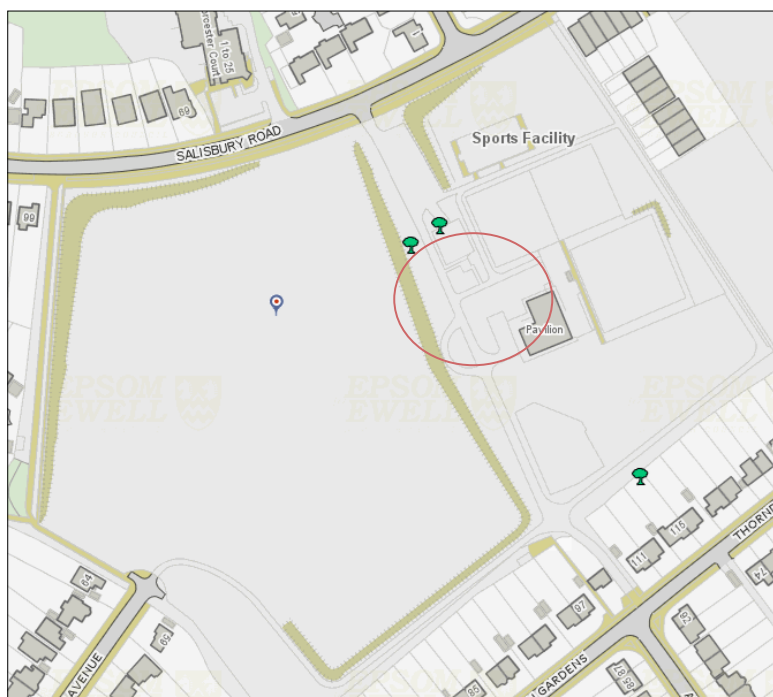
As the Friends Of group play a large part in the planting and upkeep of the vegetation in the park, it was decided that they should have access to the watering points in the park.

This allows the 'Friends Of' to easily maintain the areas they have planted, another added benefit of this is that new specimens planted by the Council can be looked after by the 'Friends Of', especially in periods of very warm weather.

Auriol Park is home to many varieties of tree, giving an interesting vista when looking cross the park. Their layout is mainly concentrated around the edge of the park leaving the grass areas open. The layout of the trees can be seen on the map in figure 25. There are two veteran trees in the park, both are English Oak trees and can be found near to the pavilion and are circled in figure 23 and pictured during winter in figure 24. As well as these there are many well established mature trees. Some distinctive types that stand out in the park are the large Indian Bean Tree (*Catalpa bignonioides*) that grows on the lawn to the left of the pavilion.



**Figure 22 Trees and shrubs lining back of the playground**



**Figure 23 Location of two veteran English Oak trees in Auriol Park**





Figure 24 Veteran Oak trees in winter

Other trees that can be found in Auriol Park include but are not limited to

Common Name	Genus	Species
Balsam Poplar	<i>Populus balsamifera</i>	
Common Ash	<i>Fraxinus excelsior</i>	
Common Oak	<i>Quercus robur</i>	
Crack Willow	<i>Salix fragilis</i>	
Field Maple	<i>Acer campestre</i>	
Hawthorn	<i>Crataegus monogyna</i>	
Hornbeam	<i>Carpinus betulus</i>	
Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	
Norway Maple	<i>Acer platanoides</i>	
Pissard's Plum	<i>Prunus cerasifera</i>	'Nigra'
River Birch	<i>Betula nigra</i>	
Wild Cherry	<i>Prunus avium</i>	

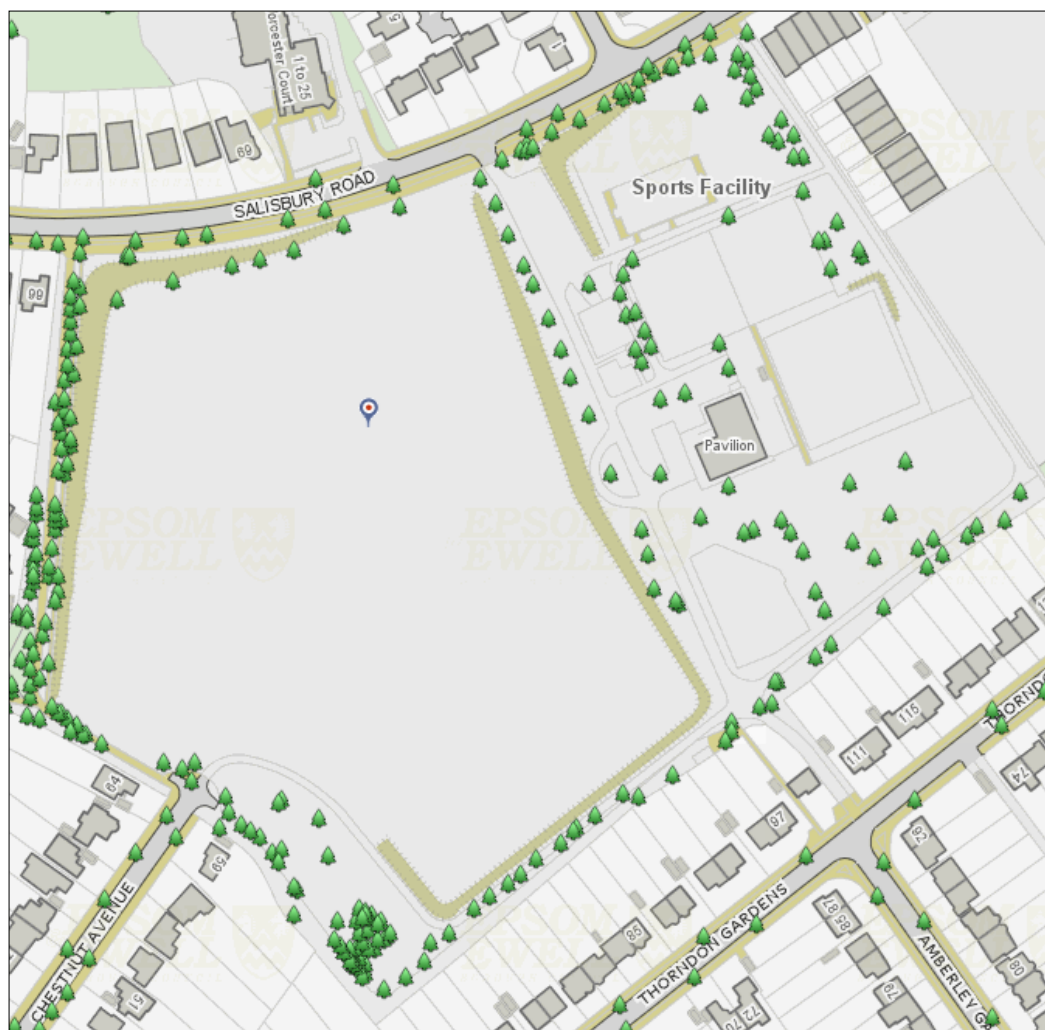


Figure 25 Tree map of Auriol Park

## 5.6 COMMUNITY INVOLVEMENT

### 5.6.1 FRIENDS OF EPSOM & EWELL PARKS (FEEP)

Many of the Boroughs larger well used parks have a 'Friends of' user group. These 'Friends Of' groups are also part of the larger group 'Friends of Epsom and Ewell Parks' (FEEP). The 'FEEP' group are in place to ensure all parks are looked after as some are so small that they do not attract enough people to form their own individual 'Friends Group'. The 'Friends of Epsom and Ewell Parks' meet every three months along with members of the Council to discuss current issues, projects and progress.

### 5.6.2 FRIENDS OF AURIOL PARK

Auriol Park is one of the parks in Epsom & Ewell that benefit from having its own 'Friends of Auriol Park' group. The Friends Of are very active and meet every first Wednesday of the month to carry out tasks in the park which could be from litter picking, to planting, to building a raised bed out of old sleepers.

In March the Herald of Spring floral display takes place at the local Bourne Hall Park. Once the display has finished, all of the local 'friends of' groups are invited to come and take some of the left over plants and bulbs to plant in their parks which the Friends Of Auriol utilise.

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### 5.6.3 PARTNERSHIPS

Epsom & Ewell Borough Council have an obligation to support the holder of the current Home Ground Agreement which is Stoneleigh Athletic Football Club (SAFC), to deliver their Football Development Plan (FDP) as agreed with the Football Foundation as part of the terms of funding.

The ways in which Epsom & Ewell Borough Council links with the football clubs development plan are summarised below:

- SAFC will review its FDP in conjunction with Surrey FA (SFA) and EEBC annually
- SAFC will work with EEBC and their ground staff to improve playing surface and maintenance (FA Pitch Improvement team to help with advice to improve and develop the pitches)
- SAFC will aim to use the facilities at Auriol Park to promote social and sporting activities for club members and visitors
- SAFC worked with EEBC in the Surrey Youth Games (SYG) 2016, leading the girls senior football team (9-11 year olds). Training sessions took place at Auriol Park in 2016 between the months of April and June
- SAFC are committed to working with EEBC as part of SYG once again in 2017. Training sessions will take place at Auriol.

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#### 5.6.4 AURIOL PARK EVENTS

##### Tri-Fest

In September 2015 and September 2016 the event known as Trifest was held in Auriol Park. Organised by the Residents associations of 3 wards, it was an event for the residents of Ewell Court, Stoneleigh & Auriol and Cuddington to come together for a great day of fun and live music. In 2015 they had an ABBA tribute act and then in 2016 to celebrate HM The Queen's 90th birthday a Freddie Mercury & Queen live tribute band played to the crowd. At the events they've had stalls hosted by 1st Ewell Court Scouts, Cuddington Residents Association, local WI ladies and Epsom Girl guiding. The event had free entry to the public with the option to give a donation. Due to its success it is scheduled to be held again in Auriol in September 2017.

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#### 5.7 MARKETING

All parks are advertised on Epsom and Ewell Borough Council website. All of the parks facilities are advertised as well as the 'Friends of' groups. This website is a great form of advertisement as all the information can be found in one accessible place.

What we have to remember is that it is only accessible to those who have internet access. In the Action Plan we aim to maximise the usage of the two new notice boards in Auriol Park that are going in early 2017 to promote all events and facilities to those who may be new to the park or who cannot view the information online. Notice boards also provide a fantastic platform for 'Friends of' groups to advertise themselves and their activities to attract new members.

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#### 1.1.1. IN HOUSE USER SURVEY

The Council used to use an external program called GreenSTAT to conduct surveys of their parks but this is no longer running. However the council wanted to find a way to keep the public involved in the future of our parks and open spaces so trialled their own in-house survey for Nonsuch Park, a well-used and loved park that is shared with the London Borough of Sutton. 1200 postal votes were sent out and 635 returned and was deemed a success. Due to this success the ranger service carried out surveys for Alexandra Recreation Ground in 2015 and Auriol Park in 2016 and both although on a smaller scale have proved very successful.

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#### 1.1.2. IN HOUSE SURVEY RESULTS

The survey ran from 07 November to 02 December 2016 - a period of four weeks. The survey was available in paper and electronic formats. The electronic version was featured on the Council's main webpage and via our social media platforms Twitter and Facebook - all containing links to the online survey. Postcard-size fliers were also distributed to:

- Mead Infant School
- Auriol Junior School
- Cuddington Primary School.

In total, 372 survey responses were received; of which 316 were paper-based (85%, n=316/372) and 56 were online submissions (15%, n=56/372).

Respondent profile:

The majority of respondents were female (66%, n=206/312) and 34% (n=105/312) were male.

Based on age groupings: 52% (n=178/340) were over 55 years old and 48% (n=162/340) were under 55 years old.

When asked about ethnicity, the majority of respondents (83%, n=274/330) described themselves as British white or English white.

The majority of respondents (64%, n=209/329) said they were Christian.

Four per cent (n=14/315) of respondents indicated they had a disability according to the Equalities Act of 2010.

Nearly six in ten respondents (58%, n=210/364) visit the park multiple times weekly; this comprises 19% (n=69/364) visiting daily and 39% (n=141/364) visiting two or three times weekly. A further 27% (n=98/364) visit the park two or three times monthly and 12% (n=45/364) visit the park two or three times a year. Only 1.4% (n=5/364) visit less than once a year.

Over eight in ten respondents travel to the park on foot (82%, n=341/414), whilst 13% (n=52/414) travel by car and 5% (n=20/414) by bicycle.

Overall, the most popular reason for visiting the park was to 'go for a walk' (14%, n=90/657). This was followed by 'use the playground' (13%, n=87/657) and 'children/family outing' (12%, n=82/657).

Looking at the age profile, most respondents between:

35-44yrs 'use the playground' (49%, n=41/84) and use the park for a 'children/family outing' (42%, n=32/77)

45-54yrs use the park to 'walk the dog' (28%, n=15/53)

55-64yrs use the park to 'walk the dog' (30%, n=16/53)

65-74yrs use the park to 'go for a walk' (37%, n=30/81) or use it 'as a short cut' (47%, n=18/38).

The top three positively rated aspects of the park were:

1. 'Accessibility' (88%, n=300/340)
2. 'Grass areas' (84%, n=295/350)
3. 'Facilities for 12's and under' (72%, n=204/283).

The top three negatively rated aspects of the park were:

1. 'Toilets' [lack of] (83%, n=186/225)
2. 'Range of visitor facilities' (29%, n=86/298)
3. 'Flower/shrub displays' and 'Facilities for over 12's' (tie: 23%; n=76/335, n=57/252; respectively).

Overall, 74% (n=275/352) of respondents rated 'the park in general' positively, 20% (n=70/352) rated the grounds fair and 2% (n=7/352) rated the grounds negatively.

Respondents who gave a negative response to an opinion relating to the park were also asked to provide reasons for their answer. The three most prevalent reasons were:

1. 'Toilets needed' (40%, n=152/379)
2. 'Benches/ seating' (10%, n=39/379)
3. 'Café needed' and 'Flowerbed/ shrubbery improvements' (tie: 8%, n=32/379).

When considering improving the visitor experience, the three most prevalent suggestions for using the park more often or staying for longer include:

1. Café needed (31%, n=107/342)
2. Toilets needed (25%, n=87/342)
3. Better range of facilities (12%, n=42/342).

Of the respondents that took part in this survey, 40 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.


## 5.8 MANAGEMENT PLAN

In completing this management plan using the criteria for Green Flag and having put other parks in the borough successfully through the Green Flag process we now understand the importance of a structured management plan. An improved management plan is not just for the day-to-day running of the facility but also for its long-term future. Our management plan will be a work in progress with the help of the parks user groups.



APPENDIX A

AURIOL ACTION PLAN



GREEN	Projects are on track and in control
YELLOW	The project has been postponed to explore alternatives or is not required to be active at this time
RED	The project has been stopped and will not meet its commitments for cost, schedule or scope. Projects in the red will need their budget and schedule increased, or their scope of work increased, to get back on track

Green Flag Criteria	Objective	Implementation/Task	Target Date	Achieved	Progress					Project Managed By
					2017	2018	2019	2020	2021	
A Welcoming Place	New Notice Boards	Remove dated and uninformative signs	Spring 2017		During late 2016 the process was started with the design of the board and communication with Friends Of and Councillors. Boards went to final design at the beginning of February and will be due to install early spring					Ranger Service & Operational Services Management



	Pathways	Friends Of have identified the want for a pathway to run the entire loop of the park	Dependent on funding		Pathway currently ends at the gate that leads out into Chestnut Avenue. There is currently no pathway to the main gate so have to walk back the same way. Pathway would lead from this gate to the main gateway. Currently there is no funding for this project.				Managers / Outside Contractor
	Benches	It was requested in the 2016 public survey and also by the Friends Of that they would like more benches	2017		Area identified along the front edge with the pavilion behind. In particular for people who want to watch the football at the weekends. This will be actioned as part of the bench replacement programme.				Maintenance Ranger



	Name Plaques	To install name plaques on the main entrances and smaller entrances of the park	Summer 2017		The leftover budget has been allocated to getting name plaques on most of the main entrances of the park so the public know which park they are entering even from the smaller less obvious entrances. They will match the header board of the new noticeboards and will create a uniform look across all the parks in the borough. Quotes are being obtained.					Ranger Service
	Facilities	It was highlighted in the 2016 survey that the park lacked equipment for over 12's and more sporting equipment would make people stay/use the park	Dependent on funding		The MUGA is designed to be used for over 12's with basketball courts and football pitches. Any future funding can be					Procurement

					directed to facilities for the Over 12's – outdoor gyms have been installed in other parks, could be a possibility for Auriol, dependent on funding					
	It was highlighted in the 2015 survey that the park could do with a café as no food or drink facilities near by	2017		The café in part of the pavilion is due to open in 2017.					Procurement	
	It was highlighted in the 2015 survey that the park required toilets	2017		Due to the cost associated with public toilets the majority of them were closed across the whole borough and this included the ones at Auriol. When the Café goes in to the pavilion later this year there will be a disabled toilet available whilst					Procurement	




					the café is open and there are talks that as part of their agreement they will open the outdoor toilets to the public.					
Healthy, Safe & Secure	Securing the Park at night	The park and pavilion are to be locked up every day	Daily		Both the park and pavilion are locked on a daily basis, half an hour before sunset. Any break in attempt on the pavilion out of hours will set off an alarm and alert the duty officer					Ranger Service
	Field Drainage	Look at getting the football pitch drainage sorted out. Water collects at the base of the hill at does not drain away	2017		This has been an on-going problem with these pitches and remedial works have been conducted in the past. Further investigation will need to take place to access what further can be done.					GM / Managers

	Ruts	Issue with vehicles cutting corners in the winter.	Monitor		Looked into getting pavements widened at the corners but this is expensive so knee rail was installed to keep vehicles on the path. Will monitor any future damage caused by vehicles					Maintenance / Ranger Service
	Police Patrol	Liaise with local police and PCSO's to include Auriol Rec in their patrols	Monthly		Auriol Park is not considered a crime hot spot, and due to police resources, monthly police patrols are no longer carried out. Rangers continue to maintain close contact with PCSO's should the need of their assistance arises.					Ranger Service
	Anti-Social Behaviour	Auriol Park is locked at night, and the 2016 survey highlighted that they would like to see	On-Going		<ul style="list-style-type: none"> <li>The rangers log any incidents they encounter on their own</li> </ul>					Ranger Service

		some security during the day.			<p>internal spreadsheet and to the police.</p> <ul style="list-style-type: none"> <li>• If rangers receive intel from the public they encourage them to report to the police.</li> <li>• There is CCTV in the park so any incidents would be recorded and can be accessed by the police.</li> <li>• There is no funding or resource for security personnel however the rangers tackle antisocial behaviour should they witness it</li> <li>• The café will provide a permanent presence so</li> </ul>					
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					may deter antisocial behaviour					
	Encourage Responsible dog ownership and good practice in the park	Educational tools. Posters and stencilling.	2 – 3 Months		Posters & Stencilling on the pavement is listed as a priority park for Auriol Park. Stencilling is done as and when needed (weather permitting) and recorded on a database. The decision has been made after that there will be a space allocated on the new information boards highlighting good dog ownership.					Ranger Service
		Use the new noticeboards to highlight the dangers of not clearing up after your dog	Spring 2017		There will be a space allocated on the new information boards highlighting good dog ownership.					Ranger Service









		Deliver educational information at the Auriol Friends Of Tri-Fest	September 2017		Rangers to take the comms unit to the event and hand out information regarding the bye laws and good dog ownership.					Ranger Service
Clean & Well Maintained	Bins	Emptying & Maintenance	Weekly		All bins checked on and emptied daily. Inspected during weekly checks for damage and are replaced/repared as and when required					Operational Services / Ranger Service
	Litter	Removal of rubbish in the park	Daily		Any litter found is removed by the team that empties the bins on a daily basis. When the ranger team inspect the park on a weekly basis any litter found is removed. When the Friends OF have their task days, rubbish is left bagged by the bins and removed					Ranger Service


					by Street Cleansing or Ranger Service.					
	Dog Mess	Removal	Weekly		Rangers patrol park to check for dog mess. If found it is collected and recorded on a database					Ranger Service
	Locks	Maintained	Every 3 months		All locks on the gates should be removed, cleaned and oiled					Ranger Service
	Tennis Court Cleaning	Repair damaged tennis court surface	Weekly /Yearly		Weekly inspections to be carried out to monitor for damage. Annual cleaning is carried out by a contractor when detritus builds up					Ranger Service & Specialist Contractor
	Repairs to playground/Muga/Tennis Courts/Park Furniture	Inspections	Weekly		All are inspected on a weekly basis and any damage found reported to the maintenance ranger.					Ranger Service / Maintenance Ranger

