Oxfordshire Ash Summit

22nd May 2019

Sylva Wood Centre, Sylva Foundation

Meeting Notes

Supported by Oxfordshire County Council

Summary

On 22nd May, a group of stakeholders with an interest in ash dieback in Oxfordshire, gathered together at the Sylva Wood Centre in south Oxfordshire. The meeting was convened to consider the risks, impacts, and communication issues relating to ash dieback. After some introductory talks, the main business of the day was a series of sessions during which groups considered three key areas in turn, each building on a previous iteration. The outputs from these sessions are summarised in the appended documents. The main outcome of the meeting was an agreement to reconvene in the autumn to progress collaboration and possible development of an Ash Dieback Action Plan for the county. The Oxfordshire Ash Workshop was funded by Oxfordshire County Council.

Delegates

~~Strike through names~~, last minute apologies.

~~Adam Todd~~	~~Pryor and Rickett Silviculture~~
Andrew Ingram	Greenfield Farm
Andy Lederer	Oxfordshire County Council
Arthur McEwan-James	Oxfordshire County Council
Caroline Svendsen	Natural England
Gabriel Hemery	Sylva Foundation
Henry Oliver	North Wessex Downs AONB
Jenny Scholfield	Woodland Trust
John Lockhart	Lockhart Garratt
John Morris	Chiltern Woodlands Project
Louise Hill	Oxford University
Keith Kirby	Department of Plant Sciences, University of Oxford
Ken Hume	The Oxfordshire Woodland Group
Kevin Caldicott	Oxford City Council
Mark Connelly	Cotswolds Conservation Board
Mark Vallance	BBOWT
Martin Gammie	Consulting with Trees Ltd
Matt Gulliford	South Oxfordshire and Vale of the White Horse District Councils
~~Megan Lock~~	~~CLA~~
Nathan Fall	Nicholsons
Neil Chamberlain	Mayden Croft Ltd
Neil Clennell	Wychwood project
Nick Dalby	West Oxfordshire District Council
Nick Mottram	Oxfordshire County Council
Paul Orsi	Sylva Foundation
Rob Coventry	Forestry Commission
Roselle Chapman	Wild Oxfordshire
Sam Prior	Oxford Direct Services (Oxford City Council)
Sam Prior	Oxford Direct Services (Oxford City Council)
Sam Riley	Forestry Commission
Scott Brown	Trust for Oxfordshire's Environment
Tim Read	Earth Trust

Welcome address by Nick Mottram, Oxfordshire County Council

On behalf of Oxfordshire County Council, I am pleased together with the Sylva Foundation to welcome you to this workshop. Oxfordshire has seen significant landscape change throughout its history. The 1970s and 1980s saw the loss of many hedgerow and roadside trees and important historic avenues to Dutch elm disease. The loss of elm was felt deeply by those who experienced it and much thought and energy was given to how the effects might be addressed. Subsequent generations have grown up with a different landscape and may not appreciate the cultural, ecological and landscape character changes that major tree disease outbreaks bring in their wake. Books such as *After the Elm.…* (1979)[1] describe the challenges faced at that time and also consider the opportunities. The challenges faced today with ash dieback, whilst no less severe, are therefore not new. However, they take place within a different and more challenging context. Significant new tree diseases threaten other key species such as oaks and chestnuts. Deer and grey squirrel are now a substantial pressure on woodlands and global heating will increasingly affect ecological systems. However, we also have at our disposal new technologies including better understanding of tree genetics, an improved baseline of ecological information and vastly improved mapping technology. The many benefits that trees and woodlands bring are also better understood, by more people.

With regard to the County Council's involvement, it seems clear that ash dieback is going to have major and wide ranging economic and environmental impacts in the county. As a body with responsibility for many highway trees and, public rights of way ash dieback will also bring specific challenges for the authority. Understanding the impacts of ash dieback is perhaps best appreciated at a whole landscape scale and in that context a county-wide approach seems appropriate. Responding to these impacts will involve individuals, communities and organisations working at all levels.

