# Bron y Buckley (Plan period - 2023 to 2028)



# Management Plan Content Page

Introduction to the Woodland Trust Estate Management of the Woodland Trust Estate The Public Management Plan Location and Access

# Introduction to the Woodland Trust Estate

The Woodland Trust owns and cares for well over 1,250 sites covering almost 30,000 hectares (ha) across the UK. This includes more than 4,000ha of ancient semi-natural woodland and almost 4,000ha of non-native plantations on ancient woodland sites and we have created over 5,000ha of new native woodland. We also manage other valuable habitats such as flower-rich grasslands, heaths, ponds/lakes and moorland.

Our Vision is:

"A UK rich in native woods and trees for people and wildlife."

To realise all the environmental, social and economic benefits woods and trees bring to society, we:

• **Create Woodland** – championing the need to hugely increase the UK's native woodland and trees.

• **Protect Woodland** – fighting to defend native woodland, especially irreplaceable ancient woodland and veteran trees; there should be no loss of ancient woodland

• **Restore Woodland** – ensuring the sensitive restoration of all damaged ancient woodland and the re-creation of native wooded landscapes.

# Management of the Woodland Trust Estate

All our sites have a management plan which is freely accessible via our website

#### www.woodlandtrust.org.uk

Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council<sup>®</sup> (FSC<sup>®</sup>) under licence FSC-C009406 and through independent audit.

The following principles provide an overarching framework to guide the management of all our sites but we recognise that all woods are different and that their management also needs to reflect their local landscape, history and where appropriate support local projects and initiatives.

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity, safety and to further the development of more resilient woods and landscapes.

2. We establish new native woodland for all the positive reasons set out in our Conservation Principles, preferably using natural regeneration but often by planting trees, particularly when there are opportunities for involving people.

3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe. Where possible, we pro-actively engage with people to help them appreciate the value of woods and trees.

4. The long term vision for all our ancient woodland sites is to restore them to predominantly native species composition and seminatural structure, a vision that equally applies to our secondary woods.

5. Existing semi-natural open ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.

6. The natural and cultural heritage value of sites is taken into account in our management and in particular, our ancient trees are retained for as long as possible.

7. Land and woods can generate income both from the sustainable harvesting of wood products and the delivery of other services. We therefore consider the appropriateness of opportunities to generate income from our Estate to help support our aims.

8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we encourage our woods to be used for local woodland, conservation, education and access initiatives.

9. We use and offer the Estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. We maintain a network of sites for long-term monitoring and trials leading to reductions in plastics and pesticides.

10. Any activities we undertake are in line with our wider Conservation Principles, conform to sustainable forest management practices, are appropriate for the site and balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

# The Public Management Plan

This public management plan describes the site and sets out the long term aims for our management and lists the Key Features which drive our management actions. The Key Features are specific to this site – their significance is outlined together with our long, 50 years and beyond, and our short, the next 5 years, term objectives for the management and enhancement of these features. The short term objectives are complemented by an outline Work Programme for the period of this management plan aimed at delivering our management aims.

Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. Any legally confidential or sensitive species information about this site is not included in this version of the plan.

There is a formal review of this plan every 5 years and we continually monitor our sites to assess the success of our management, therefore this printed version may quickly become out of date, particularly in relation to the planned work programme.

Please either consult The Woodland Trust website

www.woodlandtrust.org.uk

or contact the Woodland Trust

operations@woodlandtrust.org.uk

to confirm details of the current management programme.

A short glossary of technical terms can be found at the end of the plan.

# Location and Access

Location maps and directions for how to find and access our woods, including this site, can be found by using the following link to the Woodland Trust web-site which contains information on accessible woodlands across the UK

https://www.woodlandtrust.org.uk/visiting-woods/find-woods/

In Scotland access to our sites is in accordance with the Land Reform Act (of Scotland) 2003 and the Scottish Outdoor Access Code.

In England, Wales and NI, with the exception of designated Public Rights of Ways, all routes across our sites are permissive in nature and where we have specific access provision for horse riders and/or cyclists this will be noted in the management plan.

