



Managing Woodland for Ground flora

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**Small Woods
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Small Woods



Ground flora species only make up about 5% of the above ground weight of vegetation in a wood, but, they often contribute 80% of the vascular plant species.



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How do we define ground flora?

Woodland ground flora is the mixture of herbs, grasses and ferns that develop below the tree and shrub layers, mainly the vegetation below 1-2m high but bramble (*Rubus fruticosus*), bracken (*Pteridium aquilinum*) and some other tall herbs sometimes exceed this.

Climbers such as clematis or Old Man's Beard (*Clematis vitalba*) and common ivy (*Hedera helix*) are also

generally included, even when they get up into the canopy¹. In the west of the UK, the **vascular plants** may be much reduced and the ground flora made up predominantly mosses and liverworts. Tree and shrub **seedlings** and **saplings** are mixed in with the ground flora, so, when managing for the ground flora, consider also the implications for their regeneration.



A lowland mixture of Yellow archangel (*Lamium galeobdolon*)



Moss and grasses at Johnny's Wood in Cumbria

Why bother managing for ground flora?

The ground flora species only make up about 5% of the above-ground weight of vegetation in a wood, but, they often contribute 80% of the vascular plant species and therefore are key to the species diversity of the woodland. Fortunately, most are relatively easy to identify.^{2,3} Woodlands are dynamic **ecosystems** and the balance of advantage and disadvantage for other species can be influenced by the ground flora present. Ground flora composition is critical to the way that woodland works.

Ground flora helps protect the soil from erosion and captures nutrients in the spring and late autumn when the trees are generally dormant.

Dense stands of flowers, ferns and grasses can disadvantage tree seedlings from establishing successfully, but at times, provide

an advantage by creating essential shelter to the young trees to stop them being grazed by deer and sheep.

Flowers produce **nectar** and **pollen** for a wide range of insects and in return benefit themselves from the **cross-pollination** that occurs. Fruits, such as blackberries, are eaten by birds and mammals, but some seeds pass through their gut and are dispersed to new parts of the wood.

Leaves provide food for tiny leaf-mining moths through to our largest land animal, the red deer. While grazing damages the growth of the plants affected, it may allow other species to thrive, because there is less competition from the most vigorous plants.

For people, flowers such as bluebells are one of the glories of our woodlands in spring.

**Bluebells in Trench
Wood, Worcestershire**



What, apart from management, drives ground flora variations?

In addition to any management practices in a woodland, variations in the ground flora are driven by three major factors: climate, soil and history.

Climate

Some species are rarely found north of a line from the Thames Estuary to south Wales, such as Southern woodrush (*Luzula forsteri*) and Butcher's-broom (*Ruscus aculeatus*). Others, such as Spurge-laurel (*Daphne laureola*) and Thin-spiked

Wood-sedge (*Carex strigose*) extend their range to roughly a line from Durham to Anglesey.

Another group reaches into the lowlands of Scotland but are largely absent from the central and northern Highlands, including Moschatel (*Adoxa moschatellina*) and Hairy-brome (*Bromopsis amose*).

Some species show the reverse patterns: Beech fern (*Phegopteris connectilis*) and Lemon-scented fern (*Oreopteris limbosperma*) for example, have a strongly northern



Spurge-laurel, a southern species



Beech fern, a more north-westerly species

Cleavers spreading close to a farmland edge. Dense shade can limit the growth of these competitive species and help maintain a cool microclimate



and westerly distribution, while a small group including Creeping Ladies-tresses (*Goodyera repens*) and Serrated wintergreen (*Orthilia secunda*) is largely confined to the Highlands of Scotland.

With climate change we may see some 'southern' species starting to survive further north: look for them particularly in woodland 'hot-spots' such as felling gaps and glades. Conversely, northern species may come under more stress, so maintaining a cool microclimate at ground level through continuous cover techniques may allow them to keep a foothold at their southern and eastern limits

Soil

Ground flora composition is affected by the available nutrients that their roots can take up from soil, the availability of water and the soil acidity.

There are relatively few woodland vascular plants on the most nutrient-

poor, generally acidic, woodland soils compared to those in non-woodland habitats and not many species can cope with the double stress of both shade and poor soils together.