					Timescales for repairs depends on severity of damage				
	Flower Beds	It was highlighted in the 2016 that people would like to see more flowers in the park			Due to resource, maintenance and cost it is not viable to have high maintenance flower beds. There are some spring/summer flowering wildflower beds in the park and displays of spring bulbs which add seasonal colour.				
Sustainability	Electricity and Water Efficiency	Ensure all taps and showers in pavilion are functioning properly. Check all light bulbs in pavilion and lamp posts are energy efficient and are timed to come on at the correct times.	Weekly		Lamp posts are owned by Surrey County Council, any faults are reported directly to them. Kier (maintenance contractor) carries out monthly planned preventative maintenance (PPM) where the water				Ranger Service & Kier


					temperatures and emergency lights are checked. There are other PPM tasks that come up quarterly, half yearly and annually that also get attended to.					
Conservation & HEritage	Re-Introduction of wildlife area	Establish wildlife area in particular beetle loggery	Annually		Friends of collect dead wood and pile up at bottom of Auriol in a secluded area. This is left in situ to promote habitats for insects					Ranger Service / Friends of Auriol
	Maximise opportunities for ecological enhancement	Identify areas where mowing regimes can be relaxed and bulbs introduced	Annually		There are several areas in Auriol that have had bulbs planted by the friends of. These bulbs are in low use areas of the park – under signs, in edging of park and at bottom. These areas are left					Grounds Maintenance

					untouched by GM.					
Community Involvement	Promote the role that Auriol Park plays in improving the quality of life of local residents (e.g. health/contact with nature)	Promote an in house survey to give out to local residents and park users to shape the future of the park.	Winter 2016		The survey was carried out in 2016 and the results have fed in to the action plan					Ranger Service and Leisure Team
	Assess the number and profile of users, the pattern of use and users perception of safety and enjoyment	An in house survey will allow the local community to voice their opinion on how they feel the park can be improved	2021		The next in house survey will be carried out in 2021 in line with the next re-write of the management plan					Ranger Service and Leisure Team
	Encourage more visitors to the park	Friends Of group would like to see the area behind the muga utilised.	Budget dependent		Identified they would like an 'all weather' table tennis table to be installed in this area					Ranger Service

	Grow the Friend Of group	Identify more volunteers	2017		40 people who filled in the survey provided their details for future volunteering in the park. These will be passed on to the Friend liason officer					Ranger Service / Friend Of
Marketing	Make information and interperative material available about the history, landscape and ecological value of the park – and also environmental management in the park	Internet (the Council website) and leaflets.	Spring 2017		The Council launched a new external site to the public in late 2016. The parks pages will be updated with useful and up to date information					Ranger Service, Friends of Alex and Leisure Team
	Ensure information and interpretation is available and kept up to date	Use the new noticeboard to advertise future events and up to date information about the park	On Going		Checked during weekly inspections and updated as and when required					Samantha Whitehead/ Emma Brown/ Sandra Laxton

		Bins	Monthly		Advertisement of events in litter bins as and when needed updates. The bins will also become available in 2017 to hire to advertise external companies					Street Cleansing
	Promote the Green Flag award scheme across the Borough	Green Flag posters and flag poles to be renewed each year on receiving the award	Annually		Flag replaced and certificates replaced as and when successful in our application Green Flag					Ranger Service, Friends of Alex
Management	Write an up to date management plan available to staff at all levels and by different park user groups	Copy to be made available to all concerned members	Winter 2016		Completed in January 2017					Ranger Service



	Ensure effective monitoring of the management plan	Implement monitoring process by meetings between the Council and user groups thereby continually reviewing and updating the management plan	Weekly & Quarterly		Weekly checks of the park carried out by the Ranger service and bi-annual walkabouts arranged with the 'Friends Of' group					Ranger Service & Relevant Parties
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APPENDIX B

A GREEN SPACES STRATEGY

Borough of Epsom and Ewell

A Green Spaces Strategy



Skylark



Juniper



Orchid



Great Crested Newt

Green Spaces Strategy

Policy Statement

To protect, conserve, enhance and promote our green spaces recognising the importance of them to the identity of the Borough. To work in consultation with residents, users and other interested groups to conserve the natural diversity, visual amenity and historical interest and to promote public access and recreational opportunities.

1.0 INTRODUCTION

2.0 COUNTRYSIDE

3.0 TREES AND WOODLAND

4.0 PARKS

5.0 OPEN SPACES

6.0 CONSERVATION

7.0 ALLOTMENTS

8.0 PUBLIC ACCESS

9.0 OTHER INSTITUTIONAL OR PRIVATE LAND

10.0 STRATEGIC POLICIES

11.0 EDUCATION

## 1.0 INTRODUCTION

The development of a green spaces strategy for the whole of the borough provides the context in which land managers, planners and recreation providers can work to provide this borough with open spaces for the use of the residents and visitors alike. Emphasis in the past has been placed strategically on countryside areas on a regional basis because of the pressures on these areas and particularly the urban fringe. In Surrey over the last few years, a countrywide countryside strategy has been in place, identifying issues and action points. However in the area of parks and other open spaces there has not been the impetus to adopt the strategic and long-term approach this strategy seeks to start the process of addressing the long-term future of all the varied sites within the borough.

Green spaces in the borough are extremely varied in character ranging from the formal gardens at Bourne Hall, through informal green spaces such as that found at Royal Avenue to the wilder areas of Epsom Common. It is clearly very difficult to formulate a policy that is applicable to all of the sites and this strategy does not intend to do so. In addition all of the sites cannot be considered in isolation as residents and other uses are highly mobile and use sites for different purposes. It is clear that the use of the sites is interlinked as many of the sites are also physically linked.

In the past, land use policy was dictated by the local plan policies and these policies, although material in the development of land, were not the primary source of policy. This has recently changed such that the local plan is now given greater strength but has also had to recognise the primary role of the local plan as a land-use strategy. Closer scrutiny is now given to local plans and many of the policies which would have formally given no concerns as non-land use policies now raise issues given the primacy of the plan. Non-land use policies will be rejected. The local plan process timetable has resulted in the present plan needing now to consider the non-land use policies in a different light as a result of a clarification of central government policy. We need to establish these policies in association with the planning system backed by research and evidence as opposed to intuition. This strategic approach starts that process.

It is proposed in the first instance to identify a number of areas for policy development. In essence there are two major areas in the development of the green spaces strategy. There are those policies which refer to features on the ground, for example: land management plans, and then there are those policies which refer to the use of green space such as the play policy. These policies are not mutually exclusive and need to be referenced and considered in the development of the green spaces strategy.

The following strategy should not be considered as being set in tablets of stone. Needs and circumstances change with time and what is relevant now may not be relevant in two years time. This long-term view of the development and management of the green spaces in the borough will help in long-term objective setting for the council and will allow activity to be directed in the most effective way. It should also bring to the fore, issues about the management of the open spaces in the borough which need to be investigated and then resolved. The following strategy is divided into a number of subject areas for convenience, though it should be remembered that in practice many of the areas merge together and issues raised are rarely as simple as they seem.

## 2.0 COUNTRYSIDE

A large part of Epsom and Ewell is countryside green space and is part of the larger resource of Surrey. The land is not all in the ownership of this council and this has had an impact on the integrated management of the site. Countryside issues and policies have been well developed nationally through the work of the Countryside Commission and English Nature. As a result a good body of research is available which can be used in the local context of Epsom and Ewell. Improvements have been made in the past years with site-specific management plan and policies for sites in the ownership of the council, but there is a need for an overall policy context in which to fit the management of the countryside irrespective of ownership. There is also a need to identify the links between sites both physically and in the overall contribution to the green spaces of the borough.

### Issues

- Areas and development pressure for housing and go facilities.
- Inappropriate management either by management as parkland or no management to retain the countryside appeal and value.
- No long-term view of the management of the countryside into the future, recognising each site has a different value.
- No consideration of the relationships between the site and how they contribute to the whole and what physical links are necessary between the sites.
- No priorities for action for the management of the sites.

### Action

To identify the different types of countryside in the borough, identifying policies for their overall and site-specific management where appropriate. To prioritise the sites in terms of their value as green spaces in the borough as a whole and to identify potentially damaging activities which would be detrimental to their value. To seek to identify where links and improvements can be made in the countryside of the borough.

## 3.0 TREES AND WOODLAND

Trees and woodlands, of all the soft landscape features in the borough, play one of the most important roles. The visibility of trees and woodlands and their contribution to the landscape should not be underestimated. Fortunately the borough is in a good position with regard to its tree stocks both in parks, open spaces and highways. Past planting policy has produced a wide range of tree species though there is scope for improvement and development as inappropriate tree planting has taken place. Any policy for trees and woodlands should cover all aspects of the trees and woodland in the borough and show how they relate to our other policies on all areas of land within the borough, whether owned by this Council or not.

### Issues

- Loss of trees through a variety of means which includes development and natural processes such as storms and drought.
- Planting inappropriate trees in inappropriate places.
- Poor management of the existing trees resulting in increased cost and liability potential.
- Little recognition of the role of trees in the urban landscape.
- No overall tree planting or landscaping strategy.

#### Action

To quantify the tree resources of the borough and to draw on this to produce an urban forestry strategy to secure the long-term future and development of the borough's tree stock.

#### 4.0 PARKS

There is a wide range of parks in the Borough which range from formal gardens to sports oriented recreation grounds. Most residents of the borough use the parks on a regular basis for a number of different reasons. In the past the tendency has been to manage parks in isolation without a long term view of their role, the needs of users and their detailed management. In addition it was also felt that the priorities for the development of the parks were unclear. It is now the Council's policy to consider the use of the parks in consultation with the users, to develop long term policies for each park and also to plan for their long term development integrating them with other green spaces as a unit.

- Problems of security and abuse of facilities
- The need to generate income with limited investment in the facilities

#### Action

To develop an overall policy for the future development of the parks and then to produce individual site management plans. To identify the current provision in parks and the scope for future improvements. To address the problems of youth involvement and provision.

#### 5.0 OPEN SPACES

Open spaces are those areas recognised within the borough, both public and private, which are in addition to our recognised parks, countryside and allotments. They currently play or have the potential to play, an important role in our green space provision. An example of this would be the contribution made by the Longmead Contours to the link between the green areas of Epsom and Ewell. These areas range from informal play space within housing areas to large areas of close mown grass. These are to be considered in this green spaces strategy for the borough as they form an integral part of our green spaces network and are often some of the most frequently used sites.

#### Issues

- Consideration of the role of the open spaces in part of the overall network of green spaces.
- No long-term management plans for the management of the sites taking restricted account of the needs of users and local residents.
- No overall policy for management of the open spaces as a whole and as part of our green spaces network.
- Problems of security and abuse of the facilities.
- Varied ownership restricting the overview of the open spaces.
- Areas and development pressure for housing and golf facilities.

#### Action

To establish the role of each of our open spaces for the future development of the green spaces in the borough and develop a long-term management plan working with the local residents, users and the landowner where appropriate.

## 6.0 CONSERVATION

The need to conserve features within our environment is increasingly recognised by our residents and the users of our green spaces. There has been a dramatic increase in environmental awareness for all parts of our environment over the past few years. As a council we have started to address a number of the issues involved through the borough local plan and through a number of other strategies and policies. We still need to clearly identify conservation policies, place them in context and to implement those that are in place.

### Issues

- Loss of some of the natural features of our environment by a variety of different means.
- No policies for the management of anything other than the wildlife features of our green spaces.
- Limited awareness of the conservation interest of many of our sites which includes historical value.
- Limited resources to implement conservation initiatives.
- No plan for environmental improvements to OUI green spaces.

### Action

To define policies for the conservation of features within all of our green spaces in consultation with interested groups. To implement those policies with specific actions that will produce results.

## 7.0 ALLOTMENTS

Allotments serve the need for local residents to grow their own produce whilst at the same time having health and social benefits. The use of allotments has changed over the past years. There were high levels of occupancy after the Second World War and areas which are now Green space were then used as allotments. Usage declined in the 1960's and 1970's, however with a change in people's attitudes and with the adoption of healthier lifestyles the last few years have seen an increase in the demand for plots. The demand for allotments then clearly fluctuates with time and this changing need has to be recognised in the long-term management of allotments. Recently emphasis has been placed on the management of the site by the allotment holders themselves. This is providing real benefits and will continue into the future.

### Issues

- Fluctuating levels of occupancy and changing demand for allotments.
- Pressure of the sites for development: as housing.
- Limited past expenditure producing long-term problems such as the accumulation of rubbish.
- No long-term plans for the management of the allotment as a unit and for the future development of each of the allotment.

### Action

To devise a policy for the allotments service to form a long-term strategy for their development and to identify management priorities for each of the individual allotment sites.

## 8.0 PUBLIC ACCESS

For any green spaces strategy to have value to the residents of the borough it is important to recognise that access is particularly important. This may not mean direct access to the site but may involve being able to see the site



from roads and public rights of way and so providing visual amenity. The site may contribute to the overall green space provision of the borough without necessarily being accessible though we should strive to gain access where appropriate. The opportunities for the further development of the rights of way network should be emphasised. Access for the disabled and other groups should not be thought of as an addition to access to our sites but should be automatically considered in new and existing developments.

#### Issues

- No plan for the development of access to our green spaces.
- Lost opportunities for the enhancement of access to green spaces.
- Opportunities for the promotion of access to green spaces are not fully utilised.
- Increased future potential for improvement in the light of proposed developments.
- The need to provide access to our green spaces for all sectors of the community.

#### Action

To identify the rights of ways and other forms of access within the borough and to show how they link our various green spaces, facilitate the use of our green spaces and identify areas where we would seek to extend access to our green spaces to form an overall network. To consider access to our green spaces by the disabled and other groups.

### 9.0 OTHER INSTITUTIONAL OR PRIVATE LAND

in this borough the land owned by this council plays a significant role in the overall development of our green spaces. However this is not the whole picture. If all land which is not owned by the council is ignored then there is little justification for any overall policy context in which to work. This is vital when considering standards for green space provision. There is a need to consider non-council owned sites in this policy but not necessarily on an individual site basis as the response from the landowner may vary.

#### Issues

- Impending recent changes in the use of large green spaces such as the hospitals Cluster
- Opportunities for the extension or enhancement of our accessible green space may be lost
- Development pressure on this type of green space for housing or other usages.
- The need to identify standards for facilities in green space as a result of the Borough local plan enquiry.

#### Action

To identify all non-council owned sites and to produce a register identifying features of the green space. To seek to negotiate management of the site that conforms to our overall objectives for the management of green space and, where necessary consider the long-term management of the site.

### 10.0 STRATEGIC POLICIES

Any strategic policy cannot work in total isolation. We need to consider the effects of national policy for the various activities and features of our green spaces. This is particularly important where we are to consider local standards. The way forward is to look very clearly at our local standards and policies and identify where they differ from those agreed nationally whether formally or informally. Evidence must be provided to justify the local conditions. This has been clearly seen in the inspector's response to the Borough Local Plan Deposit Draft. The play policy is a good example.

Issues

- Lack of policies which can be applied to green space without each issue having to be dealt with on an individual basis
- Management of our green spaces with a wider perspective
- The need to identify policies and standards which will be material in the determination of planning proposals
- The need to work with adjacent landowners, authorities and interested parties.

Action

To carry out an investigation and analysis of all policies and standards which effect the green spaces in the borough and to clearly identify the implications for our own policies. To identify where appropriate further policies as necessary and to consult with interested parties.

11.0 EDUCATION

Green space within the borough is a resource which needs the support and understanding of the local residents if it is to survive. The promotion and interpretation of our green space heritage through educational programmes vital to the continued appropriate use of that green space. Informed debate and an understanding of how green spaces can only be supported by relevant information. We need not only to collect that information but also to inform people of the consequences of their actions and how to act on the result. It is through appreciating what green space resources we have that we will be able to protect those green spaces.

Issues

- Limited educational programme at present
- The need to make the resident and user alike aware of the constraints on the management of green spaces
- The need to respond to the changing needs of our users and to keep them informed of proposed changes

Action

To develop an interpretive plan for all green spaces, both as a unit and individually to identify how we will educate everyone on the importance of green spaces and their management. To implement the plan using the Ranger Service, other officers and outside agencies as appropriate.



**ALEXANDRA RECREATION GROUND**

**MANAGEMENT PLAN 2017 - 2021**



**Prepared by**

**Epsom & Ewell Borough Council**

## 1. EXECUTIVE SUMMARY

This Executive Summary enables readers to understand the main ideas of the management plan. The summary follows the guidance provided by the Green Flag Award desktop assessment. The aims and objectives of the management plan follow the Green Flag Award judging criteria. The executive summary, together with the main plan and the appendices provide details of the management of the park.

The Alexandra Recreation Ground Management Plan covers a five year period from 2017 – 2021.

Parts 2 – 4 explain the purpose of the plan, an overview of how we manage and maintain the park, and records the key features of the past and present.

Part 5 addresses the key criteria set by the Green Flag Award

5.1 – A Welcoming Place, states information relating to access, signs and facilities.

5.2 – Healthy, Safe and Secure, gives details of our Health & Safety Policies, the Ranger Service, emergency procedures and contacts, park security including CCTV. This section also discusses the steps we take to curtail irresponsible dog ownership. We discuss how we work with the Police and outlines the byelaws that apply to Alexandra Recreation Ground.

5.3 – Clean and Well Maintained, in this section we look at how the maintenance work is scheduled and carried out by the Streetcare department and how the quality of work is monitored. There is particular reference to litter, graffiti, and grounds maintenance. This section also focuses on the maintenance of the pavilion and arboriculture maintenance, both of which are provided by other departments of the Council.

5.4 - Sustainability relates to environmental sustainability and details our aims in relation to use of organic material and recycling. In this section, we detail how we use pesticides and our policy not to use peat. In general, we take our guidance from the Epsom & Ewell Borough Council Environmental Policy.

5.5 – Conservation and Heritage, looks at Agenda 21 and Epsom & Ewell's Biodiversity/Sustainability Plans. We also reference the Council's Green Spaces Strategy and the Green Infrastructure. This section also explains the steps we take to protect and encourage ecology and wildlife in Alexandra Recreation Ground.

5.6 – Community Involvement is an area in which we are exceptionally lucky to have the support of a long established Friends Group. Alexandra Recreation Ground Friends provide an additional resource that helps maintain and enhance the park for the enjoyment of the entire community. This section also discusses our relationships with our external partners such as the Martial Arts Centre and the Bowling Club.

5.7 – Marketing, although we do not 'market' the park in the commercial sense, we do find out what people want from this space by canvassing their opinions via a Visitor Survey. The point of the survey is to find out what people think about the current state of park and what they would like to see in the future. This important piece of consultation is vital in helping us plan for the next five years and the results feed into Action Plan, found in Appendix A.

Appendix A – The Auriol Park Action Plan is possibly the most important part of the plan as it details how we would like to manage the park over the next five years. Although some of the items detailed in the Action Plan are aspirational and will require specific funding to achieve, we feel it is important to include all items so that we can investigate suitable funding options as they become available.

Appendix B – Provides a copy of the Green Spaces Strategy.

## 2. INTRODUCTION

Alexandra Recreation Ground is situated in the southern half of the Borough about a quarter of a mile from Epsom Town Centre. It was purchased on 16 December 1898 and is owned by Epsom and Ewell Borough Council and managed by the Operational Services department of the Council.

