

Jacob's Well

Management Plan 2017-2022

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THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website <u>www.woodlandtrust.org.uk</u> or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- · Protect native woods, trees and their wildlife for the future
- · Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website <u>www.woodlandtrust.org.uk</u>. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

- 1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
- 2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, 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.
- The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural 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 heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
- 7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential 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 allow our woods to be used to support 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. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Jacob's Well
Location:	Coldstream
Grid reference:	NT847400, OS 1:50,000 Sheet No. 74
Area:	0.97 hectares (2.40 acres)
Designations:	Site of Special Scientific Interest, Special Area of Conservation

2.0 SITE DESCRIPTION

2.1 Summary Description

Jacob's Well is a small area of woodland on the Scottish bank of the River Tweed at Coldstream. Comprising predominantly sycamore and ash, it provides a secluded haven just a short walk from the Town Centre.

2.2 Extended Description

Jacob's Well Wood lies on the northern bank of the River Tweed on a relatively steeply sloping piece of ground between the river and the A698, in the town of Coldstream, Berwickshire. The strip of woodland varies between 20m and 40m wide. At the western end the bank is very steep, but becomes less so towards the east. The altitude varies from approximately 10m to 29m above sea level. As it is located on the north bank of the river, the woodland has a southerly aspect.

The underlying rock at Coldstream is sedimentary carboniferous rock of the Dinantian period. These are overlain with recent riverine alluvial deposits, giving rise to alluvial soils. The MLURI climate data describes much of the eastern end of the Tweed Valley as being warm dry lowland, with moderate winters. The site receives reasonable shelter due to its aspect.

The western part consists mainly of mature sycamore on very steep ground. The eastern part consists of a closed canopy plantation of mixed broadleaves, mainly ash. The plantation was thinned in 2004 and 2014. Ground flora is generally sparse due to shading and loose nature of the

soils on the steep slopes. At the lower margins it consists mainly of grasses and frequent Himalayan balsam. Giant hogweed has previously been widespread but has been routinely controlled since 2000 (as part of the Tweed Forum invasive programme) with the result that there has been a significant reduction in plant numbers. Although Himalayan balsam is also regarded as an issue along the Tweed, there is no coordinated action to attempt control. Within the plantation there is abundant deadwood as a result of the thinning to recycle work that took place in 2015. Over the rest of the site quantities of deadwood are variable. Winter flooding both deposits and carries away deadwood on a regular basis.

The woodland is part of the River Tweed SAC/SSSI and forms part of a network of riparian woodland along the Tweed valley. The woodland has a positive landscape impact, being highly visible to people crossing the Tweed bridge and thus being one of the first pieces of Scotland visible on crossing the border. It also has a role in stabilising the steep bank of the Tweed below the road.

At the west end of the site is an extremely steep bank into the river which is characterised by rough grassland with occasional sycamore regeneration.

The River Tweed was first designated as a SSSI in 1976, and re-designated in 2001. It is important for the quality of its freshwater habitat, including three species of lamprey, otter and Atlantic salmon. The SSSI was confirmed as a Species Area of Conservation (SAC) in 2005. All of the Trust's land is included within the designated area.

Within the woodland is the spring of Jacob's Well, from which the woodland takes its name. The 'well' is a small spring which discharges from a pipe in a stonework façade into a shallow circular depression lined with rough unbonded stonework, approximately 1m in diameter. The water runs in a channel from here down to the River Tweed. At one time the water from the spring was used for whisky blending by Carmichael's the Grocers in the high street. It is identified as 'Jacob's Well' on the 1st edition Ordnance Survey map (c.1850). Beyond this, little is known of its origins, and there is no mention of it in the Statistical Accounts of 1791-99 or 1834-45. The name Jacobs Well may have religious connotations and could refer to a bible story (John 4:6 Jacob's well was there, and Jesus, tired as he was from the journey, sat down by the well.). The well is neither scheduled nor listed, although it is of significant local interest. The well is visible beneath a boardwalk which protects it from damage.

The site was gifted to the Trust in 1995. Prior to this it belonged to the Lennel Estate. The site is not shown as wooded on the 1st edition Ordnance Survey map (c. 1850). The only known management history is that in 1989 0.5 ha of the site was felled and restocked with mixed broadleaves at a stocking density of 1100 stems / ha.

Excellent views over the Tweed are obtained from a level grassy area -which has a seating area and information board at the western end of the site, the area is popular as a lunchtime picnic spot. There is a small lay-by for three cars adjacent to this area. The area around the grassy level and seating is mown annually.