However, **enrichment** by ammonia compounds and oxides of nitrogen leaching into soils is an increasing issue for many woodlands, especially at the margins. These are produced from car exhausts, power plants, fertilisers and farm waste such as slurry. The result of this enrichment is the encouragement of nitrogen loving, competitive species such as Hedge garlic. (*Alliaria petiolata*), also known as Jack-by-the-Hedge and other species such as Cleavers (*Galium aparine*)

Where there is a localised source of pollution from adjacent land, developing dense cover along the edges of the wood can help to intercept and scavenge the pollutants from the air and so reduce the depth to which they can penetrate the woodland. However, be careful not to shade out existing rich edge communities.



Are these drains still needed?

There are few woodland species associated with either very dry or very wet soils compared to the rest of the British, non-woodland flora.

Wet areas in woodland add to the ground flora diversity by bringing in a different suite of species. However woodland soils may be getting drier as a consequence of climate change. Added to which, the effects of past surface drainage works and the increased water loss that occurs from a tall, closed canopy compared to former open ground or lower-growing coppice managed woodland, reduces woodland wet areas.

Small, wetland ground flora communities may benefit from blocking-up old drainage ditches. Thinning the tree layer around them can also help - particularly the removal of evergreen conifers which intercept more rainfall than broadleaves - because it allows more water to get into the soil.

History

Over the years landowners, foresters and ecologists have noted that some woods have a distinctive flora, with swathes of Bluebells and Wood

anemones whereas nearby woods, apparently similar in composition and soil, did not. Over time these observations led to the idea that these distinct differences may provide good clues to the history of the site.

In the 1970s these ideas were further developed by George Peterken and Oliver Rackham into the concept of 'ancient woodland indicators'.^{4,5} In general, these indicators show that the longer a site has been wooded,

the greater the variety of vascular plants present and, in particular, the wider the range of woodland specialists.

It has been shown that creating new woodland next to existing long-established woodland, hedgerows or old grassland increases the likelihood that some woodland specialists will colonise the new woodland quickly⁶.



Woodland plants in hedgerows can be a source of colonists for adjacent new woodland

Management for woodland ground flora – what can you influence?

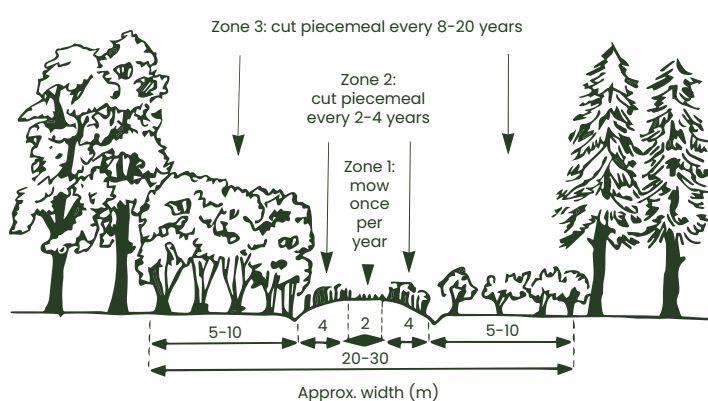
The first step is to be clear about your objectives. As mentioned above, actions taken to benefit ground flora will have implications for the other parts of the woodland system – including the tree and shrub layers; just as management to improve the tree crop, or secure regeneration, will affect the ground flora. This is the balancing of advantage to disadvantage across the whole range of woodland species.

It is important to recognise and acknowledge this balancing act in all your management planning objectives.

The importance of light

Woodland as a habitat is characterised by the shade from the trees and shrubs and few, even of the woodland specialist ground flora plants, grow well under very dense shade, particularly if there are other constraints on growth such as low fertility.

Conversely, a lack of shade usually means a much higher density of woodland species along woodland edges (*including ride edges*) than in the centre of stands and some species



'Ideal' ride structure © Warren and Fuller

An example in practice

are only found in the open spaces in woods.^{7,8}

Aim to include some permanent open space in woodland such as rides or glades.⁹ This is less important if the woods are next to rich habitats such as **unimproved grassland, heath or wetland.**

Within a managed woodland, conditions for the ground flora tend to be cyclical: stands are felled, then regrow, eventually to be felled again. The equivalent in unmanaged woods is where trees fall and create gaps, only for the gap to be filled by regeneration. Most patches of woodland go through phases when there are temporary open spaces, low scrub structures, and only later

do they become densely shaded. Management practices, particularly traditional practices effectively mimic many of the aspects of the natural cycle.

