



WOODLAND  
TRUST

# A guide to planting and looking after your new trees



# MOREwoods

[woodlandtrust.org.uk/MOREwoods](http://woodlandtrust.org.uk/MOREwoods)

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Hazel sapling photographed at a MOREwoods site in 2011. WTPL/Emma Mayo

# Introduction

Thank you for planting trees through the Woodland Trust's MOREwoods scheme.

Since MOREwoods began in 2008, we have helped landowners plant over 850 hectares of new native woodland, making a real difference to landscapes across the UK for people and wildlife.

This guide is intended to help you through the process of creating your own woodland. It includes advice on everything from planning, preparing and designing your wood, to receiving and planting your trees. You can also find information on maintenance during the first five years plus advice on caring for your trees into the future.

You can contact us for further guidance by calling **0845 293 5689**.

We're happy to answer any questions you may have about your wood. Our expert volunteer network of woodland creation champions can provide further support if needed.



# Planning your woodland

Before planting your woodland, there are certain responsibilities that you must be aware of. Our advisers can offer guidance if potential issues have been identified at your site:

**Archaeology:** Archaeological features are an irreplaceable part of our cultural heritage. It is important to preserve such features and as the landowner, it is your responsibility to check with the appropriate bodies (as listed on page 5), regarding any archaeological remains on the site. You must follow any advice or statutory obligations regarding their protection.

**Existing habitats:** Not all locations are suitable for planting trees, especially when there is high biological value. Undisturbed areas may have become home to a complex mix of species, or there may be one or more rare species which rely on a specific habitat. We do not recommend planting on species rich grassland, wetland or heath.

**Water courses:** Woodland has the potential to change the way a water course behaves. When planting adjacent to a water course or on a floodplain, talk to the relevant government department listed on page 5 before you start and follow their guidance.



Heath spotted orchids support butterflies and bumblebees. Check your land is suitable before planting. WTPL/Richard Becker



Planting trees can help improve water quality and reduce flood risk. Planting along the River Leith in Cumbria. Eden Rivers Trust

**Buildings and Services:** You should be aware of any under or above ground services and if present, you will need to design your planting accordingly. As trees grow they can interfere with electricity cables, building structures or underground pipes so you'll need to leave plenty of space. In some cases you may be legally bound to do this as part of a wayleave agreement.

**The local community:** Your new woodland will not just make an impact on your property but also the local landscape so consider how it may affect other people in your area. You may want to talk to neighbours about your planting design to avoid future conflicts or consider holding a planting event for the community.

**Planning permission:** You do not need planning permission to plant trees but if your new wood is 5 hectares or more, you may need an Environmental Impact Assessment (EIA). If you are in a National Park or Area of Outstanding Natural Beauty, the threshold for an EIA requirement is 2 hectares or more.

### Useful Contacts:

	Information on archaeology	Planting near watercourses	Government Forestry departments
England and Wales	Contact your council or check online: <a href="http://algao.org.uk">algao.org.uk</a> English Heritage <a href="http://english-heritage.org.uk">english-heritage.org.uk</a> Wales Archaeological Trusts <a href="http://archwilio.org.uk">archwilio.org.uk</a>	Environment Agency in England and Wales <a href="http://environment-agency.gov.uk">environment-agency.gov.uk</a>	Forestry Commission in England, Scotland and Wales <a href="http://forestry.gov.uk">forestry.gov.uk</a>
Scotland	Contact your council or check online: <a href="http://algao.org.uk">algao.org.uk</a> Historic Scotland <a href="http://historic-scotland.gov.uk">historic-scotland.gov.uk</a>	Scottish Environment Protection Agency <a href="http://sepa.org.uk">sepa.org.uk</a>	
Northern Ireland	Contact your council or check online: <a href="http://algao.org.uk">algao.org.uk</a> Northern Ireland Environment Agency <a href="http://doeni.gov.uk">doeni.gov.uk</a>	Check with Rivers Agency or Loughs Agency <a href="http://riversagency.cyni.gov.uk">riversagency.cyni.gov.uk</a> <a href="http://loughs-agency.org">loughs-agency.org</a>	Forest Service <a href="http://forestserviceni.gov.uk">forestserviceni.gov.uk</a>

The following organisations also offer expert advice on biodiversity and species management:

