



The benefits of woodland creation **Woods Mean Business**



How woodland creation can help you generate income

Woodland creation can help you to diversify your business and generate reliable revenue streams, whilst delivering environmental benefits that support your land management goals, nature, and society.

Harvesting trees for timber enables you to use your woodland as a valuable crop. Sawlogs can be sold for construction materials or furniture, while small roundwood can be sold or processed and used for woodfuel for your own use, saving you money.

By registering your woodland with the Woodland Carbon Code, you can sell carbon units to the government or on the private market from as early as five years after planting, and help to offset your business emissions.

Combining trees with crops or livestock can increase productivity and lead to more sustainable yields and a higher quality output – fetching a higher price.



It's not just animals and crops that benefit from trees, people pay to enjoy restorative woodland settings for recreation and sporting activities including cycling, glamping, and game shoots.

With financial incentives available and expert support on hand – planting the right tree in the right place, for the right reasons, can benefit you, your land, and your bottom line.



Why act now?

The farming and land management sector is changing. Growing environmental pressures are altering the way we look at our landscapes, and shifts in farming subsidies mean that many farmers and land managers are reviewing their land use models. Influenced by global factors, prices for feed, fertiliser and fuel are in flux, impacting cash flow and every business' bottom line. In this context, business diversification to seek alternative sources of revenue is of growing importance.

This is where trees can help. As well as providing direct sources of income, such as through the sale of timber or carbon credits, they can also help cut costs. Shelterbelt woodland can decrease winter feed costs by protecting livestock from adverse weather conditions, reducing how much feed is consumed.¹ Trees can decrease the amount of fertiliser needed on fields by enriching soils and reducing nutrient losses caused by water run-off. Growing trees for fuel can power biomass boilers to heat your farm buildings.

Financial support and expert advice is also available through the Forestry Commission and our partners.



Grow your income through woodland creation

Generating income is dependent on a variety of factors including the size, type and composition of your woodland, as well as your overall objectives and local markets. Before planning your new woodland, it's important to research local markets to understand current demand for wood products and how those markets may develop into the future.

Woodland creation can boost your business' revenue in a variety of ways:

Carbon

Registering your woodland with the <u>Woodland Carbon</u> <u>Code (WCC)</u> is your first step towards generating revenue from the sale of official carbon units for every tonne of carbon dioxide (CO₂) sequestered by your woodland. Carbon credits can be sold to the government through the <u>Woodland Carbon Guarantee</u>, or sold on the open market as early as five years after planting, as long as your woodland is validated and verified through the WCC. Alternatively, you could look to offset your business' carbon emissions to meet the rising demand for net zero supply chains.

Between 2019 to 2021, the number of companies announcing net zero targets doubled. There has been a steep rise in the total value of woodland carbon transactions and the value of individual units, with further demand for woodland carbon credits set to increase.³ Woodland creation projects can generate a generous return, with carbon prices ranging from £10 to £30+ per unit. Typically, woodland projects can produce in the region of 100 units/ha to over 500 units/ha – generating anywhere from £1,000/ha to £15,000+/ha through the sale of carbon units via the WCC over the same period. There are different factors that can affect your carbon unit prices and more information on this can be found in our <u>Woods and Carbon fact sheet</u>.

Explore how the <u>Blenheim Estate</u> converted low-grade, unprofitable agricultural land into new woodland to sequester carbon, and support nature and the wider environment.

£ Timber

Growing timber to sell to the commercial timber trade can generate a reliable short or long-term revenue stream for your business. Planting and harvesting fast-growing trees that can be coppiced or felled and restocked on a frequent cycle can result in a quicker turnover, but may be less profitable over time than slower-growing higher value hardwood timber from broadleaf species. The sale price for different types of wood can vary and can be influenced by local demand. Depending on your site and tree species, you could look to harvest lower-quality timber from your new woodland for fenceposts or woodfuel as early as 15-20 years after planting.²

The UK boasts a strong forestry industry, with wellestablished markets and specialist sawmills and processors that can cater for an array of timber types.¹ The best quality timber can be sold for sawlogs and converted into construction materials, while small roundwood timber can be sold for fencing, pulp and chipwood products. Timber used for framing or internal wood features can be processed from high quality hardwood logs – any lower quality hardwood can be sold to the firewood market.

There is a demand for premium quality wood for high value niche markets that produce anything from ship masts to bespoke film set props. There could also be niche markets that already exist in your locality, often requiring wood from all parts of a tree for floristry materials, small handicrafts, and decorative materials. It's best to research the local demand for specific wood products to highlight any lucrative markets that can inform your woodland creation objectives.

