

# The benefits of woodland creation

## Woods for Nature



## How woodland creation can help biodiversity

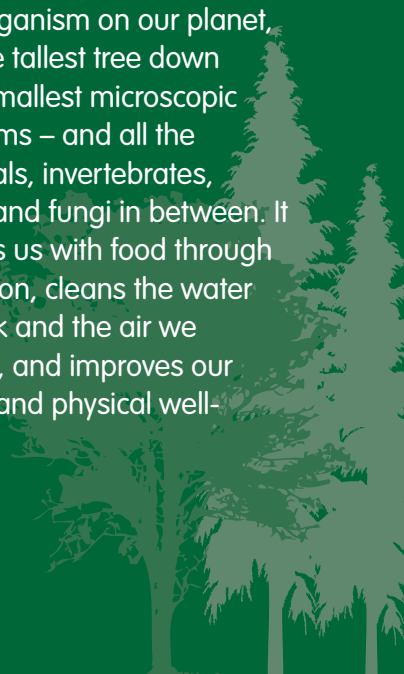
Woodlands offer a unique and diverse habitat that thousands of species call home. Mammals, birds, invertebrates, plants, lichens, and fungi rely on a woodland's diverse structure, from the tips of a tree's flourishing canopy all the way down its vast network of underground roots. Trees not only support wildlife – they help sustain healthy ecosystems, maintain climate regulation, and protect soils – playing a major role in aiding nature's recovery.

Creating more woodland will enable us to restore and reconnect England's wooded landscape – currently covering 10% of our landscape, compared to Europe's 40% average forest cover<sup>1</sup>. Creating larger, wooded habitats will enable us to expand and join up vital wildlife corridors on a transformative scale – with each and every tree giving nature a fighting chance to recover.

Oak trees can support over 2,300 species – 326 of which are entirely dependent on oak for their survival<sup>2</sup>.

## What is biodiversity?

Biodiversity includes every living organism on our planet, from the tallest tree down to the smallest microscopic organisms – and all the mammals, invertebrates, plants, and fungi in between. It provides us with food through pollination, cleans the water we drink and the air we breathe, and improves our mental and physical well-being.



## Boosting pollinator populations

Approximately three-quarters of all crops need insects to pollinate them<sup>3</sup>. Without these vital insect pollinators, we would have to do this difficult and time-consuming job ourselves – costing £1.8 billion every year<sup>4</sup>. Pollinators support healthy ecosystems, pollinating crops and flowers which in turn provide food for other wildlife. Woodlands are particularly important for pollinators, such as bumblebees and butterflies, providing a safe refuge all year round and supporting insects with a reliable food source thanks to a range of pollen and nectar-producing plants.

## The importance of woodland soils

Healthy soil is essential for biodiversity, with a teaspoon of garden soil containing thousands of species, millions of individual creatures, and a hundred metres of fungal networks<sup>5</sup>. This ecosystem sustains life on our planet, and is crucial for successful agriculture, helping to process waste organic matter, store carbon, and regulate the water cycle. Without healthy soil, plants cannot access the nutrients they need to grow, and the whole food chain collapses.

Woodland soil takes decades to form and is rich and fertile thanks to extensive root networks, layers of leaf litter, and a lack of disturbance. Deadwood and dying trees play an essential role in the formation of those soils, and act as a habitat for up to a fifth of woodland species<sup>6</sup>. Even outside large woodlands, trees and hedges can make a big impact on soil health, for example within regenerative agricultural practices. Find out how the Sustainable Farming Incentive's [arable and horticultural standard](#) focuses on improving soil health, structure, organic matter, and biology to benefit food production.

## Why act now?

Biodiversity is in trouble. One million species are on the brink of extinction globally. Nature is under increasing pressure from population growth, industry pollution, intensive land use, and climate change – decreasing and fragmenting our natural habitats. The UK is now rated as one of the most nature-depleted countries in the world, with over 40% of species in decline, including many important insect pollinators<sup>7</sup>. We can protect, restore and expand existing woodland habitats, home to a wealth of animal and plant species, to support nature's recovery at a transformative scale.