- British Trust for Ornithology – [bto.org](http://bto.org)
- The Grasslands Trust – [grasslands-trust.org](http://grasslands-trust.org)
- Royal Society for the Protection of Birds – [rspb.org.uk](http://rspb.org.uk)
- Pond conservation – [pondconservation.org.uk](http://pondconservation.org.uk)





Careful planning can help you create a wood that is both functional and beautiful. WTPU/Peter Carpenter

# Woodland design

**Spacing:** The planting density of your trees will depend on what is best for the site and how you intend to use your wood in the future. MOREwoods is offered at a density of 1,000 trees per hectare, and we recommend you plant in wavy lines and vary the spacing across your site. This will enable you to balance more densely planted sections with open areas for a natural look and feel. Plant small groups of the same species together to help to reduce competition between different species as they grow. There may be occasions when a higher density is needed and our team can advise you if this is the case. Typical planting densities include:

- Planted every 3 metres – 1,100 trees per hectare
- Planted every 2.5 metres – 1,600 trees per hectare
- Planted every 2 metres – 2,500 trees per hectare

**Shrubs:** It is likely your species mix will contain 20-30% shrubs such as hazel, hawthorn and blackthorn. We recommend most shrubs are planted around the edge of your planting site, with some shrubs also mixed in among the trees. By mainly planting these species around the perimeter of your site you can create a graded woodland edge, which will act as a windbreak and help encourage wildlife.

**Glades:** Leaving some open spaces within your woodland will enhance its biodiversity value by encouraging different habitats. A glade is an ideal place for wildflowers, while planting shrubs around the edge will benefit species such as butterflies, bats and birds.

**Footpaths:** Including a footpath as part of the design of your new woodland will allow you to easily enjoy the trees as they grow and develop. To create a winding footpath through your trees, miss out a row whilst planting. Depending on how frequent use is, footpaths will sometimes need mowing to keep them open. If planting for woodfuel, it is important to consider routes for extracting materials.



## Delivery and storage of trees

Receiving your tree delivery is a straightforward process but there are a few things to consider to ensure it all goes smoothly.

**When will my trees arrive?** We will agree a date with you to receive your delivery between mid- November and the end of March (April in Scotland). We can arrange delivery Tuesdays – Fridays and the delivery will be during the day. Someone needs to be in to receive the delivery, or if that's not possible, there needs to be clear instructions on where to leave the materials. If you have any special delivery requirements or you know that your home is difficult to find by SATNAV, then please let us know in advance.

### **What will the trees arrive on?**

Delivery is on a 6 wheeler lorry so it's important to have an area of hard standing for unloading. If you don't, please let us know so we can arrange a smaller van.



Your trees will arrive packaged for their protection. WTPL



Spiral tree guards help protect your trees from small mammals. WTPL/Jennie Ryan

### **How will the trees and guards be packaged?**

When the trees and guards arrive they will be on at least one pallet (the protective guards are bulky so expect the pallet to be large and heavy). Guards will be nested together so make sure you take account of this when checking you have received the correct number with your delivery.



**What size will the trees be?** The trees delivered will be young bare root saplings for England and Wales, and will vary in size between 40 – 60cm. In Scotland and Northern Ireland, you'll receive cell grown stock between 20 – 60cm. Don't worry if trees seem small – they'll grow lots in spring!

**What should I do with the trees before planting?** Choose somewhere cool, dry and frost-free to store the trees. Take care to avoid dropping the trees or knocking them – root damage will severely limit tree growth. When storing your trees remember that they will take up a lot of space. The trees will be protected from outdoor conditions in their packaging, but we don't recommend trees are stored in this packaging for long once you've received delivery.

**What if I can't plant all the trees within 7 days?** Unless you can't plant due to adverse weather conditions, you should plant the majority of your trees within 7 days of delivery to ensure they are given the best chance of survival. Cell grown trees should be kept upright in a sheltered area and the root plugs kept moist.

If you want to keep bare root trees longer than 7 days, they will need to be heeled in. You can do this by digging a trench, laying the roots of the trees into the trench, and then covering the roots over. They can be stored like this for a few months, but the trees will need to be planted before spring or they will start to grow in the trench.



