Shrewsbury Town Council

Ash Dieback Action Plan.

Jim Goldsmith, Countryside and Greenspace Manager.

June 2025.

Summary updated for 2025.

Ash dieback *(Hymenoscyphus fraxineus)* is a fungal disease originating from Asia that is killing our native European Ash *(Fraxinus excelsior)* in large numbers. The disease has been present in the U.K since the early 2000's, from imported tree stock but also by wind-blown spores from the continent. The disease had been seen by STC staff to be affecting Ash trees in Shrewsbury in increasing numbers and in 2020 the first edition of this action plan was created. Five years on and with five years of annual ash tree surveys and work undertaken by the Town Council staff, this update brings together the latest guidance and information to take us to 2030.

There are an estimated 2 billion Ash trees in the U.K and it is one of our most abundant trees in Shropshire and Shrewsbury. The benefits of Ash are numerous, it helps to reduce pollution and flooding, stores carbon, as well as supporting many native species of wildlife. The loss of many of our Ash trees will have a detrimental effect on the landscape of Shrewsbury, current evidence suggests at least 50% mortality of our non-woodland Ash with higher 70-85% mortality expected in woodlands.

These figures are still reliable five years on. The original survey in 2020 saw a total of 10,000 ash trees counted, with the majority of these on Countryside land (8,500) with an error rate of approx. 20% due to difficult conditions while surveying meaning that the real count would likely be around 12,000 ash trees under our management. Using the intermediate 70% mortality we could expect to lose 8,400 trees.

Only trees with a diameter at breast height (dbh) of 4cm and over were counted, a tree of 4cm dbh would be recognisable as a tree rather than a sapling or a seedling for example. Ash trees seed profusely and during the survey it was noted that the number of smaller saplings and seedings far outweighed the trees counted. So, the actual number of ash trees is likely to be in the tens of thousands.

This updated report and action plan will allow us to understand the current situation in Shrewsbury. It will outline the continuing need to raise awareness, plan our

response, the actions we will need to take to mitigate the disease and finally, the recovery measures to restore our landscape in the aftermath of Ash dieback.

This is one of the biggest operational issues to affect the Town Council's Grounds Maintenance Team for decades. There is no "Do Nothing" option as the tree stock is continuing to show signs of the disease taking hold. We need to work with our Colleagues at Shropshire who are currently working on the County approach to managing their tree stock. This too will have implications on the new Horticultural Service Level agreement/delegated function as we will be required to act on both the Town Council's tree stock and Shropshire Council's tree stock. We need to develop awareness of all staff, members of the Council and the public to Ash dieback to ensure we can maximise the support and resources.

Summary of ash dieback work undertaken since 2020.

In 2020 I was tasked with writing the Ash Dieback action plan and to complete a baseline survey of the Town Councils ash tree stock raising any work which would need to be completed during the following winter.

Since 2020, annual summer surveys have been completed by me and more recently Adam Clifford (Countryside Ranger), these have been purely on a risk based approach, so all trees near any targets e.g. all pathways, gardens, public open areas, benches, play areas, roads etc have been surveyed and given a risk rating, with those requiring work further inspected and work recommended/issued to either the Countryside and/or the tree team.

In 2020 the total number of trees requiring work was:

40 on Countryside land, 9 on other Town Council land, total = **49** with 30 to be replaced with new planting

2021: 66 on Countryside land, 9 on other Town Council land, total = **75** with 32 to be planted.

2022: 40 on Countryside land, 8 on Other Town Council land, total = **48** with 35 planted.

2023: 83 on Countryside land, 14 on other Town Council land, total = **97** with 40 to be planted.

2024: 174 on Countryside land, 26 on other Town Council land, total = **200** with 15 planted.

Total requiring work = **469.** Total re-planted = **152.**

There was and continues to be a marked difference between disease prevalence on countryside sites and non-countryside sites, this may be due to the denser proximity of trees to each other and other environmental conditions found on Countryside sites (discussed in 2.1).