# The Management Plan

- 1. Site Details
- 2. Site Description
- 3. Long Term Policy
- 4. Key Features
  - 4.1 f1 Ancient Semi Natural Woodland
  - 4.2 f2 Informal Public Access
- 5. Work Programme

# Appendix 1 : Compartment Descriptions

# GLOSSARY

1.	SITE	DETAILS

# Bron y Buckley

Location:	Welshpool	Grid	reference:	SJ220079	OS	1:50,000	Sheet	No.	126
Area:	4.91 hectare	es (12.13	3 acres)						
External Designations:	Ancient Serr Order	ii Natura	al Woodland,	Site of Speci	al Scie	ntific Intere	st, Tree F	Preserv	ation
Internal Designations:	N/A								

# 2. SITE DESCRIPTION

Bron y Buckley is a 4.9ha ancient woodland occupying a south-facing hill slope immediately adjacent to Welshpool. The woodland forms a highly visible backdrop to the town and is protected by a Tree Preservation Order (TPO). A stream (flowing north to south) bisects the site forming a deep incised gully known to geologists as 'Trilobite Dingle' on account of its fossil interest. This is the type site for Silurian Hibolite fossils and the gully is designated SSSI for its geological interest. To the south, the site immediately borders a housing estate, to the north it is pasture, there is a quarry adjacent to the west and a school to the east.

The natural canopy would largely comprise elm, ash and cherry, although the eastern side of the site is now dominated by planted oak and beech (planted around the 1950s and last thinned in the 1990s), with beech and holly regenerating prolifically in the shady understorey and a sparse field layer. The loss of mature elm within the gully and western half of the site (thinned in 1990) have left a lighter, slightly more open canopy with a denser shrub layer and a more diverse field layer with soft shield-fern, dog's mercury and bluebell all frequent and locally abundant. An area adjacent to the housing estate was felled in 1988 and has been periodically coppiced thereafter for tree safety reasons, this area supports additional tree and shrub species such as field maple, dogwood and elder which are rare elsewhere on site and provides a lighter ride edge habitat.

A public footpath follows the stream through the site, passing along the eastern gulley side. Other paths are present throughout and the woodland is well used by local residents, with some fire setting and littering occurring. There is poor access between the western and eastern halves of the site due to the steep gully that bisects the wood.

Key features are:

· the broadleaved ancient woodland (semi-natural and replanted);

 $\cdot$  informal public access.

# 3. LONG TERM POLICY

Bron y Buckley will remain a predominantly native broadleaved woodland with a robust ancient woodland flora, good levels of deadwood habitat and a diverse range of shrub species. This shall be achieved primarily through allowing natural processes and retaining felled and fallen trees in situ. Other key objectives are to protect the geological interest of the site and to maintain safe informal public access on foot in the wood, to benefit visitors from the adjacent community for whom the wood is a significant piece of local green space.

The south-western boundary strip will be managed as coppice, cut, in sections, on an approximately 10-15 year rotation. While driven by safety objectives, this will also provide valuable scrubby woodland edge habitat/ open space within the wider woodland and maintain views from the ride over Welshpool. The only other significant interventions would be delivered to maintain visitor safety along the path network and adjacent roads.

# 4.1 f1 Ancient Semi Natural Woodland

#### Description

All the woodland at the site is included in the Ancient Woodland Inventory. Much of the woodland can be considered ancient semi-natural woodland but parts have been replanted with broadleaved species, mainly beech, oak and sycamore.

To the east, the woodland canopy is clearly of plantation origin, dominated by beech and oak with some sycamore. Here the shrub layer is dominated by young regenerating beech with frequent holly. The field layer is mostly sparse and species-poor, dominated by bramble with frequent creeping soft-grass and ivy (W10/14). Deadwood is less frequent in this area, having been removed following past operations.

In the central gully and to the west, the woodland composition and structure is more semi-natural with ash, beech and sycamore co-dominant. The shrub layer is well developed and locally (beneath gaps) dense comprising a variety of species and abundant ash and sycamore regeneration. The field layer is more species-rich with bramble, ivy, soft shield-fern, dog's mercury, lords-and-ladies, lesser celandine, false wood-brome, wood avens and bluebell all frequent and locally abundant (W8/W12). Deadwood is abundant within the gully and to the west, including many whole trees (dead elms and felled trees retained following thinning).

