Case Study

Woodland restoration and the fight against tree disease

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WOODLAND TRUST

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Taking on the restoration of a planted ancient woodland site brings many challenges, but how does tree disease affect the process? Kent landowner Jim Reid, discovered Chalara dieback of ash in his planted ancient woodland in 2008.

The privately owned ancient woodland in Kent is primarily used as a recreation site, and provides firewood for the owners and their friends and family. In 1965 the site was planted with mixed conifers and hybrid black poplars which damaged the ancient woodland, and the broadleaf timber value decreased as a result.

Jim's intention is to completely restore the land to native British woodland with a focus on pendunculate oak, which was the main species on the site before the plantation was established. Planting oak will produce high quality timber in the future and supplement natural oak regeneration. Conversion to native trees will also continually improve the wildlife value of the ancient site.

In 2008 ash dieback was discovered on site and the Woodland Trust was able to offer advice on tree disease, timber production and veteran tree management as well as ancient woodland restoration practice. The gradual removal of conifers allows light to reach the woodland floor in stages and gives ancient woodland indicator plants more time to adjust to new light levels, ensuring minimum shock and damage to ground flora.

Since thinning the conifers, the aesthetic value of the woodland has improved considerably. The number of species in the wood and their ranges has expanded and the woodland is now far better positioned to resist the pressure from ash dieback because of this wide mix of native broadleaf species. Wood fuel production has helped save money on heating bills and oak produced in the future will provide a timber resource.

> "Areas that were so black in summer that you almost needed a torch to walk through them in day are now open and full of flowers and wildlife."
>
> **Jim Reid, the woodland owner**

Birdlife has also expanded in the wood. Sparrowhawks, firecrests, tawny owls and lesser and greater woodpeckers have all been seen since the thinning. Rides through the wood feature numerous wildflowers including bluebells,

Veteran ash pollard

Key Facts

- The site supports at least 26 ancient woodland indicator plants and was designated as a Site of Nature Conservation Interest in 2004.
- Rare species on the site include herb paris, greater butterfly orchid, early purple orchid and common spotted orchid. Since restoration these species, which were confined to broadleaved areas have now spread into former conifer sections.
- Ash dieback was first noticed in the woods in 2008.
- At least 50% of the ash trees in the wood are affected.
- The woodland understorey was left in place to discourage windborne ash dieback spores entering the canopy. A variety of broadleaf tree species have now naturally regenerated in place of the ash creating a more resilient landscape against disease.

four species of orchid and herb paris as well as many species of butterfly.

As a result of the restoration flood mitigation has been boosted. The woods border a reservoir and the water holding capacity of the wood has improved significantly since conversion to broadleaf species and the additional planting of trees.

The Woodland Trust continues to work with Jim to ensure the restoration process remains effective and to advise on grant applications for future work.

Ash dieback on the site

A significant component of the woodland is ash coppice and in 2008 a disease was discovered in some tall well established ash trees in two areas of the wood. The disease was recognised as ash dieback in 2012 when the epidemic hit the headlines and has now spread to large areas of the wood including sections that were planted in 2002.

Many important species are dependent on the ash bark and would be seriously threatened if the ash was lost and not replaced with alternative broadleaved habitats. Further threat to wildlife presented itself when *Phytophthora* pathogens presented themselves on sweet chestnut and alder in the wood.

Ash trees were selectively thinned and, in this instance, a strict no clear fell policy was put in place. More resilient ash trees were left to maintain important habitats for wildlife. Some of the ash coppice stools were singled and a veteran ash pollard was halo-released. However the understory was left to discourage windborne ash dieback spores entering the wood through the canopy. Jim was keen to encourage natural regeneration in the cleared areas and although plenty of ash regrew, much was replaced by hornbeam, hazel, field maple, alder, goat willow and oak.

Thinning the conifers on site for restoration purposes and encouraging natural regeneration of a wide mix native broadleaf species has certainly played a part in helping to protect the wood against the further spread of tree disease.

How the Trust can help

Bringing damaged ancient woodland back into restoration requires careful management. Thanks to funding from the Heritage Lottery Fund, the Woodland Trust is working to offer landowners and managers professional support and training to sustainably manage and restore their woodlands.

If you own a plantation on an ancient woodland site we can help you discover its history, and provide independent and practical advice on topics including:

- How restoration can complement your woodland business and interests
- How restoration can support forestry certification
- Making the most of grant funding

Protect your land against tree disease

Tree Disease Recovery packs, containing a mix of 45 native broadleaf species measuring 40-60cm, plus protection and stakes, are available from the Woodland Trust. Thanks to generous funding, landowners in the regions currently most affected by ash dieback (Suffolk, Norfolk, Kent, East Sussex and Northumberland) can apply for these packs at a third of the wholesale cost. There are also a variety of other subsidised tree packs available for planting trees or hedgerows outside these counties.

FOR MORE INFORMATION CONTACT:

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Chalara on ash

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