An issue raised during the survey of 2020 was the lack of any council owned tree software, this meant surveys were completed using paper forms and maps, many of which were out of date. After discussions with various suppliers, we purchased a subscription to TreePlotter which holds real time information of our tree stock mapping and can be used to issue work to staff by location, type or priority. TreePlotter is a powerful piece of software which can also be utilised elsewhere, the Countryside team are currently using it to plot Himalayan Balsam and to log and conduct surveys on the Town Councils veteran/ancient tree stock.

The increase in ash dieback work has so far successfully been absorbed into the work schedules of the Countryside team and the tree team with the two teams working well together. Ash work generally takes up most of October until Christmas. We have seen MEWP work and hire costs increase yearly and more climbing work for the tree team on Countryside sites. Some trees that can't either be felled from the ground or where MEWP access is impossible have had to be removed earlier than usual, as leaving the tree too long would make it unsafe for the climber.

The 152 newly planted trees require aftercare via mulching and watering. We have been quite lucky with the wet summers of 2023 and 2024 that we haven't had to worry about watering too much but during the hot summer of 2022 we had to water numerous times. We have installed notices on trees near to houses asking residents to water their trees. Through this enhanced after-care, losses have been minimal at around 10%.

There are 7 species of tree recommended as replacements for ash (further info in 6.2) with a large bought in potted tree representing a considerable investment of £60 - £120. To mitigate this cost somewhat I have undertaken to purchase annually, as an investment, a number of small whips (£1 - £1.50) of each species to grow on with the

help of the greenhouse staff and by utilising the new tree nursery at our weeping cross depot. This will hopefully in the next 4-5 years create a supply of large replacement trees ready to plant.

2025 sees a review of this action plan but also another complete survey of our ash stock. As per the 2020 plan this should help the Town Council plan our response to the disease for the next 5 years taking us to 2030.

I have attached copies of the 2020 reports and once the 2025 survey is complete, I will forward a 2025 update report on to Senior Management and Councillors.

Table of Contents

1. Action plan aims and objectives.

- To identify, communicate and address the risks of Ash Dieback (ADB) on Shrewsbury Town Council (STC) land.
- Identify and manage the risks from the disease to the environment including biodiversity and effects to landscape. To include both woodland and non-woodland trees.
- Identify and manage the risks to public safety and infrastructure from diseased or falling trees.
- Identify actions that are a priority because they pose a short-term major risk, such as to public safety or damage to property. And those that pose a longer-term risk such as loss of tree cover and diversity and require long term planning and budgeting.
- Consider both a worst-case scenario, where over 90% of Ash die or are clearly dying within a ten-year period, and a less severe scenario, where about 50% of Ash are affected.
- Identify the likely costs of responding to the disease and thereby identify where extra resources will be needed.
- To update the plan with new guidance available in 2025 and to review the past five years of ash dieback work.

2. Ash and Ash Dieback.

2.1 What is Ash Dieback?

Ash dieback affects Ash and other *Fraxinus* species of trees and is caused by a fungal pathogen *Hymenoscyphus fraxineus* (previously known as *Chalara fraxinea*). The fungus arrived from Asia to Europe during the 1990's and spread rapidly across the content. Although the first official record in Britain was in 2012, evidence now suggests it arrived here earlier, with analysis demonstrating trees dying from the fungus in 2004.

This invasive fungus causes a range of symptoms from foliar leaf spots to branch dieback to the death of Ash *Fraxinus excelsior* trees and some other *Fraxinus* species. Once infected, most trees will die. A few Ash trees may survive the infection because of genetic factors which give them tolerance to the disease. In non-woodland situations, the percentage of the UK's Ash trees that are likely to be tolerant to the fungus is uncertain. In woodlands, evidence in December 2018 suggests mortality rates may be as high as 70% and 85%. Evidence from Europe suggests that around 10% of trees were found to be moderately tolerant to the disease, with 1-2% having high levels of tolerance.