A narrow strip of woodland along the western part of the southern boundary was felled in 1988 and now comprises dense regeneration from cut stumps (ash, sycamore) and planted shrubs (hawthorn, hazel, field maple, holly, elder, dogwood). This area provides variety of structure and a component of temporary open space within the high forest woodland.

#### Significance

The woodland is ancient, part ancient semi-natural and part replanted with broadleaves and so represents an irreplaceable and high value habitat in the UK. The site supports areas of upland mixed ash wood and lowland mixed deciduous woodland habitats, priority habitat types in the UK Biodiversity Action Plan. The woodland area also includes a geological SSSI of significant fossil interest.

#### **Opportunities & Constraints**

The woodland is prominent in the landscape, clearly visible from much of Welshpool. Therefore any management should take into account the external appearance of the woodland and maintain continuous cover as well as the TPO designation. Given its small size and location within other open habitats, any additional interventions to significantly increase the open space percentage within the site would probably be inappropriate.

The lack of reasonable management access means that any felling will be to waste. To discourage fires, felled trees have been left whole on site in the past. This practice has resulted in an excellent provision of deadwood habitat but does present the risk of logs being rolled down into the gully. Also, much of the timber was removed from the eastern part of the wood (probably by a local firewood merchant).

Flash floods have occasionally lead to blockage of the culvert on southern boundary. Powys County Council is responsible for ensuring the culvert is kept open but the Trust has a duty to keep the watercourse free from obstruction. Deposition of debris as a result of fossil collecting or tree fall could contribute to the blockage of the culvert at the southern end of the stream and cause local flooding. While limited intervention in the gully - allowing dense ground cover to establish and promote slope stability - is probably generally the best approach to reduce flood risk, allowing natural deadwood to build up within the stream close to the culvert may not be feasible given the flood liability.

NRW consent is required for fossil collection - the SSSI interest could be damaged by unregulated collection activity. CCW (now NRW) has varied in its views as to whether erosion caused by uncontrolled fossil collecting is damaging or beneficial to the geological interest. A monitoring programme set up by CCW in 1997 has not been repeated recently.

# **Factors Causing Change**

Natural processes: windblow and deadwood accumulation is creating small canopy gaps, while natural regeneration of site-native species is frequent and sufficient to maintain woodland cover in the long term. In the absence of management the scrubby strip to the south-west will redevelop into high forest and open space is likely to be limited.

Pests and diseases: ash dieback is likely to reduce the relative abundance of ash as a canopy species, which could over the longer term provide opportunities for planted species such as beech to dominate: this has the potential to reduce the robustness, coverage and diversity of the ancient woodland flora communities at the site through shading.

Recreational impacts: mountain biking and fires have caused local damage to flora through erosion and burning. Timber (deadwood) theft was an issue when the site was last thinned in the 90s. The woodland is located immediately adjacent to a housing estate and school and as such there have been some problems associated with inappropriate activities in the past, including garden waste dumping (introducing invasive species), flytipping and littering, especially around the culvert where this can result in blockage of the culvert (causing local flooding).

Invasive species: Japanese knotweed has been recorded near the woodland entrance in the past and has been chemically controlled. Cherry laurel is present along the southern and eastern edges of the wood and may colonise the understorey more widely if not subject to periodic control.

# Long term Objective (50 years+)

A diverse mixed broadleaved woodland, with large mature trees and abundant regeneration and shrubs in the understorey and in canopy gaps. Wildflowers will be abundant in spring and early summer. There will be abundant retained deadwood, mainly fallen. A small rideside/ boundary coppice strip will provide some diversity of age class and temporary open space component although most of wood will remain high forest.

# Short term management Objectives for the plan period (5 years)

In compartments 1a-1c, natural processes will be allowed to operate and deadwood allowed to accumulate except where public safety (tree safety or blockages to the culvert) dictate some local intervention.