There are still many uncertainties not least how fast will ash dieback progress in the county; how quickly will different risks become significant; what are the likely financial and resource implications and what are the wider and longer-term environmental impacts? But there are also opportunities to create a tree-rich landscape that is suitable and resilient for the 21st Century.

The foreword of *After the Elm.…* , written by H.R.H. The Duke of Edinburgh finishes with "But this book is not just a requiem for the elm, it is also a valuable guide to the future care and improvement of the countryside as a whole." It is hoped that this workshop can capture that forward-looking spirit.

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[1] Clouston, B. and Stansfield, K, (Eds). *After the Elm…., (*London*:* Heinemann, in association with the Tree Council, 1979) Note: It is encouraging to see that the Tree Council are still active today, helping to develop the national response to ash dieback.

Talk by Gabriel Hemery, Sylva Foundation

PART A (Introduction)

The impacts of ash dieback in Oxfordshire will be very significant, affecting the local economy, health and safety, landscape, tourism, habitat, environmental protection, and more. There is a strong case to prepare for these impacts, and we are lucky that some other counties (Devon, Kent, and Leicestershire) have led the way in developing action plans (plus the creation of the Tree Council's toolkit), although by convening this meeting today we are among the few counties to do so. Planning is not just important to help manage impacts from ash dieback, but to help us think towards recovery. We should devise a coherent plan of action, and then act on it.

We should consider how best to support better information gathering and knowledge-sharing, aim to improve consistency in approaches taken, avoid duplication of effort and wasted resources, and overall take a stronger and strategic approach to dealing with ash dieback (including attracting additional resources).

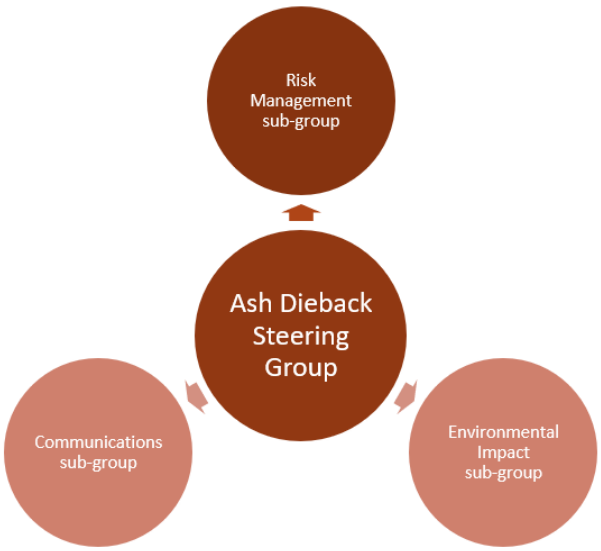
There are three main areas which we will be focussing on today:

- RISKS
  - who will be affected
  - how they will be impacts (H&S, £ cost, reputational, environmental)
  - the scale of the impacts
  - developing a risk register (impact x likelihood)
- RAISING AWARENESS
  - communication risks to stakeholders
  - equipping then with knowledge and planning tools
  - increasing awareness among the general public
- ENVIRONMENT IMPACT
  - quantifying benefits of our natural resources
  - quantifying the impacts of ash dieback
  - monitoring impacts and impacts of actions taken
  - supporting a resilient natural world

PART B (post workshop sessions)

An Action Plan for the county would address all the above. It might contain the following main actions:

Action 1: Communications plan (internal and external)
Action 2: Understanding biodiversity and ash loss
Action 3: Adopting common position and practices
Action 4: Managing ash in high-risk areas
Action 5: Public guidance/toolkit
Action 6: Monitoring programme
Action 7: Recovery and Adaptation responses