The environment also has a role in how trees decline from ADB, with trees growing outside of optimal conditions declining more quickly. The precise speed of decline of any individual tree is currently impossible to predict and will be influenced by other factors including soil type, soil moisture levels and topography. It has been seen on trees within Shrewsbury that close grown scrub or woodland with the prevalence of ash seems to have a much higher incidence of disease when compared to less crowded open grown trees. It is thought that this may be due to higher moisture levels within woodland leading to a higher fungal spore load within the canopy. Anecdotally, the author has seen higher levels of infection in years following a wet summer in the previous year. Also drought is certainly a factor in trees declining more quickly in the current year, so a wet summer followed by a very hot one the year after could mean many diseased trees, although this hypothesis is yet to be tested.

Infection mostly occurs through sexually produced ascospores landing on leaves, but infection can also occur at the base of trunks (the root collar), probably entering the tree through lenticels. The wind-borne ascospores are produced from fruiting bodies (small white mushrooms) on the central stem (the rachis) of last year's fallen Ash leaves.

Figure 1: Fruiting bodies on the stem of last years leaves. *(Hortweek.com)*

As it grows, the fungus destroys the infected tree's phloem and xylem, which results in the tree being unable to move water and nutrients around its structure. This lack of water and nutrient movement will cause the branches of the tree to fail and the tree 'dies back', hence the name. Repeated loss of nutrition and water, the depletion of energy reserves because of the lack of leaves, and the invasion of secondary root killing pathogens (e.g. *Armillaria*), causes the tree to become brittle, lose branches and eventually succumb to the disease.

Where basal lesions are observed these can develop into a butt or root rot and the affected trees can become unstable and dangerous very quickly. The rot is usually associated with other secondary pathogens such as honey fungus and can occur without any obvious dieback symptoms in the canopy. This makes identifying 'dangerous' Ash trees considerably harder. Basal lesions have been seen extensively across Europe and seem to be associated with areas of dense Ash populations, and therefore spore load, where infection has been present for a long time. Wet woodlands seem to be at highest risk from this form of infection in Europe, but further evidence is needed to assess the UK context.

Figure 2: Basal lesion on a young Ash tree. *(marketbusinessnews.com)*

Ash Die Back is the most significant tree disease to affect the UK since Dutch Elm Disease. It could lead to the decline and death of the majority of Ash Trees in Britain, and it is estimated it has the potential to infect more than 2 billion Ash trees across the country. This equates to some 5 million in Shropshire with a significantly large sum in Shrewsbury.

2.2 Where is Ash Dieback?

Ash dieback was first recorded at a nursery in Buckinghamshire in February 2012. This was followed by the identification of the infection of a new planting in a car park in Leicestershire in May, and subsequently on young trees in Ashwellthorpe Woods in Norfolk in the autumn of the same year. By May 2018, this fungal disease was found widely throughout the UK. The fungus may occur over more of the UK than has been officially reported, as the symptoms can be difficult to detect, especially in large trees. Just because an area of the UK may not currently be shown on the maps to have ADB, it does not mean it is not there.

During the survey conducted during 2020 and through subsequent annual surveys it should be noted that all Countryside sites under our ownership and many of our other areas now at least have signs of the disease. It is particularly prevalent in our woodlands.

3. Benefits of trees and woodland.

Ash is one of the UK's most abundant species of tree with a recent Tree council report citing there is an estimated;

- 126 million Ash trees in woodlands.
- 27-60 million in non-woodland settings.
- 4 million urban Ash, 4.1% of all trees in towns and cities.
- Almost 100,000km of Ash dominated hedgerow making it our most abundant hedgerow tree.
- 2 billion total Ash trees in the UK from seedlings through to mature trees.
- 10,000 ash trees surveyed on Town Council Owned land in 2020 (over 4cm dbh).

It is easy when dealing with an outbreak of a disease to focus entirely on the cost to the council in monetary terms. We must also consider the huge benefits of Ash trees at both a landscape scale, their ecosystem services and habitat provision and the long-term effects of the loss of or reduction of those benefits may have.