An un-surfaced footpath leads from the road at a gap in the wall, down some steps to the riverside, where it proceeds eastwards under the Tweed bridge. The path crosses the enclosed spring of Jacob's Well on a boardwalk, allowing a view of the Well beneath. There is also a short path westwards along the river bank to a bench, after which the bank becomes too steep to traverse.

A further entrance through the roadside wall at the eastern end of the site takes visitors down steps to join the path leading under the bridge. The latter route is marked as 'Coldstream Country Walk'. This leads eastwards to the village of Lennel. This is one of several walking routes in the area promoted by Scottish Borders Council. The circular route covers a distance of 3.5 miles: travelling around the town of Coldstream then out to the remains of Lennel church and its cemetery, and back.

In all there are 215m of managed paths. The Scottish Borders Council Core Path Map Area 27 confirms (2017) that there are no Core Paths or Rights of Way through the wood. The nearest Core Path skirts along the northern edge of the wood, utilising the pedestrian path alongside the main road A698.Despite the path alongside the Well being shown as present on 1st edition OS maps (c. 1850).

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Jacobs Well lies immediately to the west of Coldstream on the banks of the Tweed. From the high street (A698) walk west towards the Tweed Bridge. The woodland lies on the steep bank of the Tweed just past the monument to Charles Marjoribanks-which is known affectionately by locals as "Charlie's Monument". The site can be entered at several points through gaps in the stone wall and also from the approach passing under Coldstream bridge.

Coldstream is accessible by bus, with regular services on the Galashiels to Berwick-upon-Tweed route, stopping in Coldstream high street. Coldstream is not on the rail network. There is parking for three cars in a lay-by next to the most westerly entrance to the wood (picnic area). There are public toilets at the town centre car park.

3.2 Access / Walks

There are three entrances to the woodland through gaps in the wall from the A698 and one entrance passing under the Coldstream bridge. The first entrance gives direct access to the picnic site, with benches offering excellent views across the Tweed. The second entrance leads, via steps, to Jacob's Well, a spring protected beneath a boardwalk, and then to the river bank. The third entrance leads, via steps, to the riverbank next to the Tweed bridge. Passing under the Tweed bridge, the river bank path can be followed to the village of Lennel (1.25km, 3/4 mile).

4.0 LONG TERM POLICY

Woodland

The long term vision (50 years plus) is to create and maintain a broadleaved woodland with a range of species and ages and a healthy riparian ground flora. The woodland will form an attractive landscape feature when viewed by people crossing the Tweed into Scotland. Wind-firm and well-rooted trees will stabilise the steep bank below the road. The woodland will benefit the Tweed SAC/SSSI in maintaining water quality and providing semi-natural riparian vegetation.

In the medium term this will be achieved by periodic thinning of the young trees at the east end of the wood (cpt 1c) to promote broad crowns and strong roots, and allow ground flora development. The woodland on the steeper ground (cpt 1b) will be left to develop naturally as long as this is consistent will retaining woodland cover and stability of the bank. Giant hogweed will be controlled by herbicide spraying, in line with the strategy of the Tweed Forum Invasive non-native species (INNS) - species project.

The site will continue to be monitored and assessed for evidence of Ash dieback-which could have a significant impact upon the plantation in cpt 1c-which is mainly composed of ash. Any trees which die as a result of ash dieback and pose a threat to H&S will be felled to recycle and made safe.

Access

The site will continue to provide quiet informal recreation to mainly local users. The paths and will be maintained as well-drained, safe and clear of obstructions and overhanging branches. The Well will continue to be a point of interest to visitors and will be kept clear of debris. Views will be maintained from the picnic area by cutting of vegetation (cpt 1a) if it begins to obscure view. Woodland Trust Scotland (WTS) will work with Coldstream Community Trust (CCT) to ensure; view points, seating areas and walk ways are maintained and the site is kept clear of debris and litter. WTS will cooperate with Scottish Borders Council (SBC) to promote the site, walks within the wood and alongside the river-side path from Jacobs Well to Lennel.

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Informal Public Access

Description

Excellent views over the Tweed are obtained from a level grassy area with seating at the western end of the site. In summer this is a popular lunchtime picnic spot. There is a small lay-by for three cars adjacent to this area. The grassy level seating area and viewpoint is mown annually. The Nun's Walk leads away westwards along the river bank and follows the line of the wall is associated with a Cistercian Priory which used to be found along this walkway.