Timber prices

Timber values have risen by 70% from 2016-2021.³ There are many factors that can influence timber prices, including your site's access conditions, the quality and age of your timber, the extraction process, and transportation distances to mills for timber processing. We would recommend researching your local market demand for timber products, as demand can be influenced by location, the type of mills available and their proximity to your site, as well as the demand for specific tree species and the volume of timber required in your local area. This information will determine the value of your timber per hectare and will allow you to track emerging market trends to aid business planning. Your local Woodland Officer can help by providing you with the expert insight needed to plan your woodland. Private forestry agents will be able to assist you with timber forecasting and planning, and contractors can be hired to manage the maintenance, harvesting and transportation of your crop.

Home-grown timber has far-reaching benefits: not only can you generate an income, but you can also help to reduce the UK's reliance on imported timber, ensure timber is harvested sustainably and thereby support local ecosystems, and help to replace carbon-intensive materials while supporting more green jobs in the local economy. Certification schemes such as '<u>Grown</u> <u>in Britain</u>' can provide proof of sustainable woodland management, and may attract a premium for your products. No part of a tree needs to go to waste, as there are markets for everything from quality sawlogs to woodchip.

The **England Woodland Creation Offer (EWCO)** can help cover capital costs associated with tree planting, provide annual maintenance payments, and help to cover a proportion of the costs to install infrastructure to improve access to your site.



As of 2022, the UK imports 81% of its timber ⁵ which equates to over \pounds 7 billion a year, and is the second largest importer in the world after China.⁶

With timber predicted to help decarbonise economies across the globe, it's estimated that demand for timber will quadruple with timber values also expected to rise.⁴ Learn more by reading <u>timber price</u> <u>indices</u> produced by Forest Research.

Discover farmers and landowners generating income from sustainable timber crops: <u>Grascott Farm</u>, <u>Elslack Estate</u>, <u>Waterfoot Bridge</u>, <u>Lowther Estate</u>, and <u>Chatsworth Estate</u>.



Recreation and leisure

Woodlands designed for recreation and leisure can offer new and exciting opportunities to diversify your business. Evidence shows that visiting forest environments can help lower your blood pressure and pulse rate, and lower cortisol levels – benefitting people's health and well-being.⁹

Woodland creation can create suitable habitats for game that could generate revenue from running paid shoots. Idyllic woodland settings appeal to holiday makers looking for camping and glamping experiences, as well as sporting activities such as cycling. Woods can also offer the perfect environment for woodcraft workshops and forest schools. Farm shops selling local, seasonal produce appeal to a wide range of visitors as well as the local, rural community who want to support local producers.¹⁰

The **England Woodland Creation Offer (EWCO)** can cover a proportion of your costs to install infrastructure for better public recreational access. The grant provides additional stackable payments for new woodlands that deliver benefits to society, nature and the wider environment. By providing public access to your new woodland, you could receive additional payments and for projects located close to settlements.

66% of farms across the country already offer some form of diversified business activity to help generate income and supplement overall business revenue.¹⁰



Discover how farmers and landowners are benefitting from offering recreational activities: <u>Monkridge Hill Farm</u> and <u>Howards Woods</u>.



Woodfuel

Wood for fuel can be sold to local markets in the form of logs, kindling and well-seasoned firewood. Kiln-dried hardwood logs, split, bagged and certified 'Ready to Burn' can fetch premium prices, alongside split and bagged kindling. Find out more about the UK's woodfuel quality assurance scheme 'Ready to Burn' – Woodsure certification.

Lower-grade wood can easily be turned into woodchips, pellets, and sawdust to power biomass boilers to save on heating costs – approximately three to four hectares of woodland is needed to heat a farmhouse, year-onyear, using wood thinnings, small fellings or coppicing.⁷ Producing woodchip for biomass boilers, and in some cases an alternative bedding for livestock, can be achieved as part of your routine woodland management activity by thinning or coppicing your woodland.

Demand for woodfuel has seen a substantial increase in recent years, thanks to the renewable energy market, energy prices, and an increasing homeowner preference for log burners.¹ Assessing local demand for woodfuel is key to your business planning and woodland design.

The amount of fuel you can produce from your woodland is dependent on your site's conditions and tree species – coniferous species are capable of achieving a minimum of eight cubic metres per hectare, per year, while broadleaf species are around half that at four cubic metres per hectare, per year.⁸ To calculate how much fuel you could produce from your woodland, search for 'Fuel from woodland' on forestresearch.gov.uk.