3.1 Historical and wellbeing benefits.

- All trees benefit our physical and mental health. Ash, as an often-majestic species when mature, is particularly beneficial in this respect. Ash trees can grow to over 35 metres in height and have a widely spreading crown often drooping down to the ground before turning up at the ends. Its silhouette along with its velvety black buds in opposite pairs make it easily identifiable even in winter.
- Ash trees were traditionally used to ward off evil spirits and were used for its medicinal properties. The Ash tree is commonly believed to be the Norse 'tree of life' Yggdrasil of which the first man 'Ash' was created from.
- People have worked with Ash timber for years. It is one of the toughest hardwoods and absorbs shocks without splintering. It is the wood of choice for making tools and sport handles, including hammers, axes, spades, hockey sticks and oars. An attractive wood, it is also prized for furniture.

3.2 Root system benefits for soil stability and the prevention of flooding.

Trees and woods can help to mitigate against flooding in the following ways:

- Water penetrates more quickly and more deeply into soils under and around trees (higher infiltration rates) leading to less surface run-off and greater water storage within soils.
- Trees, shrubs and deadwood along streamside's and on floodplains act as a drag on flood waters, holding back water and slowing the flow at times of flooding.
- Trees protect soil from erosion and reduce sediment run-off into water bodies, which in turn helps the efficient passage of flood waters downstream.
- The canopy of trees slows the speed at which rain reaches the ground, with some rain also evaporating into the atmosphere (especially in spring and summer in the case of native broadleaf trees).
- The sheer abundance and large canopy of Ash means that the species is more effective at preventing water reaching the ground, and facilitating soil water storage and infiltration, than most other trees.

3.3 Sequestration of carbon.

- The tree delivers high carbon capture through rapid woody growth, but the rapid recycling of its leaves is poor for soil carbon storage. Ash roots may be particularly good at reducing N2O release from soil, a powerful greenhouse gas.
- Ash trees can live to 400 years old, storing the carbon they have taken in through photosynthesis in their woody tissue.

3.4 Biodiversity importance.

- An estimated 955 species rely on Ash for all or part of their life cycle including mammals, birds, mosses, fungi, lichens and invertebrates.
- Ash dominated woodlands are a type of habitat that is created by the specific way that Ash trees grow and shed their leaves each year. The late budding and airy leaf pattern allows light to penetrate through to the woodland floor

providing ground flora optimal conditions to grow, these in turn support a high number of pollinators.

- Ash leaf litter is high in nitrogen and is easily broken down on the woodland floor, increasing nutrient levels and raising pH. This is beneficial to the decomposers such as fungi, earthworms and soil communities.
- The seeds or 'keys' of Ash trees are an important food source for a number of animals including wood mice and bullfinches

3.5 Particulate matter removal.

- Ash is quite poor at capturing particulates because it has hairless leaves and a short leaf season. Still, it is such a common tree in our towns and cities that its smaller benefit will be increased by its extent.
- While it does not cast dense shade and is in leaf for a shorter period than most other trees, Ash nevertheless is effective at reducing urban air temperatures through evapotranspiration.

4. Impacts.

4.1 Landscape.

The extent of Ash trees and the prevalence of the disease in Shrewsbury is yet unknown, but it is certain to affect the landscape in a negative way. Young trees can succumb to the disease quickly whilst larger trees are known to hold on for longer, but once infected they will often be attacked by a secondary infection (e.g. honey fungus) and die.

Enhancement of the landscape is a key consideration in STC's Tree and Landscape Strategy. The strategy places an emphasis on having a diversity of species and ages to meet the needs and challenges of the future.

It is important that we continue to include a replanting programme in the action plan to at least make up for losses, but ideally to improve and increase the diversity of tree cover.

4.2 Ecosystem services.

Ecosystem services by definition are "The important benefits for human beings that arise from healthily functioning ecosystems". The ecosystem services of trees are numerous and important, and some have been mentioned above.