Most light reaches the ground, and hence there is often the most flora, in the early open stages of woodland areas but the richness and cover of ground flora tends to decline in the thicket stage and then may increase again as the stand ages and gaps start to appear in the canopy through the death of individual trees.

Importantly, for woodland biodiversity in the 21st century, much of the young growth that developed after trees were felled during WWII is now in the closed thicket stage of the cycle thanks to lack of management and so woods that have not been



A stand of sweet chestnut coppice in Jun 2011(a), May 2012(b), Feb 2015(c), and Jun 2020(d)

cut-over in the last 80 years tend be rather species-poor for ground flora.

Create temporary open spaces through interventions such as coppicing or thinning that break up the canopy/shrub cover.⁹ These generally increase the richness of the ground flora, through the increased ground cover and subsequent flowering of those species already present and the appearance of new species

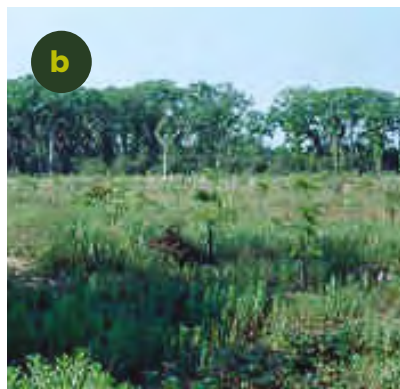
In ancient or long-established woodland some species also come up from the buried seed bank after gaps are created¹⁰, but the seed bank becomes increasingly depleted over time and few species are likely to emerge after about 40-50 years of shaded conditions. The species that emerge are mainly light-demanding but some more shade-tolerant species may appear. In woods recently established on old farmland,

there may also be a buried seed bank, but this is mainly of non-woodland species, including former crops such as wheat or oil-seed rape.

Small scale ground disturbance such as may happen during coppicing or felling and removing timber may help to bring buried seed to the surface where exposure to light can help stimulate germination.

Other species colonise new gaps from the surrounding woodland, particularly other open stands or permanent open space in the wood¹¹ – hence the appearance of Willowherbs and Ragworts which have wind-dispersed seeds.

Plants may also be spread by animals moving from one place to another.¹² In the second or third year after cutting, stands are often full of tall thistles and tussocky grasses but think of them as nectar sources for



This clear-fell in 1988 seemed to have largely destroyed the pre-existing ground vegetation (a), but full vegetation cover had re-established by 1990 (b) and a reasonable woodland flora subsequently developed 2022 (c).



Seeds of Willowherbs and Thistles are commonly blown into newly created gaps in a wood.

bees and butterflies, and habitat for small mammals.

The floral boom may not last long under a temporary gap. If the tree and shrub cover re-establishes quickly, the developing shade reduces the abundance of flowering and eliminates the more light-demanding species, as will developing cover of Bramble, Bracken or tall grasses.

Manage for a succession of temporary open spaces about every 5 years apart (*depending how long it takes to close canopy*) to complement the species and

conditions found under the canopy and in the permanent rides and glades.

Thinning lightly in a woodland tends to increase the vegetation cover of the species already present but has much less effect than coppicing or felling on the richness of the flora. There is generally less ground disturbance; the increase in light level at the ground is less; and it lasts for a shorter period because the canopies of the remaining trees rapidly close the gaps.

Less is known about the flora response under **Continuous Cover**



Thinned stands in transition to a Continuous Cover Forestry system

Forestry systems, but recent research suggests it can have a similar effect to coppicing.¹³

If thinning or using selective felling to create gaps, ensure that at least some are more than a large tree canopy-width across to provide scope for light-demanding species to develop in the gap.

Competition and disturbance

Under stable conditions just one or two species are likely to dominate the rest. Monoculture may not be a word readily associated with biodiversity but not all monocultures are seen as undesirable and once again the balance of advantage and disadvantage within your management objectives should be uppermost; for example, we welcome the swathes of Bluebells (*Hyacinthoides non-scripta*)

and Wood anemones (*Anemone nemorosa*) in spring. However in dark shady conditions on **calcareous soils** there may just be a green sea of Dog's mercury (*Mercurialis perennis*), on moderately acid well-drained sites with reasonable light – Bracken; in shaded new woods a ground cover of Common ivy.¹⁴

Disturbance helps to break up such monocultures and allows opportunities for other species to thrive. This process is a natural part of woodland systems, for example when trees fall over, but particularly when they are uprooted by windblow, root-plates create small hollows that allow new species to thrive.