Find out more about the farmers already producing sustainable woodfuel to power their biomass boilers: Grascott Farm and Orchard Farm.



Integrating trees into your farming systems

Combining trees and shrubs with crop and livestock farming systems is known as agroforestry – 'farming with trees'. This management approach can increase farm productivity, support nature, enhance livestock welfare, and boost soil health.

Growing trees in between crops, otherwise known as silvoarable agroforestry, is between 10% - 40% more productive than monoculture arable systems.¹¹ Integrating trees in rows within an arable scheme can also increase the area farmed above and below ground. Tree roots inhabit a different space to most arable crops and can even deliver more favourable growing conditions for crops grown between trees, by improving water efficiency and protecting soil.¹¹ Integrating trees into the same area of land as livestock is known as silvopasture agroforestry. This typically includes forest grazing, wood pasture, and orchard grazing. Silvopasture can increase soil health by capturing nutrients, limit soil compaction caused by animals, and increase infiltration rates.¹ Trees can provide shelter for livestock, resulting in improvements to animal welfare and an increase in production.¹ A reduction in heat stress in livestock can be attributed to trees providing accessible shade - improving live weight gains, milk production, fertility rates, conception rates of ewes, and egg weights.¹ Trees can also provide more favourable conditions for livestock by drying soils to reduce bacteria known to cause foot rot and snails that contribute to liver fluke.¹

A sheltered area created by trees can contribute to a 17% estimated rise in dairy milk production. For sheep, sufficient tree shelter can enable live weight gains up to 10-21%, as well as reduce lamb mortality rates between 30-60%.¹

Growing alternative crops in the form of fruits, nuts, and berries can be profitable as well as mitigate the risk of a single crop failing due to adverse growing conditions.¹ This also enables farm businesses to operate throughout the year to avoid the highs and lows of seasonal demands.

Woodland management techniques

There are a variety of woodland management techniques you can adopt to generate an income from your woodland crop. These include:

Coppicing – wood from a tree is harvested by cutting suitable trees near to ground level, allowing the tree to regrow and produce multiple stems to provide a sustainable supply of smaller wood products. Coppicing is done on rotation, and each year small areas of woodland can be cut in sequence to leave areas not being cut to grow on for between 15 and 20 years for chestnut, and seven for hazel.¹³ This woodland management technique also benefits biodiversity by creating wooded habitats with varying light levels reaching the woodland floor. Coppice coupes – an area of a wood to be harvested – can be up to one hectare and are usually determined by the size of your woodland, the number of coupes being cut, the length of your coppice cycle and local site conditions.

Continuous Cover Forestry (CCF) – selectively thin trees to allow for natural regeneration to happen beneath the canopy to promote a more diverse forest structure. This can make your forest more resilient to future changes in climate as well as pests and diseases. CCF allows you to support biodiversity and adapt to fluctuations in market prices – enabling you to sell thinnings at the right time.

Clear felling – fell and harvest every tree in a stand on a rotational cycle of felling and replanting, offering you an efficient way of harvesting timber. A group felling will always need a Felling Licence from the Forestry Commission, and you should consider how the clearing will be regenerated as part of your long-term strategy, as this technique can impact local ecosystems. To ensure a more resilient timber supply, you may wish to replant with nursery grown plants with clear tree health management standards in place, such as Plant Healthy. This will help to determine which tree species you grow and accelerate woodland creation.



Planning your new woodland

Woodlands must be carefully planned and managed for the long-term. Only healthy and resilient woodlands can help maximise your overall business productivity and profitability, as well as benefit nature, society, and the wider environment.

New woodlands must integrate into and enhance our landscape, connect with communities, and consider any existing features, land use, and habitats. The UK Forestry Standard (UKFS) is a set of guidelines to follow when planning and managing your new woodland – outlining the seven key factors you must consider with any new woodland design. Read more indepth guidance from the <u>UKFS</u>. Trees need protection from rabbits, squirrels, and deer for successful woodland establishment. Protection in the form of tree shelters, guards, or fencing must be incorporated into your woodland plan. It's important to factor in the time it takes for your woodland to establish, which can present a gap in your income. Maintenance grants and the sale of venison resulting from deer management activity can help to bridge the gap.

Our expert Woodland Officers can discuss the income opportunities tree planting can offer you, including the most appropriate woodland designs and available funding to achieve your objectives.

Tax guidance for woodlands

There is guidance available about tax implications for woodlands. If you're interested and want to find out more, check out our woodland owners tax guidance page on GOV.UK and speak to a financial advisor about your individual situation.

