membership resources

Briefing 20-23 July 2022

Ash Dieback Survey Results 2022

To: All Chief Executives, Senior Policy Officers Main Contacts and APSE Contacts in England, Scotland, Wales and Northern Ireland

Key issues

- Ash Dieback – a fatal disease of Britain's native Ash trees (*Fraxinus excelsior*) – is one of the worst tree disease epidemics the UK has ever seen. The disease is caused by a fungus that originated in Asia but is thought to have arrived in Europe on exotic plants in the early 1990s, where it has devastated native Ash species which have very little natural immunity.
- It is estimated at least 75% of the UK's ash population could be lost and that whilst 5% of the UK Ash trees may have some degree of tolerance or immunity, it may take up to 50 years for Ash numbers to fully recover, at a time when there is a national drive to increase tree numbers to combat climate change and carbon emissions.
- The management of Ash Dieback is proving a real challenge for tree managers as to whether trees should be felled, or allowed to stand, in order to develop resistance to the disease and protect species which are reliant upon the Ash for their home. There is also the issue of public safety with regards to falling branches, a symptom of the disease.
- As a consequence of the above APSE has received a number of enquiries as to how local authorities are dealing with this insidious disease. Rather than to ask a series of individual questions to members, it was decided a wider survey would be more effective in gathering UK councils' responses to this issue.
- The responses to the survey show the work local authorities are currently undertaking to address the problems this disease is posing, but it also shows the limitations facing many and the need for more support if this disease is to be dealt with.

Following a number of enquiries about how local authorities are dealing with the issue of Ash Dieback, APSE decided that a wide-ranging survey would prove helpful to identify the concerns and actions being taken by local authorities to address this issue.

Some of the key questions that were repeatedly being asked by members included:

- The estimated numbers councils will have to remove over the next 2, 5 and 10 years and beyond.
- The estimated costs for each of these periods.
- The total eventual costs councils envisage.
- The eventual loss (as a percentage) of their total Ash population.
- How councils are monitoring and recording data.
- Whether councils will be replacing the lost trees with new trees and which species they will be planting.
- Where the new trees will be sourced from.
- Any innovative approaches they are using to manage the problem of Ash Dieback.

APSE therefore distributed a survey in May 2022 to gather information on the above issues. What follows is the responses to the questions asked.

By the close of the survey period APSE received 42 individual local authority responses.

Responses

Q1. How many trees affected by Ash Dieback do you expect to remove in the next 2, 3-5 and 6-10 years?

The basis behind this question was to identify the rising scale of infection levels and potential resources required to deal with the ongoing problem. The responses were as follows:

Next 2 years

- 0-100 trees = 42.5%
- 101-1000 trees = 17%
- 1001 – 2000 trees = 13%
- 2001 – 3000 trees = 0%
- 3001 – 4000 trees = 0%
- 4001 -5000 trees = 5%
- Over 5000 trees = 2.5%
- Unknown 20%

3-5 years

- 0-100 trees = 19.5%
- 101-1000 trees = 34%
- 1001 – 2000 trees = 2.5%
- 2001 – 3000 trees = 2.5%
- 3001 – 4000 trees = 0%
- 4001 -5000 trees = 2.5%
- Over 5000 trees = 24%
- Unknown 15%

6-10 years

- 0-100 trees = 10%
- 101-1000 trees = 29%
- 1001 – 2000 trees = 5%
- 2001 – 3000 trees = 0%
- 3001 – 4000 trees = 2%
- 4001 -5000 trees = 2%
- Over 5000 trees = 33%
- Unknown 19%

It is apparent that there is less demand in the coming two years to fell and remove diseased tree than in the coming 3-10 years which increases significantly over time, from 2.5% in the next two years to 33% in the next 6-10 years indicating the ongoing and increasing impact of the disease.

There is therefore some time to develop plans and identify resources and funding to address the future needs which Ash Dieback will place on local authority budgets and officers' time.

Q2. What do you estimate the costs to be to carry out these works?