This management plan will identify how Alexandra Recreation Ground is managed using the green flag assessment criteria. The management plan addresses the good practices and recommendations suggested by the Green Flag judges along with further opportunities.

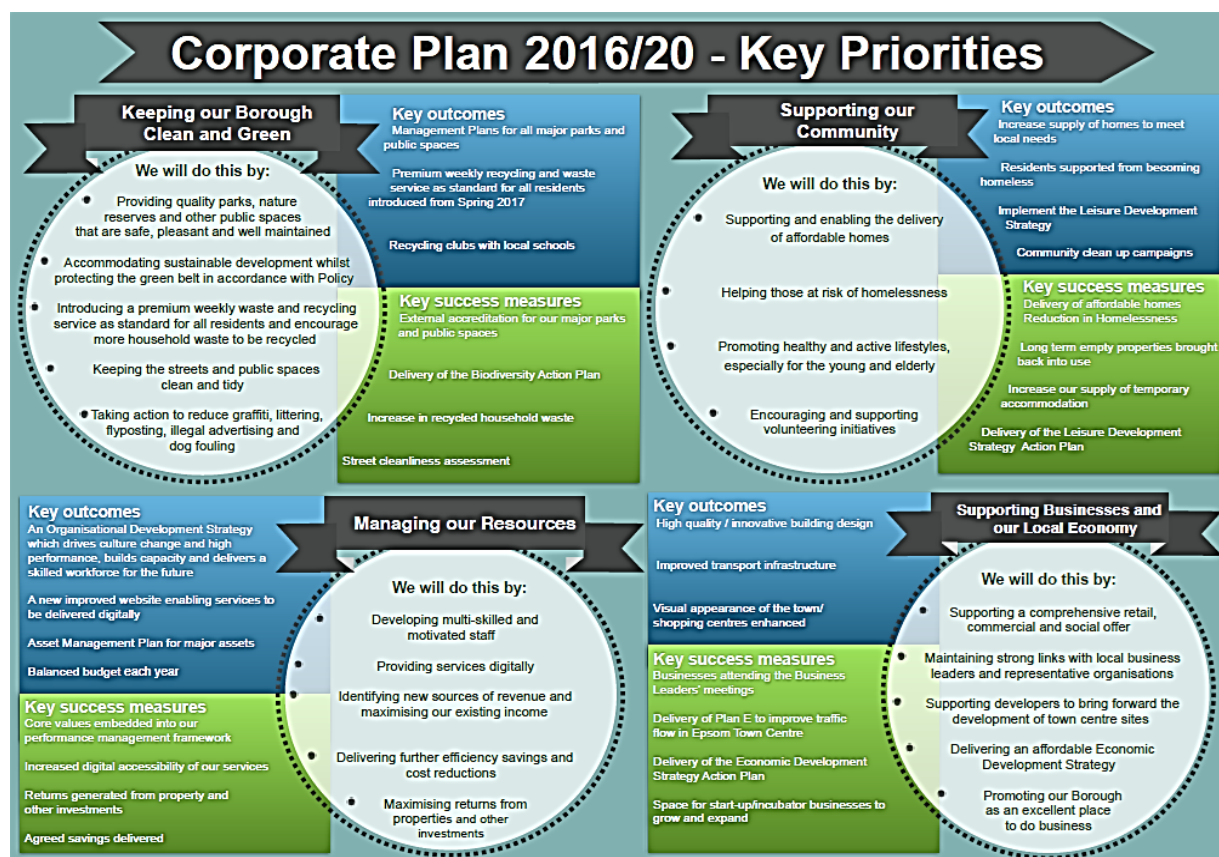
### 1.1. STATEMENT OF PURPOSE

The purpose of the management plan is to:

- Ensure that the objectives of management and maintenance are documented
- To identify the resources required to manage and maintain the park
- To assess priorities and challenges for future action
- To encourage and support community involvement
- To promote and market the park
- To monitor and review changes that occur in the park

The management plan has been written to cover a 5-year period. It is a working document that brings together all information relating to Alexandra Recreation Ground. The action plan that works alongside the management plan will be updated and revised on an annual basis as part of the Green Flag award scheme process. The management plan will serve as a benchmark against which delivery and performance objectives can be measured.

## 1.2. EPSOM & EWELL BOROUGH COUNCIL'S KEY PRIORITIES



## 1.3. THE VISION FOR ALEXANDRA RECREATION GROUND

Our long-term vision for the park is to:

‘Provide a safe, attractive and sustainable environment for the benefit of all park users now and in the future’

To achieve this vision we have incorporated the key criteria set out in the Green Flag award scheme as a national benchmark for quality standards for public parks.

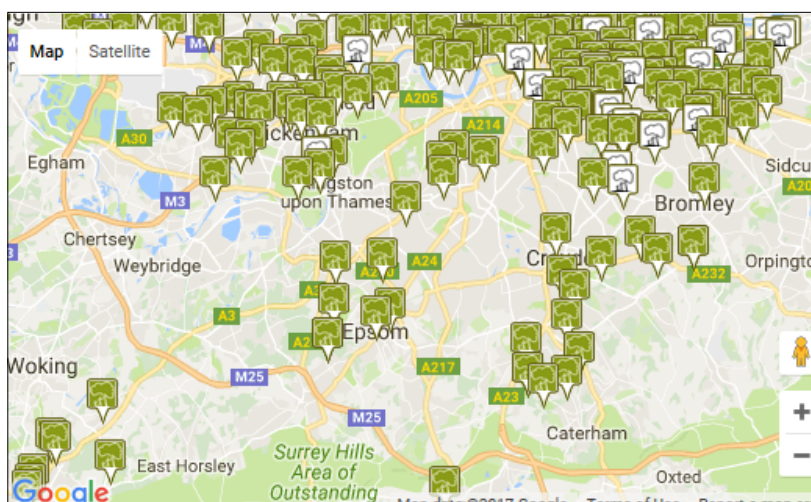


Figure 1 Distribution of Green Flag parks in the South East region

#### 1.4. KEY OBJECTIVES

- To ensure the effective implementation of both financial and staffing resources to deliver a high level of quality management.
- Positively welcome people into the park, in terms of both physical and social access.
- Ensure a healthy, safe and secure experience for park users.
- Provide a well maintained and clean park.
- Improve the environmental quality and sustainability of practices carried out in the park.
- Maintain the restored historic landscape character, whilst ensuring provision for contemporary users.
- Provide opportunities to increase community use and involvement, particularly through events, education and interpretation.
- Ensure effective promotion of the park as a community resource.



1.5. OBJECTIVES OF THE MANAGEMENT PLAN

Epsom & Ewell Borough Council work to an annual maintenance schedule involving the Grounds Maintenance team, Street Cleansing team and the Ranger Service. These three teams work in unison to provide a safe, clean and enjoyable environment for all who wish to use Alexandra Recreation Ground.

Epsom & Ewell Borough Council have strived to ensure its parks and facilities are open to all who wish to use them and you can find good disabled access throughout. To ensure work is completed to Council specification there are policies in place for any issues that arise. When working on public areas such as parks and open spaces these issues tend to be litter (including drug paraphernalia), dog fouling, graffiti and vandalism of equipment. These policies ensure that the Council can continue to keep its parks and open spaces as clean and safe as possible for its users. Regular meetings with the Friends of Alexandra Recreation Ground ensure open communication channels are maintained, allowing the Council to respond to any problems that may arise but more importantly to try and prevent these problems arising in the future.

### 3. BACKGROUND INFORMATION

#### 1.6. SITE OVERVIEW

##### **Address**

Alexandra Recreation Ground  
Alexandra Road  
Epsom  
Surrey  
KT17 4BX

##### **Size**

6.11 Hectares

##### **Access**

Alexandra Road  
Bridge Road  
Norman Avenue  
Wallace Fields  
Windmill Lane

##### **Ownership**

Epsom & Ewell Borough Council

##### **Management & Maintenance**

Epsom & Ewell Borough Council

##### **Facilities**

Under 12's Playground  
Basketball courts  
Bowling green  
Over 12's play area  
Cricket pitch  
Football Pitches  
Football changing facilities  
Tennis courts  
Multi-use games area (MUGA)  
Epsom Martial Arts Centre  
Pavilion

1.7. LOCATION OF ALEXANDRA RECREATION GROUND

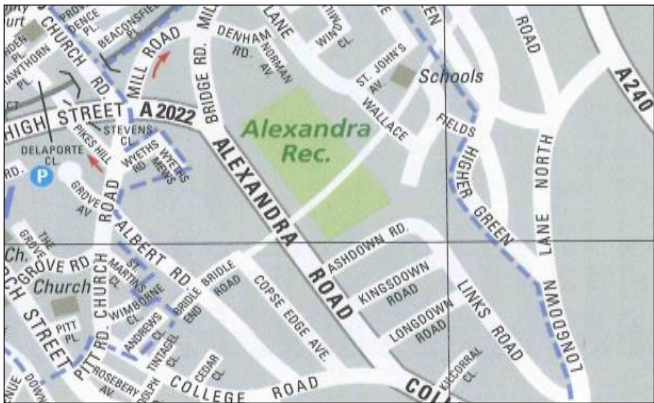


Figure 2: Location of Alexandra Recreation Ground in relation to surrounding roads



Figure 3: Location of Alexandra Recreation Ground in relation to Epsom town centre



Figure 4: Location of Epsom in relation to London

## 1.8. HISTORIC CONTEXT

In March 1887, one hundred and ten young men signed a petition for a Recreation Ground. Councillor Beams said that some twelve years ago, there had been one but now lost, but was needed 'with the intention to give young men an opportunity of wholesome and innocent recreation (EUDC Mins). In December, a new ground was proposed, 'a ground where youths may indulge in those games which have done so much for Great Britain, and where those who were part of it, could walk on the turf and breathe fresh air without trespassing (EUDC Mins). A site in Waterloo Road was proposed but the railway bridge would need to be widened and the railway would only pay an eighth of the cost, but later in the month purchase of land somewhere was recommended.

The only land available at the time was away from the centre of the town, but in March 1898 the Misses Butcher offered 15 Acres in Alexandra Road at a cost of £200 per acre. It was thought that the land should be built on but it was not suitable. The land was finally bought by the Council on the 16 December 1898 for £3,197 (roughly £350,000 in today's money) and the park is now Epsom's oldest public park.

"In 1898 the newly formed Council bought it with a Central Government loan, after fierce debate in which expense to ratepayers was justified by recognising the unsuitability of the Downs and Common for organised games, and the need to keep the local youths occupied".

They considered that the park should not be ornamental but 'a place where children could disport themselves as if they were in the country', 'the children of Epsom should always be grateful to the memory of the late Mr G J Beams who was mainly responsible for persuading the Council to buy this lovely stretch of level ground' (Incorporation of E & E 1937). The estimate for the permanent buildings necessary for the Recreation Ground were approximately £1500.

The park was officially opened on 27 June 1901, with a procession which included Fire Engines, both manual and steamer, from Epsom, Sutton, Malden and Coombe and Leatherhead, followed by representatives of local organisations carrying banners, accompanied by the Royal Artillery and Epsom Town Bands. After the opening ceremony performed by Mrs Aston, the local MP's wife, there were races and games for both children and youths, followed by band concerts and dancing (The Herald, Saturday June 29 1901).

Alexandra Recreation Ground was selected for the public celebration of King George V's Coronation on 22 June 1911 and a three feet diameter dial clock for pavilion was provided by the Coronation Committee.

Apart from the religious service at the Congregational church, the inhabitants of the town requested to assemble in the high street at 12 noon and sing 'God save the King'. At 2:30 the children of the parish will march to the Recreation Ground (it was the only one) led by the bands for tea, followed later by children's sports which included 100 yards, three-legged, wheelbarrow and sack races for the big boys, and 100 yards, skipping, egg and spoon and hoop races for the big girls. Here similar events for younger children, there were six prizes for each event. The pavilion was erected and opened by Mr A W Aston, JP on 30 March 1912 and is shown together with the bowling and putting greens, two tennis courts and the public conveniences on the 1915 ordnance survey map.

At the beginning of World War I only two football pitches were in use and during World War I convalescent soldiers were given free use of greens and bowls, but complaints were made to the Brigadier, UPS Brigade about the unnecessary damage to grass from men exercising. In 1916 a promenade dance concert in the park was arranged by the committee of the convalescent hospital at Woodcote Park.

Later in the year, the football pitches were ploughed for potato growing as with most other empty grounds. With the war over, the allotments were levelled and returned to football pitches and in July 1919, another civic event 'European war, 1914-1919, Peace Celebrations' took place in the high street and in the Recreation Ground, with a program very similar to that of the coronation.

During the 1920s and 1930s, contributions came from a variety of sources: boys from Dr Barnardos home in East Street put in considerable work on local cricket pitches and the putting green was laid out by unemployed labour. In 1933, again unemployed men were to be engaged over Christmas on marking out parking spaces. In 1927 a Weathervane was donated for the pavilion. In 1933, the chalk quarry was partially filled in following a letter from Mr Beaumont suggesting that it was a problem to the cricketers.

At the time of the George V's jubilee in 1935 and for the 1937 coronation of George VI, Rosebery Park and the Court Recreation Ground and Gibraltar Recreation Ground in Ewell were in existence and so Alexandra Park only played a small part. In March 1939, Epsom cottage hospital had been designated as one of three fixed first aid posts, but as this meant losing too many beds, the Park pavilion was later named instead. During 1942 programmes for sports and entertainment were arranged for children in the summer. February 1945- Two wrought iron seats were given to the Council by a resident in Windmill Lane.

By 1945 much reconstruction was required in most parks and Recreation Grounds, with allotments to be filled in. It was suggested that in general, Recreation Grounds should have rough natural terrain.

In September 1946, there was a suggestion by a local resident that the bottom of the pit should be levelled and planted with shrubs for children to play in, but it was turned down. Five years later the Council were presented with a petition by school children for a children's playground with suitable swings, an erected slide, two roundabouts; one just above the ground and one which revolves at different levels, a flatboard swing to take a number of children at one time, a rocking horse for the little tots and a seesaw.

This was again rejected as being too expensive but in the mid 1960s, the children at last got their playground, built in the hollow that was left by the filled in Pitt. It was rumoured that it was built where a flying bomb had landed; so did the bomb land in the same site of the old pit/quarry? In the late 1940s, Alexandra Recreation Ground became the home of the Epsom and Ewell Harriers and a running track was laid out and the jump pit was built. They remained until Poole Road Recreation Ground was laid out (*Parks in the past, Carol Hill*).

### 2.3.1. FIELDS IN TRUST



Figure 5 Fields in trust plaque

Fields in Trust was founded back in 1925 as the National Playing Fields Association by King George V. Their mission is the same now and as it was then: to ensure that everyone – young or old, able or disabled and wherever they live – should have access to free, local outdoor space for sport, play and recreation. These spaces are vital to building happy and healthy communities and sadly continue to be threatened by all kinds of development.

They are a national charity and operate throughout the UK to safeguard recreational spaces and campaign for better statutory protection for all kinds of outdoor sites. Alexandra Recreation Ground is one of their sites in Epsom and Ewell and in 2015 Fields in Trust celebrated their 90th anniversary. 90 years of protecting parks and playing fields across the UK for current and future generations to enjoy.

Since it was founded by King George V in 1925, Fields in

Trust has been privileged to have the support of the Royal Family. The Duke of Edinburgh was President of Fields in Trust for 64 years - without his help and contribution the organisation could not have achieved what it has done if, indeed, it still existed as an independent charity.



In 2013 his grandson The Duke of Cambridge stepped into the role of President following this patronage of the successful Queen Elizabeth II Fields Challenge (*Fields In Trust.org*).

In 2012 Alexandra Recreation Ground was one of seven recreational spaces in Epsom & Ewell given QEII status. Known as the Queen Elizabeth Fields Challenge in Scotland, where it is still ongoing, this is the most successful engagement and land protection programme ever run by Fields in Trust. They created a grassroots legacy across the UK from 2012's big events, the Queen's Diamond Jubilee and the London Olympic & Paralympic Games. They worked with 873 landowners from parish councils to sports clubs, local authorities to charitable groups. Over 20,000 acres have been nominated for protection through the Challenge, on 1585 sites. Fields in Trust were committed to producing a strong and enduring legacy from the Olympics, in the name of Her Majesty, which shows in the numbers. Operating since 1925, in the years before the Challenge, Fields in Trust protected 1,180 sites covering 7,377 acres (*qe2fields.com*).

### 2.3.2. ALEXANDRA RECREATION GROUND TODAY

Very little has changed in the layout of the park and the facilities offered. The children's play area in the shallow pit has now been moved to the area covered by the putting green and adjacent to this is a teenage play area, this change can be seen in figure 6 which shows the park in 1998 and in 2014 as a comparison. As well as three tennis courts, there is a multi-use games area and a basketball court and a purpose-built martial arts centre has been built next to the refurbished/rebuilt pavilion.

Shrubs have in the most part replaced the more ornamental flower beds but the Friends of Alexandra Park have cleared a site by the pavilion in the upper field and have established an exciting collection of wildflowers, some chosen to attract butterflies. This has extended to the site of the old playground where the Friends Of have created a spring bulb garden. The park is home to a variety of wildlife including many different species of birds, foxes and grey squirrels. Pipistrelle bats are also thought to frequent the park in the summer (*EEBC website*).



Figure 6 Layout comparison of the park between 1998 and 2014

4. MANAGEMENT

Epsom and Ewell Borough Council is responsible for the maintenance of all public grounds in the Borough. The In-house Operational Services Streetcare department provides grounds maintenance, public realm maintenance, graffiti removal and cleansing operations to all public parks and open spaces. Whilst the Ranger Service are responsible for patrolling and managing these sites.

The work included within Alexandra Recreation Ground covers grass cutting, pruning and planting and also clearance of litter, building and infrastructure maintenance, security, events and other aspects of park management. Maintenance functions are output based as far as possible – this means that work is carried out to a specified standard, rather than the way in which the service is to be provided.

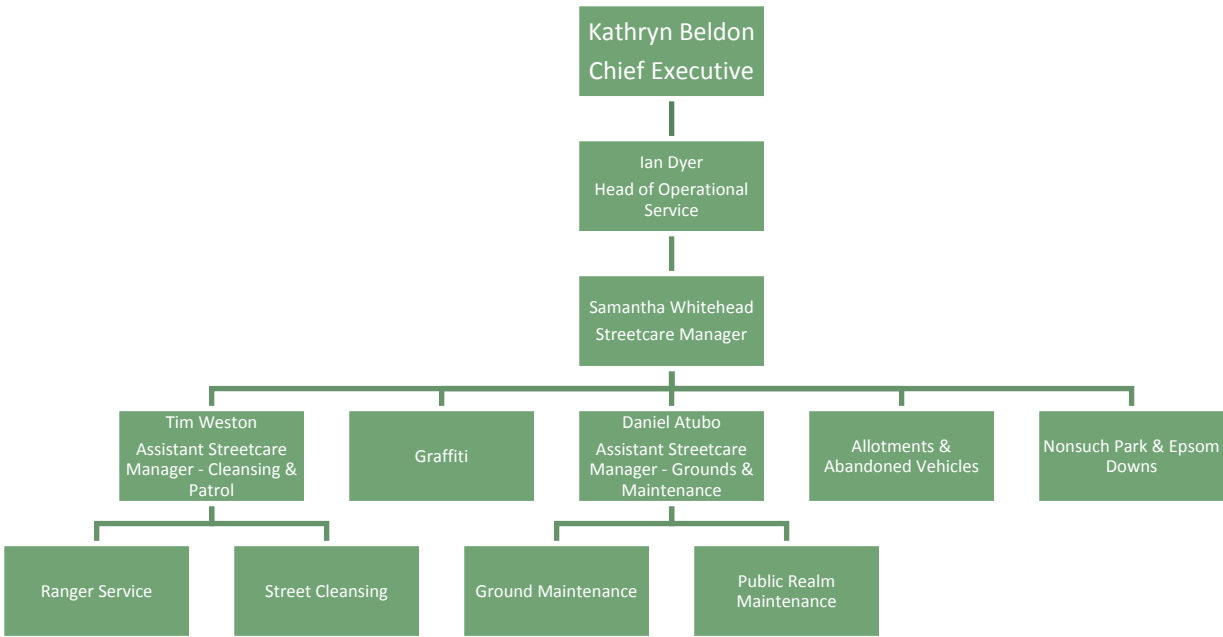


Figure 8 Streetcare Organisational Chart

## 5. ALEXANDRA RECREATION GROUND IN RELATION TO GREEN FLAG CRITERIA

### 1.9. A WELCOMING PLACE

#### 1.9.1. ACCESS

Alexandra Recreation Ground is located within an urban area and is served by a number of local bus routes and the nearby Epsom, Epsom Downs and Ewell East railway stations. There are four entrances to Alexandra Recreation Ground. Two of these are vehicle friendly; one of these is specifically for disabled parking insuring the closest access possible to the new pavilion. The other vehicle friendly entrance leads to a small carpark which again has disabled parking. These entrances are both on Alexandra Road, located South and South-West in the park and can be seen in figures 8 and 9. Once in the park both these entrances provide authorised vehicle access in to the rest of the park should Council staff or emergency services need access. The two pedestrian entrances are located North and North-East in the park. As a result of Alexandra Recreation Ground being enclosed so closely on all sides by housing there is little the Council is able to do with the entrances. The vehicle friendly entrances provide an open and welcoming feeling when entering the park. As expected the pedestrian entrances are more enclosed, but any shrubbery that may be growing in the vicinity, whether it is on the Council ground or growing over walls from houses bordering entrances, has been cut back. The Council understands that shrubbery provides excellent cover for people who wish to do harm to park users so it is vital that continual maintenance around the entrances is carried out to minimise the risk presented to park uses when entering the park.