Any loss of ecosystem services should be considered and mitigated against by a robust replanting programme. Replanting has consisted of species that will mimic the ecosystems services of Ash as much as is possible. Newly planted Ash replacement trees are also large standards of around 7-8 years old, this allows for the tree to replace the functions lost by the removed ash more quickly than for example a small 2-year-old tree (commonly called a whip).

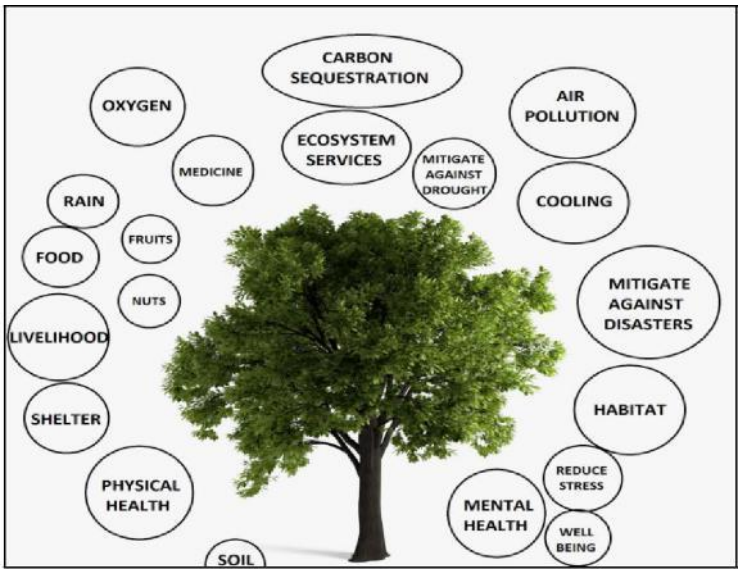

Figure 3: Some of the many ecosystem services provided by trees. *www.thegreenmarketoracle.com*

4.3 Biodiversity.

An estimated 955 species rely on Ash for all or part of their life cycle including mammals, birds, mosses, fungi, lichens and invertebrates. An Ash associated species is determined by its use of Ash trees, either for nesting/roosting e.g. birds and bats, as a food source e.g. mammals and invertebrates, habitat on which to live e.g. lichens and bryophytes, or to hunt for food living on the tree in the case of birds and insects.

Of the 955 species associated with Ash, seventy-one species are assessed as high risk and considered to be in danger of either going extinct or subject to severe population declines due to projected impacts of ADB.

One hundred and seventy species are assessed as medium risk and may decline in abundance following loss of Ash, while 383 species are assessed as low risk and may also decline but are unlikely to be as greatly affected by the loss of Ash. 330 species are defined as cosmopolitan in their use of Ash and considered unlikely to be impacted by the loss of Ash. One hundred and seven of these species are classed as having an obligatory or high association with Ash, relying on it completely for their life cycle and are unlikely to be able to survive without Ash trees in the landscape.

4.3.1 Woodlands.

Ash dominated woodlands as previously mentioned are a type of habitat that is created by the specific way that Ash trees grow and shed their leaves each year. The late budding and airy leaf pattern allows light to penetrate through to the woodland floor providing ground flora optimal conditions to grow. Ash leaf litter is high in nitrogen and is easily broken down on the woodland floor, increasing nutrient levels and raising pH.

Forty-seven species of plant have been identified as being particularly associated with Ash woodlands. Many of these are recognised as ancient woodland indicator species and five appear on the Vascular Plant Red Data List for Great Britain.

Loss of Ash is predicted to influence ground flora composition. Extra light combined with disturbance from woodland management and the high nutrient content of Ash woodland soils will allow grasses and bramble to gain control, shading out the existing plants.

5. Impacts of ADB on Shrewsbury Town Council.

The impacts of ADB on STC continue to be numerous, for ease of viewing they have been broken down into the following categories.

5.1 Health and safety impacts.

- Potential for death or injury because of ADB related accidents.
- Increased health and safety issues due to declining Ash trees on roads, countryside sites, housing estates, schools, cycleways, bridle paths and footpaths.
- Risks to staff carrying out work on affected trees due to their brittle nature and unpredictable holding wood during felling.

