

Ash Dieback Action Plan



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Appendix 1 – Location of Ash Trees on Council land within the Borough

1. Introduction

Common Ash (*Fraxinus excelsior*) is a native tree found in abundance in most parts of the UK. Ash is a common feature of countryside hedgerows and woodland edges. In the urban setting it is found in a variety of areas including open spaces, urban woodlands, parks, private gardens, schools and cemeteries. Ash is prolific at self-seeding on unmaintained land and, prior to the disease, was extensively planted by woodland managers, local authorities and private landowners.

Ash Dieback (*Hymenoscyphus fraxineus*) is the most significant tree disease to affect the UK since Dutch Elm Disease and has the potential to infect more than two billion UK Ash trees (from saplings to mature trees) and lead to the death of approximately 75-90% of them.

It is necessary for the Council to set out how it will manage the anticipated impacts of the disease, focussing primarily on public safety. It is particularly important to understand the location of the disease on Council owned land to address the risk to public safety as a result of mature Ash trees dying and subsequently falling or shedding large limbs.

The loss of the ecosystem associated with Ash trees is also of concern. Not only are they important to wildlife, but Ash trees also remove pollution from the air, store carbon and intercept rainfall, and are a functioning part of a vital ecosystem. The value of these ecosystem services is substantial.

In addition to the loss of biodiversity the disease can lead to negative impacts on the quality and appearance of the landscape.

2. What is Ash Dieback?

Ash Dieback (*Hymenoscyphus fraxineus*) is a fungal pathogen that affects the UK's native Ash tree and other members of the *Fraxinus* species. The disease, arrived in Europe from Asia during the 1990's and has spread rapidly.

This invasive fungus causes a range of symptoms from leaf and branch dieback to death of Ash trees. The disease Infects leaves twigs, branches and occasionally stems via spores. The spores are produced from minute flask like fruiting bodies that form on the leaf rachis (stalks) which survive from the previous year's fallen leaves (see plate 1 below). In favourable warm and wet conditions during June to September, many millions of spores become airborne and ascend into the tree canopy.

Within the tree the fungus grows quickly, progressively destroying the trees vascular system. This results in the loss of nutrients and water which depletes the trees energy until dysfunction, dieback and death ensues. The

pathogen can also cause lesions on the lower stem and weaken trees to invasion by secondary pathogens such as decay fungus leading to death or biomechanical failure.

Initially symptoms of the disease are wilted and subsequently blackened leaves (Plate 2). As the disease progresses diamond shaped lesion are found at the base of dead side shoot (Plate 3). Stem lesions can also be seen at the base of occasional trees but not always in combination with crown dieback (Plate 4).

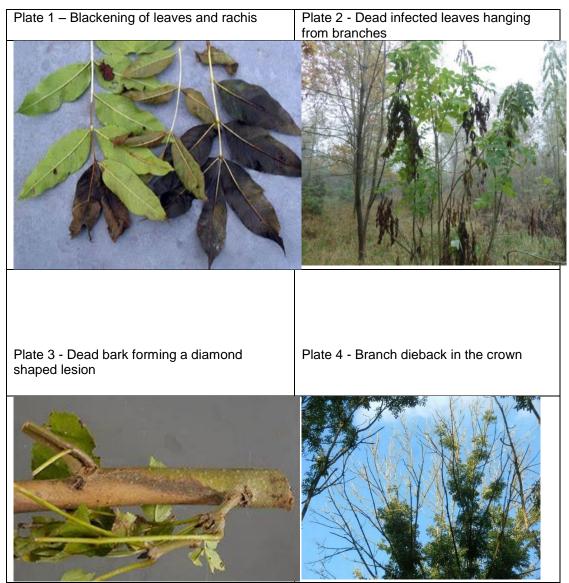


Figure 1

The Tree Council, Observatree and the Forestry Commission have online resources for the disease's identification.

Tree Council: <u>http://www.treecouncil.org.uk/Portals/0/Our%20work/Tree%20Care%20Campaign/ch</u> <u>alara_summer_id_guide.pdf</u> <u>http://www.treecouncil.org.uk/Portals/0/Chalara%20larger%20trees_1.pdf</u> Observatree: https://www.forestresearch.gov.uk/tools-and-resources/pest-and-diseaseresources/chalara-ash-dieback-hymenoscyphus-fraxineus/

Forest Research: https://www.forestresearch.gov.uk/documents/7087/FCPH-ADD_photoIDChalara.pdf

Once infected, a high proportion of trees will die (up to 90%). There is hope that a small percentage (approximately 10%) of Ash trees will be highly tolerant of the disease or possibly resistant. Wider research is being undertaken to identify these trees.