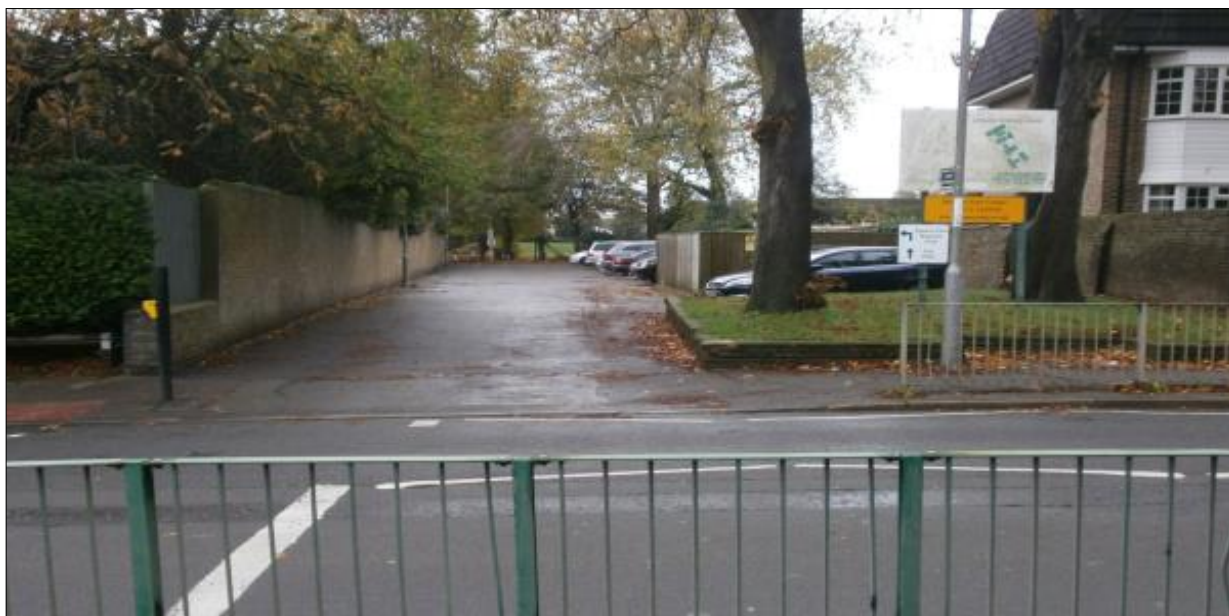


Figure 8: Main entrance to Alexandra Recreation Ground





Figure 9 Entrance to the disabled only car park

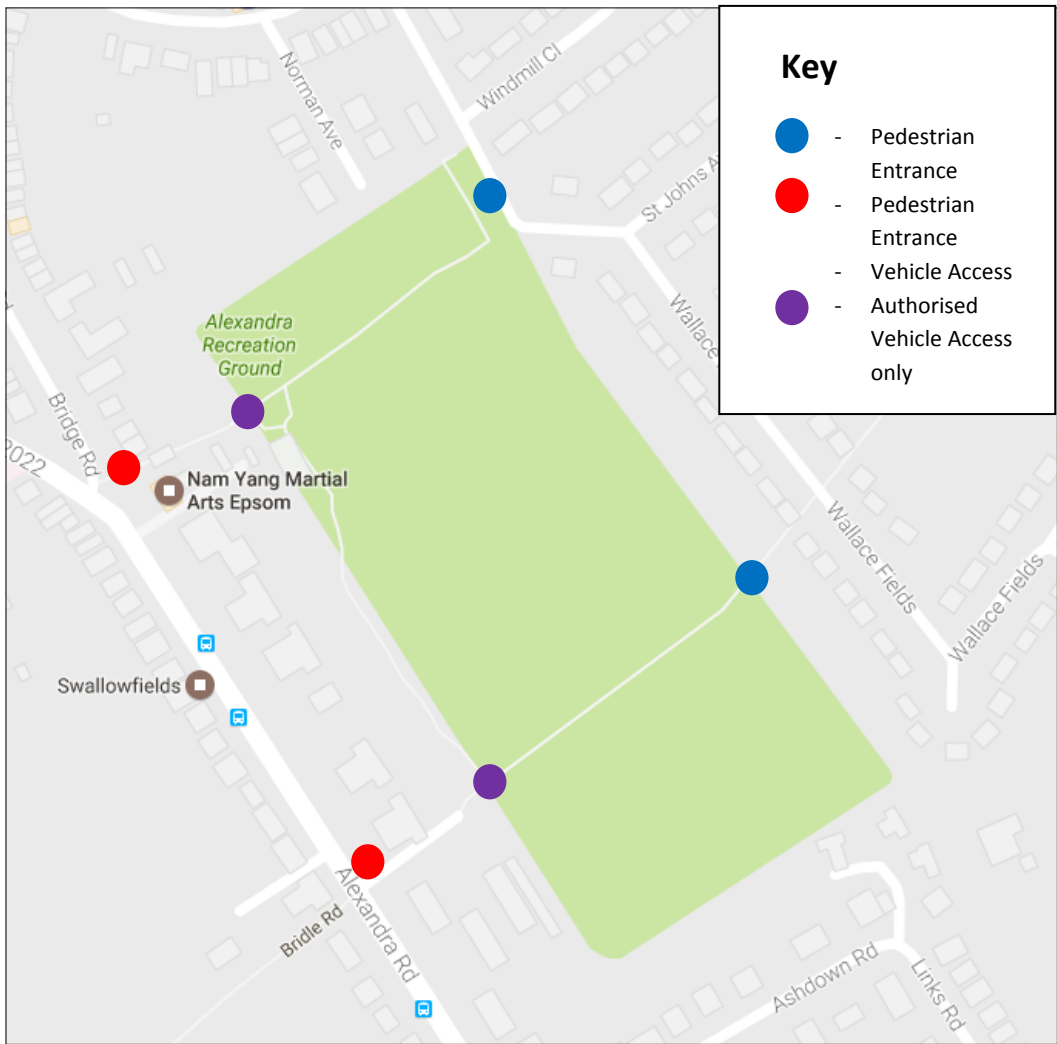


Figure 10 Map showing points of access to Alexandra Recreation Ground

### 1.9.2. SIGNAGE

Throughout the Borough, extensive work is carried out to keep all signs clean and legible. The most common problems faced by the maintenance team is graffiti. There is a team dedicated solely to working on the graffiti in the Borough. It has been found that it was more beneficial to use signs with Perspex fronts. By using Perspex fronts on signs and noticeboards it is easier to clean away graffiti.

The most common sign that it is seen in Alexandra Recreation Ground is the dog fouling sign asking all dog walkers to pick up after their dog. These signs are found on nearly all of the lamp posts. At both vehicle entrances there are information boards showing the name of the park and contact numbers. The information board situated where Alexandra Road meets Bridge Road, is a newer sign with clear and legible writing directing people to the car park and can be seen in figure 11. It also has clear information on contacting the Council for assistance or any other enquiries. It is part of the action plan to replace both these signs at the main vehicle entrances and also at the pedestrian entrance off Windmill Lane with one that is similar to the new maps that were installed in the park in 2016.

Figure 12 shows a road sign on the pavement opposite the entrance (where Alexandra Road meets Bridge Road) which directs people to the main entrance of the park and car park. Due to the nature of the disabled car park the Council felt it was important to direct traffic to the main car park to avoid traffic all descending on the smaller car park which has limited turning space.



**Figure 11: The information board at the entrance leading to the pavilion and disabled parking**



**Figure 12: The road sign (where Bridge Road meets Alexandra Road) directing people to the main entrance of the park from the road**

In 2015 budget was secured to design new informative signs to go in the park. The boards consist of a map showing the layout of the park and key features such as the playground, pavilion, tennis courts and bowling green. It also has 'you are here' points to help people new to the park orientate themselves to get around. The map has been done in a cartoon style using bright colours and stylised images and was designed by Mary Gorton, an external graphic designer. As well as the map, there is a brief history of the park and the Councils 'Do's and Don'ts' whilst in the park which covers etiquettes around cycling and dog walking. Alongside the map is a locking pin board for Council use and if the 'Friends Of' wish to advertise their group or events. Two boards were installed in early 2016 by the two main entrances and are a welcome addition to the park. Figure 13 shows one of the boards in situ by the main pavilion.



Figure 13 Alexandra Recreation Ground noticeboard and map in situ by the main pavilion.



### 1.9.3. FACILITIES

As the list of facilities below would suggest, Alexandra Recreation Ground prides itself on the extensive facilities it provides to the community. The Council is continually working on 'providing something for everyone'.

Alexandra Recreation Ground is home to:

- 1 Multiuse games area (MUGA)
- 2 Basketball courts
- 1 Bowling green
- Under 12's children's playground
- Teenage play area
- 1 Cricket pitch
- 3 Full-sized and 2 mini football pitches
- Sports changing facilities
- Pavilion with room for hire
- 3 Tennis courts (hard surfaced)
- Epsom Martial Arts Centre

#### **Sports**

The park is home to Epsom Park Bowling club who use the main pavilion and bowling green (figure 16) and Epsom Cricket Club during the summer months. During the winter months Alexandra United football club have the home ground agreement and use the pitches. Although it would be financially beneficial to try to get more teams using the pitches mid-week, it would compromise the quality of the pitches for those already contracted to use them. It is important that the grounds maintenance team continually provide a safe and enjoyable playing surface. There used to only be one adult cricket pitch which was also used by Juniors, however it was not a long-term option as there was a lot of damage getting done to the square. To ensure both age groups could continue to play, the grounds maintenance team began constructing a junior cricket square opposite the top pavilion and was completed in 2012.

Next to the main pavilion is the Epsom Martial Arts Centre, here people can come to learn Traditional Shaolin Temple Martial Arts - Kung Fu, Lion Dance & Chi Kung, and although it is a private business, they have an agreement with Epsom & Ewell Borough Council for the use of the porta cabin and changing rooms in the pavilion and it attracts more people to the park. The tennis (figure 14) and basketball courts (figure 15) are open all year round, are free to use and do not require hiring so the public are free to turn up and play whenever they wish. In 2015 two outdoor table tennis tables were installed in the MUGA and funded through Fields in Trust, providing more sporting facilities to the public. For a ground with limited size it hosts a remarkable amount of sporting and recreational facilities for the whole family which are accessible all year round. The Council uses in-house surveys as a valuable learning tool helping them to identify the needs for the community.



Figure 14: Hard Surfaced Tennis Courts



Figure 15: One of the basketball courts/5-a-side hard surface



Figure 16 Bowling Green

### **Pavilion**

Access to the pavilion is compliant with the disability discrimination act 1995 and is mainly used by sports teams. There are changing rooms, shower facilities, toilets, a telephone, first aid kit, a function room and fire safety equipment. The pavilion has several toilets which are accessible to the public if a Ranger is in the park and also a disabled toilet which is accessible during the pavilion opening times. Due to graffiti and vandalism problems with public toilets, it is not possible to leave them open full-time. During the summer months when the park is at its busiest, the Ranger service regularly patrols the park. When they are in the park, any member of the public can request they open a toilet for them.

The pavilion is opened every morning at 9am and closes half an hour before sunset and is often used as a polling station during government elections.



**Figure 17: The main pavilion and the adjoining Martial Arts Centre.**

### **Playgrounds**

The Under 12's playground in figure 18 has a large variety of equipment including swings, climbing apparatus, slides and balancing beams and is a well-used playground. The MUGA has a small over 12's play area providing equipment including a basket swing and spring roundabout for those who have outgrown the playground.





Figure 18: Under 12's children's playground



Figure 19 MUGA with over 12's play equipment

## 1.10. HEALTHY, SAFE AND SECURE

### 1.10.1. HEALTH AND SAFETY POLICIES

Training is issued when using new machinery and to new members of staff (in conjunction with the health and safety at work act 1974). This applies to the Ranger team and the Grounds Maintenance team. Training is always available throughout the year for anyone who feels it will benefit them. Risk assessments are carried out on all tools and tasks conducted by the services. Risk assessments are encouraged even if it is felt the risk is manageable. Situated in the council depot there are three fire officers, two health and safety officers and there is a health and safety committee. The health and safety committee meets to discuss the Council health and safety policies to ensure they are up-to-date and relevant to the staff they are placed upon. The system that was used to report accidents in the workplace was updated in 2012. It was originally a paper based reporting system but it was felt the paper trail was too long, leading to a longer time frame from when the accident was reported to it being logged. A new database has been put in place to reduce the amount of time and the paper being used in reporting accidents. By computerising all reports on a spreadsheet, everyone has access to them at all times. This enables results to be analysed at ease. Analysis allows the council to identify patterns and accidents which aids the development of new policies and suitable training for specific areas where accidents occur.

Epsom and Ewell Borough Council have a playground safety check system in place called 'Playsafe'. These playground safety checks are carried out using a mobile phone application that links directly with an online 'Playsafe' database. All ranger staff members who carry out these checks are RoSPA (The Royal Society for the prevention of accidents) trained to level 1 – Routine Inspections. Visual checks are carried out by Ranger team members on a weekly basis, however other teams that are in there daily, carry out visual inspections and any problems are reported.

By logging any faults found on the 'Playsafe' handheld devices, it firstly eliminates the need for paper which can get lost or the information written down fails to get passed on to the relevant people, and secondly it provides the maintenance ranger with direct access to the findings and they can see photos, the risk and then prioritise repairs accordingly.

Quarterly checks are carried out by the maintenance ranger who is trained to RoSPA level 2 as an Operational Inspector. This is a thorough check of all fixtures, nuts, bolts etc and findings are also logged on to the 'Playsafe' computerised checklist. Annually an independent company who are recognised by RoSPA carry out an inspection and report back to the council with their findings and with improvements that need to be made.

The football pitches get a lot of use and as a result weekly checks are made on the goalposts when the rangers check the other facilities in the park, therefore any problems can be rectified swiftly.

### 1.10.2. RANGER SERVICE

The Ranger service not only patrol the parks and open spaces, they also carry out minor maintenance work on amenity infrastructures such as the park signs, benches, bins and playground equipment. The park rangers and a dedicated street care team operate with a 'find a fault and fix it' approach and a separate graffiti team are also on constant call out to solve any issues immediately. Repairs are carried out as soon as possible, if the amusement in question is considered a risk to health it will be cordoned off with an appropriate sign put in place warning of its danger. If the fix is out of the capabilities of the ranger service it is passed on to the dedicated maintenance ranger who patrols in a vehicle already stocked with tools. By carrying tools in the vehicle it allows a number of repairs to be carried out immediately when the problem is identified.



The ranger service are a team of 8, working on a 7 day rota and the shifts are worked out so there are rangers on duty from 8am to 11pm. Once the rangers have finished their shift at 11pm their duty phone is diverted so any issues that arise in the night will be dealt with by the duty officer. So effectively if someone has a problem in a park they can reach someone 24 hours a day, seven days a week.

Due to the Ranger services job profile it is important to provide a wide spectrum of training, this may include:

- Handling conflict
- Awareness and enforcement of bye-laws
- Dealing with anti-social behaviour
- Emergency first aid
- Playground inspections
- Carrying out patrolling and inspection duties
- Knowledge of green flag, what work is being carried out to achieve green flag status and the overall management plan

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### 3.2.2 EMERGENCY PROCEDURES

All facilities at Alexandra Recreation Ground comply with the statutory fire and safety regulations. In addition to this all staff are advised and trained on a regular basis. All Ranger vans carry a First Aid Kit and are First Aid at Work trained.

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### 1.10.3.EMERGENCY CONTACT

When the Ranger service is on shift they respond to emergency calls placed to the council. Rangers carry at all times the duty phone so they can respond quickly to requests, thus eliminating the need to return to the office. When the Rangers are not on shift, the ranger duty phone is diverted to a duty officer who takes all out of office hours calls. When Rangers are called out to an emergency all correct paperwork procedures are completed in compliance with council policy. All parks and recreation grounds in the borough have signage with the relevant information for contacting the Ranger service or the out of office call out service.

If the emergency services are needed the Ranger service do not hesitate to get in contact and also encourage the public to contact the emergency services if the rangers are not on site. The rangers are familiar with working with the emergency services, assisting them on any incidents that occur on council land. There are times when the Ranger service will be contacted by the emergency services when they are not familiar with certain parts of council land.

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### 1.10.4.CLOSED-CIRCUIT TELEVISION

It was felt that CCTV was not necessary in Alexandra Recreation Ground as vandalism and anti-social behaviour was not a significant problem. When the evening Ranger shift finishes, all buildings, including the pavilion at Alexandra Recreation Ground are locked up with shutters and are alarmed. When the shutters are down, physical damage to the building is limited, the main concern is graffiti. In 2017 the rangers will be supplied with new vehicles which will come equipped with CCTV. Should rangers be on site and witness any criminal behaviour, it can be recorded and used as evidence if needed.

### 1.10.5.DOG ENFORCEMENT

All of the parks in the borough are extremely popular with dog walkers which in turn lead to the problem of dog fouling. It is an issue that is a high priority for the council. If a dog walker finds themselves in a need of a bag, Rangers carry bags on them at all times. There are notices up all over the park instructing people to pick up after their dog. These include stickers and bin posters, a type of which can be seen in figure 25, stencilling on the ground as can be seen in figure 26 and good dog ownership posters displayed in the bins. It is important to encourage the public to pick up after their dog as the health impacts of dog mess when making contact with eyes is well documented. Toxocariasis occurs when toxocara worm eggs in dog mess come into contact with the eyes. This can lead to partial and/or complete blindness.



**Figure 21 Bag it bin it pavement stencil**

Over the course of the last few years there has been an increase in the concern over multiple dog walkers. This ranges from members of the public who own more than two dogs to people who run dog walking businesses and have been seen to have in excess of ten dogs. The concern is that as commercial dog walking is a fairly new concept, the legislation on what is acceptable is not clear. The issues range from: should there be a limit to the amount of dogs per person? Should they be on a lead? Does the walker have the necessary insurances? etc.

The Council understand that this is an issue that needs to be addressed but are also aware that this is a controversial topic that generates strong opinions from both sides. We recognise that measures put in place to control this activity will need to be fair and appropriate.



