



Position statement: Planted ancient woodland sites

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Definitions

Ancient woodland is defined as land believed to have been continuously wooded since at least 1600 AD^{1,2,3}. **Ancient Semi-Natural Woodland (ASNW)** consists predominantly of native trees and shrubs that have not obviously been planted but have arisen from natural regeneration or coppice regrowth. **Planted Ancient Woodland Sites (PAWS)** are sites that were formerly semi-natural but have been replanted, either with conifers, broadleaves or a mixture of the two.

The extent of PAWS

Of the ancient woodland that survived in England, Scotland and Wales in the 1930s, only around half survives as ASNW. 8 per cent has been cleared for agriculture or development and 38 per cent has been converted to plantation^{1,2}. Research undertaken by Oxford University's Forestry Institute in association with Forest Research, commissioned by the Woodland Trust⁴, reveals that the extent of PAWS is as follows:

	England	Wales	Scotland	Total GB
ASNW (ha)	193,460	26,972	64,570	285,002
PAWS (ha)	140,125	24,703	54,725	219,553
PAWS as % of all ancient woodland	42	48	46	44

Across Britain, 66 per cent of PAWS (29 per cent of all ancient woods) are coniferous or mixed plantation⁴.

These figures were generated from overlaying the Ancient Woodland Inventories (AWIs), produced in the 1980s, with the National Inventory of Woodland and Trees, a digital map of woodland produced from aerial photographs and completed in 2001. They represent the most accurate picture currently possible. However, these figures differ significantly from those that can be derived from the AWIs alone, especially in Scotland, illustrating the need for further work to reconcile different datasets.

English Nature has commissioned further analysis of the datasets for England, which will be followed up by field checks in conjunction with the Woodland Trust. This should establish whether the discrepancies arise from mapping differences, inaccuracies in the original inventories, or genuine change and will enable the AWI to be updated. There is as yet no similar review of datasets for Scotland and Wales.

There is no comprehensive record of ancient woodland in Northern Ireland and therefore no accurate figures for the area of PAWS. The Forest Service has recently identified which of its

plantations appear as woodland on the First Edition 6" to the mile OS map (1830s) with a view to prioritising sites for restoration.

The value of PAWS

Ancient woodland is our most valuable wildlife habitat⁵. Restoration of PAWS, by removing non-native species, represents the only opportunity to increase the area of ancient woodland with semi-natural characteristics. Given the area of ancient woodland that has been converted to plantation, it has the potential to reverse fragmentation of semi-natural habitats significantly and thereby place woodland biodiversity on a more sustainable footing.

Research involving field assessment of over 100 PAWS stands by Oxford University's Forestry Institute (OFI), commissioned by the Woodland Trust, indicates that in over 80 per cent of PAWS stands there may be significant survival of species and communities that are characteristic of ancient woodland⁶. Two-thirds of PAWS visited by OFI had remnant ground flora typical of ancient woodland and more than half contained ancient trees (in 7 per cent of sites these were frequent). In 40 per cent of sites assessed by OFI there was valuable coarse woody debris still surviving from the ASNW stands felled up to 50 years ago. These ancient woodland components tended not to survive uniformly within a site but to be concentrated in specific areas, for instance along rides or streams, in damp areas, where plantations failed, or where veteran trees were retained.

PAWS also have great cultural value. Historical and archaeological features often survive in them as they do in ASNW³.

Policy background

The Forestry Commission's Broadleaves Policy of 1985 began to reverse the trend of replanting ASNW with conifers. However, the area of PAWS being restocked with conifers does not appear to have changed dramatically during the 1980s and 1990s⁴.

Both the Forest Principles and the Biodiversity Convention agreed at UNCED (1992) stressed the need 'to restore degraded forest ecosystems' and in biodiversity terms there is no doubt that PAWS are degraded. The Government has since made international commitments to the protection and restoration of native woodland and biodiversity in general⁷, enshrined at a national level in the UK Forestry Standard⁸ and UK Biodiversity Action Plan⁹ which both contain direct references to the desirability of restoring PAWS. The Countryside and Rights of Way Act (2000) also places a statutory obligation on all public bodies in England and Wales to take reasonable steps to conserve biodiversity and particularly priority habitats, which include native woodland. The Habitat Action Plans (1999) contain quantitative national targets for restoration, generally along the lines of restoring 10 per cent of the area of each habitat type over the next 15 years^{10, 11}. Similarly, the UK Woodland Assurance Standard (1999) for certifying 'sustainable forests and timber' requires managers to develop plans for restoring PAWS within each forest at a comparable rate.

The UK Forest Partnership for Action, which includes DEFRA, Forestry Commission, the Scottish Executive and the Northern Ireland Forest Service, is committed to helping develop programmes for forest restoration at country, regional and local levels, as well as joined up approaches to ensure effective support for restoration of wooded landscape habitats.

Current progress of PAWS restoration

Forest Enterprise (FE) manages 40 per cent of PAWS in Britain⁴. It has already undertaken large-scale restoration projects, notably in Scotland and parts of England. In England and Wales, FE has undertaken comprehensive surveys of ancient woods in its care in order to develop strategies for restoration¹² and is now drawing up substantial programmes of restoration, though in some areas it appears likely that these will still fall a long way short of restoring all PAWS. While conservation bodies have been carrying out restoration work for some time, they own only 3 per cent of the area of PAWS⁴. Private landowners account for the majority of remaining PAWS and a recent study¹³ shows that around 70 per cent of these sites in England are covered by a Woodland Grant Scheme, however, this may be no indication of the amount being restored, which is unknown.