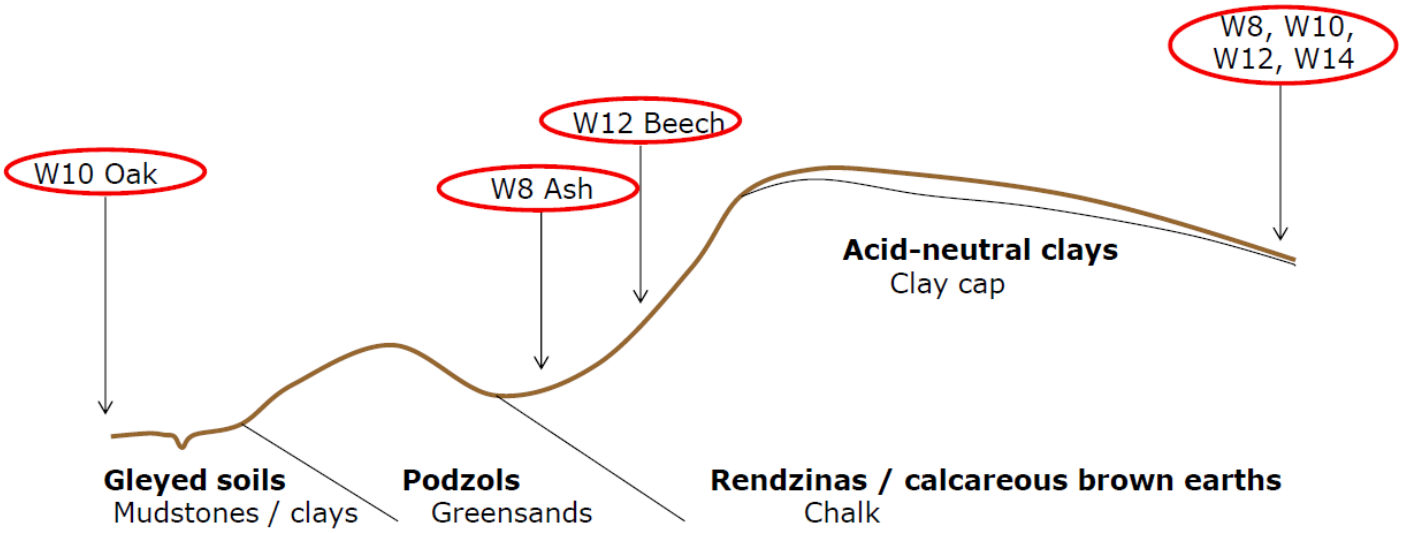


If the stakeholders here today agree that there should be follow up activity, there is merit in looking how other pioneer counties have approached the task. Appointing a steering group is likely to be effective, including the creation of sub-groups tasked with leading three key areas.

Talk by Rob Coventry, Forestry Commission

Ash dieback is caused by the invasive fungal pathogen *Hymenoscyphus fraxineus* that is currently in its epidemic stage in Britain. It appears to have originated from East Asia. Our native common ash Fraxinus excelsior is highly susceptible to the pathogen as it has not co-evolved with it, with only 1-5% of the ash population estimated to have any genetic tolerance. The pathogen's optimal growing condition is 20°C, and at >30°C mycelial development is limited, while high humidity can increase the severity of symptoms.

Common ash is a 'gap specialist' which grows on a broad range of sites, excelling on well-drained, deep calcareous brown earths. In the south-east it exists in large numbers in the following woodland types:



As a ring-porous species, common ash's fast growth increases strength and density via increased late-wood growth. In trees affected by ash dieback, the amount of late wood is reduced, as is its fibre length and cell wall thickness. This is why infected trees are prone to weakness in the canopy, posing significant problems for arboriculturists and foresters.

Under high levels of infection lesions can develop at the base of ash trees. Often, secondary pathogens including honey fungus will colonise the tree through these and lead to stem or root rot (and timber discolouration) and subsequent whole tree instability.

Basal lesions are often a characteristic diamond-shaped sunken and/or discoloured area. These lesions can be present on trees even with low levels of crown dieback. Basal lesions are easier to spot on smooth-barked younger trees. On older trees (with rougher bark) it may be necessary to remove the bark in order to confirm the lesion, perhaps after spotting dark-stained cracks on the outer surface. Trees can become unstable in as little as 4 years from early signs of infection.

Outside woodlands, where humidity and levels of the primary and secondary pathogens are lower, the long-term effects are less certain. Some trees will persist for many years with few symptoms.