With expert advice and financial support available, you can create new woodland now and make a difference – safeguarding a wildlife-rich legacy for your community and future generations to enjoy.



# Different types of woodland support nature in different ways

All woodland and forests can be valuable for nature if managed appropriately to conserve and enhance biodiversity.

- **Ancient semi-natural woodlands** have been in existence since 1600. They support more species than any other land-based habitat in the UK<sup>8</sup> – as well as delivering ecosystem services such as water regulation and carbon storage. Protecting and managing ancient woodlands, while expanding and connecting nature networks with new native woodlands, is critical and beneficial for all living things. Read more about the protection of ancient and native woodland in the [Keepers of time: ancient and native woodland and trees policy in England](#).
- **Native woodlands** can include both semi-natural and planted broadleaf trees. They are very rich in biodiversity and support a wide range of flora and fauna. Broadleaf woodlands account for half of the UK forest cover<sup>6</sup> and are wildlife havens for iconic species such as the hazel dormouse, barbastelle bats, and nightingales.
- **Non-native woodlands** typically consist of mainly conifer species, often managed commercially. Whilst they tend to support a less diverse range of species than their native counterparts, they still enhance biodiversity if managed appropriately. Their scale can often provide protection from disturbance, allowing species to thrive that couldn't elsewhere. Dormice, bullfinch, bats, and pearl-bordered fritillaries can all be found in non-native woodlands, especially where there are plenty of clearings, rides and glades within them.
- **Mixed woodlands** contain both broadleaf and conifer species. Depending on the tree species and management of these woodlands, they may provide a similar habitat to semi-natural woodlands, supporting similar species. Diversity in tree species, age, and woodland structure is key to how wildlife-rich they are.
- **Riparian woodlands (alongside rivers)** will encourage wide wooded buffers to develop around watercourses. Allowing natural processes to take place will encourage rivers and streams to meander, slowing the flow of water off the land, protecting soil, improving water quality, and creating complex and connected wetland habitats. Consider what historic drainage works have occurred in your wood and if there is scope to re-engineer and re-wet your site to boost biodiversity. Watch our [Woods and Water video](#) to discover more water-related benefits.
- **Large-scale woodlands** can support a greater variety of species, especially where natural processes can create more dynamic forest environments. The return of keystone species including the beaver and pine marten will help to maintain our future large-scale woodlands, as beavers sustain forest wetland habitats and pine martens are crucial woodland predators. Extending existing woodland also helps to reconnect semi-natural woodland, and contributes to the overall resilience of the woodland and the wider environment.
- **Agroforestry** helps farms support biodiversity by adding more trees into the landscape; incorporating hedges, in-field trees, orchards and wood pasture which all help restore and protect nature within traditional agricultural systems – whilst also providing crops such as fruit and nuts, shelter and shade for livestock, greater soil stability, reduced wind erosion and flood risk, and reduced pollution run-off. Agroforestry can be of greater benefit to nature recovery compared to more conventional agricultural methods.
- **Other woody habitats**, including scrub, hedgerows, orchards, and wood pasture, can be just as valuable as woodland for nature recovery and can create a network for nature across the landscape. Dormice and nightingale thrive in scrub, as do many insect species and the bats and birds that feed on them. Hedgerows offer vital corridors – linking wildlife-rich areas together.



# Woodland management makes a difference

The way in which woods are created, and then managed for the long-term, has an impact on their value for biodiversity. Active on-going management is essential for a healthy woodland of any type, and will ensure the woodland is resilient to pests, diseases, and the effects of climate change.

Well-managed woodlands not only support nature recovery but can deliver viable income generation opportunities and cost savings such as the sale of timber and local woodfuel, carbon offsetting, venison, or recreation opportunities. Revenue and support for nature can go hand in hand!