The coppice rotation in 1d will be maintained, preventing the establishment of mature trees in this area and retaining the current proportion of open space and rideside shrub cover. Small rideside blocks of approx 25mx10m/ 5m3 will be felled in 2025 and 2028.

Invasive non-native species (particularly Japanese Knotweed but also cherry laurel) will be rare and shall be controlled if necessary to prevent their spread.

# 4.2 f2 Informal Public Access

#### Description

A small accessible woodland adjacent to a housing estate on the outskirts of Welshpool. A public footpath runs through the site from the northern tip to the southern boundary along the eastern side of the gully. Other permissive paths are present on both sides of the woodland. There are two main points of access on the southern boundary from the adjacent housing estate, marked with Woodland Trust signage and an information panel (vandalised). A bench is provided to the south east of the site. Additional informal access has been created from many of the adjacent gardens. Visitors are mainly local and include unaccompanied youth from the adjacent estate. Firesetting and litter require ongoing clearance work. The site also attracts visits from official and unauthorised fossil hunters due to the trilobite deposits in the dingle.

#### Significance

The wood is well used by local residents and provides easily accessible green space for those living on the adjacent estate. The site is of academic and scientific interest for its fossil desposits.

#### **Opportunities & Constraints**

Due to the difficulty of constructing a suitable crossing point on the stream in the gulley the wood is effectively divided into two separate areas in terms of public access.

NRW consent is required for fossil collecting. There is a current consent for research activities that aim to add to the understanding of the site and excavated materials are being provided to the National Museum in Cardiff.

#### Factors Causing Change

Landslip has occurred in the past at the northern end of the public footpath and paths may further deteriorate as a result of unsuitable use (e.g. bikes, motorbikes).

Littering, fire setting and other inappropriate use may impact on other responsible visitors' enjoyment of the local environment or deter walkers, as well as causing damage to the woodland features.

Abundant regeneration and tree growth may require ongoing maintenance in order to keep existing paths accessible, especially to the south end of the wood. Ash dieback is necessitating some additional tree safety interventions to maintain visitor and neighbour safety.

Unregulated fossil collecting, including by commercial fossil collectors is still happening on occasion, which could damage the site's special interest and cause blockages in the culvert.

#### Long term Objective (50 years+)

The wood will provide a valuable local green space for residents of Welshpool, with safe provision of low key public access routes on both sides of the dingle. The site will be well presented and welcoming to visitors. The gully will continue to be valued as an important and protected geological site within the woodland with only legitimate and controlled research, studies and removal of material being carried out.

# Short term management Objectives for the plan period (5 years)

Litter, flytipping and fire sites will not be allowed to accumulate, with regular cleansing visits (note a particular focus on items with potential to block the culvert). Existing paths, access points and site furniture will be maintained in accessible and safe condition as part of the regular Estate Maintenance Contract programme. Any reports of unauthorised fossiling shall be passed to the relevant authorities. Coppicing in 1d is required for tree safety purposes but will also provide viewpoints from within the wood.

# 5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date
2023	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	July
2023	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	December
2024	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	May
2024	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	July
2024	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	December
2024	SL - Routine Safety Work	Works associated with undertaking planned visitor and structure safety orientated actions, such as erection/creation or maintenance of safety features such as fencing, rails, re-pointing of retaining walls etc	February
2025	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	May
2025	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	July
2025	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	December

Year	Type Of Work	Description	Due Date
2026	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	Мау
2026	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	July
2026	WMM - Invasive Plant Control	Works associated with the on-going management of invasive plants– such a repeat cutting and control treatments	September
2026	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	December
2027	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	Мау
2027	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	July
2027	AW - Visitor Access Maintenance	Works associated with the maintenance of existing visitor access infrastructure and paths. Work could include items such as repairing pot-holes and path surfaces, mowing grass paths, path widening, maintaining footbridges and steps, cleaning signage etc,	December
2027	SL - Routine Safety Work	Works associated with undertaking planned visitor and structure safety orientated actions, such as erection/creation or maintenance of safety features such as fencing, rails, re-pointing of retaining walls etc	February

