

Maintenance for new woodlands

Practical Guide

The first few years after planting are critical to grow strong trees, and getting the maintenance work right during this period will give you an established woodland that requires minimal ongoing work.

The main aims of young woodland maintenance are:

- Controlling weeds
- Protecting against wildlife damage
- Replacing losses

Forestry Grant Scheme (FGS) funding for woodland creation includes annual maintenance payments for the first 5 years. These payments are intended to help get the woodland successfully established, meaning the trees are healthy and in a condition that they can continue to grow without further weed control, at the stocking density required by the contract.

Weed Control

Competing with other plants for light, water and nutrients is the main challenge for newly-planted trees, until they are tall enough to shade out other vegetation. Weed-free prepared ground gives trees a good start but will soon be invaded by weeds.

Herbicides are usually the most cost-effective method of weed control. On most woodland sites a knapsack sprayer is used to treat a circle, roughly 1m diameter, around each tree – known as spot weeding. Band spraying from a quad bike or small tractor may be possible on suitable terrain.

Systemic herbicides need to be applied carefully to avoid contact with the tree. Typically, one application is made in spring and, depending on the vigour of the weeds, another in mid-late summer. Selective herbicides and residual herbicides can be over-sprayed on certain tree species. Residual herbicides are applied in winter and their effects are visible in spring. Plastic shelters or tubes provide some protection but if weeds establish inside the tube they can quickly smother the tree; a selective liquid or granule herbicide should be applied inside the tube.

The list of herbicides approved for use in forestry is constantly changing so always **seek up-to-date professional advice**. Herbicide use must follow label instructions, comply with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 and only by done by people with Certificates of Competence for spraying.



Spot weeding



Band spraying

Hand-weeding with a sickle or strimmer is labour-intensive but may be necessary on very dense or tall weeds. Care and skill are needed to avoid damaging the trees. Grasses or other weeds that respond to grazing should be cut with caution as this can stimulate further growth.

Inter-row mowing controls the overall weed population and reduces cover for voles (see Wildlife Control).



Shading out



Hand weeding

Maintaining Protection

Deer fences are very effective at protecting young woodlands from wildlife damage, as long as they are well maintained. If one deer manages to get through the fence it can do significant damage, and where one has entered more could follow.

Walk the fenceline to check for damage as often as you can. Regularly used gates can be particularly vulnerable, as can water gates, or stretches close to mature trees. It's especially worth checking potential weak points following bad weather.

Tree shelters, or tubes, fixed to wooden stakes or bamboo canes protect trees from wildlife, and create a greenhouse effect that encourages rapid growth. Shelters can be damaged by weather, deer fraying or vandalism. If the shelter comes loose, or the stake or cane is broken, the whole thing can lean, resulting in a tree with poor stem form.

Check shelters regularly, particularly after stormy weather and during the rut. Keep any shelters and stakes left over after planting to replace broken ones. If a large number of shelters or stakes are damaged a planting contractor can replace them efficiently.

Wildlife Control

Browsing by **rabbits**, **hare** and **deer** can damage and kill trees. Deer may fray their antlers against trees that are a few years old.

Voles eat the roots and thin, delicate bark of broadleaves, and heavy damage can kill young trees.

A forestry agent should check for such damage while assessing the overall health of the woodland. Regularly check for signs of wildlife, such as tracks or droppings and identify the cause of damage:

- Rabbits and hares make a clean, angled cut to the stem, often leaving the severed top lying beside the stem
- Browsing deer leave a rougher, more ragged wound
- Deer fraying strips or cuts bark, and may even snap or push over the trees
- Voles strip bark where they can reach the stem and eat roots.



Vole damage to stem



Rabbit or hare damage

If there is evidence of wildlife inside the fenced area, they need to be removed and the fence repaired. Vole guards fitted at planting may become dislodged or lost so check they are in place and pushed a couple of centimetres into the soil. If a large number are lost it may be more efficient to have a planting contractor replace them. Tall collapsed weeds allow voles to climb above the top of guards so effective weed control will prevent this and limit the vole population by reducing cover (see Weed Control).

Replacing Losses – Beating Up

Losses of 5-10% are normal for new woodland planting but they must be replaced. It's a **condition of grant funding** that the agreed number of trees per hectare is maintained until the woodland is established, and stocking density is also important to get the **full benefits of the woodland**. Maintaining the right spacing in a productive woodland is essential to grow a uniform crop with minimal branching that will yield **high-quality, high-value timber**. The effectiveness of a **shelterwood** will be reduced by gaps left by dead trees.

The percentage of losses should be estimated towards the end of the growing season, usually by your forestry agent, and replaced in the next planting season. Planting contractors will walk along each row and plant a new tree next to every dead one.