An unsurfaced footpath leads from the road at a gap in the wall, down some steps to the riverside, where it proceeds eastwards under the Tweed bridge. The path crosses the enclosed spring of Jacob's Well on a boardwalk, allowing a view of the Well beneath. There is also a short path westwards along the river bank to a bench, after which the bank becomes too steep to traverse.

A further entrance through the roadside wall at the eastern end of the site takes visitors down steps to join the path leading under the bridge. The latter route is marked as 'Coldstream Country Walk'. This leads eastwards to the village of Lennel and is promoted by CCT and SBC as a as one of several local walking routes.

In all there are 215m of managed paths within the site. However, none are claimed, as of 2017, as Core Paths or Rights of Way.

Significance

The site is regularly used by local people and is within easy walking distance of Coldstream. The seating area at the west end of the site affords excellent views across the Tweed and beyond and is a popular resting place. The riverside is well used by the fishing community and has a two mooring points for boats. The site is also well used by local people out for a relaxing walk and by dog walkers. The Well is a local point of interest although little is known of its history and there are many wells known as Jacob's Well throughout the UK. It may be a Biblical reference from the days of the Cistercian Priory in Coldstream-the Nun's Walk is not far away. It is known that in the past washerwomen used to gather at the well and also that the water was at one time used by a local shop keeper - Carmichael & Sons for whisky blending.

The paths link both to the Nun's Walk and to a riverside route to Lennel along the north bank of the Tweed, a walk being promoted by CCT and SBC.

Management of the access supports the Trust's corporate objective of 'Increasing people's enjoyment and awareness of woodlands'.

Opportunities & Constraints

Constraints:

Small site and steep slopes limit access potential

Opportunities:

Cooperation with Scottish Borders Council in promotion of riverside route to Lennel.

Factors Causing Change

Long term Objective (50 years+)

The site will provide quiet informal recreation to mainly local users. The paths and will be maintained as well-drained, safe and clear of obstructions and overhanging branches. The Well will continue to be a point of interest to visitors and will be kept clear of debris.

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

(i) Access provision will be in keeping with WT access guidelines and site access coding (B). Paths will be cut back, kept well drained, and free from obstacles and overhanging branches. Steps and boardwalks will be maintained in safe condition by annual inspection and maintenance. The site will be kept clear of litter and fly tipping. Regular tree safety inspections and remedial work will be carried out. Any trees which die as a result of ash dieback and pose a threat to H&S will be felled to recycle and made safe. The Well be maintained clear of debris.

(ii) Views will be maintained from the picnic area to the west and the view across to the bridge at the eastern end of the wood. Achieved by selective thinning and cutting back of vegetation in (cpt 1a &1c) when views become restricted.

(iii) WTS will work with CCT, by agreement, to help maintain the appearance of the site. WTS, CCT and SBC will collaborate to promote the site and river-side path from Jacobs Well to Lennel. WTS will continue to liaise, as required, with CCT and SBC.

5.2 Secondary Woodland

Description

The woodland occupies the steep bank of the river Tweed below the A689. The western part consists mainly of mature sycamore on very steep ground. The eastern part consists of a pole stage, closed canopy plantation of mainly ash, with some mixed broadleaves thinned in 2004 & 2015 to reduce crown competition, promote the better trees and improve the view of the bridge from the road. Ground flora is generally sparse due to shading and loose nature of the soils on the steep slopes. At the lower margins and alongside the Tweed it consists mainly of grasses, frequent Himalayan balsam with a scattering of few-flowered leek, daffodils and primroses. Giant hogweed has previously been widespread but has been regularly controlled since 2000 (as part of the Tweed Forum INNS programme) with the result that there have been no flowering plants in recent years. Although Himalayan balsam is an issue along the Tweed there is not sufficient resource available to be able to control it along the entire length of the river Tweed. Control is limited to annual pulling on the smaller watercourses within the Tweed catchment. The Tweed catchment is also part of a nationwide rust pathogen release and monitoring programme, funded by Natural England-following extensive research and testing from Centre for Agriculture and Biosciences International and approval from DEFRA. The rust pathogen is specific to Himalayan balsam and was licensed for release. Initial releases, using live plants, were made in May/June 2015. There is intended to be further release of the rust pathogen in 2017.

Ash dieback could have a serious effect upon the pole stage ash in cpt 1c. Remedial work will be undertaken as required. Quantities of deadwood are variable, abundant within the plantation area and occasional throughout the rest of the site. Winter flooding frequently deposits some deadwood and carries some deadwood away on a regular basis.