Next 2 years

- £0 -£100k = 49%
- £101k – £250k =8%
- £251k - £500k = 5%
- £501k- £1 million = 8%
- Over £1 million = 8%
- Unknown 22%

3-5 years

- £0 -£100k = 35%
- £101k – £250k =12.5%
- £251k - £500k = 7.5%
- £501k- £1 million = 5%
- Over £1 million = 22.5%
- Unknown 17.5%

6 – 10 years

- £0 - £100k = 20%
- £101k – £250k = 10%
- £251k - £500k = 8%
- £501k- £1 million = 5%
- Over £1 million = 35%
- Unknown 22%

Not surprisingly, over time costs are set to increase, as a greater number of trees succumb to Ash Dieback. What is of concern is the scale of these costs. When referring to the above responses it should be noted that many of the reported costs, some running into tens of millions for a single authority, are larger than the current total for the authority's greenspace budgets. These costs must be accepted at face value, especially when considering it has been estimated that up to 95% of Ash trees will die as a result of this disease, amounting to over 100 million trees in the UK. Again, as with the tree numbers at risk there is a long-term impact on budgets with just 8% anticipating that Ash Dieback will cost over £1 million in the next two years rising to 22.5% suggesting costs will reach this figure in the next 3-5 years and 35% of respondents believing that their costs will reach over £1 million in dealing with Ash Dieback in the next 6-10 years.

Q3. What do you estimate to be the eventual total costs for dealing with the impacts of Ash Dieback?

- Under £250k = 14%
- £251k - £500k = 5%
- £501k - £1 million = 2%
- £1.1 million - £5 million = 29%
- £5.1 million - £10million = 5%
- Over £10 million = 24%
- Unknown = 21%

Again, quite stark reading. The cost of dealing with Ash Dieback will be beyond the capabilities of current local authority budgets and considering the health and safety aspects of falling branches, a common result of the disease, then there will be a pressing need for

Governments to help in dealing with this UK wide problem in a coordinated and sustainable way both environmentally and financially.

Q4. What percentage of diseased trees are located on:

- **Council owned land**
- **Privately owned land**
- **Others**

This question assumes a certain degree of knowledge as to the local authority areas total tree stock, and an ability to identify where trees are growing in relation to land ownership.

The results showed that there is a good understanding of the state of trees which are infected on council land by the acknowledgement that almost a third were reporting infection rates of up to 50% of their Ash tree stock at this current time, and a similar proportion of trees on private land. Due to the mammoth task of inspecting all of a council's tree stock, the actual infection rates may be much higher and clearly many authorities are still gathering data on tree numbers. Perhaps not surprisingly knowledge about infection rates on other land such as that owned by charities and NGO's is patchy, but it is probably not unreasonable to assume infection rates are likely to reflect those seen on council and private land.

Q5. Which areas of council owned land are most affected by Ash Dieback (percentage score)?

- **Highway verges (10 - 40%)**
- **Parks and open spaces (10 – 30%)**
- **Woodlands (10-70%)**

Results were mixed regarding presence of Ash Dieback.

With regards to highway verges the most common response was that between 10% – 40% of highway verges have trees suffering Ash Dieback. In Parks and open spaces there were varied returns, but again the most common answers suggested Ash Die back was present in 10-30% of these spaces. Finally, and perhaps not surprisingly, in relation to Woodlands, presence ranged from 10% up to 70%. One authority stated that they have Ash Dieback in all of their woodland areas. It is worth noting that trees in woodlands with high proportions of Ash are likely to decline more quickly due to higher inoculation loads.

As a supplementary question (**Question 6**), asked whether local authorities undertook surveys for Ash Dieback in residential gardens – 41% stating that they did, which is reflected in the responses to the returns to the earlier question about the presence of Ash Dieback on privately owned land.

Q7. What do you estimate will be the percentage loss to your Ash tree population?

The responses to this question did not make pleasant reading, with over 75% of respondents expecting losses between 60 –95%, most reporting figures at the higher end of this scale. It may be that some of these figures are estimates based on industry reports of potential losses, but nevertheless it is quite clear councils are expecting significant losses of Ash trees.

