

Woodland management matters Ensuring the future health and resilience of our woodlands



Why woodland management matters

Managing your woodland in a sustainable way can make your wood more resilient to the threat of climate change, pests, and diseases – as well as helping you meet your woodland objectives.

Trees need nurturing to deliver the many benefits they can bring, from timber, carbon sequestration and flood alleviation to wildlife habitats, improved livestock

welfare, soil health, crop productivity and enhancing people's health and well-being through recreation.

Before undertaking any woodland management activities, it's important to understand the current condition of your woodland to help inform your woodland objectives and your long-term woodland management plan.

Ways to manage your woodland

Woodland management activities can range from controlling mammal populations to limit damage to trees and removing invasive plants to avoid the suffocation of young trees, to the thinning of trees to adjust the light levels reaching the forest floor to encourage greater biodiversity.

You may wish to adopt a mix of these management activities depending on your woodland type and condition, to achieve your overall management strategy and woodland objectives.

Different management activities include:

- **Formative pruning:** allows you to manipulate the shape of trees as they grow by removing side branches while they are small to encourage straighter and taller trees for timber.
- **Selectively thinning trees:** is where you remove selected trees within a woodland, to ensure the best trees are not competing with other trees for light, space and nutrients, maximising their potential for growth. Both broadleaf and conifer trees can be managed in this way to alter the light levels reaching the woodland floor, to encourage more biodiversity and natural regeneration. Thinning also limits the risk of trees being impacted by wind.
- **Felling to remove stands of trees:** is the removal and harvesting of specific groups of trees on a rotational cycle, followed by either the replanting of trees or leaving a handful of trees – known as regeneration felling – to act as a suitable seed source for natural regeneration where trees self-seed and grow within the woodland habitat itself. This will improve your woodland's resilience by increasing the age structure and species diversity.
- **Regenerating forests:** involves removing specific trees to increase light levels to promote natural regeneration, which encourages greater genetic diversity in seedlings growing from fallen seeds from nearby trees – encouraging a more diverse structure and range of tree ages for greater future resilience.
- **Restocking woodlands:** by planting tree species that will be better equipped to meet the challenges of a changing climate, which improves the resilience of existing tree species by creating a more structurally diverse and species rich woodland.
- **Suppressing or removing weeds:** to get rid of competing vegetation from around the base of young trees to help them establish.
- **Protecting ancient and veteran trees:** by ensuring they have adequate space, light levels and undisturbed growing conditions to continue to provide unique and valuable habitats for nature. It's important to select and manage future veteran trees to provide the next generation of trees.

Top five reasons to manage your woodland

A well-managed woodland is better able to:

1

Withstand extreme weather events such as wildfires, drought, flooding and high winds caused by climate change.

2

Be more resilient to the threat of pests and diseases.

3

Increase biodiversity and support nature recovery by encouraging woodland regeneration – promoting stronger, more genetically diverse seedlings to grow as well as allowing other woodland plants and flowers to flourish.

4

Capture carbon – otherwise known as carbon sequestration, which improves air quality and benefits the local community and the wider environment.

5

Produce better quality wood for timber, which can increase the overall economic value of your wood. Indirect financial returns due to greater livestock productivity, improved soil health and crop productivity can also benefit your business' bottom line, as well as helping you to manage public access in your woodland.

- **Coppicing trees:** involves cutting suitable trees near to ground level to allow the tree to regrow from the cut stem. Coppicing your woodland can provide a sustainable source of varying wood products depending on the rotation length, allowing small areas of woodland to be cut in sequence to allow other areas to regrow. Coppicing can also benefit biodiversity as it allows varying light levels to reach the forest floor and promotes a wider variety of flora and fauna species.

- **Leaving deadwood in your woodland:** supports many species of insects, animals, plants, lichens and fungi – encouraging greater biodiversity.

- **Maintaining or creating open space:** allows more light to enter the forest floor which is hugely beneficial for woodland ground plants and shrubs to thrive and support wildlife. Incorporating open spaces can also increase your woodland's resilience to wildfires by acting as a natural fire break.

- **Managing woodland tracks:** by opening up old tracks and glades to allow sufficient access for machinery to carry out woodland management activity, while increasing light levels at the same time to boost biodiversity. It's best to survey these areas as they can be home to shade tolerant plants. Maintaining paths and tracks can also help you to manage any public access in your woodland.

- **Creating space for off-road stacking:** to allow timber to be temporarily stored to encourage sufficient drying for firewood usage, or for safe collection by timber lorries.

- **Managing trees outside woodlands:** these include hedges and trees growing around the edge of fields that help to protect livestock and crops, as well as providing vital nature corridors by connecting wildlife to other habitats.