Currently in the south-east and London areas, 9.0% of the woodland area is comprised of ash (9.4% standing volume/6.4Mm3). Currently there is widespread severe deterioration in ash woodland condition throughout Kent, and East Sussex, with West Sussex, Surrey and Hampshire lagging 1-2 years behind. Oxfordshire appears another 1-2 years behind again.

Forestry Commission Operations Note 046 (see Further Information) contains the following key messages:

- Risk zone estate and map ash, use this to prioritise increased monitoring and management
- Consider management approach in advance and get FL in place prior to need
- Retain potentially tolerant trees where safe and cultivate natural regeneration from these.
- Plan and document EPS mitigation works
- Redirect resources from other work programmes

- Use the restocking grant

Replacement species should be well-suited to climate and soil conditions of the site, and capable of handling drier conditions in the future. Protection from deer and squirrels will be essential.

Operational challenges will come in the form of:

- ensuring safety of contractors and public
- the cost of operations on steep and roadside sites
- access to, and quality of, contractors

Conservation challenges:

- public and interest group perceptions
- SAC and SSSI maximum allowed felled area

Silvicultural challenges:

- Managing retention and subsequent windthrow risk for:
- Potentially tolerant ash
- Potential bat habitat trees
- Other tree species
- Vegetation management and restocking where canopy has deteriorated
- Restocking species, especially on rendzina soils
- Historic under-management

Talk by Dr Louise Hill, Oxford University

Ash dieback is now found pretty much right across the UK, with only a handful of areas without confirmed cases. It is starting to cause significant problems for councils, which we can only expect to accelerate as more trees decline. The pathways for transmission are usually caused/exacerbated by human economic activity, so to greatly reduce the transport of P&D round the world, we would need to take an economic hit.

Our recent paper reported the economic cost of ash dieback in Britain over the next 100 years to be £15 billion, with half of this coming over the next ten years. These costs are made up of a number of costs, including loss of ecosystem services. [see Further Information]

We estimated the national cost of safety felling to be £4.8 billion. We modelled the numbers of roadside ash trees with data obtained from Freedom of Information requests to every GB county. The average cost per tree is expected to be £800. It is very likely that council tree budgets will require more funding.

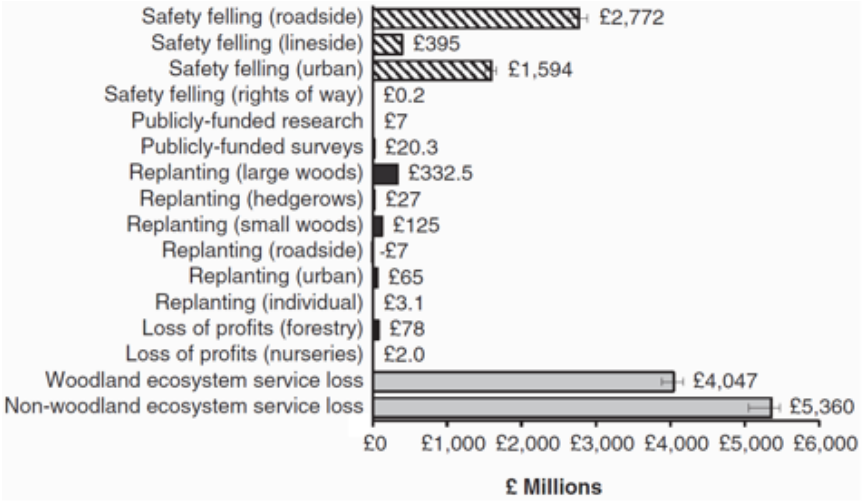
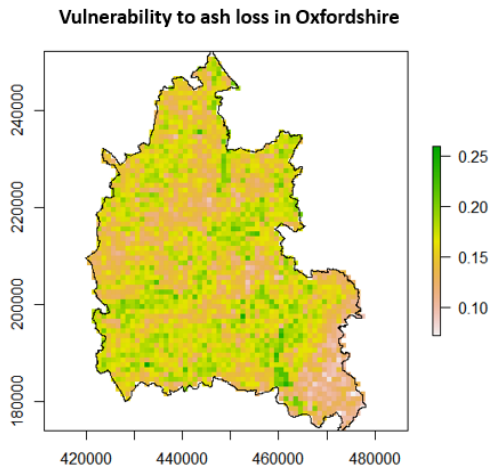