Management for ground flora should allow for an element of disturbance, physical damage to the plants and exposure of mineral soil as part of the woodland operations such as coppicing, thinning and felling operations – but not too much. Try



Bare chalk and loose soil created by the uprooting of a tree; on the top of the rootplate Ragworts and other open ground species established.

not to have more than 40% highly disturbed ground, bearing in mind that some of the ground may have been bare soil or just litter-covered before the operation. If there are special plants present make sure that these are undisturbed as far as possible, so they can flower and spread.

Suppression and weeding

Tree and shrub seedlings may be suppressed by the more competitive elements in the ground flora, hence the need for weeding to get the new trees away. Weeding is also occasionally used to benefit rare or attractive ground flora species.

Grazing and browsing

The effects of grazing and browsing differ according to the animals involved, their density, the season and length of their access to the

woodland.

Grazing and browsing can reduce the growth, flowering and sometimes even the distribution of ground flora species throughout a wood.

Which plants are preferred by browsers depends on some factors intrinsic to the plants themselves, but also what is available – Dog's mercury is not often eaten by mammals but Muntjac deer will eat it when it is the dominant plant and there is little else available.

High grazing pressure tends to favour weedy species such as Dock (*Rumex obtusifolius*) or Rough-stalked meadow grass (*Poa trivialis*) over woodland specialist such as bluebell and Yellow-archangel (*Lamium galeobdolon*). The flora becomes more homogenous as just those species that can tolerate high grazing remain. However, as always, the situation is dynamic and a complete exclusion of grazing can also lead to dominance by just one

Oops, too much disturbance





Differences inside and outside of fences protecting against browsing in woods in Cumbria, Devon and Sussex on how woodland flora subsequently developed (2022)

or two very competitive species.

Whether grazing is seen as negative or positive depends on which species are affected and the scale at which it happens⁸. A positive grazing outcome for some ground flora species, e.g. reduced tall Bramble allowing more, lower-growing plant species to thrive, may mean less cover for small mammals and birds to forage and nest in.

Use the state of the ground flora and regeneration to judge grazing impact: are there seedlings growing through to sapling stages in gaps; is there a variety in the height of

vegetation; are palatable species showing signs of being heavily eaten? Varying the level of grazing over time may allow different groups of ground flora species to thrive so giving a species higher richness overall.^{15,16}

Separate to direct grazing impacts there may be damage to the ground flora through trampling. For example, pigs and wild boar trample heavily and also dig up bulbs of plants such as Bluebells.¹⁷ This tends to be only a localised problem – though significant if the locality hosts a rare species!

Localised effects may also occur



Effects of pigs in a Bluebell patch and wild boar rooting amongst mosses.

where livestock congregate regularly under veteran trees in parkland: the bare soil and Stinging nettle (*Urtica dioica*) patches that develop may indicate that there could be soil compaction and enrichment damaging the roots and mycorrhizal fungi with effects on the tree health.

People also cause damage through trampling, for example along paths, and indulge in a form of grazing when they pick flowers. The trampling damage from the initial few passes is high, particularly on wet ground and woodland species tend to be more sensitive to trampling than grassland species.^{18,19,20}

Encourage people to stick to a limited number of paths; consider opening these up, widening them or making them more attractive to walkers to allow them to dry out more and to develop more of an open grassland cover; develop thickets along path edges to discourage people from wandering more widely.

Bryophytes

In western Britain particularly, the ground flora may consist of a rich carpet of mosses and liverworts known as **Bryophytes**, with relatively few vascular plants. These are generally oakwoods in the wettest parts of the country and these woodland areas are sometimes

referred to as temperate rainforest.

These Bryophyte carpets are vulnerable to loss of humidity and too much shade. Some grazing in these woods is generally desirable to reduce the density of any shrub layer and to suppress vigorous growth of the vascular ground flora. The levels of grazing need to be managed because the moss carpet is also vulnerable to damage from trampling that may break off sections from rocks and tree bases in particular.

Use grazing to stop the vascular plants becoming too dense and shading out the mosses and liverworts but be ready to take the animals off if trampling is starting to damage the ground-living species.

Introducing woodland ground flora to new wood

There is rarely a case for introducing ground flora to ancient or long-established woods.

