Ash Dieback: Key messages and principles for landscape maintenance and restoration, including wildlife and natural capital

The loss of ash trees will have a major impact on the environment as well as on the economy. Unless ash trees lost to disease are replaced with other species quickly we can expect to experience an environment that is less inspiring and attractive, and which supports less wildlife. We can also expect to have to pay substantially more for some key services, like the removal of pollutants from air and water and reducing the risk of land and property flooding.

Impacts

The loss of ash is likely, due to its sheer abundance, to impact heavily on:

- Landscape quality.
- Wildlife dependent on trees.
- The volume of storm run-off, and consequent risk of downstream flooding.
- The summer temperature of cities and towns.

Reflecting the tree’s special properties, its loss will also have a particular impact on:

- Our cultural heritage, reflecting ash’s particular role in Celtic and Norse mythology.
- Soil composition, quality and functioning in woodland, with subsequent ecosystem consequences. The extent of these impacts will depend on the tree species which succeed ash.
- Specialist lichen communities growing on ash tree bark.
- Broadleaved timber production in woodlands, firewood availability and the production of tool handles, etc. These impacts are ones not only of production, but also of employment and so may impinge on the rural economy.
Key principles for replacing lost ash trees

1. Act now to minimise the landscape impact of ash tree loss – start promoting new trees and taking better care of existing trees.

2. Use the 3/2/1 formula: at least 3 new trees for loss of a large tree, 2 for a medium tree and 1 tree for a small tree.

3. Promote natural regeneration wherever possible, particularly in woodlands.

4. Grow the Right trees in the Right places in the Right ways, and give them the Right aftercare.

5. Encourage a diverse range of trees to develop a resilient landscape. No one species alone can substitute ash. Aspen, alder, field maple, sycamore, birch, rowan and disease-resistant elm, along with native oaks, have some similar traits.

6. When choosing species, consider local factors such as what trees are characteristic of the area, soil type, management requirements, local stresses, etc.

7. For wildlife, landscape and woodfuel, choose native species, or those well established in the British Isles such as sycamore, wild pear, crab apple or white willow. In urban areas it is more acceptable to use species from other parts of the world.

8. Reduce the risks of introducing new diseases by only planting trees sourced and grown in the UK (UKSG).

Key principles to follow when managing diseased trees, from an environmental perspective

1. Where trees do not pose a risk to roads, paths, buildings, etc, don’t fell if you don’t have to.

2. Check trees before undertaking any works for active bird nests or bat breeding or roosting sites.

3. Ensure works comply with protected species requirements.

4. Where possible, keep deadwood, both standing and fallen.

5. Remove the causes of tree stress such as over-shading by other trees, compaction of the root area and cultivation around the base of the tree.

Key principles to follow to increase the resilience of treescapes

1. Reduce stress on existing trees (see above).

2. Increase the diversity of trees, and genetic diversity within tree species.

3. Encourage a balanced age structure and structural variation.

4. Practice good biosecurity – including using UKSG trees wherever possible.

5. Reduce landscape fragmentation.

6. Control pests such as grey squirrels and deer where these pose a significant threat to tree regeneration and growth.

7. Raise awareness of the value and benefits of trees, especially those outside woodlands.

Ash pollards
Pollarding is an ancient management and wood production technique (cyclical cutting of trees above the browse height of livestock enables new shoots to grow which in time are cut so the cycle continues).
Further information

This guidance note is part of a series produced by the Devon Ash Dieback Resilience Forum:

- Ash benefits & economic value
- Increasing the resilience of Devon’s treescapes
- Engaging with contractors
- Replacing ash: appropriate tree selection
- A guide to protecting species and habitats
- The many benefits of ash trees

See Natural Devon for more information