Figure 1 Hill, L, Jones, G, Atkinson, N, Hector, A, Hemery, G, and Brown, N. 2019. "The £15 billion cost of ash dieback in Britain." Current Biology, 29 (9), R315-R316, May 6. https://doi.org/10.1016/j.cub.2019.03.033

A specific set of estimates for this summit were prepared, using the same data, resulting in the following costs for **Oxfordshire**:

- total cost £50 million for roadside trees alone
- 1.75% of the total GB cost (ranked No.20 county in GB for costs)
- likely to have a high urban cost (note there are significant long-term benefits of replanting these trees - £2.5 billion nationwide).

What should we replace ash with when replanting? We should aim to replicate the ecological traits and functioning of ash as closely as possible. Ash is ecologically unique. We should also account for other tree species present, which will provide some ecological/functional traits. See: Hill, L, G Hemery, A Hector, and N Brown. 2019. "Maintaining Ecosystem Properties after Loss of Ash in Great Britain." Journal of Applied Ecology, 56 (2): 282–93. https://doi.org/10.1111/1365-2664.13255



In Oxfordshire, we combined predicted distributions of tree species and an ecological trait database, to produce maps of ecological vulnerability to ash loss. Broadly (*i.e.* not site specific) the species recommended for the county are ***Alnus glutinosa, Acer campestre, Sorbus aucuparia*** *and* ***Populus tremula.*** Note that any such recommendations are not a substitute for good site knowledge and management. Managers should also consider other diseases.

In terms of future prospects, we should take tree diseases more seriously!

Workshop sessions, All Delegates

Summary of plenary sessions – detailed notes to follow

Communications

- Vast range of people involved, and therefore wide range of channels required.
- Strong pressure to act now…but there is a risk in this.
- Benefits of knowing what is coming from looking wider across the South and East.
- Communications should focus on acting soon – there is time, but need to start planning now.
- Risks are massively diverse…power, soils *etc*.
- Wider environmental threat management response, with ash being conduit/exemplar.
- Mitigation and adaptation – how do we take these themes but make them palatable to the public?
- Treescape for 21st Century.
- Carrot and stick – scare and inform…
- Need for very clear guidance for the different audiences – tailored to generate right type of response.
- FC need to make sure legislature is clear.
- AONBs will have specific issues and requirements to tend to. Will overlap but room for oversight of county-wide action plan.
- How do we use the time we have to best effect?
- Locally-tailored communications important.
- Use of technology to understand the asset and therefore the need to manage the problem – how will landscape look after ash?
- Creating a link with Oxford Times to drip-feed stories *i.e.* coordinated communications plan.

Environmental impacts

- Must identify what your objectives are.
- What is liability risk and what are the risks of what you want to achieve?
- What does ash do in that place that you most value, and how are you going to replace those functions?
- Must have some management in place as don't have examples of non-intervention from the continent.
- Must consider habitats rather than preservation of one specific species.
- Opportunity of planting trees for pollinators.
- The public understanding of things like deer management need to be changed.
- Crucial to know where ash is in the landscape at a good resolution.
- Knowing locations of ash is important for H&S and for monitoring in high-risk areas.
- For planning at a landscape-scale, will require to know where ash is.
- Also, for planning more productive management.
- It helps to make sure you have the right regulations in place – thinning or selective fell.
- Biodiversity impacts.
- Risk and does the woodland have the ability to regenerate?
- Deer management is required for regeneration.
- Once you get trees established, need to get past grey squirrels.
- Replicating ecology of ash is going to be difficult – do we wait for resistant strains or plant multiple new trees now to replicate the ecology?
- Could a reduction of woodland cover be desirable in some landscapes – *e.g.* AONBs?