# **APPENDIX 1 : COMPARTMENT DESCRIPTIONS**

This sub-co dominated	•	Oak (pedunculate) nt comprises the e	1930	High forest	No/poor vehicular access to the site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Tree Preservation Order
dominated	•	•	astern part			
sparse and A public foo	oundant be d species-po potpath form	ech regeneration por comprising ma ms the western bo	ch and pedu in the shrub ainly brambl oundary of t	unculate oak with layer along with e, creeping soft-g	occasional sycamore (last the frequent holly. The field lay rass and ivy (W10/14). ent with pasture and a schoor	hinned in the 1990s). ver is relatively
1b	1.3	Beech	1950	High forest	Housing/infrastructure, structures & water features on or adjacent to site, Legal issues, No/poor vehicular access to the site, Site structure, location, natural features & vegetation, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Site of Special Scientific Interest, Tree Preservation Order

compartment 1c below. Ferns (for example, soft shield-fern and hart's-tongue fern) are particularly frequent here (W8e/W12).

Dead wood is frequent including many whole trees (retained after thinning).

The stream and lower parts of the gully sides are included in the geological SSSI. The gully is an important site for the study of fossil trilobites which are found in the Ordovician mudstones deposited some 425 million years ago and exposed along the stream section. Other fossils occurring with the trilobites are valuable in understanding conditions which prevailed in this area during late Ordovician times. There is usually a reasonable amount of exposed earth and rocks in the gulley due to erosion during heavy rainfall and the instability of the steep slopes. The site is of great historical and current scientific importance. 'Trilobite Dingle' has been known to geologists for nearly 150 years and was described by Murchison. It is the only mixed graptolitic and shelly assemblage in the Welsh Harnagian and is a type locality for certain trinucleid trilobites.

The sub-compartment is mainly bound on both east and west sides by paths/rides.

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1c	2.3	Ash	1950	High forest	Legal issues, No/poor vehicular access to the site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Tree Preservation Order
particula locally al but with brome a Dead wo A wide p north.	arly beneath bundant reg locally frequ nd wood ave bod is abund bath/ride for	the larger canopy eneration of ash a uent dog's mercur ens. Other species ant including man ms the eastern/sc	gaps, and ir and sycamore y, bluebell, i s present inc by whole tree outhern bour	ncludes hazel, haw e. The field layer vy, soft shield-fer clude gooseberry, es (dead elms and ndary of the sub-c	hrub layer is dense and wel thorn, wych elm, holly, eld is relatively species-rich, do n, lords-and-ladies, lesser ca primrose and hart's-tongue trees felled during previous ompartment, with pasture	er, wild privet and minated by bramble elandine, false wood- fern. (W8/W12). s thinnings).
1d	etts are pres	sent in the undistu Mixed broadleaves	1990	of the compartme	nt. Housing/infrastructure, structures & water features on or adjacent to site	Ancient Semi Natural Woodland, Tree Preservation Order
			1	1		

# GLOSSARY

#### **Ancient Woodland**

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

#### Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

#### **Ancient Woodland Site**

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

#### **Beating Up**

Replacing any newly planted trees that have died in the first few years after planting.

#### Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

#### Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

#### Clearfell

Felling of all trees within a defined area.

#### Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

#### Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

#### **Continuous Cover forestry**

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

# Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

# **Exotic (non-native) Species**

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

# Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

# **Group Fell**

The felling of a small group of trees, often to promote natural regeneration or allow planting.

# Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

# **Minimum Intervention**

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

# Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

# National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

# **Native Species**

Species that arrived in Britain without human assistance.

# **Natural Regeneration**

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

# **Origin & Provenance**

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

# **Re-Stocking**

Re-planting an area of woodland, after it has been felled.

# Shrub Layer

Formed by woody plants 1-10m tall.

# Silviculture

The growing and care of trees in woodlands.

# Stand

Trees of one type or species, grouped together within a woodland.

# Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

# Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

# **Tubex or Grow or Tuley Tubes**

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

# Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established.

# Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.

**Registered Office:** 

The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.

The Woodland Trust is a charity registered in England and Wales no. 294344 and in Scotland no. SC038885. A non-profit making company limited by guarantee. Registered in England no. 1982873. The Woodland Trust logo is a registered trademark.