Safety of staff and public was and continues to be the top priority for the Council. Staff, particularly climbing staff have been apprised of the danger of working with diseased ash trees via The Arb Association Industry Best Practice for Arboriculture (appended) which highlights the hierarchy of tree work at height. This promotes work from the ground where possible and where work at height can't be avoided, to then consider mechanical means as a starting point. Work using MEWP's (cherry pickers) has increased significantly over the last five years and Council MEWP hire costs have risen consequently.

The Forestry Contracting Association produced Ash Dieback Chainsaw Operator Guidance has been given to each member of Chainsaw qualified staff and should be passed on to any new staff with qualifications or those recently trained (appended).

5.2 Economic impacts.

- Increased liabilities in cases of death or injury as a result of ADB related incidents.
- Increased liabilities as a result of risks to adjacent land and property from trees falling shedding branches.
- Inadequate staffing levels for the work required.

- Cost of purchasing and maintaining extra equipment used in tree work.
- Cost of hiring equipment e.g. MEWP and competition for these resources from other authorities and private sector.
- Cost of purchasing a council owned MEWP.
- Cost of purchasing survey equipment and handheld tablets/smart phones.
- Cost of training new staff and developing the skills of current staff to manage the work.
- The cost of employing skilled tree contractors to undertake work STC staff are unable to complete. There is also likely to be a shortage of contractors and costs may rise because of this.
- Additional costs of the disposal of waste products from felled, diseased Ash.
- Increased direct/indirect costs due to increased flood risk due to the loss of water retaining Ash trees.
- Costs of replanting needed to retain ecosystem services provided by Ash e.g. flood reduction, urban shading, carbon storage and habitat for biodiversity.

5.3 Reputational damage.

- Potential for disruption to site users from path closures/road closures.
- Political and reputational risks as a result of negative press over ADB management and public outrage and/or anxiety.
- Potentially strained relationships with other landowners/homeowners as ADB spreads.

5.4 Environmental impacts.

- Landscape changes with impacts on tourism and recreational opportunities.
- Losses to ecosystem services such as reductions in air quality, potential for increased flooding, biodiversity losses, increases in noise levels adjacent to roads, losses of visual screens.

- Risks to protected species / sites through alteration of habitat structure, stability and composition e.g. loss of bat breeding/ feeding sites.
- Losses of carbon storage and sequestration.

6. Recovery from ADB.

Ash provides many and varied benefits as mentioned previously. To replace these benefits will be, at least in the short term, impossible. Newly planted trees will not provide the same habitat and ecosystem services as an old tree for perhaps 100 years or more depending on the species. There will be a “hit” to biodiversity and ecosystem services wherever ADB is prevalent.

It would seem prudent to compliment replanting by attempting to reduce the negative effects of ADB as much as possible. Some things to consider are:

- Where possible, keep deadwood, both standing and fallen.
- Where trees do not pose a risk to roads, paths or buildings, don’t fell.
- Keep a record of potential resistant Ash and protect them.
- Encourage natural regeneration in woodland instead of needlessly replanting.

No one species of tree can replace Ash, a report from Forestry Research found that some species such as oak and beech will host a large proportion of the species associated with Ash. However, they do not replicate the ecosystem functions provided by Ash, particularly in a woodland setting. Therefore, we should aim to plant a mix of trees to fulfil as many of the functions lost as possible.

Alternative tree species	Ecosystem function	Species use
Most suitable	Alder (*Alnus glutinosa*)	Oak (*Quercus robur/petraea*)
	Small-leaved lime (*Tilia cordata*)	Beech (*Fagus sylvatica*)
	Common walnut (*Juglans regia*)	Sycamore (*Acer pseudoplatanus*)
	Rowan (*Sorbus aucuparia*)	Birch (*Betula pubescens/pendula*)
	Field maple (*Acer campestre*)	Alder (*Alnus glutinosa*)
	Sycamore (*Acer pseudoplatanus*)	Rowan (*Sorbus aucuparia*)
	Aspen (*Populus tremula*)	Aspen (*Populus tremula*)
	Wild cherry (*Prunus avium*)	Field maple (*Acer campestre*)
	Birch (*Betula pubescens/pendula*)	Common walnut (*Juglans regia*)
Least suitable	Beech (*Fagus sylvatica*)	Wild cherry (*Prunus avium*)