Risk

- Not possible to quantify risk at the moment, although many identified in plenaries.
- Need to look at how different people/sectors are doing as the work they are doing may mitigate the risks
- Key impacts on transport – roads/rails

- Power cables
- Public open spaces – *e.g.* schools
- Economic issues
    - Power failure
    - Road closures
    - Where does money come from
    - Insurance premiums – likely to increase
- Reputational damage *e.g.* to local authorities removing trees
- Change of landscapes without public communication
- Loss of confidence in woodland professionals
- Landscape impacts
- Importing exotics as replacement option
- Impacts of biodiversity changes
- What is appropriate risk management for each landowner or authority?
- Risks must be balanced with opportunities
- Must think about new opportunities for using arising ash timber

Actions

- Cotswolds AONB were part of a 'Trees Outside Woodlands' bid led by the Woodland Trust, but ultimately unsuccessful. The partnership which came together however still aim to do something. Th group were clear that they wanted to keep to Cotswold and the Vale geography. Wanted to begin to plant successor trees. Did not want to put in another HLF bid. Wanted Cotswolds Conservation Board to pull together a steering group. About to launch a public appeal across Cotswold to raise money to plant trees (and small groups). Would welcome an overlap of a county approach with the Cotswolds group.
- In North Wessex Downs AONB there is nothing substantial yet but new plan will have objective to look at ash dieback and replanting. There is a cluster in the south of NW Downs. Also involved in project with Kent Downs connected with ash.
- Should the focus just be addressing ash dieback or wider trees in crisis?
- Agreement that we should use Oxfordshire as the basis for creating an action plan.
- County seems to be the way that people are thinking about ash. Important outcome is to be able to present to councillors to start to allocate budget.
- Speed important. Agreement that there should be another meeting in early autumn to move forward.
- Sylva Foundation will produce a briefing note of the meeting. Afterwards, a more detailed summary of discussions so that stakeholders can tailor it to their needs and therefore move forward within their own organisations.
- Agreed to provide some actions for stakeholders to work on, prior to another meeting.
- Delegates to go back to their organisations and identify the top three priorities.
- "It's an achievement here today just getting the Treescape community together."

Further Information

Presentations and some of the following resources are provided in a Dropbox folder – click here to access

Devon ash dieback plan:
https://www.treecouncil.org.uk/.../Devon-ash-dieback-action-plan-February-2016.pdf

Leicestershire ash dieback action plan:
politics.leics.gov.uk/documents/s138890/Cabinet%20Ash%20dieback.pdf

Tree Council ash dieback action plan toolkit:
https://www.treecouncil.org.uk/What-We-Do/Ash-Dieback

Chalara management plan:
https://www.gov.uk › Environment › Rural and countryside › Forests and woodland

Forestry Commission Operations Note 046:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741800/ON046.pdf

Hill, L, G Hemery, A Hector, and N Brown. 2019. "Maintaining Ecosystem Properties after Loss of Ash in Great Britain."Journal of Applied Ecology, 56 (2): 282–93. https://doi.org/10.1111/1365-2664.13255

Hill, L, Jones, G, Atkinson, N, Hector, A, Hemery, G, and Brown, N. 2019. "The £15 billion cost of ash dieback in Britain." Current Biology, 29 (9), R315-R316, May 6. *https://doi.org/10.1016/j.cub.2019.03.033 [with supplementary material]*

Forestry Commission (FC) overview of ash dieback: www.forestresearch.gov.uk/chalara

Observatree symptoms guide: www.observatree.org.uk/portal/ash-dieback/

Interactive map showing ash dieback infection across GB: http://chalaramap.fera.defra.gov.uk/

Forest Industry Safety Accord and Euroforest guidance on working with diseased ash trees:
www.ukfisa.com/safety-information/safety-alerts1/felling-dead-ash-safety-guidance-for-managers.html

National Tree Safety Group guidance on tree safety management: www.ntsgroup.org.uk/guidance-publications/

Countryside Stewardship tree health restoration grant: www.gov.uk/government/collections/countryside-stewardship-woodland-support