However, introductions may be worth considering for some newly created woodland where it is unlikely that colonisation from nearby sites will be fast.^{21, 22}

If there are no immediate sources of colonisation for woodland species consider introductions once the woodland is established: the species selected should be



Primrose (*Primula vulgaris*) and Bluebell introduced to established plantings; woodland edge species introduced at same time as tree planting.

suitable to the soils and climate of the area and preferably be capable of rapid spread thereafter. This will generally rule out rare species or the more demanding woodland specialists. Avoid areas with dense competition from competitive grasses, Bramble and Bracken.

Dealing with introduced or invasive plants


Introduced ground flora in woods may range from deliberately planted daffodils and snowdrops intended to give more spring colour; species such as Crocosmia growing up from garden rubbish dumped over the hedge; to the spread of plants from adjacent gardens, including varieties

of native woodland plants such as the variegated Yellow archangel.

Controlling introduced species is easiest when they are still sparse. Small/localised invasions may be dealt with manually or by targeted herbicide use. With extensive invasions, particularly if the source is outside the wood, there may be little choice but to accept that the introductions will become part of the established future flora of the wood.

There may also be a need to control the spread of introduced shrub layer species such as Rhododendron, Laurel etc. that can shade out the ground flora completely. Holly thickets can have the same effect.

Summary

- Identify what species are present or potentially might occur, taking account of the climate, soil and history of the site.
 - Look at the current occurrence of temporary and permanent open space in the wood; use coppicing, thinning or felling to create more if the wood is predominantly closed and there are not open habitats immediately around the site.
 - Accept some disturbance to soil when managing woods, because this may stimulate seeds in the soil and help keep competitive species under control.
 - Use grazing to manipulate the ground flora: to reduce competition from vigorous species; to create regeneration niches; or to favour moss layers.
 - Explore direct introduction of desirable species and control of introductions.
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Glossary

How do we define ground flora?

Vascular plant

Vascular plants are characterised by having tissues that carry water and nutrients through the plant. Vascular plants include; ferns, horsetails, trees and flowering plants.

Seedlings

A young tree or shrub in the very early stages of growth. At this stage the young plants are at their most vulnerable to weather, competition, trampling and browsing

Sapling

A young tree or shrub usually over 1m in height. They are still too young to flower or bear fruit but are flexible and smooth barked. Saplings from different species grow and mature at different rates.

Why bother managing for ground flora?

Ecosystems

A biological community of interacting organisms and their environment, such as a woodland

Nectar

A sugary secretion produced by flowers to attract pollenating insects to visit the flower and pick up pollen

Pollen

The soft powder in flowering plants that is made up of male sperm cells. As pollen just transferred by visiting insects it fertilises the female (*pistil*) flower parts

Cross-pollination

Pollination from one plant to another

What, apart from management, drives ground flora variations?

Enrichment

Woodland soils function well when they are nutrient poor but since the industrial revolution and especially since WWII industrial processes and farming have increased the movement of nutrients into woodland soils, changing the balance of growth conditions

Management for woodland ground flora –what can you influence?

Ride

A wide, often grassy strip between stands or rows of trees designed to provide access for woodland management

Unimproved grassland

Grassland or meadow that has not been fertilised, or sown with high yield grazing grass for livestock. Somewhat of a misnomer as unimproved grassland tends to be more species rich than 'improved', agricultural grassland

Coppicing

A woodland management technique involving cutting trees back to the ground to encourage regrowth.

Thinning

The removal of a percentage of trees in a stand to allow more light and space to others and thereby encourage growth

Felling

The cutting down of a tree in its entirety

Continuous Cover Forestry

A management system favouring multi-age woodlands with trees in various stages of growth between sapling and canopy.