As well as financial incentives, greater biodiversity will boost your land management objectives or farm business in other ways – from supporting crop pollination, to enhancing soil health, and reducing nutrient loss which could lead to more sustainable yields. Growing trees in-between crops, also known as silvoarable agroforestry, can produce as much as 1.4 times more produce as arable on its own.<sup>9</sup>



## Key considerations for nature-friendly woodlands

- **A diverse forest structure** will support a greater range of species. This can be achieved by managing a forest using continuous cover principles – which means selectively thinning your trees to allow more light in, thereby allowing natural regeneration of tree seedlings to occur, as opposed to operating on a clear-fell rotation. This creates a multigenerational and diverse forest with an irregular structure and a greater diversity of species, where the forest canopy is always maintained. Coppicing is another management technique that creates a diverse structure for a range of species.
- **Maintaining open spaces**, rides and glades where light can reach the forest floor allows a range of native plant species to flourish, with plenty of structural diversity, providing a wildlife-rich habitat within a woodland.
- **A range of tree species, of varying ages**, will boost biodiversity levels. Having a diversity of species is also essential to help the woodland adapt to climate change and remain resilient for the long-term.
- **Standing deadwood** provides nestholes for rare birds like the lesser spotted woodpecker, and roosts for bats, such as barbastelle and Bechstein's.
- **Fallen deadwood** supports many invertebrates and fungi, and provides an ideal hibernation refuge for reptiles and amphibians. As it decays, deadwood builds up the rich soils of the forest floor.
- **Scrub around and within a woodland** is a rich habitat in itself, supporting dormice and butterflies like the brimstone or green hairstreak, and will be teeming with invertebrates, encouraging the bat and bird species that feed on them.
- **Wet woodland** supports a unique invertebrate community, which in turn supports predators like the Daubenton's bat, known for snatching insects from the surface of ponds and streams.
- **Initial regeneration after clear-fell** can be beneficial for ground nesting birds including nightjar and woodlark. As scrub and trees begin to regenerate they attract scrub-nesting birds such as the willow warbler, while thicket stage conifer provides a safe refuge for the lesser redpoll.
- **Planted trees should be sourced from biosecure stock** and selected for their climate resilience. Choose your plants from nurseries with clear plant health management standards in place, such as [Plant Healthy](#).
- **Minimise soil disturbance** during any maintenance operations, to protect the soil structure and integrity.
- **Protect your woodland** from deer, squirrels, and rabbits to ensure successful woodland establishment and the creation of wildlife habitats.



## Buzzing about biodiversity

Your land could have great potential to support nature and its recovery in many ways. Depending on your objectives for nature, for example, you can consider pollinators within your woodland design by:

- Incorporating plenty of south-facing glades and open spaces within the woodland – providing warm areas and sheltered foraging spots for pollinators.
- Planting woodland edges with early-flowering trees such as blackthorn, wild cherries, hawthorn, or goat willow.
- Cutting glades and rides on a multi-year rotation – creating different vegetation heights and structure to maximise nesting and foraging habitat.
- Making the most of your natural wetland features, such as ditches and marshy areas. Allow watercourses to follow natural processes, and restore or create new woodland ponds.
- Creating a buffer strip adjacent to the woodland edge to encourage more flowering shrubs and wildflowers to grow, such as knapweed, bird's-foot trefoil, yarrow, and wild red clover, which all provide food for pollinators<sup>10</sup>.

## Natural colonisation and regeneration

Natural colonisation is the process by which trees naturally seed into surrounding open habitat, gradually turning into new woodland. Seeds can be scattered by the wind, birds, or by mammals. This is different to natural regeneration, where trees seed within the woodland habitat itself – and rewilding, where land is left to restore to its natural state without any human intervention, which may or may not result in woodland.

Natural colonisation can:

- Encourage a variety of different tree and plant species.
- Support intricate plant life and complex biodiversity within our soils, valuable for a wide variety of wildlife.
- Eliminate biosecurity risks associated with commercial plant transportation, helping to strengthen overall woodland resilience.
- Encourage the development of genetic diversity and therefore resilience through natural reproduction.
- Allow diverse habitats to develop for wildlife to move freely between mature woodland and open habitats.
- Reduce the release of carbon from soil due to minimised soil disturbance.

Being close to a wildlife-rich habitat, like an ancient woodland – with a plentiful and diverse source of seed – can be an effective way to establish new woodland. However, if there is no natural seed source close by, it could take decades to establish a desired habitat. In most cases, planting woodland – alongside natural colonisation where possible – can accelerate the creation of a wildlife-rich habitat.