• **Mammal management:** Unsustainable mammal populations can have a significant impact on our woodlands flora and fauna, and can result in trees being stripped of their bark, and buds, shoots and foliage being eaten – significantly weakening trees which can cause them to eventually die. Before starting any mammal management it's recommended that you undertake a woodland condition assessment to understand the overall health of your woodland, and to record any grazing and browsing mammal damage. Find out how to complete a [woodland condition assessment](#). For a more in-depth view, you may wish to conduct an impact assessment for [deer](#) or [grey squirrels](#).

Tree shelters and guards can be used to protect young trees by deterring small mammals and deer during tree establishment. Timber tree guards or loop mesh fencing can also prevent tree damage from deer and grazing livestock. Deer fencing can be installed for larger woodland areas with small mesh fencing at the base to help deter rabbits and hares as well as muntjac deer. Culling deer is also an effective way to manage deer populations and selling the venison may help offset management costs. Live trapping and shooting can help to control grey squirrel populations.

Discover further guidance on [how to manage destructive mammals](#).

• **Managing and removing invasive, non-native plants:** Japanese knotweed, Himalayan balsam, rhododendron, giant hogweed, and New Zealand pygmyweed are all examples of invasive, non-native plant species that can smother and suffocate native trees and plants and have a detrimental impact on

woodland biodiversity. You can remove invasive plants by adopting the most appropriate method for your site which could include cutting, rolling or using a herbicide treatment.

Find out how to [safely remove invasive plants](#).

• **Preventing the spread of pests and diseases:**

A changing climate is leading to an increase in the number, spread and impact of pests and diseases on our woodlands. There are several measures you can adopt to help reduce pest and disease damage, they include:

- monitoring your woodland to spot the early signs of pests and diseases and [reporting them to the Animal and Plant Health Agency \(APHA\)](#).
- increasing tree species diversity and encouraging different tree ages, shapes and sizes to grow in your woodland.
- selecting suitable tree species that thrive in hotter climates and will suit your site's future climate conditions.
- considering your woodland design by assessing risks during site selection.
- implementing contingency planning to cope with current and future risks such as extreme weather events and pest and disease outbreaks.
- sourcing trees from biosecure stock and with a Plant Healthy Certification (or similar).
- washing kit, cleaning boots and vehicles before and after visiting your woodland.

Discover more information on [tree and woodland adaption measures](#).



Three steps to creating a woodland management plan

A woodland management plan will provide you with a structured way to plan and implement the long-term sustainable management of your woodland to achieve your objectives. A plan is often needed if you wish to apply for any relevant grants.

1

Understand your woodland

It's important to understand the overall health and condition of your woodland and conducting surveys can be one way to help you do this.

Surveys and online tools can help you to determine your woodland's soil type, its structure – in terms of tree ages and species, any wildlife habitats present, as well as the quality of timber in your woodland.

You also need to know whether your woodland has any designations, special features, structures, rights or public access, or if it contains any endangered species – a [Woodland Wildlife](#) survey will help you to conduct an ecological condition survey.

A selection of online tools include:

- **Magic Map:** holds maps and data on the natural environment.
- **Ecological Site Classification:** a tree species selection tool.
- **Climate Match tool:** to view the predicted climate of your site.

2

Set clear woodland objectives

Consider all your research including any threats or limitations you may have uncovered, to help set clear and realistic woodland objectives.

3

Create a woodland management plan

With clear objectives set and research in hand, you can begin to create your woodland management plan. Speak to your local Forestry Commission Woodland Officer who can advise you on the best management approach and activities for you and your woodland, that meets the UK Forestry Standard.

You can apply for the [Woodland Management Plan \(WMP\)](#) grant to fund the creation of your woodland management plan.

Find out how to create a [woodland management plan](#).

Woodland management strategies

A woodland management plan often lays out a range of different activities to help you to deliver your chosen management approach to the UK Forestry Standard and to achieve your objectives. Some key management strategies include:

Continuous Cover Forestry (CCF): involves selectively removing individual trees or groups of trees known as selective thinning or selective felling, to allow different trees to access varying light levels and for natural regeneration to take place (where trees seed within the woodland habitat itself) beneath the canopy, to create a more diverse forest structure. CCF can make your forest more resilient to extreme weather conditions caused by climate change as well as pests and diseases. By mimicking natural processes, you can support nature and produce a regular timber crop at the same time to help pay for your woodland management activities.