**Figure 20 Type of dog poo sticker and poster that can be found in the park**

### 1.10.6.BYELAWS

Byelaws apply to all pleasure grounds and open spaces in the Borough of Epsom and Ewell. The Byelaws For Alexandra Recreation Ground are made under Section 164 of the Public Health Act, 1875, and Section 15 of the Open Spaces Act, 1906.

Particular byelaws have been chosen from Section 12 and 15 of the Open Spaces Act 1906 and section 164 of the Public Health Act 1875. These byelaws are consistent across all areas designated as pleasure grounds and open spaces except for byelaws pertaining to dog prohibition, canine faeces and dogs on leads, which are allocated to individual named areas. Alexandra Recreation Ground has several dog prohibited areas including the Playground, Bowling Green, Tennis Courts, Top Field (Schedule 1, Part 1, Under section 164 of the Public Health Act 1875). Part of Alexandra Recreation Ground excluding the dog ban areas are covered by the canine faeces removal byelaw (Schedule 2, Part 1, Under section 164 of the Public Health Act 1875). The byelaw requiring that dogs must be kept on a lead (Schedule 3, Part 1, Section 164 of the Public Health Act 1875) does not apply to Alexandra Recreation Ground.

### 1.10.7.POLICING IN ALEXANDRA PARK

Alexandra Recreation Ground falls under the 'Epsom and Ewell North' section of the Surrey Police safer Neighbourhood Team. Regular foot patrols of the park are carried out by the Police Community Support Officers, dealing with issues such as anti-social behaviour and other community concerns. The Safer Neighbourhood Team also works in partnership with the Ranger Service to tackle these relevant issues. The current dedicated Neighbourhood Specialist Officer for the particular area is PC 3701 Elena BOAFO.

An arrangement existed with Rangers and PCSO's whereby joint patrols of Alexandra Recreation Ground and other borough Parks were carried out, however due to lack of resource and the park not being considered a crime hot spot these joint patrols are no longer carried out. However the Ranger service and all departments that may be in the parks, including the 'Friends Of' are encouraged to report any damage or crime to the police, as the distribution of police resources is dependent on the volume of calls/reports relating to a particular area or issue

## 1.11. CLEAN AND WELL MAINTAINED

### 1.11.1.WORK SCHEDULING

Epsom and Ewell's work program is designed to ensure that each team is allocated a program of works that is defined prior to the start of each period by the management team.

To reach the required standard in our parks, the program of works is based on a schedule of need for example grass and hedge cutting, emptying of bins etc. which is on a specific frequency or rotation but is responsive to seasonal changes and sporadic events which could have an impact like flooding or a large public celebration, as well as user feedback which could come in the form of a letter, telephone call or CRM case from a member of the public, Councillor or Council staff members

### 1.11.2.MONITORING

Monitoring of the services is undertaken at a number of levels and on an ongoing basis. The Council monitors the performance of the staff out in the field but also through an appraisal system, so operational issues are identified and responded to in a sufficient timescale. Without monitoring, problems could be ongoing for long periods of time unbeknownst to managers which could contribute to long term issues.

### 1.11.3.LITTER

Alexandra Recreation Ground has litter bins placed in a number of locations along the pathways. The litter bins were replaced in 2013 to a new style which also could be used to dispose of dog waste. This meant the red dog waste bins could be removed from the park.

The bins are emptied 3 times a week by the street cleansing team. The Ranger service also provides a litter picking service when they are on patrol and will empty any bins that need it. In the summer when there is more activity in the park, additional patrols are made to combat the increased activity which leads to a sharp rise in litter.

### 1.11.4.CLINICAL WASTE

Any litter such as clinical waste, syringes etc are collected by the street cleansers who are 'sharps' trained. Using special tools the item is inserted into a lockable 'sharps' box. The location of the 'sharps' will be recorded and when full, the box will be transported to the designated clinical waste disposal point.

#### 1.11.5.GRAFFITI

There is a graffiti team working all year round who respond to call outs from the public and from staff members who have found graffiti while on their day to day inspections. Timescale for removal is 4-6 weeks unless the graffiti is racist or offensive in which case it is removed within 1 working day and reported to the police.

#### 1.11.6.GROUNDS MAINTENANCE

All grounds maintenance work is carried out (to correct horticultural practices) to a schedule to ensure particular sites do not get forgotten about or overlooked which can happen when working from memory. After each site is complete it is logged on the grounds maintenance database with the appropriate times, dates and names of the staff who were on site. The grounds maintenance team also respond to CRM (customer relationship management) notices. These may have been served via a call from a member of the public or from a staff member after visual inspections of the sites. The work carried out is varied throughout the year. In the height of summer, the grass and shrub beds get far more attention than in the winter months as growth is at its fastest. During the autumn and winter months, leaf clearance is carried out regularly as well as preparing beds for selected bedding plans. All organic waste accumulated from grounds maintenance work is taken to a composting site until it is suitable for using on the shrub beds. All hard surface sports facilities (playgrounds, five-a-side pitches, tennis courts and basketball courts) are all spray cleaned when it is felt necessary. A build-up of dust and dirt on these hard services make them increasingly slippery underfoot. Spray cleaning using a jet power washer plate that glides along the surface removes all dust and dirt from in between the tiny crevices in the tarmac surface. All dust and dirt that has been excavated is then removed with either a hard brush or a backpack blower before it has the chance to work its way back into the tarmac.

- **Weed control** - This is carried out in the parks by staff that are certified with PA1 and PA6 certificates. It is important that only trained staff use these chemicals, not only for their personal safety but when working in parks as there are animals and park users to consider. The certificate PA1 is the theory behind pesticide application. It covers legislation regarding environmental, public and personal safety and all procedures regarding health and safety. PA6 is the certificate for manual handling and application of pesticides. Epsom and Ewell Borough Council do not have a schedule for spraying in the parks. It is felt that scheduled spraying may lead to excessive spraying. When parks are inspected by the Ranger services and the Grounds Maintenance, they will determine as and when spraying may need to be carried out.
- **Litter** - Litter is collected as and when it is necessary. The Ranger service carries out litter picking when on patrol. The grounds maintenance teams also carry out litter picking as part of their duties when working in the park.
- **Dog fouling** - When carrying out daily inspections, the Ranger service collect any dog mess found on public walkways in the parks.

Job	Carried Out By	Frequency	Additional Information
Grass	Grounds Maintenance	Summer –Weekly Winter – Dormant Spring – Monthly	Spring and Autumn are done when deemed necessary. No definitive rota
Shrubs (Mature)	Grounds Maintenance	Dependent on results of monthly inspections	Usually 1-2 cut backs during summer, one more in winter
Weeding (in beds)	Grounds Maintenance	Dependent on results of monthly inspections	Usually monthly, possible addition of pesticide application
Line Marking on Pitches	Grounds Maintenance	During football season it is done bi-weekly	During periods of rain, application will increase
Playground Inspections	Rangers	Weekly visual, monthly physical, plus an annual independent inspection	All results are logged on ‘Playsafe’ online database
Repairs (playground, benches, bins and sports equipment)	Ranger maintenance service	All faults are logged after inspection and will be repaired or removed immediately	Maintenance team also responds to complaints from the public
Arboriculture	Tree Team/Ranger Service	Annual Inspection	During adverse weather conditions, Rangers inspect parks for tree damage and report to tree team

Table 1 Grounds maintenance scheduling

#### 1.11.7.EQUIPMENT

All grounds maintenance equipment is purchased centrally with great consideration for staff safety in regards to emissions and vibration. All staff are inducted either internally or externally if the piece of equipment requires a certificate i.e. Chainsaw, before using all machinery and equipment to ensure the equipment is used efficiently and effectively. Annual service programs are in place for all equipment and daily safety checks are carried out and recorded.

#### 1.11.8.PAVILION MAINTENANCE

The Ranger service is in charge of keeping the pavilions locked at the required times. An external company called Kier are in charge of all internal maintenance (cleaning, fire extinguishers, fire alarm and electrical equipment inspections). In the pavilion there are changing rooms, toilets, shower facilities and a kitchen/meeting room with complete cooking facilities.

#### 1.11.9.ARBORICULTURAL MANAGEMENT

Increasing public concerns about environmental and sustainability issues are focusing our attention on the importance of trees in our towns and countryside. The Borough Council manages and maintains thousands of publicly owned trees; these include 8000 street trees and over 50,000 trees distributed across our 2500 acres of public open space. Trees make a major contribution to the quality of the local environment but they also need careful management and we have a duty of care in respect of tree management to take reasonable steps to ensure that trees do not constitute a danger or a legal nuisance.

To comply with our duty of care and legal responsibility, the Council follow a tree risk management policy. It is important that the Council keep these programmes intact and adequately funded. This will help to ensure we comply with duties over public safety and nuisance as well as promoting environmental care.

As part of this policy the Council operate a comprehensive tree inspection programme every 3 years. Tree care is the responsibility of the council tree officer Jeremy Young. Jeremy oversees all inspections and work carried out and when he is not in the office the deputy tree officer takes over. The professional tree inspections are undertaken by Council officers and qualified tree inspectors. Sites are zoned in accordance with risk. The inspections involve visual tree assessments to evaluate whether there are any observable defects that constitute a danger or actionable nuisance. When defects are identified they are scheduled for work under the defect management programme. The time scales for these works are undertaken in accordance with the assessed priorities as agreed in table 2.

Priority	Target Response
Emergency	Within 24 hours
High	Within 12 weeks
Medium	Within 1 year
Low	Within 3 years or reassessed within this time frame.

**Table 2 Agreed timescales for defect tree work**

In addition to defect management, the Council operate programmes of routine tree pruning to help control tree growth. Routine tree pruning involves pruning to raise the canopy above the road, clearing phone wires and lamps etc. Access work is the removal of suckers and low branches for pedestrian footway clearance. The work is done as appropriate for subsidence management. One of our main Council priorities is to protect and enhance the environment. Therefore we will not undertake tree works which could be detrimental to natural biodiversity or the aesthetic quality of the landscape, unless absolutely necessary. Where possible trees will be allowed to

grow naturally and maintenance tends to focus on higher priority public safety and nuisance factors, such as storm damage, dealing with decayed or dead trees, removing branch obstruction to the highway or pruning branches encroaching onto buildings.

The Council has awarded the tree maintenance contract to a locally based and well equipped arboricultural company called Advanced Tree Services LTD (ATS). ATS undertake the vast majority of Council tree maintenance, including emergency call out, routine pruning, tree felling, stump grinding and planting. They also assist the Council tree officers with tree inspections. There is at least one team of tree surgeons from ATS that work in the Borough full time.

During spells of adverse weather, the Ranger service will inspect the park to check for falling trees or limbs that may be a hazard to park users. This is not as big a problem on some sites like Epsom Common where many of the trees can be left where they fell, but in Alexandra Recreation Ground it is vital to keep the green space clear from tree debris.

#### 1.12. SUSTAINABILITY

Epsom and Ewell Borough Council strives to maintain and improve its green spaces using sustainable methods. All service departments involved in the maintenance of Alexandra Recreation Ground are encouraged to carry out their duties using methods that are environmentally friendly. As Sustainability in definition, is the quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance (*Dictionary.com*), the Council understand the importance of maintaining these standards wherever possible for the long term ecological benefits to its parks and open spaces.

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##### 1.12.1.ORGANIC MATERIAL/RECYCLING

Throughout the year, the grounds maintenance teams remove all organic waste produced from pruning and grass cutting. This green waste is taken off site to a large composting facility in the nearby Horton Country Park. When enough green waste has been collected, trained staff members use mulching equipment to compost all the green waste. The process involves shredding the waste but burning it sufficiently to kill the weed seeds. This compost is piled and left to continue decomposing. When it is sufficiently composted it can be returned to the beds in the form of mulch. This mulch provides nutrients to the beds but it can also serve another purpose. The Christmases' of 2009 and 2010 left all of Epsom and Ewell covered in snow, dealing with sub-zero temperatures. Mulch can be used to insulate the beds. Newly planted shrubs will struggle to cope with such low temperatures in comparison to established shrubs. By insulating the beds it gives the root systems a little extra help in resisting frost damage. Mulching also helps keep weed growth under control. Epsom and Ewell Borough Council work hard to ensure they do not use peat. They also try to buy their plant stock from responsible nurseries that do not use peat.

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##### 1.12.2.PESTICIDES

The use of pesticides is kept to a minimum, and where they are used, the most eco-friendly products are selected. All staff must be trained to PA1 or PA6 standard. The purchase, storage, usage and disposal of chemicals is carefully controlled under COSHH. A basic glyphosate is the chemical utilised within the park.

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##### 1.12.3.PEAT

Peat is **not** used in Alexandra Recreation Ground and the council uses its own recycled waste as mulch for the shrub beds.

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##### 1.12.4.POLLUTION REDUCTION



All chemicals are stored in secure containers that meet Health and Safety regulations. The distribution of keys is regulated to ensure chemicals are not stolen or mislaid through negligence. Pesticide spraying in the parks is only carried out when absolutely necessary. It is felt that a schedule of regular spraying may lead to excessive spraying. It is always the prerogative to weed the beds manually, in summer months when weed growth is at its fastest, spraying is carried out more regularly. When any of the teams are working in the parks they are encouraged to park the vehicle and walk to the specific site reducing engine emissions from the vehicles.

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#### 1.12.5.WASTE MINIMISATION

Waste is not only expensive to get rid of, it also has an environmental cost due to the pollution caused by the disposal of such waste. Epsom & Ewell Borough Council identifies two ways of tackling this problem 1) reducing actual production of green waste and 2) re-using green waste after composting, with the emphasis being on the former of these. Green Waste can be reduced by avoiding unnecessary pruning, using herbicides correctly and allowing leaves to decompose naturally amongst shrubs and hedge bottoms. As much green waste as possible is recycled, however loads with a high percentage of weed content are not recycled minimising the risk of seeds spreading. Any materials that cannot be recycled are disposed of by the Council street care team.

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#### 1.12.6.ARBORICULTURE AND WOODLAND

Newly planted trees are staked, watered well and checked on a regular basis. Dead wood should be left standing if possible, to provide an important habitat for invertebrates and other habitats. Clippings and cuttings should be composted where possible and re-used within the park environment.

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#### 1.12.7.WATER AND ENERGY EFFICIENCY

The Epsom & Ewell Environmental Policy aims to reduce the amount of energy used through good management, training, and informed purchasing practices and decisions. Vehicles and machinery are maintained regularly. The operational services team also tries to reduce dependence on mains water supplies for irrigation. Watering of plants is kept to a minimum and watering points are located away from public access. Effective training of staff, including health and safety, and following all environmental legislation relevant to the council, prevents incidents of pollution.

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#### 1.12.8.ASSET MANAGEMENT

A centralised asset management plan exists to account for and manage all Council assets. This plan includes all assets in the Borough's parks and open spaces.

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### 1.13. CONSERVATION AND HERITAGE

Biodiversity, a contraction of "biological diversity," generally refers to the variety and variability of life on Earth. One of the most widely used definitions defines it in terms of the variability within species, between species and between ecosystems. It is a measure of the variety of organisms present in different ecosystems (*United Nations Environment Programme, World Conservation Monitoring Centre*). However during the last century, decreases in biodiversity have been increasingly observed. In 2007, German Federal Environment Minister Sigmar Gabriel cited estimates that up to 30% of all species will be extinct by 2050 (*BBC News*). As biodiversity contributes to

our very existence on this planet, we must adopt the "Think Globally, Act Locally" concept which originally began at the grassroots level, however, it is now a global concept with high importance (*Warren Heaps, International Forum*), and adopting sustainable ways of living will ensure the protection of biodiversity and our future.



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### 1.13.1.AGENDA 21- LOCAL BIODIVERSITY

The need for biodiversity was recognised at the United Nation's 1992 Rio de Janeiro Earth Summit. Leaders recognised that a diverse environment is essential to maintain air quality, to provide valuable species for food and medicine, and to provide a varied and interesting environment for future generations. As a result the Government were asked to produce national and regional biodiversity Action Plans, which filtered down at Local Authority level through the Local Agenda 21 initiative.

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### 1.13.2.EPSOM AND EWELL BIODIVERSITY ACTION PLAN 2010

A 'Local Biodiversity Action Plan' has been produced for Epsom & Ewell to help ensure both the long term protection and enhancement of biodiversity within the Borough. The complete Epsom & Ewell Local Biodiversity Action Plan can be found at:

<http://www.epsom-ewell.gov.uk/EEBC/Environment/Biodiversity.htm>

This strategy provides an over-arching review of open space in the borough and has been developed in line with current national, regional and local policy context and initiatives. The following objectives from the biodiversity action plan for Epsom & Ewell 2010 are of particular relevance in informing the Management Plan.

**Objective 1:** Develop partnerships to ensure that the conservation and enhancement of biodiversity in Epsom and Ewell is maintained in the long term.

**Objective 2:** Ensure the conservation and enhancement of habitats and species, as specified nationally and in the Surrey Habitat Action Plans.

**Objective 3:** Ensure opportunities for the conservation and enhancement of the whole biodiversity resource in Epsom and Ewell are identified considered and acted upon.

**Objective 4:** Raise awareness, appreciation and involvement in the conservation and enhancement of biodiversity in Epsom and Ewell

**Objective 5:** Provide on-going monitoring of biodiversity in Epsom and Ewell.

**Objective 6:** Seek to increase the funding available for the long-term conservation, enhancement and monitoring of biodiversity in Epsom and Ewell.

**Objective 7:** Seek to identify the wider benefits to the community of improving biodiversity

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### 1.13.3.EPSOM AND EWELL'S SUSTAINABLE COMMUNITY STRATEGY 2011 – 2022

'A Brighter Future'

A Brighter future is Epsom and Ewell's Sustainable Community Strategy. The Strategy looks at the future for Epsom and Ewell, It sets out how the Borough's many positive aspects will be developed and how the issues and challenges faced by the Borough will be met through partnership working.

Epsom & Ewell Borough Council's ambition is:

"To maintain and develop those distinctive characteristics that make living and working in Epsom and Ewell a matter of conscious choice and, in conjunction with others, provide quality and innovative services that are based on the identified priorities of our residents"

The Local Strategic Partnership has identified the following topics as areas for future focus and partnership working:

- The visual appearance of the surroundings, both in terms of the natural and the built environment

- The impact of organisations and individuals in securing a sustainable future (recognising the need for economic health and more housing)
- The ability to get around (including the use of the existing transport and traffic infrastructure, car movements and alternative means of travel)
- The promotion of community safety and the enhancing of public confidence, recognising the formal position and responsibilities of the Borough's Community Safety Partnership
- The support for particular communities (children & young people, older people and the disabled, the disadvantaged and pockets of relative deprivation)
- Social change and the achievement of a balanced demography
- Economic prosperity
- Improving Epsom Town Centre and maintaining other local centres

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#### 1.13.4.GREEN SPACES STRATEGY

Epsom and Ewell Borough council also have a Green Spaces Strategy. The development of a green spaces strategy for the whole of the borough provides the context in which land managers, planners and recreation providers can work to provide this borough with open spaces for the use of the residents and visitors alike. The Green Spaces Strategy can be found in the appendix. With a simple strategy in place, achievable strides can be made towards improving all Green Space in the borough. With the Green Spaces Strategy in mind, the Action Plan will identify what improvements will be implemented at Alexandra Recreation Ground.

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#### 1.13.5.EPSOM & EWELL GREEN INFRASTRUCTURE POLICY

A Green Infrastructure Policy for the Borough was written in 2013 by the Countryside team and Head of Planning Policy. Green infrastructure (GI) is a term used to refer to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to cover benefits provided by wildlife, trees, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands. The report highlights the important role parks can play in conserving and enhancing biodiversity across the Borough. It was noted that parks and formal gardens provide a valuable community resource and are important open spaces in urban areas. For example, Rosebery Park and Mounthill Gardens provide essential green spaces within Epsom Town Centre which are heavily frequented by residents and those employed there, as well as students from the UCA.

The main objectives of the study are to:

- Bring together existing green infrastructure evidence in Epsom & Ewell
- Identify gaps in the local plan evidence base
- Map the Borough's existing GI assets.