For more information on natural colonisation, read our [Using natural colonisation for the creation of new woodland guide](#).

Financial support is available through the [England Woodland Creation Offer \(EWCO\)](#) – natural colonisation under EWCO encourages at least 60% woody cover and a minimum of 100 tree stems per hectare ten years after any capital works have been undertaken. For more information, read the [EWCO grant manual](#) or speak to your [local Woodland Creation Officer](#).

## Species reintroduction to encourage biodiversity

Encouraging the return of woodland wildlife helps to restore and support functioning, natural ecosystems. Across the UK, projects are underway: from the reintroduction of wild beavers – nature's 'ecosystem engineers' – as they help to improve water quality, reduce flooding and boost biodiversity, to the reintroduction of pine martens, the successful fledging of ospreys, and the return of the iconic white-tailed eagle to England after more than 240 years. Find out more about [Forestry England's wildlife success stories](#).





## Planting the right tree, in the right place

New woodlands must integrate and enhance our landscapes by considering any existing features, land use, and habitats. From soils and water to the historic environment and biodiversity, the UK Forestry Standard (UKFS) provides a consistent framework to ensure the right tree is planted in the right place, and for the right reasons.

The role of conserving, enhancing, and restoring priority habitats and species is essential – for example ensuring no planting on deep peat or in areas that would otherwise compromise existing or neighbouring bog, wetland habitats, and species-rich grassland.

### Encourage biodiversity with a sustainable woodland design

The UKFS recommends that the conservation of biodiversity should be at the heart of any sustainable land management plan to encourage a more diverse landscape. Every woodland application is rigorously reviewed to ensure it delivers for nature by:

- Protecting, conserving, or restoring priority habitats and species.
- Preventing and removing invasive, non-native species.
- Adopting forest management techniques to conserve or enhance biodiversity – for example by including a minimum of 10% open space, developing graded edge habitats, and thinning woodland edges to create a diverse structure.
- Assessing the impact of woodland creation in the wider landscape – as a habitat and for its role in reconnecting with other habitats.

Online mapping tools can help you to assess your land and its existing natural features, to identify potential and suitable areas for woodland creation. For more detailed guidance read the [UKFS](#) and [Planning new woodland in England guide](#).

[The UK Woodland Assurance Standard \(UKWAS\)](#) provides higher standards for the maintenance of biodiversity and ecological functions, allowing woodland owners to demonstrate to society that their woodlands are managed responsibly.

## How you can support nature recovery – and how it will benefit you

Woodland creation has a key role to play in nature recovery, and you can be part of the solution: expert advice and financial support are available now to help you create woodlands. Our flagship [England Woodland Creation Offer \(EWCO\)](#) supports new woodland creation that is at least 1 hectare in size or woodland blocks of 0.1 hectares. It covers:

- Standard capital costs up to £10,200/ha.
- Annual maintenance costs of £350/ha for 10 years.
- Additional contributions up to £8,000/ha when delivering wider benefits to society, nature recovery, and the environment.
- A contribution towards the costs of access infrastructure.
- Applicants can retain Basic Payment Scheme payments.

The additional contributions include a payment of up to **£2,800/ha for nature recovery** – for woodland creation that will expand areas of existing native woodland, create new areas of new native woodland, or expand habitat for red squirrel populations. Planting riparian buffers can provide up to £1,600/ha and will also qualify for a nature recovery payment.

For more information, read our [EWCO leaflet](#).



## Wider benefits of woodland creation

A carefully planned and managed woodland offers a wide range of benefits beyond supporting biodiversity. Trees can support health and well-being, improve air quality, offer shade for crops and livestock, prevent nutrient loss and soil erosion, improve water quality, and reduce the risk of flooding. Woodlands help tackle the climate emergency, capturing and storing carbon and helping mitigate against the effects of greenhouse gas emissions. Woodland creation can also deliver opportunities to diversify business and create reliable income streams from timber, local woodfuel, carbon offsetting, venison, and recreation.