Calcareous soils

Soils with an abundance of chalky (*calcium carbonate*) minerals

Bryophytes

Small, flowerless, green plants consisting of mosses and liverworts

References

1. KIRBY, K. J. 2020. *Woodland flowers: colourful past, uncertain future?* London Bloomsbury.
2. ROSE, F., O'REILLY, C., SMITH, D. P. & COLLINGS, M. 2006. *The wild flower key: how to identify wild flowers, trees and shrubs in Britain and Ireland*. Frederick Warne.
3. FITTER, R., FITTER, A. & FARRER, A. 1992. *Grasses Sedges, Rushes and Ferns of Britain and Northern Europe, Collins Pocket Guide*. Harper Collins Manufacturing, Glasgow.
4. PETERKEN, G. 2000. *Identifying ancient woodland using vascular plant indicators*. British Wildlife, 11, 153–158.
5. GLAVES, P., HANDLEY, C., BIRBECK, J., ROTHERHAM, I. & WRIGHT, B. 2009. *A survey of the coverage, use and application of ancient woodland indicator lists in the UK*. Grantham: Woodland Trust.
6. PETERKEN, G. & GAME, M. 1984. *Historical factors affecting the number and distribution of vascular plant species in the woodlands of central Lincolnshire*. The Journal of Ecology, 72, 155–182
7. PETERKEN, G. F. & FRANCIS, J. L. 1999. *Open spaces as habitats for vascular ground flora species in the woods of central Lincolnshire, UK*. Biological Conservation, 91, 55–72.
8. KIRBY, K. J., BAZELY, D. R., GOLDBERG, E. A., HALL, J. E., ISTED, R., PERRY, S. C. & THOMAS, R. C. 2022. *Five decades of ground flora changes in a temperate forest: The good, the bad and the ambiguous in biodiversity terms*. Forest Ecology and Management, 505, 119896.
9. WARREN, M. S. & FULLER, R. J. 1993. *Woodland rides and glades their management for wildlife, Peterborough*. Joint Nature Conservation Committee.
10. BROWN, A. H. F. & WARR, S. J. 1992. *The effects of changing management on seed banks in ancient coppices*. In: BUCKLEY, G. P. (ed.) Ecology and management of coppice woodlands. London: Chapman and Hall
11. RACKHAM, O. 2003. *Ancient woodland: its history, vegetation and uses in England (revised edition)*. Dalbeattie, Scotland, Castlepoint Press.
12. EYCOTT, A., WATKINSON, A., HEMAMI, M.-R. & DOLMAN, P. 2007. *The dispersal of vascular plants in a forest mosaic by a guild of mammalian herbivores*. Oecologia, 154, 107–118
13. ALDER, D. C., EDWARDS, B., POORE, A., NORREY, J. & MARSDEN, S. J. 2023. *Irregular silviculture and stand structural effects on the plant community in an ancient semi-natural woodland*. Forest Ecology and Management, 527, 120622.

14. MARRS, R. H., KIRBY, K. J., LE DUC, M. G., MCALLISTER, H. A., SMART, S. M., OKSANEN, J., BUNCE, R. G. H. & CORNEY, P. M. 2013. *Native dominants in British woodland – a potential cause of reduced species-richness*. *New Journal of Botany*, 3
15. KIRBY, K. J., MITCHELL, F. J. G. & HESTER, A. J. 1994. *A role for large herbivores (deer and domestic stock) in nature conservation management in British semi-natural woods*. *Arboricultural Journal* 18, 381-399
16. MITCHELL, F. J. G. & KIRBY, K. J. 1990. *The Impact of Large Herbivores on the Conservation of Semi-natural Woods in the British Uplands*. *Forestry*, 63, 333-353.
17. SIMS, N. K., JOHN, E. A. & STEWART, A. J. A. 2014. *Short-term response and recovery of bluebells (*Hyacinthoides non-scripta*) after rooting by wild boar (*Sus scrofa*)*. *Plant Ecology*, 215, 1409-1416
18. LITTLEMORE, J. & BARKER, S. 2001. *The ecological response of forest ground flora and soils to experimental trampling in British urban woodlands*. *Urban Ecosystems*, 5, 257-276
19. ROOVERS, P., VERHEYEN, K., HERMY, M. & GULINCK, H. 2004. *Experimental trampling and vegetation recovery in some forest and heathland communities*. *Applied Vegetation Science*, 7, 111-118
20. ROOVERS, P., DUMONT, B., GULINCK, H. & HERMY, M. 2006. *Recreationists' perceived obstruction of field and shrub layer vegetation*. *Urban Forestry & Urban Greening*, 4, 47-53.
21. BLAKESLEY, D. & BUCKLEY, G. P. 2010. *Woodland creation for wildlife and people in a changing climate: principles and practice*. Newbury, Pisces Publications.
22. WORRELL, R., LONG, D., LAVERACK, G., EDWARDS, C. & HOLL, K. 2016. *The introduction of woodland plants into broadleaved woods for conservation purposes: best practice guidance*. Edinburgh: Plantlife Scotland, Scottish Natural Heritage, Forestry Commission Scotland and Scotia Seeds.

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Interested in involving your woodland in the Mercian Woodland Biodiversity Project?

If your woodland falls within the Severn Trent catchment and you would like to hear more about the project, please get in touch.

Contact the project co-ordinator

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