Table 1: Eleven broadleaved tree species ranked from most suitable to least suitable as alternatives to Ash as assessed by provision of ecosystem function (litter decomposition rate, litter quality and nutrient cycling) and used by Ash-associated species. *Forest Research, 2017.*

6.2 Replacement trees.

When replacing Ash, it is important to consider all the challenges that ground conditions and surrounding land use may pose. The aim should be to "grow the right tree in the right place", considering soil type and local stresses such as over shading and root compaction. The current landscape should be a consideration along with the management requirements of the species to be planted.

We should consider a diverse range of species to encourage a resilient landscape. Species such as aspen, alder, field maple, sycamore, birch, Rowan, along with native oaks, have some similar traits.

There is a consensus for the 3,2,1 formula when planting replacement trees. That is: At least 3 new trees for loss of a large tree, 2 for a medium tree and 1 tree for a small tree. We should treat this as a minimum guide, as mentioned previously it will take many years for the replacement trees to perform the same functions as those lost, natural processes will also take its toll and thin out some of the replacement trees. It is believed that some trees like oaks have a mortality rate of 50% every 100 years (higher for seedlings and saplings), using this simple formula would call for at least 6 young oak trees to be planted for there to be any chance of one of those

reaching 200 years old, 24 for a 400-year-old tree! Mortality rates for faster growing species could be higher.

Natural regeneration should be encouraged where possible, particularly in woodlands. The community woodlands under STC ownership are already in a process of being thinned as part of a management plan to try to limit the effects of ADB on them. Some of the aims are to limit the spread of ADB between individual trees by increasing air flow in the woodlands; to reduce the reliance on Ash as the dominant species; to promote oak as the new dominant species but to encourage a diverse range of species and ages/sizes. Much of this is being achieved by under-planting with native species but by also promoting natural regeneration.

7. Action plan table.

The action plan is broken down into the following categories:

Section 1: Plan delivery, communication and strategic planning.
Section 2: Short term risks, to public safety.
Section 3: Longer term risks, to the environment.
Section 4: Survey, monitoring, and bio-security.
Section 5: Training.
Section 6: Risks.

Action plan item.	Topic.	Key people/bodies affected.	Actions.	Priority. H/M/L	Est costs.	Suggested lead.
1	Action plan review in 2030.	STC management.	Review this plan and amend as required. Review by professional arb consultant? Shropshire Tree officers?	H		JG
2	Action plan delivery.	All STC employees/ councillors.	Make all staff/councillors aware of issue and what to look out for (bulletin).	M		JG, MB
3	Communication	Councillors.	Publish the finished plan to councillors.	M		MF

4		Public/other bodies.	Produce a communication strategy. Targets? Involve other organisations to promote? Wildlife trust etc.	M		JG, MB
5		Neighbouring landowners	Communicate with landowners to inform of their responsibilities with trees near to our land.	M		AC
6	Ash survey.	Countryside Ranger, Countryside manager.	Conduct full survey of ash stock on Countryside and Town Council land. Produce a report to compare to 2020.	H		JG, AC
7		Management.	Update TreePlotter licence in 2027	H		JG
Action plan item.	Topic.	Key people/bodies affected.	Actions.	Priority H/M/L	Est costs.	Suggested lead.
8	Ash trees near to public rights of way.	Management/ survey team/tree team.	Conduct surveys using risk matrix. Report to relevant management. Gain consents for work (TPO, road closure etc). Perform relevant ecological surveys if applicable. Remove or conduct remedial work on trees within time scales shown on the survey.	H		JG
9	Ash trees near to roads.					
10	Ash trees near	Management/	Conduct surveys using risk matrix.	H		JG