Discover the far-reaching benefits of woodland creation in our [brochure](#).

## 3 steps towards woodland creation



# 1

**Consider opportunities for woodland creation on your land**



# 2

**Have clear objectives for your woodland**



# 3

**Speak to your local Woodland Creation Officer or one of our partners**

Read the latest guidance on [woodland creation](#) and information on grants and available support.

Find more in-depth guidance on [Planning new woodland in England](#).

## Forestry Commission grants

### **Woodland Creation Planning Grant (WCPG)**

Enabling applicants to assess the suitability of land for woodland creation, and to design a UK Forestry Standard (UKFS) compliant woodland. Up to £30,000 per site is available and a Forestry Commission Woodland Creation Officer can assist in the production of a plan.

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## Partner grants

### **England's Community Forests Trees for Climate Fund**

Expert support and up to 100% flexible and bespoke grant funding for up to 15 years. Open to all landowners within any Community Forest area.

### **The National Forest**

Generous grants and support for tree planting, forest creation and habitat management in the Midlands, available to landowners within the 200 square miles of the National Forest. Grant schemes offer funding to cover design, planning and up to 100% of implementation costs.

### **Northern Forest**

A partnership between the Woodland Trust, four Community Forests – Mersey Forest, Manchester City of Trees, White Rose Forest, Humber Forest – and the Community Forest Trust, with funding from the government's Nature for Climate Fund. You can secure up to 100% of the capital costs of woodland design, planning and creation, and a generous maintenance budget.

### **Woodland Trust**

Offers three national schemes: MOREwoods and MOREhedges covering up to 75% of the costs for a range of woodland and hedgerow creation, starting from 1.25 acres or 100 metres of new hedging, and Trees for Your Farm, funding up to 100% of costs for bespoke agroforestry schemes.

# Useful resources

[Butterfly Conservation – Woodland management for butterflies and moths](#)

[Confor – Biodiversity, forestry and wood – An analysis of the biodiversity benefits of modern forestry and wood production](#)

[Department for Environment Food & Rural Affairs – Keepers of time: ancient and native woodland and trees policy in England](#)

[Department for Environment Food & Rural Affairs – Biodiversity metric: calculate the biodiversity net gain of a project or development](#)

[Department for Environment Food & Rural Affairs, Forestry Commission, and Natural England – Decision support framework for peatland protection, the establishment of new woodland and re-establishment of existing woodland on peatland in England](#)

[Forestry Commission and Natural England – Manage and protect woodland wildlife](#)

[Forestry Commission – How to benefit species and habitats biodiversity in your woodland](#)

[Forestry Commission – Managing ancient and native woodland in England](#)

[Forestry Commission – Principles for afforestation on or near priority habitats: operations note 43](#)

[Forestry Commission – Priority open habitats and woodland creation: A field guide](#)

[Forestry Commission – Using natural colonisation for the creation of new woodland guide](#)

[Forestry Commission – The UK Forestry Standard: The governments' approach to sustainable forestry](#)

[Forest Research – Managing deadwood in forests and woodlands](#)

[Joint Nature Conservation Committee, Natural England, Natural Resources Wales, NatureScot, Northern Ireland Environment Agency – Nature Positive 2030 report](#)

[Natural England – Nature Networks Evidence Handbook](#)

[Organic Research Centre and Woodland Trust – Wakelyns Agroforestry: Resilience through diversity](#)

[Pond Conservation and Natural England – Designing wildlife ponds in woodland](#)

[Soil Association – How to increase the biodiversity on your farm](#)

[Soil Association – Protecting and celebrating forests](#)

[Sylva Foundation – Woodland Wildlife Toolkit](#)

[The UK Woodland Assurance Standard \(UKWAS\)](#)

[The Wildlife Trusts – How to manage a woodland for wildlife](#)

[Woodland Trust – Benefits of trees on livestock farms](#)

[Woodland Trust – Why trees are important for biodiversity](#)

**Discover farmers and landowners boosting biodiversity and benefitting from woodland creation by reading our case studies: [Grascott Farm, Orchard Farm, Blenheim Estate, 800 Wood.](#)**



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## References

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