Q8. How will you monitor occurrence of Ash Dieback and what will the actions be which you take to address the problem?

Most authorities responded that they have programmes of regular tree monitoring which over time will highlight any trees affected by Ash Dieback. Trees are often given a risk category based on the areas they are growing (e.g. at the side of a road), their level of maturity, state of health etc. But as well as traditional inspection regimes many councils have now created and adopted Ash Dieback Plans which identify specific actions needed to be taken to manage this problem. For advice on developing such plans it is worth referring to the Tree Councils' Ash Die Back Toolkit.

Authorities responding to the survey stated that they were now developing tree databases which not only identify the location of trees but also use photographs to monitor tree canopy coverage with many using 50% leaf loss as a prompt to remove diseased trees.

Other approaches include six monthly surveys on trees known to have Ash Dieback to ensure they are still in a safe condition or need removal.

Councils are also monitoring diseased Ash trees in private gardens and where the owner will not take any required action regards making the tree safe or removing it, then enforcement action is taken for non-compliance. One council also reported that they are actively thinning out Ash dominated woodlands to reduce future risks. Coupled to this is the comment that veteran Ash trees are being monitored to try to save them due to their biodiversity value as well as monitoring healthy Ash trees and reporting their state to interested bodes such as The Living Ash Project.

Importantly many councils are looking at tree replacement programmes to combat the expected loss of Ash trees over the coming years.

Q9. Will your local authority be replacing trees lost to Ash Dieback? If so, what species of trees will you be using to replace Ash Dieback losses?

Most respondents stated that they would be replacing lost trees using a wide mixture of native species including: Lime, Oak, Beech Birch, Hazel, Rowan Field Maple, Sycamore, Hornbeam, Elder, Willow, Aspen, Holly and Cherry.

Adopting a 'right tree, right place' approach is resulting in the widening of the tree palette to give greater resistance against existing and new pests and diseases.

Where appropriate respondents often stated that they would still plant non-native trees in order to both increase the range and opportunities for increased biodiversity and match the landscapes in which they are being planted, e.g., parks.

Interestingly, many respondents mentioned about any losses being allowed to naturally regenerate, and only if this fails will they consider replanting new trees.

Q10. Where will the new / additional trees be sourced from?

All respondents quoted using UK sourced trees with the required provenance and biosecurity protocols in place. Some also mentioned the use of council or community nurseries to provide replacement stocks, thereby ensuring the source of trees used in the future is known.

Only one respondent mentioned about using oversea sources, but with the proviso that the trees where suitably quarantined before being planted.

Q11. Do you have an Ash Dieback Plan?

Bearing in mind the previous questions, it was felt to be of value to ask whether local authorities are writing and adopting Ash Dieback Plans. Responses showed that 52% now had formal plans.

Q12. Do you have any innovative approaches you are using or developing to manage the problem of Ash Dieback?

Many authorities are focusing on software systems which help identify the scale of Ash Dieback and those trees affected. Using drive by surveys this is speeding up the traditional foot surveys and providing evidence as to where the problems are and allowing resources to be allocated to deal with any issues more speedily.

Regarding the trees themselves, more mature trees are being pruned back to reduce diseased limbs in the hope that they can be retained longer without the need to fell. Pollarding is also being used to prevent whole tree failure.

Regional forums are also popular with councils where best practice is discussed, one example being the offsetting of the cost of felling by partnering with a local contractor who is willing to buy the timber from felled trees assuming the quality is good. Councils are also linking with external agencies who have expertise in this area, e.g. The Tree Council, to share the latest information on Ash Dieback and how best to manage it. APSE's own Parks and Open Spaces Advisory Groups have also been utilised to share best practice and responding to the challenges of Ash Dieback issues

It was also made clear that accurate communication with the public is necessary, especially if a tree is to be felled to explain why this course of action has had to be taken.

Funding to address the issue of Ash Dieback is now being urgently sought across the councils responding to the survey and no doubt by others across the country.

Q13. Are there any other tree-related diseases you are now finding which may cause future issues (e.g., Oak Processionary Moth).