Restoration practice

OFI's research concluded that the first priority for restoration is to create the conditions in which remnant ancient woodland communities can recover. In most cases this will be best achieved by an appropriately targeted continuous cover system, rather than clear felling, and retaining some conifers in the long term (even up to 20 per cent of the canopy) may be beneficial⁶. The research also concluded that the assumption that restoration is financially disastrous is not borne out, and that gradual restoration by continuous cover has potential to be as profitable in the long term than conventional clear felling and replanting¹⁴. The Forestry Commission has committed to incorporating the findings of this research into a Practice Guide, due to be published in 2003.

Threats

Our understanding of the threats to PAWS has been substantially informed and enhanced by the OFI research.

Conifers have more impact on the ecology of an ancient wood than planted broadleaved trees. Most broadleaves on PAWS are native. Even beech, which casts dense shade and is considered non-native in northern Britain, accounts for only one-fifth of the broadleaved area of PAWS⁴ and is likely to be suited to much of northern and western Britain within a few decades due to climate change¹⁵.

Most conifer plantations on ancient woodland sites will reach economic maturity in the next 10 years⁴. If they are felled and replaced again with non-native conifers there is little hope that the fragile ancient woodland communities they contain will survive.

Until now, there has been little guidance on what "restoration" means, and how it should best be carried out, and no real incentives to persuade private landowners to restore. Grants are still paid for replanting with non-native trees. Even where restoration is undertaken it may be done rapidly through clear fell and restocking, which could cause more harm than good⁶. Although the research suggests that the sooner restoration starts the better, this is so that work can be phased thereby limiting disturbance and allowing recovery of the ancient woodland ecology to keep pace rather than be overtaken by coarse vegetation.

The lack of an inventory in Northern Ireland means that many plantations may not be identified as ancient woodland sites and the opportunities for their restoration may be compromised severely.

The Woodland Trust's view

1. The Trust believes a distinction should be made between:
 - Broadleaved PAWS and ancient woodland sites planted mainly with conifers which are native to the site (i.e. native pinewoods in Scotland), and
 - PAWS where the plantation is wholly or partly made up of conifers that are not native to the site. These sites are referred to below as non-native conifer PAWS.
2. The Trust believes that restoration is a term that should be applied only to non-native conifer PAWS and that the approach to native conifer and broadleaved PAWS should be more one of restructuring to create, for example, a more uneven-aged structure.
3. The Woodland Trust is committed to restoring all non-native conifer PAWS in its ownership and is currently restoring more than 100 sites (more than 2000 ha of PAWS, nearly 1 per cent of the area of PAWS in Britain). We will also continue to acquire PAWS where our ownership will make a difference.
4. In relation to non-native conifer PAWS, the Trust would like to see:
 - Restoration of all sites in the UK started in the next 10 years
 - Restoration focused on conserving ancient woodland communities through adoption of targeted continuous cover techniques rather than just restoring native tree cover
 - Site-native species of local provenance used to restock PAWS during restoration
 - Greater awareness of the value of PAWS and the need for restoration.
5. In order to achieve this the Trust is calling for:
 - The Government to review the UK Forestry Standard to express a clear presumption in favour of restoring PAWS
 - The Forestry Commission to adopt a policy to restock all PAWS with native species
 - The Government to enable Forest Enterprise to commit to restoring all its PAWS and in doing so act as a catalyst by setting an example to other landowners
 - The Forestry Commission to give high priority to restoration of PAWS, and to provide adequate incentives to ensure this occurs on a wide scale targeted to give maximum benefit to biodiversity, taking into account the needs of private landowners
 - The UK Woodland Assurance Standard for certification of sustainably produced timber to be reviewed to reflect the need for more gradual and widespread restoration
 - The restoration targets enshrined in the UK native woodland Habitat Action Plans to be re-defined to reflect the need to be more ambitious in scale and focused on conserving the communities of species that are characteristic of ancient woodland¹⁶.
6. In order to ensure accurate records and monitoring the Trust would like to see:
 - a. An AWI that accurately identifies PAWS and ASNW, and includes a new category of "restored ancient woodland"
 - b. Use of the NIWT data to enable further classification on the AWI of woodland as broadleaved, mixed or coniferous
 - c. Investigation of discrepancies between the AWI and NIWT in Wales and Scotland

- d. An AWI for Northern Ireland that identifies PAWS, which the Woodland Trust will have produced by the end of 2005, and its use by Forest Service to develop restoration policy and strategy for Northern Ireland.
7. The Trust also urges the Government to enable further PAWS research to be completed within the next five years into:
- factors affecting the survival of ancient woodland communities, including the seed bank
 - ecological responses to restoration treatments, especially re-colonisation of ancient woodland communities and the impact of coarse vegetation
 - the impact of restoration operations such as timber extraction, treatment of brash and canopy removal around veteran trees.

References

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- ⁹ HMSO 1994b *Biodiversity: The UK Action Plan* (HMSO London)
- ¹⁰ HMSO 1995: *Biodiversity: The UK Steering Group Report Volume 2: Action Plans* (HMSO London)
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- ¹⁴ Pryor, S N and Jackson, T J F (2002) *The cost of restoring planted ancient woodland sites*. The Woodland Trust (www.woodland-trust.org.uk/policy/publications.htm)
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