Trees ready for planting at a MOREwoods event in South Hams. Paul Glendell

# How to plant your trees

Planting trees is great fun but it's important that it's done properly to give your trees the best start. The recommended method is pit planting as it is most thorough but also most time consuming. Other methods which are faster and less labour intensive include slit and T-notch planting, which are described below.

If you're using a mixture of tubes and spiral protection, put the tree species in tubes and use the spirals to protect the shrubs. If you are unsure please contact us.

## Introduction to site preparation, marking your site, storage



Start by marking out the planting positions for your trees. This can be done with stones, spray paint or just use the stakes/canes when they arrive.



Keep trees in their bags on the planting day so the roots don't dry out in the wind. If they do dry out, soak them in a bucket of water prior to planting.



Some sites may require 'topping' if overgrown with tall weeds. This involves cutting everything down to a certain height to make planting easier.

## Pit planting

Pit planting is the most thorough but time consuming method suitable for all ground types but can be difficult in areas with stony soils. This is the recommended planting method for areas that are susceptible to drought.



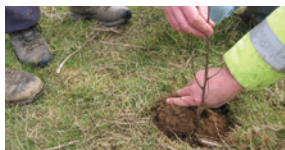
**1.** Each tree will require a pit to be dug with a spade. These pits need to be several centimetres wider and deeper than the tree's roots.



**2.** The grass you have dug up can be placed upside down in the bottom of the pit to provide the tree with extra nutrients.



**3.** Place the tree into the pit and check that all the roots will be below ground level.



**4.** Now carefully backfill the soil around the tree while holding it upright. Firm the top layer of soil around the tree with your heel.



**5 & 6.** Now push the cane/stake into the ground next to the tree, making sure it is stable. If using a spiral guard, place this over both the tree and cane. If using a tube, place it over the tree with the stake on the outside. The tube can then be fixed to the stake using the nylon ties. Press the shelter into the top of the soil. Deer tubes can be tied using nylon ties.



## Slit planting

Slit planting is a simple method that is suitable for bare soil and grass, and can be an easier method than pit planting for stony soils. We don't advise using this method if you are planting in an area susceptible to drought or with clay soils because in dry conditions the slit can re-open exposing the tree roots.



1. First, fully insert a spade into the ground and push it forwards to create a slit. Ensure the slit is deep enough for the tree roots.



2. When the slit is open, insert the roots into the slit, keeping the roots straight and ensuring they're all below ground.



3. Then simply remove the spade and push the soil back firmly down around the tree.

## T-notch planting

T-notch planting is another quick method suitable for grass covered ground but not bare soil. This method is an alternative to pit planting in areas susceptible to drought but again not recommended for sites with clay soils.



1. Push the spade fully into the ground.



2. At a right angle to the first cut, repeat step 1 to create an inverted T-shape.



3. Take the spade to the original cut and lever it upwards parting the turf.



4. Place the tree carefully in between the sections of turf.



5. Lever the spade back out and the turf will fall into place. Ensure all roots are taken into the hole.



6. Adjust the tree to ensure it is at ground level, and thoroughly firm down soil around the tree.



## Caring for your new wood – the first five years maintenance

It is important to care for your new wood to help your trees thrive, particularly in the first few years when the trees are still establishing. Guidance is given below, but you should also consult the UK's Forestry Practice guides at: [www.forestry.gov.uk/publications](http://www.forestry.gov.uk/publications) which provides an overview of the expected quality of new and existing woodland in the UK.

**Weeding:** Weeding each spring in the first couple of years after planting will reduce competition for moisture and nutrients, helping your trees establish successfully.

Chemical based products containing glyphosate will kill weeds with minimum effects in the wider environment and breaks down in the soil quickly. Spray around the base of each tree to create a weed-free ring approximately 1m in diameter. As with all pesticides, care should be taken applying it and be careful not to touch the tree with the chemical.

Alternatively, use a mulch such as bark chips, squares of old carpet, or straw bales around each tree to suppress weeds. You'll need to use plenty of straw or bark chips to prevent them from being blown away or dispersed, and will need to top these up annually. You can also buy mulch mats which can be pegged into the ground to keep them in place.



Weed free ring created using glyphosate. WTP/L



Straw being used to protect young saplings. WTP/L/Malcolm Allen

**Watering:** Your trees will adapt to the natural conditions of your site so watering shouldn't be necessary; especially as it encourages the roots to grow towards the soil surface rather than down towards groundwater. If there is a particularly long dry spell and you feel watering is a necessity, saturate the ground thoroughly to ensure the water percolates deep into the soil.