Most respondents see Ash Dieback as the main issue but other common diseases / pests included:

- Alder Leaf Beetle, with several respondents saying it had increased significantly in their areas.
- Horse Chestnut Leaf Miner which again was reported as a problem by a number of respondents.
- Bleeding canker in chestnuts, honey fungus, Acute Oak Decline and Phytophthora in larch were again common concerns.

It is clear that councils are now gaining greater awareness of the different pests and diseases which are appearing, often from plant imports and are developing greater levels of vigilance to try to stem or control these occurrences.

Q14.Do you feel Government is providing sufficient funding to local authorities to address the problem of Ash Dieback?

It will come as no surprise that 86% of respondents said no, with only 2% saying yes, the remaining 12% felt only to some extent were funds forthcoming.

A recent report estimated that the true cost of Ash Dieback will be over £15 billion, half of these costs coming in the next 10 years. It is therefore critical that action needs to be taken as soon as possible to manage infected trees without the need for widescale felling and disposal.

APSE Comment

This survey was carried out to assist those people who as part of their often-varied roles, are responsible for tree management, which is difficult enough in itself, and is now made all that much harder by having to deal with Ash Dieback and other pests and diseases waiting in the wings.

Recently both Governments across the UK, and various organisations have announced plans to massively increase the number of trees intended to be planted to help alleviate the effects of climate change and soak up the thousands of tonnes of carbon dioxide being emitted each year by the UK. It is estimated that UK woodland cover needs to increase from 13 per cent to 17 per cent – the equivalent of 1.5 billion new trees - in order to meet its pledge to reach net zero emissions by 2050, and it needs to happen quickly.

However, whilst making plans to plant all these new trees, Ash Dieback, is spreading across the UK and is likely to result in the loss of virtually all of Britain's Ash trees. The disease is

now found throughout the UK and there is no cure and very few trees are showing signs of long-term resistance.

This disease will cost more than just lost habitats for wildlife (there are estimated to be 955 species associated with Ash trees of which 45 are believed to have ever only been found on ash) and treasured woods for recreation. A new estimate of the economic cost of Ash Dieback, puts the price tag at £14.8 billion, which is around three times as much as estimates for the Dutch Elm disease crisis in the 1960s and 70s, largely because there are far more Ash trees.

Ash trees are the third most common tree in Britain after oak and birch - there are estimated to be around 150 million Ash trees in the UK. Therefore, with a mortality rate of up to at least 75% in natural forests, potentially the loss in tree numbers could be around 112 million trees, this is at a time when more trees are needed to combat the effects of climate change and carbon emissions.

Dealing with infected trees can be problematic as many argue that felling live Ash trees should be avoided due to the impact on amenity and biodiversity. But this needs to be measured against those infected trees which are in areas of high public access and the potential risks posed by falling branches, a symptom of Ash Dieback.

However, by allowing trees to continue to grow it is hoped greater levels of tolerance will be developed and natural selection will promote healthier trees in the future. An approach which seems to be being considered by respondents to this survey.

But despite this guarded optimism, as a precautionary note, there is equally the view that local authorities should consider planning ahead and budget for any felling that may be required. Which clearly from the results of the survey is estimated to run into millions of pounds over the next decade at least.

Dealing with Ash Dieback may very much be like trying to hold back waves, as the disease is now so entrenched in the UK's Ash tree population, but, that does not mean we cannot learn lessons, such as having the correct biosecurity measures in place to prevent the future importing of tree and plant diseases, if we are to ensure we can guarantee the future health of our trees and woodlands.

From the results of the survey, it is clear there will be a large expense involved in dealing with Ash Dieback, and it is unlikely local authority budgets alone will be able to deal with these costs. Therefore, over the coming years it will be anticipated that Government will need to step in, not only to promote the planting of new trees to address climate change, but also to help deal with the felling and removal of dead and dying Ash trees.

APSE will continue to search for the most up-to-date information on the fight against Ash Dieback and the most effective management methodologies being successfully used and share its findings with members via briefing notes, advisory groups and seminars.

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