Clearfelling, regeneration felling and selective felling: are efficient ways to remove trees to harvest a timber crop, managed on a rotational cycle of felling and replanting, with woodland regeneration to include climate resilient tree species to form an important part of your long-term strategy. Most felling activity will require a Felling Licence from the Forestry Commission – your local Forestry Commission Woodland Officer can advise on felling activity.

You may also consider **agroforestry systems** – a management approach that combines trees and shrubs with crop and livestock farming systems. Agroforestry boasts major benefits to your farm including increased farm productivity, improvements to livestock welfare, boosting soil health and supporting nature. Agroforestry systems should be carefully planned and designed from the beginning; we would not advise that you introduce crops or livestock to an existing woodland.



Income opportunities from a well-managed woodland



A healthy and well-managed woodland can provide a range of income opportunities to help cover your management costs.

- **Income from the sale of biodiversity units** – you could generate biodiversity units which can be bought by developers if your woodland is managed to improve habitats and biodiversity.
- **Income from the sale of carbon units** – by registering your woodland with the [Woodland Carbon Code](#) before planting any trees, you can generate income from selling official carbon units. With increasing demand for net zero supply chains, you could also look to offset your own business' emissions to make you a more attractive supplier.
- **Income from the sale of timber and wood products** – selling high quality timber and saw logs to the commercial timber trade can help you to generate a reliable income stream. Small roundwood can be sold for fencing, pulp and chip wood products, while lower quality, well-seasoned and [Woodsure certified](#) hardwood can be sold as firewood.
- **Income from recreation and leisure** – providing access to your woodland for recreation and leisure activities can offer new opportunities to diversify your business.



Woodland management funding



There are multiple grants from the Forestry Commission and our partners available to you. If you would like to apply for any Countryside Stewardship grants you must firstly register with the [Rural Payments service](#).

Woodland Management Plan (WMP) grant: You can apply for a capital grant for a one-off payment to create a 10-year woodland management plan. Your plan will be produced with support from a Forestry Commission Woodland Officer.

Higher Tier Capital Grant Scheme: Apply for a number of capital items such as deer fencing and

rhododendron control as stand alone items, or in addition to an existing agreement. This grant is available all year round.

Countryside Stewardship Woodland Tree Health grant: Apply for a grant to help restock or improve your existing woodland after tree health problems. Restocking may be needed after felling due to a tree health issue. Improvement work may be required to remove trees and rhododendron infected by diseases. This grant is open all year round and cannot be applied for if any of the work has already been completed.

Woodland management statutory requirements

There are several statutory requirements you need to be aware of when managing your woodland.

- **Felling licence** – find out how to apply for a [felling licence](#) to remove trees.
- **Conservation areas and protected trees** – if you wish to carry out management work and remove a tree that is in a conservation area or is protected by a [Tree Preservation Order](#) (TPO) you will need to get permission from your local planning authority.
- **The protection of endangered species** – extra protection is given to specific species identified in the Conservation of Habitats and Species Regulations

2017 and the Wildlife and Countryside Act 1981. In some cases you may need to apply for a [wildlife licence](#). More guidance can be found on [how to identify protected species in your woodland](#).

- **Notifiable pests and diseases** – some tree pests and diseases must be reported to the Forestry Commission or the Animal and Plant Health Agency (APHA) to monitor their spread. Find out when and how to [report a notifiable tree pest or disease](#).

Subscribe for updates from the Forestry Commission to receive the latest forestry news, regulations, grants and more.

Useful resources

[Magic Map](#)

[Ecological Site Classification](#)

[Climate Match tool](#)

[Forest Research Climate Change Hub](#)

[Woodland Wildlife Toolkit](#)

[UK Forestry Standard](#)

[Create a woodland management plan](#)

[Advice on small woods](#)

[Managing your woodland](#)

[Types of woodland management](#)

[Forestry Commission blog: Tree felling – do you know right from wrong?](#)

[Forestry Commission blog: Tree protection – thinking about risks and opportunities](#)

[Managing destructive mammals](#)

[Deer impact assessment](#)

[Grey squirrel impact assessment](#)

[Grascott Farm case study – Innovating with timber, biomass, and wood products](#)

[Buckle Wood case study – Creating a legacy woodland to benefit the landscape, wildlife, and the community](#)

[Swains Wood case study – A woodland that benefits business, biodiversity, and the local community, leaving a lasting legacy for the family](#)

[The benefits of woodland creation: Woods for Nature fact sheet](#)

[The benefits of woodland creation: Woods and Carbon fact sheet](#)

[The benefits of woodland creation: Woods Mean Business fact sheet](#)

[So, you own a woodland? – An introductory guide to woodland management](#)

[Managing England's woodlands in a climate emergency](#)



Discover more helpful resources on our [Woodland Management Matters webpage](#).



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