Wider business benefits

In addition to direct income generation, woodland creation can provide wider indirect benefits for your land, crops, and livestock – all of which affect your business' health and profitability. Here's how:

- Planting woodland between your field edge and a river can enhance soil health by helping to manage soil and nutrient losses, reducing sediment run-off by 90-100%, nutrient losses by 20-80%, and even reducing pesticide loss in run-off by 60-100%.¹²
- Shelterbelt woodland can help manage water during times of drought and flooding. By offering shade, they can reduce evapotranspiration rates during a hot summer, and slow storm water run-off through increased transpiration during wetter winter months. Due to greater water efficiency, shelterbelts can increase wheat yields by at least 3.5%.¹¹
- Woodlands can support the fertilisation of many crops by providing pollinators with an alternative source of food earlier on in the year when nectarproducing plants are scarce, and a safe refuge over the winter months.

Trees provide rich and diverse habitats for thousands of species, helping to create vital wildlife corridors to aid nature recovery – demonstrating that it's possible to support nature as well as generate an income from woodland. Explore how woodland creation can benefit biodiversity in our <u>Woods for Nature fact sheet</u>.

Planting more trees and protecting existing woodland can also help to counteract some of the harmful effects of greenhouse gas emissions and improve the air quality for you and your local community.

For a more in-depth view of the business benefits trees can bring to your farm business, read <u>Grow your</u> farm business: How trees can benefit your land, crop, and livestock.

Read how <u>Cherryrock Farm</u> created woodland to improve soil and water quality, while providing much needed shelter for livestock.

Forestry Commission grants

Woodland Creation Planning Grant (WCPG)

Contributes towards the costs of designing your new woodland in line with the UK Forestry Standard, and offers you access to expert advice from your local Forestry Commission Woodland Creation Team to assist in the production of your plan.

England Woodland Creation Offer (EWCO)

Covers standard capital costs and annual maintenance payments as your woodland establishes, with additional stackable payments when delivering wider benefits to society, nature recovery, and the environment.

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

Farm Carbon Toolkit

<u>Forestry Commission – Plant your future: The case</u> <u>for trees</u>

Forestry Commission – Woodland Carbon Guarantee – Brown & Co case study

Forest Research – Assessing the investment returns from timber and carbon in woodland creation projects

Grown in Britain

The Woodland Trust and Agricology – The Barbour family – Farmer profile case study

The Woodland Trust and Agricology – David Rose – Farmer profile case study

The Woodland Trust – Enhanced bird health results in premium woodland produce case study The Woodland Trust – Shelter boosts lamb survival rate case study

<u>The Woodland Trust – The benefits of integrating</u> <u>trees on livestock farms</u>

The Woodland Trust – The role of trees in arable farming

The Woodland Trust – The role of trees in free range poultry farming

The Woodland Trust – The role of trees in sheep farming

The Woodland Trust – Trees enhance flock health and field drainage case study

The Woodland Trust – Tree shelter for livestock case study

Soil Association – The Agroforestry Handbook

3 steps towards woodland creation



Consider opportunities for woodland creation on your land



Have clear objectives for your woodland



Speak to your local Woodland Creation Team or one of our partners

Read the <u>latest guidance</u> on woodland creation and information on grants and available support. Find more in-depth guidance on planning new woodland in England.



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References

- 1 Soil Association, July 2019. The Agroforestry Handbook Agroforestry for the UK First Edition [handbook].
- 2 The Woodland Trust, August 2012. Benefits of trees on livestock farms [research report].
- 3 Tillhill and John Clegg & Co, 2021. The UK Forest Market Report [report].
- 4 Tilhill, 2022. The UK Forest Market Report in partnership with Goldcrest Land and Forestry Group [report].
- 5 Soil Association, 2022. Regenerative Forestry Forestry and forests for the future [report].
- 6 National Farmers Union (NFU), July 2021. Get more from trees [webpage].
- 7 Forestry Commission, July 2012. New farm woodlands How planting trees can contribute to your farm business [publication].
- 8 Forest Research. Fuel from woodland resource [webpage].
- 9 Forestry England. Forests for wellbeing How do forests improve our wellbeing? [webpage].
- 10 National Farmers Union (NFU), November 2019. How agriculture is changing: The importance of diversification [webpage].
- 11 The Woodland Trust, Spring 2015. The role of trees in arable farming [publication].
- 12 Forestry Commission, 2021. Plant your future: The case for trees [publication].
- 13 Woodlands.co.uk, May 2007. Coppicing: An Introduction [blog].