The study's main recommendation is to create a landscape scale Green Infrastructure Strategy that seeks to protect and enhance a Borough-wide network of green infrastructure that delivers a wide range of benefits including improvements to biodiversity, public access, health and well-being, sports provision, allotments, flood protection and air quality.

The full document can be found at:

<http://dev-epsom-ewell.pantheonsite.io/sites/default/files/documents/residents/planning/planning-policy/Green%20Infrastructure%20Study.pdf>

#### 1.13.6.ECOLOGY/WILDLIFE AND HABITATS

Within Epsom and Ewell there are sites designated for their biodiversity value. There are four Local Nature Reserves (LNR) in the Borough including Epsom Common which is Surrey's largest LNR. The other LNR's are Horton Country Park LNR, Howell Hill LNR, and running parallel with Ewell Court Park, the Hogsmill LNR.

Along with national legislation protecting wildlife, for example the 'Wildlife and Countryside Act, the 'Greenbelt', 'Ancient Woodland', 'Protected Hedgerows, 'Tree Preservation Orders' and areas identified as 'Strategic Open Space' in Epsom and Ewell also afford biodiversity some protection by limiting and controlling development. In addition some land in the borough is owned by trusts which aim to protect and enhance biodiversity.

#### 1.13.7.FLORA AND FAUNA

The general layout of the park is large swathes of open grass (figure 22) which are predominantly used for sport, therefore most of the flora in the park is kept to the edges of the parks, but the flower beds host as many shrubs and seasonal bedding plants as possible considering the environment. With so many shrub beds in close proximity to the football or cricket pitches, it is difficult to maintain a full and vibrant bedding scheme with the damage done by stray footballs being kicked into the beds throughout the sporting seasons. It was felt that while it was important for the beds to be stocked, plant choice was vital as broken branches were going to be regularly removed. Some plants do not respond well to regular and heavy pruning which is why hardy plants must be in place. These shrubs are robust plants, not only in relation to extreme weather conditions but also to continued pruning.



**Figure 22 View across the park**

An opportunity arose when a playground in the north corner of the park was relocated after it was deemed to be on an unsafe site in the ground as there were so many trees around the playground. Instead of removing the trees which is something the Council will always try and avoid, the playground was relocated to a more suitable site in Alexander Recreation Ground. After all the equipment and foundations were removed the site was taken over by the 'Friends of Alexandra Recreation Ground' who have been regularly planting saplings and bulbs and they can be seen in full bloom in figure 23. It is an ideal site for planting as it is fenced off with no access except to those with the necessary keys. It is felt that with a larger selection and number of trees it will increase wildlife diversity which already boasts a variety of birds, foxes, grey squirrels and there have also been sightings of Pipistrelle bats.

## AGENDA ITEM 7 ANNEXE 4



Alexandra Recreation Ground is home to many varieties of trees, with their layout mainly concentrated around the edge of the park leaving the grass areas open. The layout of the trees can be seen on the map in figure 24.

There are no ancient/veteran trees in the park but there are many well established mature trees. Some trees that stand out in the park are the corridor of common limes (*Tilia Europaea*) that line the pathway that runs straight across the park from Alexandra Road to the alleyway leading to Wallace Fields. And the Winter Flowering Pink Cherry's (*Prunus subhirtella* 'Autumnalis') that stand in the raised bed in the car park of the main pavilion and have lavenders growing at their base.



**Figure 23 Spring bulbs in bloom in the old playground**



Other trees that can be found in Alexandra Recreation Ground include but are not limited to:

Common Name	Genus
Austrian Pine	Pinus nigra
Black Elder	Sambucus nigra
Golden Irish Yew	Taxus baccata 'Fastigiata'
Hawthorn	Crataegus monogyna
Horse Chestnut	Aesculus hippocastanum
Juniper	Juniperus unidentified species
Lawsons Cypress	Cupressus Lawsoniana
Norway Maple	Acer platanoides
Pandora Cherry	Prunus 'Pandora'
Silver Birch	Betula pendula
Sweet Chestnut	Castanea sativa
Sycamore	Acer pseudoplatanus
Western Red Cedar	Thuja plicata
Wych Elm	Ulmus glabra

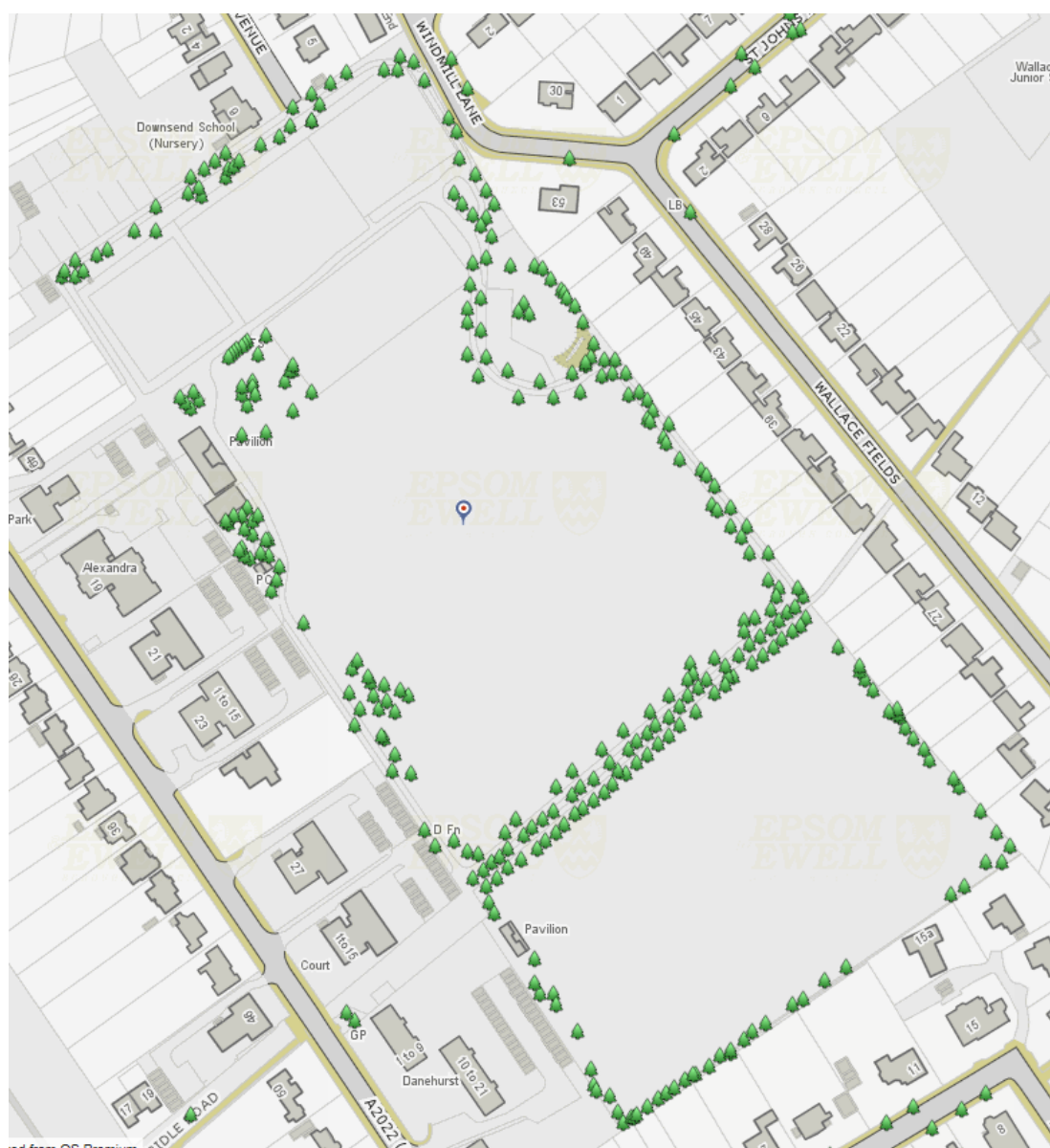


Figure 24 Tree Layout Map of Alexandra Recreation Ground

#### 1.13.8.BIODIVERSITY SPECIFIC TO ALEXANDRA RECREATION GROUND

Finding ways to create spaces that are sensitive to and encourage biodiversity can be a challenge, especially in an urban park like Alexandra which has many user groups and Stakeholders. Ways in which we have addressed this is by:

- **Dead Wood**  
Any dead wood that is suitable for insects is left behind in the wild areas of Alexandra. It can create shelter or a place for breeding or feeding and can also play host to lichen and fungi.
- **The Introduction of Wild Flower Beds**  
The space between the pavilion in the top field and the wildflower area was planted with wild flower seeds in 2012. This increased diversity in plants attracts insects and other invertebrates (including but not limited to butterflies, bees, spiders), birds and mammals.
- **Wild Areas**  
There are two areas of Alexandra that have been left as 'wild areas'. One is situated in the old playground and the other in the dog free section of the park behind the pavilion. This means they are excluded from the frequent mowing and grounds maintenance practices that are carried out in the rest of the park. By leaving areas undisturbed we reduce the disruption to habitats, thereby reducing the repeated removal of preferred nesting or feeding grounds and the direct injury and death rate to small insects and invertebrates. As mentioned previously the site of the old playground that is regularly planted with spring bulbs, this increased diversity in plants attracts insects and other invertebrates (including but not limited to butterflies, bees, spiders), birds and mammals.
- **Hedges**  
Hedges that are not over-pruned provide nesting and feeding grounds for birds, insects and small mammals. In an urban park it also provides a safe hiding place from dogs, cats and humans. The hedges in Alexandra are only maintained at certain times of the year when the nesting season is over.

#### 1.14. COMMUNITY INVOLVEMENT

##### 1.14.1.FRIENDS OF EPSOM & EWELL PARKS (FEEP)

Many of the Boroughs larger more well used parks have a 'Friends of' user group. These 'Friends Of' groups are also part of the larger group 'Friends of Epsom and Ewell Parks' (FEEP). The 'FEEP' group are in place to ensure all parks are looked after as some are so small that they do not attract enough people to form their own individual 'Friends Group'. The 'Friends of Epsom and Ewell Parks' meet every three months along with members of the Council to discuss current issues, projects and progress.

##### 1.14.2.FRIENDS OF ALEXANDRA RECREATION GROUND

Alexandra Recreation Ground is one of the parks in Epsom & Ewell that benefit from having its own 'Friends of Alexandra Recreation Ground' group. The 'Friends of Alex Park' group meet every three months with a Ranger representative to put forward their feelings on the park management.

In March the Herald of Spring floral display takes place at the local Bourne Hall Park. Once the display has finished, all of the local 'friends of' groups are invited to come and take some of the left over plants and bulbs to plant in their parks.

### 1.15. MARKETING

All parks are advertised on Epsom and Ewell Borough Council website. All of the parks facilities are advertised as well as the 'Friends of' groups. This website is a great form of advertisement as all the information can be found in one accessible place.

What we have to remember is that it is only accessible to those who have internet access. In the Action Plan we aim to maximise the usage of the two new notice boards in Alexandra Recreation Ground to promote all events and facilities to those who may be new to the park or who cannot view the information online. Notice boards also provide a fantastic platform for 'Friends of' groups to advertise themselves and their activities to attract new members.

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#### 1.15.1. IN HOUSE USER SURVEY

The Council used to use an external program called GreenSTAT to conduct surveys of their parks but this is no longer running. However the council wanted to find a way to keep the public involved in the future of our parks and open spaces so trialled their own in-house survey for Nonsuch Park, a well-used and loved park that is shared with the London Borough of Sutton. 1200 postal votes were sent out and 635 returned and was deemed a success. Due to this success the ranger service carried out surveys for Alexandra Recreation Ground in 2015 and Auriol Park in 2016 and both although on a smaller scale have proved very successful.

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#### 1.15.2. IN HOUSE SURVEY RESULTS

The survey ran for a period of three weeks (12 to 30 October 2015). A total of 880 paper surveys were distributed via the following methods:

- 660 were mail-dropped to residents who lived in close proximity to the grounds
- 140 were left at local schools and at Bourne Hall
- 80 given out in the park.

Links to the electronic version of the survey were promoted via:

- Council website ([www.epsom-ewell.gov.uk](http://www.epsom-ewell.gov.uk))
- e-Borough Insight (Issue 21: October 2015) (<http://insight.epsom-ewell.gov.uk>)
- Twitter ([@EpsomEwellBC](https://twitter.com/EpsomEwellBC))
- Facebook ([www.facebook.com/EpsomEwellBC](https://www.facebook.com/EpsomEwellBC)).

The questions were developed in liaison with the Head of Operational Services and the Patrol Ranger. Subject areas included:

- Frequency of visiting the grounds
- Method of travel to the grounds
- Reasons for visiting the grounds
- Opinions on various aspects of the grounds
- Improving visitor experience and encouraging more use of the grounds, or staying for longer
- Volunteering opportunities.

A total of 340 survey responses were received. Responses to the electronic questionnaires were automatically imported into the survey design and analysis package (SNAP v11). The paper returns were sent to an outside agency for data inputting, then merged with the online version. The results were analysed by the Council's Consultation and Communication Team.

The majority of respondents were female (67%) and 33% were male. Almost two thirds of respondents (62%) were under 55 years old. When asked about ethnicity, the majority of respondents 88% described themselves as British white or English white. The majority of respondents (59%) said they were Christian.

Of those that responded, 3% indicated they had a disability according to the Equalities Act of 2010.

Nearly seven in ten respondents (67%) visit the grounds a number of times per week. This comprises: 29% visiting on a daily basis and 38% visiting two or three times per week. 24% visit the grounds two or three times per month and 8% visit two or three times a year.

Over three quarters of respondents indicated that they travel to the grounds on foot (76%), whilst 13% travel by car, and 11% by bicycle.

The most popular reason for visiting the grounds was to 'Use the playground' (13%). This was followed by 'Go for a walk' (12%) and 'Children/family outing' (11%). Looking at the age profile of respondents; most respondents between 35-44yrs said they 'Use the playground' and use the grounds for a 'Children/family outing'. Younger respondents aged between 16-24yrs tend to use the grounds to 'Play other sports', whilst a broad age group of respondents between 45yrs and 84yrs use the grounds to 'Go for a walk'.

The ground's top three positively rated aspects were:

1. 'Accessibility' (86%, n=273)
2. 'Grass areas' (83%, n=271 )
3. 'Facilities for 12's and under' (81%, n=232).

The ground's top three negatively rated aspects were:

1. 'Toilets' (85%, n=189)
2. 'Range of visitor facilities' (29%, n=83)
3. 'Park security' (25%, n=127).

Regarding 'the park in general'; the majority of respondents (74%) rated the grounds positively, 22% rated the grounds fair, and 3% rated the grounds negatively.

The three most prevalent reasons amongst respondents who ticked 'Poor' or 'Very poor' include:

- o 'Toilets needed' (36%, n=143)
- o 'Security/ Anti-social behaviour' (8%, n=33)
- o 'Pathway improvements' (8%, n=30) and 'Flowerbed/ shrubbery improvements' (8%, n=30).

When considering improving the visitor experience, the three most prevalent suggestions for using the recreational grounds more often or staying for longer include:

- o Café needed (30%, n=107)
- o Toilets needed (19%, n=69)
- o Better range of facilities (16%, n=57).

Of the respondents that took part in this survey, 51 people kindly provided their names and contact information for volunteering activities. This information will be passed onto the management team for future volunteering opportunities.

The full results will be used to shape our action plan for Alexandra Recreation Ground so any future opportunities and funding can be directed towards what the public want to see in their open spaces.








#### 1.16. MANAGEMENT PLAN





It has already been established that Alexandra Recreation Ground was managed under a relaxed plan. The thought process behind this was that it was better to carry out the work when it was needed rather than spending time there unnecessarily. In completing his application for Green Flag we now understand the importance of a structured management plan. An improved management plan is not just for the day-to-day running of the facility but also for its long-term future. Our management plan will be a work in progress with the help of the parks user groups.



# APPENDIX A





## ALEXANDRA RECREATION GROUND ACTION PLAN


Green Flag Criteria	Objective	Implementation/ Task	Target Date	Achieved	Progress					Project Managed By
					2017	2018	2019	2020	2021	
Page 519  A Welcoming Place	New Notice Boards	Remove dated and uninformative signs	Summer 2016		Two notice boards were completed and installed in early 2016. These will be monitored for vandalism and the Friends Of were provided a key to the noticeboard so up to date information could be displayed.					Ranger Service & Operational Services Management
	Signage	It was highlighted by the green flag judge that there are too many signs at the entrances	Winter 2017		The Council are fully aware that the many signs at the entrances can be confusing. We have trialled a new information sign at Ewell Court which we will look to getting in at Alexandra. Also as part of the rangers 2017 targets we will explore the alternatives to communicating information to the public.					Ranger Service

	Street Sign	Place a sign post on the road, directing people to the park			Originally it was discussed that any funding left over from the new notice boards may stretch to a road sign outside of the park. It has since been decided that the left over budget will be spent on Name Plates to go on all the park entrances.					Managers / Outside Contractor
	Name Plaques	To install name plaques on the main entrances and smaller entrances of the park	Summer 2017		The leftover budget has been allocated to getting name plaques on most of the main entrances of the park so the public know which park they are entering even from the smaller less obvious entrances. They will match the header board of the new noticeboards and will create a uniform look across all the parks in the borough. Quotes are being obtained.					Ranger Service
	Facilities	It was highlighted in the 2015 survey that the park lacked equipment for over 12's	New Equipment		The MUGA is designed to be used for over 12's with basketball courts, seating area and 3 play items. Two all-weather table tennis tables were installed in 2015 through Fields in Trust funding.					Leisure

				Any future funding can be directed to facilities for the Over 12's					
	It was highlighted in the 2015 survey that the park required toilets	Make toilets accessible to the public		Due to the cost associated with public toilets the majority of them were closed across the whole borough. If Rangers are in the park they can allow the public access to them and there is a disabled toilet accessible at all times when the pavilion is open					
	It was highlighted in the 2015 survey that the park users would like to see a café or refreshment facility in the park	Open a café		If an external company proposed a café in the park to the Council, the Venues department would consider the application.					External company and Venues
	Improve the basketball courts	Replace the back boards and repaint the court lines		The replacement of the backboards and the repainting of the lines on the court has been proposed to Procurement.					Procurement
Healthy, Safe & Secure	Police Patrol	Liaise with local police and PCSO's to include Alex Rec in their patrols	Monthly		Alexandra Rec is not considered a crime hot spot, and due to police resources, monthly police				Ranger Service / Local Police




					patrols are no longer carried out. Rangers continue to maintain close contact with PCSO's should the need of their assistance arises.					
	Anti-Social Behaviour	Alexandra Park is not a park that is locked at night so is accessible at all hours. Public highlighted from the 2015 survey that antisocial behaviour was prevalent at night.	On-Going		<ul style="list-style-type: none"> <li>• In September 2016 the benches were removed from the top pavilion to reduce its appeal as a hangout.</li> <li>• The rangers log any incidents they encounter on their own internal spreadsheet and to the police.</li> <li>• If rangers receive intel from the public they encourage them to report to the police.</li> </ul>					Ranger Service
	Encourage Responsible dog ownership and good practice in the park	Educational tools. Posters and stencilling.	2 – 3 Months		Posters & Stencilling on the pavement is listed as a priority park for Alex Rec. Stencilling is done as and when needed (weather permitting) and recorded on a database. Dog owners are requested to pick up by the rangers If seen not doing so					Ranger Service




		Use the new noticeboards to highlight the dangers of not clearing up after your dog	Summer 2016		There is a section allocated on the new information boards highlighting good dog ownership.					Ranger Service
		It was highlighted in the 2015 survey that dogs are off lead	On-Going		There is no stipulation for dogs to be kept on leads in Alexandra, however if dogs are seen to be out of control by the rangers they will be spoken to. There are dog free areas of the park.					Ranger Service
	Car Parks	It was highlighted in the 2015 survey that there was not enough car parking			The majority of respondents came to the park by foot. Due to the existing infrastructure around the park it would be very difficult to increase the size of the existing car parks.					
Clean & Well Maintained	Bins	Emptying and maintenance	Schedule (increased in busier months)		New multiuse bins installed in 2012. Bins are emptied to a weekly schedule. All bins inspected during weekly checks for damage and are replaced/repaired as and when required.					Operational Services / Ranger Service