	to wayleaves.	survey team/tree team/network operator.	Report to relevant management. Inform/consult with network operator. Network operator responsible for work scheduling and carrying out.			
Action plan item.	Topic.	Key people/bodies affected.	Actions.	Priority H/M/L	Est costs.	Suggested lead.
11	Landscape.	STC	Devise a plan for replacement of lost trees. Base replacements species on guidance to increase resilience and species diversity. Species choice based on replacing current Ash ecosystem services while being suitable for urban surroundings. Allow natural regeneration where possible (woodland). Produce “council” grown replacements.	M		JG
12	Biodiversity.	Countryside/ Tree team.	Identify any resistant Ash trees and protect where possible. Monitor advances in techniques to test trees for resistance. Identify trees that can be safely allowed to die standing.	L		JG, AC

			Identify where fallen deadwood can be left or piled.			
13	Ancient/ veteran/ notable trees	Countryside/ Management	Ensure important trees are managed sensitively with the aim to retain for as long as possible. Consider professional advice.			JG, MP
Action plan item.	Topic.	Key people/bodies affected.	Actions.	Priority H/M/L	Est costs.	Suggested lead.
14	Survey.	Survey team/Countryside team.	Feedback improvements and limitations of survey process and improve where necessary.	L		JG, AC
15	Monitoring.	Survey team/Countryside team/ Management.	After initial survey decide how often it will need repeating.	L		Complete
16	Bio-security.	Survey team/Countryside team/ Management.	Decide on level of bio-security to apply to surveys. (simple spray/wash and spray etc).	H		Complete

Action plan item.	Topic.	Key people/bodies affected.	Actions.	Priority H/M/L	Est costs.	Suggested lead.
17	Protected species.	Survey team/Countryside team/Tree team/chainsaw operators.	Organise training in protected species by a professional ecologist or similar.	M		JG
18	Tree survey upskilling.	Survey team/Countryside team/Tree team/ Management	Identify staff for training on tree surveying e.g. basic tree survey course and intermediate tree survey course.	L		JG
19	Practical tree skills.	All STC staff	Identify staff for chainsaw/pole saw/chipper training to allow for greater demand. Allow all new users time to gain experience before felling dead/diseased/dangerous trees.	M		DP, JG
20		Current trained staff.	Identify currently trained staff to send on level 3 courses. (felling large trees, severing uprooted and windblown trees, assisted felling, aerial tree rigging, chainsaw from a MEWP).	L		DP, JG

21	Tree work.	All chainsaw users.	Ensure all chainsaw users/climbers are aware of the added risks of working on/under ADB affected trees. Issue relevant and new safety guidance to all chainsaw trained staff.	M		JG, MH
22	Safety training for arborists	Tree team.	Organise training for our arborists on what to look for in terms of making the tree unsafe to climb and when to use mechanical aids.	H		
Action plan item.	Topic.	Key people/bodies affected.	Actions.	Risk addressed	Est costs.	Suggested lead.
23	Chainsaw safety/ felling safety	All chainsaw users.	Allow all new chainsaw users time to work with more experienced users to gain confidence. All teams should have at least one experienced user. All users should be aware of associated risks of working on/under ADB affected trees.	Health and safety.		DP, CT, MH, JG
24	Tree work on public sites.	STC staff/public.	Use communication strategy to reduce negative press. Ensure all staff are fully informed on objectives.	Reputational.		JG, MB
25	Loss of bird/bat nesting and	Countryside team/Tree team/	Leave habitat where possible. Where that isn't possible consider introducing bat/bird boxes into	Environmental /		JG, AC

	roosting sites.	**Management**	**remaining trees.** **Community involvement?**	**Reputational.**		

8. Appendix.

- Forestry Contracting Association Ash Dieback Chainsaw Operator Guidance - MT Edit[8].docx
- Arboricultural Association Arboricultural Association - Industry Code of Practice: Tree Work at Height
- Link to copies of base surveys in 2020 Ash dieback 2020 survey reports for Council