**Mowing:** Cutting the grass regularly is not advised as it actually invigorates grass growth and increases competition for moisture. If you do want to mow, take care to avoid damaging the guards and trees.

**Check your tree guards:** Strong winds can blow trees over so make sure your guards, canes or stakes are upright and pushed firmly into the soil. Remove grass growing inside the guard by pulling it up and replacing the guard once the grass is cleared.

**Pests:** Pests can also cause damage inside the tube – check the tree stems and guards for damage by animals. Keeping any tree guards firmly in contact with the soil and a weed-free area around your trees will help.

**Fencing and stock:** If livestock are near your planting areas, they will need to be fenced off from the young trees. Electric fencing or post and wire will prevent livestock from reaching and eating the trees.

**Keep your tree tubes:** If trees have died, remove the guards and store for re-use next winter.



Fencing will help protect young trees from livestock.  
Geograph-Jonathan Kington

## Long-term management

Once your trees have established, there are still things you can do that will enhance the appearance of your new wood and help it develop.

**Remove the tree guards:** Remove the guards once they have started to split and the tree has grown to over 3 metres in height or is too wide. The tube has now done its job and may hamper growth if left. If the tubes are still in good condition they can be recycled and used again.

**Pruning:** This is not essential but it will encourage trees to grow upwards rather than outwards once they're established. By pruning up to 25% of the trees, you can create a diverse canopy structure and keep paths clear of overhanging branches.

Invest in a good pruning saw and make a clean cut close to the main trunk of the tree. The cut should be made square to the branch and preserve the bulge at the base of the branch, known as the branch collar. To prevent disease and decay, it is important not to damage the bark of the tree and never cut the branch flush with the main stem as this creates a larger wound. If unsure, always seek expert advice.

Most native trees are best pruned in winter when dormant, except field maple, cherry and walnut which need pruning in summer to reduce risk of disease and sap bleeding.

**Coppicing:** This involves cutting a tree at its base to encourage new growth. Coppicing also gives light a chance to reach the woodland floor helping flowers to flourish. Your trees could be ready to coppice after 7 – 10 years, depending on species and growth rate. You can use this management practice as a sustainable supply of woodfuel and other woodland products. The remaining coppice stool will be vulnerable to animal browsing so make sure you protect the new growth.



Hazel coppice woodland. WTPL/Robin Weaver



**Disease:** Depending on the species you have planted, your trees may be affected by a variety of common diseases, but in the majority of cases these diseases won't kill young trees. A particularly cold winter may result in frost damage but your trees should recover. If concerned, do get in touch with us for advice.

**Thinning:** This involves the felling of some of your planted trees to reduce the competition for light, water and nutrients. By giving the remaining trees more room, they develop a better shape, grow stronger and are less likely to blow over in adverse weather. Thinning wouldn't usually occur until year 10 at the earliest but it depends on how close together the trees were planted.

**Attracting wildlife:** There are many ways to attract wildlife – you could install bird boxes, bat boxes, or perhaps even bee hives. If you have space, creating a pond will help attract a wonderful array of species to your wood. You could also plant a mix of grasses and wildflowers in an open area of your site. Remember that any open spaces will need ongoing management to avoid them becoming scrubbed over.



Bullfinches have been seen at woodland creation sites. North East Wildlife



Bat boxes can help attract wildlife to your woodland. WTPL/Geoff Sinclair



WTPL/Graham Fudger

## **Enjoy your new woodland!**

If you would like more in-depth advice on any aspect of your new woodland, our volunteer network of expert Woodland Creation Champions are here to help. For advice, or to become a volunteer yourself, please contact the team on 0845 293 5689.

We would also love to hear how your new woodland is progressing. Your experience can help us inspire more people to plant trees so please send your pictures and comments to [MOREwoods@woodlandtrust.org.uk](mailto:MOREwoods@woodlandtrust.org.uk)

## **Support the Woodland Trust – become a member**

For just £2.75 a month, you can help the Woodland Trust protect and restore the UK's precious woodland heritage, safeguarding our existing woods and creating new ones for people and wildlife.

Please join us today at [woodlandtrust.org.uk/membership](http://woodlandtrust.org.uk/membership)



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