

Planning your woodland

Getting to know your wood



WOODLAND
TRUST

GETTING TO KNOW YOUR WOOD

Every wood is different. From the unique result of its location (geology, soils, climate, slope and hydrology), the wildlife species that have colonised it and its history (archaeology and past land use).

The first step into getting to know your wood is to gather some information about the general context of your site and its condition. This will help prompt thinking on the kinds of work you might need to include when writing your management plan.

The questions below are designed to help you through this process.

1. Does your site have a designation?

If your site has a statutory designation such as SSSI (Site of Special Scientific Interest) or, in Northern Ireland, an ASSI (Area of Special Scientific Interest) then there will be legal requirements around the kind of management you do. You need to get in touch with the relevant statutory conservation agency (Natural England, Scottish Natural Heritage, Natural Resources Wales, Department of the Environment Northern Ireland) to find out what these are. Other important designations include National Nature Reserve (NNR), Special Area of Conservation (SAC) and Special Protection Area (SPA).

Local Wildlife Sites are recognised as being of particular value by local partnerships, including the local authority and conservation organisations. The names for these designations vary from one area to another, but include, for example, County Wildlife Site (CWS), Site of Nature Conservation Importance (SNCI), and Site of Biological Importance (SBI). These sites are not protected by law like SSSIs, but have some protection through the planning system. However, if a site has a local designation then it is probable someone will have surveyed it, and there may be information about the species and habitats on the site held by the local authority or local wildlife trust. Many ancient woods have local designations of this type.

Other designations you may need to be aware of include those for archaeological and historic sites, such as a Scheduled Ancient Monument which means you will have a duty of care towards the feature concerned. You will need to contact either the local authority or English Heritage if you need to find out more.

2. Is your site ancient woodland?

Ancient woodland is not a designation as such but woods that are classified as ancient do have special value and status. An ancient wood is one that has been continuously wooded since at least 1600 (1750 in Scotland). These sites are irreplaceable. They are generally of high nature conservation value as their long continuity has enabled complex communities of animals and plants to develop. They may also be of high cultural value, harbouring important archaeological features and evidence of past land use.

If your wood is ancient you should take this into account when drawing up your management proposals. Your first port of call is the Ancient Woodland Inventories for each country (try www.magic.gov.uk, or for Northern Ireland www.backonthemap.org.uk). However, most very small woods are not recorded on the inventories, and occasionally larger woods were also missed.

If you think your wood might be ancient you will need to refer to old maps and records, or look for features and clues on site. A good starting point would be old Ordnance Survey maps such as the County Series or First Edition maps of the 19th and early 20th century, which are the earliest comprehensive mapping of the country. Further back than this you may find estate maps or tithe maps. Local records offices and local history groups would be worth contacting.

On site, look for signs of historical management such as coppicing or pollarding, particularly where this has resulted in very large old coppice stools or ancient pollard trees. Coppicing involves cutting a broadleaved tree at ground level, and allowing shoots to re-grow from the base. This can be repeated again and again at regular intervals, and the stump will continue to grow in girth, resulting in some cases in big old stumps several feet across. Pollarding is a similar technique but involves cutting a tree at head height, and allowing regrowth. This was practised in wood pastures where animals were grazing, as it meant the animals could not browse off the new growth. Pollarding prolongs the life of a tree resulting in ancient trees hundreds of years old.

Other clues that a wood is ancient include the presence of archaeological remains such as earthworks that have persisted because the land has not been disturbed or ploughed. Ancient

woods also support characteristic plants that tend not to occur so frequently in recent woods. These 'indicator' species are generally those that do not colonise new areas or disperse easily, but you need to be cautious in using these. Different groups of species may indicate ancient woodland in different parts of the country. Some of the easiest to recognise include bluebell, oxlip, wild garlic, and wood anemone.

3. Is your wood semi-natural or plantation?

A semi-natural wood is one that has grown up naturally, while a plantation is one that was planted by people. Semi-natural woods may be ancient or may have grown up more recently e.g. on abandoned land. Plantations may have been grown on land that was previously bare, or they may be on sites that were previously wooded and then felled.

Ancient woods that have been felled and then replanted are known as PAWS (Plantations on Ancient Woodland Sites). Where these have been replanted with trees that have a negative effect on the valuable features of the ancient wood, for example non-native conifers which shade out the ground flora, they should be put in a process of restoration, to secure the remnant ancient woodland features and gradually revert the wood to mainly native woodland cover. There is guidance available from both the Forestry Commission and the Woodland Trust to help you plan for the best way to secure the wood's remaining value and then enhance it in future.