Litter	Removal of rubbish in the park	Daily		Any litter found is removed by the team that empties the bins on a daily basis. When the ranger team inspect the park on a weekly basis any litter found is removed.					Ranger Service / Street Cleansing
Dog Mess	Removal	Weekly		Rangers patrol park to check for dog mess. If found it is collected. The dog free area is checked and anyone walking dogs there are asked to leave.					Ranger Service
Tennis Court Cleaning	Repair damaged tennis court surface	Weekly /Yearly		Repairs to tennis court completed in 2013. Weekly inspections to be carried out to monitor for damage. Annual cleaning is carried out by a contractor when detritus builds up. Tennis Courts recently been sprayed for moss.					Ranger Service & Specialist Contractor
Repairs to playground/Muga/Tennis Courts/Park Furniture	Inspections	Weekly		All are inspected on a weekly basis and any damage found reported to the maintenance ranger. Timescales for repairs depends on severity of damage. Rangers now carry a stocked tool kit					Ranger Service / Maintenance Ranger






which allows for basic on site repairs.
<p>The issue with the path is the common limes as their roots have lifted the pathway in places. The condition of the path is monitored and a recent collapse of part of the pathway due to removal of a tree has been repaired.</p> <p>Procurement are aware that the pathways are in need of some repair work but it is down to funding and prioritise of work.</p> <p>Lamp posts are owned by Surrey County Council, any faults are reported directly to them. Kier (maintenance contractor) carries out monthly planned preventative maintenance (PPM) where the water temperatures and emergency lights are checked. There are other PPM tasks that come up quarterly, half yearly and</p>

					annually that also get attended to.					
Page 526 Conservation & Heritage	Promote Wildlife	Install 3 bat boxes & 3 bird boxes			There are currently no set targets or plans for bird and bat boxes to be installed at Alex Rec. The installation relies on funding and staff with the necessary experience to install and maintain.					Ranger Service
		Insect hotels	Summer 2017		Will research the viability and budget of installing insect hotels in wildlife area					Ranger Service
	Wildlife area	Maintenance	Annually		Area at the top of Alex Rec is left as a wildlife garden and is not cultivated. Small scale maintenance carried out Monthly Inspections					Grounds Maintenance / Ranger Service / Friends of Alex

	Maximise opportunities for ecological enhancement	Identify areas where mowing regimes can be relaxed and bulbs introduced	Annually		Wildlife area at top of Alex Rec is never mown. Area known as the old playground has a variety of shrubs which are not overly managed. Herald of Spring bulbs to be collected in March 2107 and planted in the park.					Grounds Maintenance
Community Involvement Page 527	Assess the number and profile of users, the pattern of use and users perception of safety and enjoyment	An in house survey will allow the local community to voice their opinion on how they feel the park can be improved	Autumn 2021		The in house survey was carried out in October 2015 to coincide with the re-write of the management plan. An in house survey will be carried out in Autumn 2021 to coincide with the re-write and a comparison of responses can be carried out.					Ranger Service and Leisure Team
	Increase the number of Friend Of members	Encourage the public to join the Friend Of group	On-Going		He friend of can advertise their group in the new noticeboards and the in house survey allowed those who filled in the survey to provide their details for future volunteering opportunities. These were passed on to Sandra Laxton who oversees the Friends Of groups					Ranger Service and Friends Of Alex

Marketing Page 528	Make information and interperative material available about the history, landscape and ecological value of the park – and also environmental management in the park Ensure information and interpretation is available and kept up to date	Internet (the Council website) and leaflets.	Spring 2017		The Council launched a new external site to the public in late 2016. The parks pages will be updated with useful and up to date information					Ranger Service, Friends of Alex and Leisure Team
		Use the new noticeboard to advertise future events and up to date information about the park	On Going		Checked during weekly inspections and updated as and when required					Samantha Whitehead/ Emma Brown/ Sandra Laxton
		Bins	Monthly		Advertisement of events in litter bins as and when needed updates. The bins will also become available in 2017 to hire to advertise external companies					Street Cleansing

Page 529 Management	Promote the Green Flag award scheme across the Borough	Green Flag posters and flag poles to be renewed each year on receiving the award	Annually		Flag replaced and certificates replaced as and when successful in our application Green Flag					Ranger Service, Friends of Alex
	Write an up to date management plan available to staff at all levels and by different park user groups	Copy to be made available to all concerned members	Winter 2016		Completed in January 2017					Ranger Service
	Ensure effective monitoring of the management plan	Implement monitoring process by meetings between the Council and user groups thereby continually reviewing and updating the management plan	Weekly & Quarterly		Weekly checks of the park carried out by the Ranger service and bi-annual walkabouts arranged with the 'Friends Of' group					Ranger Service & Relevant Parties

GREEN	Projects are on track and in control
YELLOW	The project has been postponed to explore alternatives or is not required to be active at this time
RED	The project has been stopped and will not meet its commitments for cost, schedule or scope. Projects in the red will need their budget and schedule increased, or their scope of work increased, to get back on track

APPENDIX B

A GREEN SPACES STRATEGY

Borough of Epsom and Ewell

A Green Spaces Strategy



Skylark



Juniper



Orchid



Great Crested Newt

Green Spaces Strategy

Policy Statement

To protect, conserve, enhance and promote our green spaces recognising the importance of them to the identity of the Borough. To work in consultation with residents, users and other interested groups to conserve the natural diversity, visual amenity and historical interest and to promote public access and recreational opportunities.

1.0 INTRODUCTION

2.0 COUNTRYSIDE

3.0 TREES AND WOODLAND

4.0 PARKS

5.0 OPEN SPACES

6.0 CONSERVATION

7.0 ALLOTMENTS

8.0 PUBLIC ACCESS

9.0 OTHER INSTITUTIONAL OR PRIVATE LAND

10.0 STRATEGIC POLICIES

11.0 EDUCATION



## 1.0 INTRODUCTION

The development of a green spaces strategy for the whole of the Borough provides the context in which land managers, planners and recreation providers can work to provide this Borough with open spaces for the use of the residents and visitors alike. Emphasis in the past has been placed strategically on countryside areas on a regional basis because of the pressures on these areas and particularly the urban fringe. In Surrey over the last few years, a countrywide countryside strategy has been in place, identifying issues and action points. However in the area of parks and other open spaces there has not been the impetus to adopt the strategic and long-term approach this strategy seeks to start the process of addressing the long-term future of all the varied sites within the Borough.

Green spaces in the Borough are extremely varied in character ranging from the formal gardens at Bourne Hall, through informal green spaces such as that found at Royal Avenue to the wilder areas of Epsom Common. It is clearly very difficult to formulate a policy that is applicable to all of the sites and this strategy does not intend to do so. In addition all of the sites cannot be considered in isolation as residents and other uses are highly mobile and use sites for different purposes. It is clear that the use of the sites is interlinked as many of the sites are also physically linked.

In the past, land use policy was dictated by the local plan policies and these policies, although material in the development of land, were not the primary source of policy. This has recently changed such that the local plan is now given greater strength but has also had to recognise the primary role of the local plan as a land-use strategy. Closer scrutiny is now given to local plans and many of the policies which would have formally given no concerns as non-land use policies now raise issues given the primacy of the plan. Non-land use policies will be rejected. The local plan process timetable has resulted in the present plan needing now to consider the non-land use policies in a different light as a result of a clarification of central government policy. We need to establish these policies in association with the planning system backed by research and evidence as opposed to intuition. This strategic approach starts that process.

It is proposed in the first instance to identify a number of areas for policy development. In essence there are two major areas in the development of the green spaces strategy. There are those policies which refer to features on the ground, for example: land management plans, and then there are those policies which refer to the use of green space such as the play policy. These policies are not mutually exclusive and need to be referenced and considered in the development of the green spaces strategy.

The following strategy should not be considered as being set in tablets of stone. Needs and circumstances change with time and what is relevant now may not be relevant in two years time. This long-term view of the development and management of the green spaces in the Borough will help in long-term objective setting for the Council and will allow activity to be directed in the most effective way. It should also bring to the fore, issues about the management of the open spaces in the Borough which need to be investigated and then resolved. The following strategy is divided into a number of subject areas for convenience, though it should be remembered that in practice many of the areas merge together and issues raised are rarely as simple as they seem.

## 2.0 COUNTRYSIDE

A large part of Epsom and Ewell is countryside green space and is part of the larger resource of Surrey. The land is not all in the ownership of this Council and this has had an impact on the integrated management of the site. Countryside issues and policies have been well developed nationally through the work of the Countryside Commission and English Nature. As a result a good body of research is available which can be used in the local context of Epsom and Ewell. Improvements have been made in the past years with site-specific management plan and policies for sites in the ownership of the Council, but there is a need for an overall policy context in which to fit the management of the countryside irrespective of ownership. There is also a need to identify the links between sites both physically and in the overall contribution to the green spaces of the Borough.

Issues

- Areas and development pressure for housing and go facilities.
- Inappropriate management either by management as parkland or no management to retain the countryside appeal and value.
- No long-term view of the management of the countryside into the future, recognising each site has a different value.
- No consideration of the relationships between the site and how they contribute to the whole and what physical links are necessary between the sites.
- No priorities for action for the management of the sites.

#### Action

To identify the different types of countryside in the Borough, identifying policies for their overall and site-specific management where appropriate. To prioritise the sites in terms of their value as green spaces in the Borough as a whole and to identify potentially damaging activities which would be detrimental to their value. To seek to identify where links and improvements can be made in the countryside of the Borough.

### 3.0 TREES AND WOODLAND

Trees and woodlands, of all the soft landscape features in the Borough, play one of the most important roles. The visibility of trees and woodlands and their contribution to the landscape should not be underestimated. Fortunately the Borough is in a good position with regard to its tree stocks both in parks, open spaces and highways. Past planting policy has produced a wide range of tree species though there is scope for improvement and development as inappropriate tree planting has taken place. Any policy for trees and woodlands should cover all aspects of the trees and woodland in the Borough and show how they relate to our other policies on all areas of land within the Borough, whether owned by this Council or not.

#### Issues

- Loss of trees through a variety of means which includes development and natural processes such as storms and drought.
- Planting inappropriate trees in inappropriate places.
- Poor management of the existing trees resulting in increased cost and liability potential.
- Little recognition of the role of trees in the urban landscape.
- No overall tree planting or landscaping strategy.

#### Action

To quantify the tree resources of the Borough and to draw on this to produce an urban forestry strategy to secure the long-term future and development of the Borough's tree stock.

#### 4.0 PARKS

There is a wide range of parks in the Borough which range from formal gardens to sports oriented Recreation Grounds. Most residents of the Borough use the parks on a regular basis for a number of different reasons. In the past the tendency has been to manage parks in isolation without a long term view of their role, the needs of users and their detailed management. In addition it was also felt that the priorities for the development of the parks were unclear. It is now the Council's policy to consider the use of the parks in consultation with the users, to develop long term policies for each park and also to plan for their long term development integrating them with other green spaces as a unit.

- Problems of security and abuse of facilities
- The need to generate income with limited investment in the facilities

#### Action

To develop an overall policy for the future development of the parks and then to produce individual site management plans. To identify the current provision in parks and the scope for future improvements. To address the problems of youth involvement and provision.

#### 5.0 OPEN SPACES

Open spaces are those areas recognised within the Borough, both public and private, which are in addition to our recognised parks, countryside and allotments. They currently play or have the potential to play, an important role in our green space provision. An example of this would be the contribution made by the Longmead Contours to the link between the green areas of Epsom and Ewell. These areas range from informal play space within housing areas to large areas of close mown grass. These are to be considered in this green spaces strategy for the Borough as they form an integral part of our green spaces network and are often some of the most frequently used sites.

#### Issues

- Consideration of the role of the open spaces in part of the overall network of green spaces.
- No long-term management plans for the management of the sites taking restricted account of the needs of users and local residents.
- No overall policy for management of the open spaces as a whole and as part of our green spaces network.
- Problems of security and abuse of the facilities.
- Varied ownership restricting the overview of the open spaces.
- Areas and development pressure for housing and golf facilities.

#### Action

To establish the role of each of our open spaces for the future development of the green spaces in the Borough and develop a long-term management plan working with the local residents, users and the landowner where appropriate.

## 6.0 CONSERVATION

The need to conserve features within our environment is increasingly recognised by our residents and the users of our green spaces. There has been a dramatic increase in environmental awareness for all parts of our environment over the past few years. As a Council we have started to address a number of the issues involved through the Borough local plan and through a number of other strategies and policies. We still need to clearly identify conservation policies, place them in context and to implement those that are in place.

### Issues

- Loss of some of the natural features of our environment by a variety of different means.
- No policies for the management of anything other than the wildlife features of our green spaces.
- Limited awareness of the conservation interest of many of our sites which includes historical value.
- Limited resources to implement conservation initiatives.
- No plan for environmental improvements to OUI green spaces.

### Action

To define policies for the conservation of features within all of our green spaces in consultation with interested groups. To implement those policies with specific actions that will produce results.

## 7.0 ALLOTMENTS

Allotments serve the need for local residents to grow their own produce whilst at the same time having health and social benefits. The use of allotments has changed over the past years. There were high levels of occupancy after the Second World War and areas which are now Green space were then used as allotments. Usage declined in the 1960's and 1970's, however with a change in people's attitudes and with the adoption of healthier lifestyles the last few years have seen an increase in the demand for plots. The demand for allotments then clearly fluctuates with time and this changing need has to be recognised in the long-term management of allotments. Recently emphasis has been placed on the management of the site by the allotment holders themselves. This is providing real benefits and will continue into the future.

### Issues

- Fluctuating levels of occupancy and changing demand for allotments.
- Pressure of the sites for development: as housing.
- Limited past expenditure producing long-term problems such as the accumulation of rubbish.
- No long-term plans for the management of the allotment as a unit and for the future development of each of the allotment.

### Action

To devise a policy for the allotments service to form a long-term strategy for their development and to identify management priorities for each of the individual allotment sites.

## 8.0 PUBLIC ACCESS

For any green spaces strategy to have value to the residents of the Borough it is important to recognise that access is particularly important. This may not mean direct access to the site but may involve being able to see the site from roads and public rights of way and so providing visual amenity. The site may contribute to the overall green space provision of the Borough without necessarily being accessible though we should strive to gain access where appropriate. The opportunities for the further development of the rights of way network should be emphasised. Access for the disabled and other groups should not be thought of as an addition to access to our sites but should be automatically considered in new and existing developments.

### Issues

- No plan for the development of access to our green spaces.
- Lost opportunities for the enhancement of access to green spaces.
- Opportunities for the promotion of access to green spaces are not fully utilised.
- Increased future potential for improvement in the light of proposed developments.
- The need to provide access to our green spaces for all sectors of the community.

### Action

To identify the rights of ways and other forms of access within the Borough and to show how they link our various green spaces, facilitate the use of our green spaces and identify areas where we would seek to extend access to our green spaces to form an overall network. To consider access to our green spaces by the disabled and other groups.

## 9.0 OTHER INSTITUTIONAL OR PRIVATE LAND

in this Borough the land owned by this Council plays a significant role in the overall development of our green spaces. However this is not the whole picture. If all land which is not owned by the Council is ignored then there is little justification for any overall policy context in which to work. This is vital when considering standards for green space provision. There is a need to consider non-Council owned sites in this policy but not necessarily on an individual site basis as the response from the landowner may vary.

### Issues

- Impending recent changes in the use of large green spaces such as the hospitals Cluster
- Opportunities for the extension or enhancement of our accessible green space may be lost
- Development pressure on this type of green space for housing or other usages.
- The need to identify standards for facilities in green space as a result of the Borough local plan enquiry.

### Action

To identify all non-Council owned sites and to produce a register identifying features of the green space. To seek to negotiate management of the site that conforms to our overall objectives for the management of green space and, where necessary consider the long-term management of the site.

## 10.0 STRATEGIC POLICIES

Any strategic policy cannot work in total isolation. We need to consider the effects of national policy for the various activities and features of our green spaces. This is particularly important where we are to consider local standards. The way forward is to look very clearly at our local standards and policies and identify where they differ from those agreed nationally whether formally or informally. Evidence must be provided to justify the local conditions. This has been clearly seen in the inspector's response to the Borough Local Plan Deposit Draft. The play policy is a good example.

#### Issues

- Lack of policies which can be applied to green space without each issue having to be dealt with on an individual basis
- Management of our green spaces with a wider perspective
- The need to identify policies and standards which will be material in the determination of planning proposals
- The need to work with adjacent landowners, authorities and interested parties.

#### Action

To carry out an investigation and analysis of all policies and standards which effect the green spaces in the Borough and to clearly identify the implications for our own policies. To identify where appropriate further policies as necessary and to consult with interested parties.

### 11.0 EDUCATION

Green space within the Borough is a resource which needs the support and understanding of the local residents if it is to survive. The promotion and interpretation of our green space heritage through educational programmes vital to the continued appropriate use of that green space. Informed debate and an understanding of how green spaces can only be supported by relevant information. We need not only to collect that information but also to inform people of the consequences of their actions and how to act on the result. It is through appreciating what green space resources we have that we will be able to protect those green spaces.

#### Issues

- Limited educational programme at present
- The need to make the resident and user alike aware of the constraints on the management of green spaces
- The need to respond to the changing needs of our users and to keep them informed of proposed changes

#### Action

To develop an interpretive plan for all green spaces, both as a unit and individually to identify how we will educate everyone on the importance of green spaces and their management. To implement the plan using the Ranger Service, other officers and outside agencies as appropriate.

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**COMMUNITY TRANSPORT AND LONGMEAD CENTRE**

<u>Report of the:</u>	Head of Operational Services
<u>Contact:</u>	Linda Scott
<u>Urgent Decision?(yes/no)</u>	No
<u>If yes, reason urgent decision required:</u>	
<u>Annexes/Appendices (attached):</u>	<u>Annexe 1</u> – Pictorial of draft self service information boards for advertising.
<u>Other available papers (not attached):</u>	Scrutiny Review of Routecall report and minutes of the Social Committee meeting of 29 October 2015.  Fees and Charges reports and minutes of the Social Committee meeting of 28 January 2016 and Community and Wellbeing Committee meeting of 24 January 2017.

**REPORT SUMMARY**

**This report provides an update on changes to the Routecall service, and proposes rebranding for our Community Services operations and the Longmead Centre.**

**RECOMMENDATION (S)**

**That the Committee:**

- (1) Notes the progress on implementing the recommendations of the Scrutiny Review of Routecall.**
- (2) Agrees to the rebranding of the services within the Community Services operation, as detailed in section 4 of this report.**
- (3) Requests the Audit, Crime & Disorder and Scrutiny Committee to undertake a review of the rebranded Community Services in April 2018.**
- (4) Agrees to the changing the name of the Longmead Centre to the “The Epsom and Ewell Community and Wellbeing Centre”.**

*Notes*

## **1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 The report links to the key priority of "Supporting our Community".
- 1.2 The proposals and actions presented in this report support our mid-term financial strategy which maintains the financial health of the council, whilst delivering the priorities of our Corporate Plan.

## **2 Background**

- 2.1 A review of the Routecall service was completed in October 2015 by the Audit, Crime & Disorder and Scrutiny Committee, to ensure that the service met the needs of residents and was cost effective to provide.
- 2.2 A number of recommendations were made for the service. These were agreed by the Social Committee on 29 October 2015.

## **3 Actions implemented as a result of scrutiny review recommendations**

- 3.1 The table below details the actions carried out as a result of the recommendations agreed by the Social Committee.
- 3.2 The recommendation to rebrand our Community Services operation is addressed later in this report.