Since first being identified in England the disease has been found across England into Wales, Scotland and Northern Ireland. The disease has spread rapidly and is widespread in the south east of England, so it can be assumed that all Ash trees in Epsom and Ewell have been exposed to the airborne spores of the pathogenic fungus.

3. Ash Trees and Ash Dieback in Epsom and Ewell

It is estimated that there are 200,000 trees in Epsom and Ewell and 60,000 trees on Borough Council maintained land. There are approximately 20,000 Ash trees in the Borough (excluding saplings).

Distribution of tree species is largely due to the interaction of geography, geology soils and historical management. Higher concentrations are found on the calcareous soils at the southern end of the Borough around Epsom Downs. Moving closer to Epsom Town on the lighter base rich soils there is a transition to Beech and Yew and on free draining soil Oak, Birch and Scots Pine join the community. Ash, Hornbeam and Oak woods tend to dominate the clay soils moving further north across the Borough.

Site	Individual Ash trees	Ash trees in Woodland areas	total
Countryside Sites: Horton Country Park LNR, Hogsmill LNR, Bonesgate Open Space		2529	2529
Epsom Common LNR		705	705
Epsom and Ewell Parks	743		743
Nonsuch Park	94	1661	1755
Epsom Downs		1033	1033
Grand Total			6765

On Borough Council managed land, the estimated number of Ash trees is:

Table 1 Estimated numbers of ash trees maintained by the Borough Council (excludes sapling Ash trees).

The location of the main Ash tree concentrations in Council maintained woodlands and individual Ash trees on Council maintained sites is shown on the map at Appendix 1.

Although the largest area of woodland in the Borough is on the 177 ha site of Epsom Common Local Nature Reserve (LNR), there are comparatively few Ash trees on the site, and these predominantly occupy habitats next to roads and pathways were safety considerations are higher.

There is a large number of Ash trees on the countryside sites of Horton Country Park LNR, the Hogsmill LNR and Bonesgate Open Spaces. In Nonsuch Park the Ash are generally more mature with a high population of sizable specimens found in the woodlands especially by the Banqueting House and adjoining Cheam Recreation Ground.

Larger Ash are found on the north side of Epsom Downs around the area of The Warren, blocks of large Ash are also found in the woodlands south west of the racecourse and south of the gallops. The woodlands on The Downs are Ash dominated.

There is a historic legacy of Ash trees in Borough Parks. More mature trees are associated with park landscape establishment from the Victorian era e.g. Ewell Court Park. Other surges of Ash tree establishment occurred through the redevelopment of the Longmead Contours, around the Council housing estates of Longmead Estate and along Ashley Avenue.

Currently, Ash Dieback is present throughout Epsom and Ewell and is particularly evident on young trees and in young plantations. Initially observed on Epsom Downs (2014) and Horton Country Park LNR in (2015), the disease has spread into Ash trees of all sizes. During an inspection during the summer (2020) on Epsom Downs it was noted that significant numbers of pole stage Ash were starting to die and some larger trees were becoming more noticeably denuded from more progressive dieback. Occasional dead Ash trees were observed.

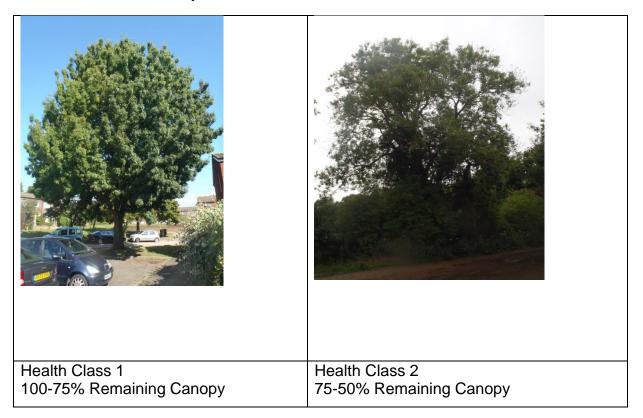
The acceleration of the disease is quicker in large areas of Ash dominated woodland because of the higher intensity of spore production, in urban areas the progression to isolated trees and stands tends to be delayed. It is anticipated that Ash tree decline will become more apparent going forward.