4. How has the wood been managed in the past?

If the wood has a long history, it may have been managed in a number of different ways. Things to look out for include coppice stools, suggesting the wood has been cut on a regular coppice cycle. Old pollarded trees might suggest the wood was once managed as wood pasture with a more open canopy and grazing animals beneath the trees. In more recent plantations, you may be able to see stumps where trees have been thinned out to allow those remaining more room to grow.

Previous management regimes will have influenced the ecology of the wood, particularly where these have been carried out over a long period of time. For example, in woods that were coppiced for hundreds of years, communities of plants developed that thrive on the conditions that this creates. Where trees have been allowed to grow very old, there will be species associated with the particular habitats these provide – dead and decaying wood, rot holes, etc. In plantations of conifers that have been left unthinned and allowed to become very dark, the ground layer will often be poor or absent.

If there are previous management records available for your wood, take time to look at these.

5. What species of trees are found in the wood?

The species found in the wood will influence what you can do. There is no point thinking about bringing in coppice management in a conifer plantation, as conifers will not re-grow from the base once cut! If you are thinking about managing for timber or woodfuel then you need to consider whether there will be a market or outlet for the species you might be cutting.

If you are managing for conservation, then you need to assess whether the tree species on the site are the most appropriate ones for the site – are they well adapted to the geology, soils and hydrology of the site, and are they the native species you might expect to find in this area? If you are unsure then talk to local conservation bodies or experts or get some advice.

It is also worth considering the number of species in your wood. If it is a plantation of one species, this affects its resilience in the face of long term impacts from tree disease, for example. More diverse woods may provide a wider range of habitats for wildlife and mean that you do not have all your eggs in one basket when it comes to producing timber. However, bear in mind that in some settings, it is actually normal for native woods to have a relatively limited number of species e.g. oak/birch woods in the uplands.

Don't forget about shrubby species as well. Hawthorn, blackthorn, elder, and a number of other shrubs can create additional layers of structure within the wood as well as providing food and shelter for wildlife.

6. What age range of trees is found within the wood?

Ideally you want to see a mix of ages of trees within the wood. These might be in different stands or scattered throughout the wood. You could look for the following:

Ancient or veteran trees - ancient trees are those that are of interest biologically, aesthetically or culturally because of their great age. They are trees in the ancient or third and final stage of their life. The age at which this occurs is different for different species. Veteran trees have some of the features of ancient trees such as dead and decaying wood, rot holes and so on. Guidance on identifying, understanding and managing ancient and veteran trees is available in a series of guides produced by the Woodland Trust in conjunction with the Ancient Tree Forum. You can see these on the Woodland Trust's website in its publications section.

Mature trees - those that have reached maturity but have not yet started to decline.

Pole stage - trees that are larger than saplings but still have not reached large diameter - for many species this could be between around 10 and 40 years old.

Saplings - trees that have become established and are too big to be seen as "seedlings", in many cases this means over 1m in height but less than 10 years old.

Seedlings - trees that are just one or a few years old.

It is not necessary to have every one of these, but at least two or three age classes will provide both structural diversity and potential for sustainable timber production. If you do not have saplings or seedlings you might need to think why - are they being grazed out by deer? Or is the forest canopy too dense, with too little light to allow seedlings to survive? If you do not have ancient or veteran trees, then from a conservation perspective you might want to think about identifying some trees to be retained and allowed to reach this stage as they provide very specialist habitat.

7. What other habitats are found in the wood?

Woods are not just a collection of trees. Often they include open spaces such as glades or rides, and water features such as streams, rivers or ponds. These are important habitats in their own right. In some cases the grassland habitats within old woods are some of the most important refuges for associated species within a landscape, especially where intensive agriculture has resulted in loss of these habitats outside the woods.

Your management plan will need to cover management of these habitats as well as areas covered in trees. Along rivers and streams, opening up the canopy to allow some light in can benefit wildlife and positive management of rides to provide plenty of light, as well as a varied structure along the edges, will not just help wildlife but will also help keep tracks dry and suitable for management access.

8. How much deadwood is there in your wood?

Deadwood is a significant part of the ecology of a wood, providing invaluable habitat. Different types of deadwood (standing dead trees and fallen deadwood, for example) provide different conditions and harbour different species. Most woods in the UK have relatively little deadwood. Encouraging more deadwood habitat is a key part of sustainable forest management.