<b>Recommendation</b>	<b>Action taken</b>
Newly developed service promoted to current members and more widely to attract new members.	<ul style="list-style-type: none"><li>• We advertise weekly excursions at the Longmead Centre, in vehicles and on our website.</li><li>• We have agreed with Surrey Downs Clinical Commissioning Group for notice boards to be placed at Doctors surgeries. Please see <a href="#">Annexe 1</a>.</li><li>• We have 200 posters advertising the service displayed within litter bin promotion panels.</li></ul>
To reduce the amount of vehicles in the Community Services fleet and procure factory built vehicles rather than custom built models.	<ul style="list-style-type: none"><li>• Four, 14 seat accessible factory built vehicles have been ordered under the new Transport contract.</li><li>• We also own a four seat and a nine seat vehicle.</li><li>• The Meals on Wheel service operates with three smaller vans.</li></ul>

Recommendation	Action taken
	<ul style="list-style-type: none"> <li>• This is a reduction of our vehicle fleet by two accessible vehicles (which had 11 seats)</li> </ul>
<p>To merge the following services: Route Call, Meals on Wheels and Community Alarm.</p>	<ul style="list-style-type: none"> <li>• The outcome of the restructure is a multi-skilled workforce which has the flexibility to deliver all services.</li> <li>• Staff have been trained and upskilled to deliver all services.</li> </ul>
<p>To replace the Council's current operating and scheduling system.</p>	<ul style="list-style-type: none"> <li>• A scheduling system (Flexiroute) was identified to improve the efficiency of services.</li> <li>• Flexiroute has been purchased, and data transfer is in progress.</li> <li>• Completion date forecast as October 2017.</li> </ul>
<p>Excursions to operate on a cost neutral basis.</p>	<ul style="list-style-type: none"> <li>• Excursions are now only held on Mondays and within the local area.</li> <li>• Payments are received on booking of excursion with a no refund policy. This has ensured full attendance on each excursion.</li> </ul>
<p>Discontinue cash payments on Routecall buses.</p>	<ul style="list-style-type: none"> <li>• A payment on booking process will be introduced as part of Flexiroute (see above).</li> <li>• This will be fully integrated with our other financial systems.</li> <li>• Bookings will be non-refundable.</li> </ul>
<p>To increase the membership fees for Routecall in line with the Council's recommended increase of fees and charges.</p>	<ul style="list-style-type: none"> <li>• Fees and charges were agreed by Social Committee in January 2016. Community and Wellbeing in January 2017.</li> </ul>
<p>That a review of Routecall be undertaken within 12 months of the</p>	<ul style="list-style-type: none"> <li>• Review to be completed by the Audit, Crime &amp; Disorder and</li> </ul>

Recommendation	Action taken
implementation of the new Flexiroute system.	<p>Scrutiny Committee.</p> <ul style="list-style-type: none"> <li>It is recommended that this review is undertaken in April 2018. This is to allow the implementation of Flexiroute.</li> </ul>
Report back on implications arising from the Committee recommendations.	<ul style="list-style-type: none"> <li>Implications will be fully assessed as part of the Audit Committee review. A summary of the current position is given below:</li> <li>The collection of non-refundable excursion payments has been very successful in ensuring the cost effectiveness of each trip.</li> <li>Developing an integrated workforce covering all services has been very successful.</li> <li>New 14 seat vehicles have been ordered, this will ensure that up 56 seats will be available to take clients to the day centre within four vehicles.</li> <li><b>There has been a reduction of members using the shopping service. The spare capacity will be marketed to the borough residential homes.</b></li> <li>Membership figures have continued to fall. This could be due to only accepting payment by direct debit (introduced in 2016-17) and the aging client profile of the service.</li> </ul>

#### 4 Proposals- rebranding Community Services

- 4.1 A recommendation was made by the Scrutiny review (see section 2 above) that Community Services be rebranded.

- 4.2 It is recommended that Community Services should be rebranded as “Community and Wellbeing Services” with a strap line of “Supporting you”.
- 4.3 It is also recommended that the Longmead Centre be renamed and rebranded as the “The Epsom and Ewell Community and Wellbeing Centre”.
- 4.4 The table below proposes rebranding for individual services:

Current branding	Proposed rebranding
Routecall	<b><u>Transport from Home.</u></b>  This will include the following visits: <ul style="list-style-type: none"><li>• Day Centre</li><li>• Shopping</li><li>• Personal (Medical appointments, hairdressers etc.)</li><li>• Excursions</li></ul>
Community Alarm and Telecare	<b><u>Community Alarm Plus</u></b>
Meals on Wheels	<b><u>Meals at Home</u></b>

- 4.5 If the proposed rebranding is agreed, the next steps will be to have the self-service information point (SSIP) boards and accompanying leaflets (see [Annexe 1](#)) created and installed in doctors’ surgeries around Epsom and Ewell.

## 5 Financial and Manpower Implications

- 5.1 One of the key financial implications for the future of the combined services is the fact that from April 2017 there is a reduction in service level agreement funding from Surrey County Council of £11,850 for the transportation of higher needs clients to the Longmead Centre.
- 5.2 Rebranding of the current Community Services offering will be financed by the Personalisation, Partnership and Prevention fund. This will pay for the design, production and installation of the SSIP boards and accompanying leaflets.

5.3 **Chief Finance Officer's comments:** The estimated contribution that would be required from PPP funding to meet Routecall service rebranding costs is £20k. The expenditure from PPP requested for the provision of Higher Needs Day Care at the Wellbeing Centre, covered by another report on this agenda, would leave a sufficient balance to accommodate this.

5.4 Costs associated with the change of name to the Longmead Centre are estimated to be around £2,500. This includes signage, updating corporate templates and communication to users of the Centre.

## **6 Legal Implications (including implications for matters relating to equality)**

6.1 None for the purposes of this report.

6.2 **Monitoring Officer's comments:** There are no legal issues arising from this report.

## **7 Partnerships**

7.1 We work with Surrey County Council with regards to the provision of services.

## **8 Risk Assessment**

8.1 Rebranding, the production of SSIP boards/leaflets and continued marketing will be necessary to ensure the sustainability of all services.

8.2 With the financial demands on Surrey County Council there is risk of further reduction of funding.

## **9 Conclusion and Recommendations**

9.1 That the progress made to meet the recommendations of the scrutiny review of Routecall be noted.

9.2 That the Committee agrees to the rebranding of the services and Longmead Centre as stated within this report.

9.3 That the Audit, Crime & Disorder and Scrutiny Committee be requested to undertake a review of the rebranded service in April 2018.

**WARD(S) AFFECTED: (All Wards);**

# Community and Wellbeing Services Support for you

## Community alarm plus

This service is great for people who value their independence. The system supports people who live alone, people who feel vulnerable, people who may have a disability and people who have been a victim of crime. This pendant alarm system gives you and your loved ones reassurance that in an emergency help is available and on its way at the press of a button.

### How it works:

A small alarm unit is connected to your phone and you wear a pendant to wear. If you ever need help in an emergency, just press your button.

This will connect you through to a 24 hours, seven days a week, 365 days a year, monitoring centre. They will contact your nominated persons and the emergency services if required.

The service can also provide various pieces of Telecare that will enhance your safety within your home, such as smoke alarms, pill dispensers, bed sensors and carbon monoxide detectors.

### Keyfobs

If you don't have an emergency in your home, it is likely that the emergency services will need to gain access to your property to help you. Having a keyfob fitted will mean that they can get to you quickly with your own

store keys. A keyfob is a small, handheld box with a coded push button keypad which is secured to the brickwork outside your property in a discreet place. The monitoring centre would hold the code and give it to the emergency services only if they are called to your property.



## Meals at home

The meals at home service delivers a choice of tasty and nutritious meals directly to your door five days a week. We cater for different dietary needs including vegetarians, diabetics, pureed, low fat, low salt, gluten free and cultural requirements such as halal.

Meals will be delivered hot to your door between 11am and 2pm Monday to Friday or on the week days that you prefer. We also offer a tea service consisting of freshly made sandwiches with fruit, biscuits and cakes. There are no deliveries during the weekend or public holidays, instead we arrange to deliver frozen meals so that you can cook them at home.

### Shopping Service

The service runs weekly in partnership with a local supermarket and provides a home delivery service for your essential food shopping needs.

Our staff will contact you by telephone to take down your shopping list. The shopping list is then passed on to the local supermarket where the staff will pack and total the ordered items. The next day our drivers will deliver the shopping to you at home with the receipt for you to check. To use this service you must be a member of meals at home with a minimum meal delivery on the day that you receive your shopping.

There is a delivery charge but there is no minimum order amount on your shopping and no postage and packaging charge by direct debit.



## Wellbeing support centre

The aim of the Wellbeing Centre is to support our growing elderly population and vulnerable adults with their physical, emotional and mental health wellbeing.

The Centre specialises with supporting people with higher needs that include people who feel socially isolated, people who have memory loss, confusion or in the early stages of dementia. We also provide support for carers. We run various sessions for people with higher needs and their carers to attend such as: Japanese tea ceremony, Tai Chi for carers, Relaxation and Rejuvenation, Painting, Visual Art Group. The Centre is a safe place to meet, laugh, enjoy a cup of tea and try out a session.

## Centre for the community

The Longmead Centre is a spacious and modern building which welcomes people 55 and over who are looking for an exciting programme of social and recreational events.

The Centre offers a range of classes designed to promote health and wellbeing. Activities include: Tai Chi, Line dancing, Stay young exercise classes, Whist drive, Arts and crafts group, Bingo, Indoor bowls, Chess, Games, Computer classes, Singing groups and yoga. The Centre is open five days a week, Monday to Friday from 9am - 4pm.

The Centre has a coffee shop is set in our comfortable dining area where you can relax over a coffee and enjoy one of our freshly baked cakes and savouries. This is the focal point of the Centre where people can catch up with friends and check out the regular events and activities. You can also enjoy a wide range of freshly prepared meals and snacks at very competitive prices. In addition, we have special occasion lunches followed by live entertainment.

### The Centre also offers the following services:

Hairstressing salon  
Foot care clinic  
Aromatherapy massage  
Bathing facility  
Laundry facility

For more information contact us on: 01372 732 000 alternatively email us: [contactus@epsom-ewell.gov.uk](mailto:contactus@epsom-ewell.gov.uk)



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**SUPPLEMENTARY FEES & CHARGES**

Report of the: Director of Finance & Resources  
Contact: Teresa Wingfield / Andrew Lunt  
Urgent Decision?(yes/no) No  
If yes, reason urgent decision required:  
Annexes/Appendices (attached): Annexe 1 - Supplementary Fees & Charges  
Annexe 2 – Ewell Court House 3 year charges  
Other available papers (not attached):

**REPORT SUMMARY**

**This report sets out Supplementary Fees & Charges for Epsom Playhouse, the Ebbisham Centre and Ewell Court House that were omitted from the report agreed in January 2017.**

**RECOMMENDATION (S)**

- (1) That the Committee agrees the fees and charges as set out at Annexe 1 and Annexe 2, effective from 1 April 2017**

*Notes*

**1 Implications for the Council's Key Priorities, Service Plans and Sustainable Community Strategy**

- 1.1 The Medium Term Financial Strategy aims to maintain the financial health of the Council whilst delivering the priorities in the Corporate Plan.

**2 Background**

- 2.1 Included in the Medium Term Financial Strategy for 2016/17, and in the budget guidelines agreed by Strategy & Resources Committee, was an overall increase in revenue from discretionary fees & charges of 3%.
- 2.2 A schedule of fees and charges was presented to, and agreed by, this Committee on 24 January 2017. However, eight fees and charges relating to various venues were omitted from this schedule in error. These were for Epsom Playhouse, the Ebbisham Centre and Ewell Court House.

- 2.3 In addition to the above, as wedding/celebration hirers can book more than a year in advance, last year a three year cycle of charges was created, to help maximise the income from this group of hirers. The proposed charges to continue with this three year cycle is set out at Annexe 2.

### **3 Proposals**

- 3.1 Eight proposed fees and charges are set out at Annexe 1.
- 3.2 Three year wedding/celebration hire fees are set out in Annexe 2.

### **4 Financial and Manpower Implications**

- 4.1 Each of the proposals falls above, or broadly within, the range of 3-5% increase as anticipated in the Medium Term Financial Strategy,
- 4.2 ***Chief Finance Officer's comments:*** None for the purposes of this report.

### **5 Legal Implications (including implications for matters relating to equality)**

- 5.1 ***Monitoring Officer's comments:*** There are no legal issues arising from this report.

### **6 Sustainability Policy and Community Safety Implications**

- 6.1 None for the purposes of this report.

### **7 Partnerships**

- 7.1 None for the purposes of this report.

### **8 Risk Assessment**

- 8.1 Income from services remains at risk due to economic conditions. Charges have been set to take into account market factors.

### **9 Conclusion and Recommendations**

- 9.1 This report proposes eight revised fees and charges for services with effect from 1 April 2017.
- 9.2 The impact of changes in fees and charges has been estimated and incorporated into the Committee's budget estimates for 2017/18.

**WARD(S) AFFECTED: (All Wards);**

<b>Service: Venues</b>						
<b>Service Manager: Andrew Lunt</b>						
<b>Service</b>	<b>Charged At</b>	<b>Description</b>	<b>Unit</b>	<b>2016/17</b>	<b>2017/18</b>	<b>% Change</b>
<b>Playhouse</b>						
		<b>Hire Community Rate</b>				
		Auditorium - Monday to Saturday 10:00 to 23:00	per hour	£70.00	£72.00	2.86%
		Auditorium - Monday to Saturday 23:00 to 10:00	per hour	£140.00	£144.00	2.86%
		Myers Studio - Monday to Sunday 10:00 to 18:00	per hour	£26.50	£27.50	3.77%
		Myers Studio - Monday to Sunday 18:00 to 23:00	per hour	£26.50	£27.50	3.77%
		<b>Hire Standard Rate</b>				
		Myers Studio - Monday to Sunday 10:00 to 18:00	per hour	£34.00	£35.00	2.94%
		Myers Studio - Monday to Sunday 18:00 to 23:00	per hour	£44.00	£45.00	2.27%
<b>Ebbisham Centre</b>						
		<b>Hire Standard Rate</b>				
		Spa Lounge	day rate	£179.50	£185.00	3.06%
<b>Ewell Court House</b>						
		<b>Hire Standard Rate</b>				
		Meeting Room	Per 2 hr session	£58.50	£61.00	4.27%

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Service: Venues  
Service Manager: Andrew Lunt

Description	Unit	2016/17	2017/18	%age change	2018/19	%age change	2019/20	%age change
<b>Ewell Court House</b>								
<b>Celebratory Rooms</b>								
Fri Sat - Peak Rates ( April - September & Easter Weekend)	Per Day( 16 hours)	£2,512.25	£2,625.00	4.49%	£2,821.00	7.47%	£2,906.00	3.01%
Fri Sat Sun Half Day-Peak Rates (April-September & Easter Weekend)	8 Hrs	£1,240.25	£1,312.50	5.83%	£1,393.50	6.17%	£1,435.00	2.98%
Fri Sat Sun Part Day-Peak Rates (April-September & Easter Weekend)	5 Hrs	new	£860.00	n/a	£881.50	2.50%	£908.00	3.01%
Sun - Peak Rates ( April - September & Easter Weekend)	Per Day ( 14.5 hours)	new	£2,380.00	n/a	£2,556.50	7.42%	£2,633.00	2.99%
Mon - Thurs	Per Day ( 16 hours)	new	£2,010.00	n/a	£2,071.00	3.03%	£2,133.00	2.99%
Mon - Thurs	8 Hrs	new	£1,090.00	n/a	£1,123.00	3.03%	£1,156.00	2.94%
Mon - Thurs	5 Hrs	new	£650.00	n/a	£670.00	3.08%	£690.00	2.99%
Mon - Thurs	Per Day ( 14.5 hours)	new	£1,675.00	n/a	£1,725.00	2.99%	£1,777.00	3.01%
Fri Sat-Off Peak Rates (October-March, Excl. Easter Weekend)	Per Day ( 16 hours)	£1,600.00	£2,010.00	25.63%	£2,157.25	7.33%	£2,222.00	3.00%
Fri Sat Sun Half Day-Off Peak Rates (October-March, Excl. Easter Weekend)	8 Hrs	£960.00	£1,090.00	13.54%	£1,168.50	7.20%	£1,203.50	3.00%
Fri Sat Sun Part Day-Off Peak Rates (October-March, Excl. Easter Weekend)	5 Hrs	new	£650.00	n/a	£674.00	3.69%	£695.00	3.12%
Sun-Off Peak Rates (October-March, Excl. Easter Weekend)	Per Day ( 14.5 hours)	new	£1,675.00	n/a	£1,955.00	16.72%	£2,014.00	3.02%

2017-18 charges have already been agreed by Committee.

2018-19 and 2019-20 charges are included above as wedding hirers are more inclined to book at least a year in advance of the wedding date.

The continuation of the 3 year cycle for wedding charge, that was created last year, will assist the venue to achieve target.

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**OUTSTANDING REFERENCES**

<u>Report of the:</u>	Head of Legal and Democratic Services
<u>Contact:</u>	Tim Richardson
<u>Urgent Decision?(yes/no)</u>	No
<u>If yes, reason urgent decision required:</u>	N/A
<u>Annexes/Appendices (attached):</u>	<u>Annexe 1</u> – Outstanding References
<u>Other available papers (not attached):</u>	

**REPORT SUMMARY**

**This report lists the Committee's outstanding references as at 21 March 2017.**

**RECOMMENDATION (S)**

**(1) That the outstanding references detailed in the Annexe be noted.**

*Notes*

**WARD(S) AFFECTED: All**

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COMMUNITY & WELLBEING COMMITTEE  
21 MARCH 2017

The following references to Officers are outstanding as at 21 March 2017:-

Reference No.	Date of reference/item	Title and nature of report back	Officers	Report due	Position at last meeting	Current Position
1	Social Cttee 29/10/15 Min 19	Shopmobility (Consideration of a more detailed cost benefit analysis of this service)	Head of Customer Services & Business Support	November 2016	Report pending	Report to June 2017 Meeting.
2	Social Cttee 29/10/15 Min 24	Social Centres (Review of Mission Statement, re-launch and external funding)	Head of Venues & Facilities	November 2016	Report pending	Report to June 2017 Meeting.
3	Social Cttee 29/10/15 Min 25	Routecall (Developing and rebranding service)	Head of Operational Services	November 2016	Report pending	Report on this agenda.
4	Community & Wellbeing Cttee 8/11/16 Min 13	Business case for improvement works to Bourne Hall – internal configuration	Head of Venues & Facilities	Future meeting	-	This item will be removed from outstanding references following this meeting as it relates to a long-term objective which is unlikely to be presented for consideration in the near future.

COMMUNITY & WELLBEING COMMITTEE  
21 MARCH 2017

Annual reports

The Committee will receive the following reports annually:

<b>Date of Reference/item</b>	<b>Title and nature of annual report</b>	<b>Responsible Officer</b>	<b>Next report to be received</b>
26/03/12 Min 41	Pricing flexibility authorisation procedure – annual report	Head of Venues and Facilities	June 2017

Annual updates

Members of the Committee will receive the following information updates annually. These will be provided via email and Members Update.

<b>Title and nature of update</b>	<b>Responsible Officer</b>	<b>Month annual update will be provided each year</b>
Annual report on Allotments	Head of Operational Services	November
Annual report on Bourne Hall Museum	Head of Venues and Facilities	June

**EXCLUSION OF PRESS AND PUBLIC**

The Committee is asked to consider whether it wishes to pass a resolution to exclude the Press and Public from the meeting in accordance with Section 100A (4) of the Local Government Act 1972 on the grounds that the business involves the likely disclosure of exempt information as defined in paragraph 3 of Part 1 of Schedule 12A to the Act (as amended) and that pursuant to paragraph 10 of Part 2 of the said Schedule 12A the public interest in maintaining the exemption outweighs the public interest in disclosing the information.

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