4. Legislation and Council Responsibilities

The Council is required by the Occupiers Liability Act 1984 to take reasonable care to "maintain its land in such a condition that it does not harm any person or damage any property." This requirement is reinforced in certain circumstances by the Health and Safety at Work Act 1974. Trees are a potential liability and therefore it is important for the Council to comply with this duty of care for trees on land it owns and not to put persons or property at unreasonable risk from tree hazards.

The Council's tree risk management policy sets out the tree risk management framework where a programme of tree inspections are undertaken proportionate to risk on Council maintained land. To address the increased health and safety risks presented by Ash Dieback it will be necessary to focus on surveying and maintenance of Council trees in higher risk areas where there are greater levels of public access and on those trees adjacent to highways and footpaths where if the tree falls or sheds branches, there is more likelihood of damage or harm.

It is advised that Ash trees could become a safety issue where the crown dieback is 75% or greater (Health Class 4). Where there is dieback but the crown remains in the primary health classes a tree may have a degree of tolerance. Trees displaying a degree of resistance should be managed commensurate with safety and monitored where feasible.



Health Class 3	Health Class 4
25-50% Remaining Canopy	0-25% Remaining Canopy

Figure 2

Where Ash trees are considered to be at risk next to the highway safety felling works are likely to incur additional costs associated with traffic management. Road and lane closures will lead to some localised traffic disruption.



Planned tree works and tree failures will cause traffic disruption

Where Ash trees growing on land maintained by the Borough Council become hazardous to the highway Surrey County Council are likely to issue dangerous tree notices under section 154 of the Highways Act. To avoid additional liability the Borough Council will need to undertake swift reactive action to any notices received.

The Borough Council itself has a statutory duty in relation to dangerous trees that threaten private or Council property. There are likely to be additional

demands on Council administration/legal services to help identify tree owners, serve notices under the Local Government (Miscellaneous Provisions) Act 1976 to make trees safe and to recover costs.

The Forestry Commission has indicated that felling licences are required to fell stands of Ash with dieback that are not yet dead or dangerous. Felling licences require the inclusion of restocking (replanting) commitment as part of the proposal and consent may be required for trees protected by Tree Preservation Orders. A resource needs to be designated to enable the submission of these licence applications and planting plans.

Under its Planning function the number of applications to the Council to carry out works to Ash trees protected by Tree Preservation Orders and within Conservation Areas will substantially increase as a result of Ash Dieback.

There is increasing evidence that Ash trees in advanced stages of Ash Dieback become embrittled which makes dismantling them more unpredictable. There is a need for contractor's tree work risk assessments to address these risks and it is likely there will be an increase in the use of mobile elevated work platform to improve the safety of tree work arborists during the tree dismantling process.

Veteran Ash trees and those with veteran characteristics can provide valuable wildlife habitats. When planning and undertaking tree works it is necessary to comply with the following legislation designed to protected species and habitats: The Wildlife and Countryside Act 1981; The Countryside and Rights of Way Act (CROW) 2000; The Conservation of Habitat and Species Regulations 2017 and The Natural Environment and Rural Communities Act (NERC) 2006.

Every effort should be made to safeguard protected species as they will already be at risk as a result of the catastrophic loss of Ash tree and woodland habitat. Bats are one of the key protected species of concern and it is necessary to ensure that their roosts and habitat is safeguarded. The Bat Conservation Trust's publication 'Bats in Trees' provides best practice guidance on protecting bats during tree works and will be followed by the Council when carrying out Ash Dieback tree works. In accordance with the advice, works to trees that have a high bat potential will be supervised by the Council's Ecologist or other licensed bat worker.

"When liaising with landowners over infected trees the Council will make them aware of the need to safeguard protected species and habitats"

5. Council approach to Ash Dieback

The risks and financial costs to the Council from Ash Dieback disease can be divided into those associated with the Council being a land manager and those resulting from its statutory functions.

Within the role as land manager the Council maintains trees on its direct Council owned land holding but also manages trees at Nonsuch Park and on Epsom and Walton Downs on behalf of the following two joint management committees:

- Nonsuch Park Joint Management Committee Comprised of members from Surrey County Council, The London Borough of Sutton and Epsom and Ewell Borough Council and;
- Epsom and Walton Downs Conservators Comprising Members of Epsom and Ewell Borough Council and The Jockey Club.