Large pieces of deadwood such as fallen trunks and large rotting stumps, in moist shaded conditions, provide the best habitat.

9. What kind of wildlife is there in your wood?

As a first step, try and find out whether there are existing records for the wood, by contacting the local authority, local wildlife trust, local biological records centre, or natural history societies. They may have records of surveys by local naturalists, including volunteers. If you are able to make contact and talk to anyone

who has surveyed in your wood you may find them a mine of useful information!

You need to be particularly aware of European Protected Species, which includes all species of bats, and a number of others such as dormouse. A list of these species and advice are available from the statutory conservation agencies. These species have additional protection under the Wildlife and Countryside Act and it is your responsibility as a woodland owner to be aware of this before starting any work on site, and ensuring you have complied with any requirements.

You will also need to know if there are rare, threatened or priority species living in your wood, as you will need to ensure your management does not have a negative impact, and preferably has a positive impact on these species. A good starting point is the local Biodiversity Action Plan, or contact your local authority or local wildlife trust. The National Biodiversity Network's online database will tell you whether any species have been recorded near you.

Once you have looked into existing information, you may wish to do some survey of your own, or find local experts who can help. Again, local interest groups such as natural history societies might harbour people who would welcome the chance to come and gather information in your wood, or who would help advise you on management for rare or important species that you find there.

10. Are there significant threats to the wood?

Some of the key issues here are grazing/browsing, tree pests and diseases, invasive species and human pressures such as fly tipping.

Too much grazing and browsing by deer can have significant impact on the ecology of a wood. Deer may graze out seedlings so that the wood is not regenerating and may also have an impact on the ground flora. This has implications if you are planning to coppice your wood, as deer may prevent coppice stools from regenerating, but also if you are relying on natural regeneration to provide new generations of trees. If deer populations are high in

your area you may need to think how to deal with this before you plan any management in your wood. Find out if there are any deer control groups operating in your area, or think about whether you can fence areas off effectively to allow regeneration.

Grey squirrels strip the bark of some species such as beech and sycamore and can have significant impacts on timber production and quality. In many areas they have out-competed native red squirrels but there are some parts of the country (e.g. Scotland, Cumbria, Northumberland, Northern Ireland) where both species still exist and there are conservation programmes aimed at securing populations of red squirrel.

Tree pests and diseases are an increasing threat to all types of woodland. Ash dieback, also known as Chalara dieback of ash, is spreading across the UK and likely to have severe impacts on native ash trees. Others to be aware of are Acute Oak Decline, *Phytophthora ramorum*, Dothistroma needle blight, and Oak processionary moth. You can read more about pests and diseases and how to recognise them on the Woodland Trust and Forestry Commission websites. For some of these, if you find them on your site you may be required to notify the Forestry Commission. Management advice is also available from the Forestry Commission website.

Invasive species could include rhododendron, Himalayan balsam, and Japanese knotweed, among others. These are species that can compete with native flora and change the ecology of a wood, and some kind of intervention may be needed to remove them or keep them under control.

Human pressures such as fly-tipping and vandalism need to be tackled through cooperation and collaboration with the local community.

11. What is the access like?

You will need to look at access for management, and for recreation, if you are going to welcome visitors to the site.

Make sure you are aware of any public rights of way within the wood and any responsibilities in relation to these. Think about the users you expect on the site, and those you wish to encourage, and whether the access provision is suitable. You might want to

find out how people are already using the site through surveying visitors, a letterbox questionnaire, or through monitoring numbers. Avoid requesting personal details and keep questions open-ended – perhaps ask people to rank options for how they would like to see the wood develop and which of its qualities they most value, and provide the opportunity for people to introduce ideas or observations you hadn't thought about.

In terms of management access, you will need to think about the kinds of operation that might be needed in the long term. To avoid disturbance to nesting birds, it is advisable to carry out tree felling outside the nesting season – but this also tends to be when weather is wetter and ground conditions can get boggy. In some woods it may be appropriate or necessary to have a surfaced track for management access, but you can also take steps to keep unsurfaced tracks more passable by ensuring they are properly drained, and keeping the tree canopy open either side. If you are likely to be removing large amounts of timber you may need to plan in stacking areas

There is a lot to think about and every wood will have its unique challenges and opportunities, but by answering these questions you are in a good place to start drafting a management plan.