The Council recognises that it is a considerable financial challenge to deliver a robust plan to manage the effects of Ash Dieback but cannot be complacent with this issue. We will therefore take a risk-based approach to managing unsafe Ash trees focussing on those trees that may cause harm to the public.

The timeline for progression of the disease is set out in the diagram below. Approximately 10% of Ash trees are expected to be resilient to the disease and over time, there will be a natural recovery of the species. However, where trees are lost to Ash Dieback, replanting in these locations, will be prioritised as part of the Council's tree planting plans.

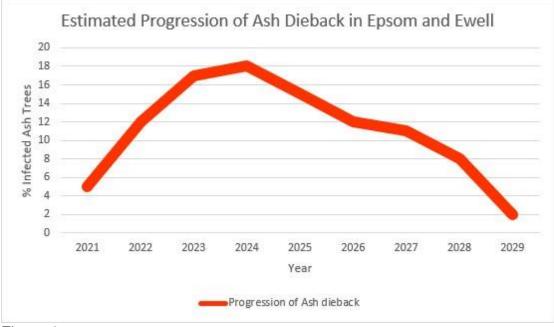
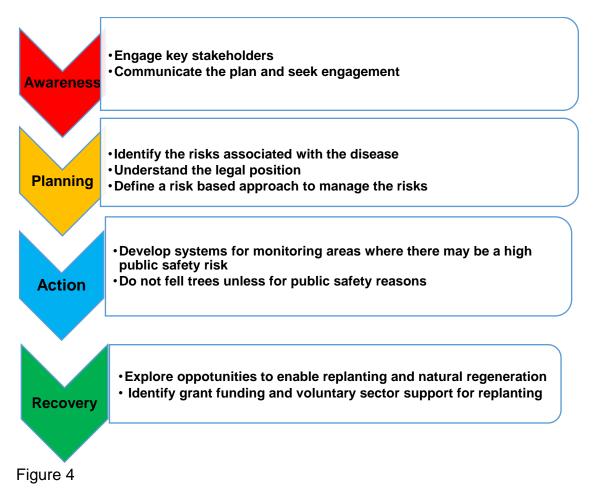


Figure 3

The diagram below sets out the approach that the Council will take to address Ash Dieback focusing on risk to public safety and where possible, within its resource to secure replanting and restocking of effected areas.



In addressing Ash Dieback, the Council will take a risk based approach to tree inspections and works undertaken focussing primarily of health and safety to the public in line with the Council's Tree Risk Strategy below:

Tree Risk Strategy

Zone	Usage Criteria	Inspection regime
High Risk: e.g. popular car parks, play areas, adjacent to main roads (A and B) railway lines, schools, shopping areas, high use parks/open spaces. Ash dieback high risk zones.	High volumes of traffic High likelihood of public access.	Formal inspection undertaken every two years by a qualified arboriculturist through the Council's tree contract
Medium Risk , e.g., lower use open spaces and parks, cemeteries, church yards, parks, footpaths, trees	Moderate volumes of traffic Moderate likelihood of public access.	Formal Inspection undertaken every three years by qualified arboriculturalist through

adjacent to lower use roads domestic property/ gardens and business premises. Ash dieback medium risk zones		the Council's tree contract
Low Risk e.g., low use footpaths, rural woodland paths, low use open spaces in areas with infrequent public access	Low volumes of traffic Low likelihood of public access.	General inspections by in house arboriculturalist/ operational staff and supported through the Council's tree contract

Figure 5

Tree Inspection Services on Formal Park and Open spaces

At present, the Council's tree inspection service on high and medium risk areas is undertaken by the Council's Tree contractor on the agreed inspection regime as set out by the Tree Risk Strategy above. In low risk areas, the Councils Tree Officer and Street Care Teams also undertake tree inspection and management supported by the Council's tree contract.

There is a comprehensive computerised tree database 'Confirm Arboriculture' which includes all tree maintenance records of trees in formal public open spaces managed by the Council. From the tree inventory records it is possible to plan for the implications of Ash Dieback with a good degree of accuracy as it is known how many trees there are, what size they are and where they are.

The Council's contractor uses this information in applying the risk based approach to tree management.

Tree Inspection Services on Woodland sites

A baseline survey was undertaken in 2019 to establish the location of Ash trees in woodlands which the Council manage. The survey calculated areas of woodland by compartments and sub-compartments and within these areas the likely percentage of Ash trees that would constitute a public safety risk.

The costs associated with the woodland work is higher than normal forestry rates. This is because of our urban/peri urban situation with trees generally on margins, adjoining roads, housing boundaries, footpaths and fencing often making it necessary to dismantle trees in sections using tree surgery techniques.

To manage Ash trees in areas considered low risk, council officers will cross reference areas of public access (highway and footpaths) to areas where Ash

trees are present to monitor any evidence of the disease. Inspections for these low risk areas will be undertaken by in house officers and through the tree contract periodically in line with agreed inspection regime. Where changes to the work programme are necessary due to unplanned events such as storms or service requests from residents this will be agreed by management in the Place Service Area.

Tree works

For trees in areas of high and medium risk set out in the Council's Tree Risk Strategy, the parameters for tree works action will be determined following initial assessment using the Suffolk County Council Ash Tree Health Assessment Model. Once the health class (condition class) is defined and considered against a risk rating matrix on the likelihood of limb failure then the priority for management intervention and the risk to contractors is determined:

Ash trees in health class 3 (50% defoliation) are likely to require action and Ash in health class 4 (over 75% defoliation) are very likely to require action. Felling programmes will then be planned proportionate to risk. There will be a need for an initial felling programme as a first sweep, but a return visit will be required at the defined intervals to find further declining trees which are in a later stage of disease submission. This will give the best chance of saving trees with natural resistance to the disease. In some high risk and hotspot areas strip clear cutting to fell all Ash within falling distance of schools/busy roads is likely to be a more cost efficient and safer option.

Tree inspection of the Ash within high risk location will be undertaken in year 1 and medium risk locations in year 2 with a repeat inspection within 2 years. Lower risk locations will be inspected in year 3 with a repeat inspection within 3 years.

In high and medium risk locations, the need for tree works to address dangerous trees due to Ash Dieback will be inspected and identified by the Council's tree contractor who will authorise the works. Regular sample checks will be undertaken by the Council's Tree Officer to ensure that the tree contractor is applying the Council's policy correctly.

In areas considered to be low risk, the inspections will be undertaken by the tree officer and supported by the Council's tree contractor. This will be undertaken through the agreed tree inspection regime referred to above to identify the health and safety implications of trees impacted by Ash Dieback. Tree works required to address Ash Dieback in low risk areas will be considered on a case by case basis and will be agreed by management within Place Development. As part of this process, an early decision will be made whether the Countryside Team manage some or all of the woodland felling works or whether this should be undertaken by the Council's contractor. Well in advance of woodland felling work it is anticipated that the Countryside Team will process felling licenses and undertake the ecological assessments. The Countryside Team will also review the works to ensure compliance with the National Forest Standard.

Replanting costs

The impact of the removal of Ash trees on biodiversity is difficult to predict but the loss of the trees will have an adverse impact on carbon sequestration and the benefit of the trees in mitigating climate change.

Natural regeneration should be promoted and managed in the first instance but, where possible and within resource levels, the Council will consider planting replacement trees with new specimen trees. At present, the Council undertakes tree planting and consideration will be given to the Council's replanting plans where specimens have been lost to Ash Dieback. The Council will also work to attract grant funding for replanting and will actively engage the voluntary sector to support plans for replanting in these locations.

Private landowners will be expected to shoulder a considerable financial burden when served dangerous Ash Tree notices by the Council. Therefore it is likely that relationships between private tree owners and officers will become strained where the Council requires works to be carried out and is unable to offer any financial assistance.

6. Conclusion

It is evident that the implications of addressing the health and safety effects of Ash Dieback disease can be considerable. This has come at the most financially challenging time as the Council remains to be faced with local government austerity with budgets and priorities further impacted by the Covid19 pandemic and Cost of Living Crisis placing burdens on already severely restricted resource.

The Council will take a pragmatic approach to managing the impact of Ash Dieback focussed on risk to the public and property. It will prioritise works to keep the public safe, but financial constraints will limit the management of the disease in low risk areas. The Council will focus prioritising replanting through its annual planting regime in areas of greatest priority and through securing grant and voluntary sector support.

12. References

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13. Acknowledgements

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2 West Sussex County Council - Ash Dieback Action Plan

3 New Forest District Council – Ash Dieback Action Plan

4 The Forestry Commission – The case for trees