Significance

The woodland is part of the River Tweed SAC/SSSI and forms part of a network of riparian woodland along the Tweed valley. The woodland has a role in stabilising the bank of the Tweed below the road. The woodland also has a positive landscape impact, being highly visible to people crossing the Tweed bridge and thus being one of the first pieces of Scotland visible on crossing the border. Management of the woodland supports the Trust's corporate objective of 'Improving woodland biodiversity'.

Opportunities & Constraints

Constraints:

Steep ground, over part of the site, limits management operations

Factors Causing Change

Ash Dieback Invasive non-native species - giant hogweed, Himalayan balsam, few-flowered leek.

Long term Objective (50 years+)

To create and maintain a broadleaved riparian woodland with a range of species and ages and a healthy riparian ground flora. The woodland will form an attractive landscape feature when viewed by people crossing the Tweed into Scotland. Wind-firm and well-rooted trees will stabilise the steep bank below the road. The structure and management of the woodland will be in harmony with the objectives of the Tweed SAC/SSSI in maintaining water quality and providing semi-natural riparian vegetation.

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

(i) On wooded steep ground (cpt 1b) allow the woodland to develop natural characteristics by carrying out no silvicultural intervention, as long as this is consistent will retaining woodland cover and stability of the bank.

(ii) In young plantation areas (cpt 1c) promote the development of attractive and wind firm trees, and ensure adequate light for ground flora (target 80% cover and native species abundant). Achieved by promoting crown and root development by periodic thinning (assess for thinning again in 2022 then at 5-10 year intervals thereafter by crown thinning at a thinning intensity of around 20% of stems selected for removal).

(iii) Carry out control of giant hogweed in line with Tweed Forum INNS project. Achieved by herbicide spraying (glyphosate) twice annually to prevent any plants flowering. Monitor annually for Japanese knotweed. Continue to liaise with Tweed Forum over approach to control of giant hogweed and Himalayan balsam.

(iv) The site will continue to be monitored and assessed for evidence of Ash dieback-which could have a significant impact upon the plantation, especially in cpt 1c as the main component in the plantation is ash. Any trees which die as a result of ash dieback and pose a threat to H&S will be felled to recycle and made safe.

6.0 WORK PROGRAMME					
Year	Type of Work	Description	Due By		

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.13	Open ground		Non-wood habitat	vehicular access	Informal Public Access, Secondary Woodland	Site of Special Scientific Interest, Special Area of Conservation

A small area comprising a flat section, with mown grass and seating at the northern boundary and a steep grassy bank down to the river. The vegetation on the bank is dominated by grasses with frequent brambles, broom, bindweed, comfrey, nettles and teasels. The riverbank is almost vertical below the benches, dropping 20m into the river, with rock exposures at the base. There is occasional giant hogweed regeneration, but it has not reached the flowering stage for a number of years due to control.

1b	0.34	Sycamor	1940	Min-intervention	No/poor	Informal Public	Site of Special
		е			vehicular access	Access,	Scientific
					within the site,	Secondary	Interest, Special
					Very steep	Woodland	Area of
					slope/cliff/quarry/		Conservation
					mine shafts/sink		
					holes etc		

An area of mature woodland growing on a steep riverbank, dominated by sycamore with occasional ash, horse chestnut and Norway maple. There is a sparse understorey of occasional elm, holly and hawthorn. The ground flora is sparse under the trees but on the river bank is dominated by grasses with frequent Himalayan balsam and comfrey, and occasional tansy, black knapweed and teasel. There is occasional giant hogweed regeneration, but this has not reached flowering for a number years due to control.

1c	0.54	Ash	1990	Min-intervention	· ·	Informal Public	· ·
					vehicular access within the site	,	Scientific Interest, Special
						,	Area of
						-	Conservation

An area of young, closed canopy woodland, dominated by ash with a mixture of: lime, willow and cherry along the flat ground adjacent to the river and occasional elm, Norway maple and sycamore. This area was thinned in 2004 & 2015 to reduce crown competition, promote the better trees and improve the view of the bridge from the road. Under the trees the ground flora consists of frequent grasses, comfrey, nettles and docs with occasional Himalayan balsam near the river bank. There is occasional giant hogweed regeneration, but it has not reached flowering for a number years due to control. There is abundant stacked deadwood as a result of thinning in 2015.

Ash dieback has not yet been discovered on the site (2017). The disease has been recorded on sites nearby. The site will be monitored annually for evidence of ash dieback and remedial work undertaken.

The plantation area was thinned (2004 & 2015 and a small area at the eastern end was thinned in 2017 to improve the view from the road to the bridge). The plantation will be assessed for selective thinning in 2022.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	1a	Thin	0.10	50	5
2022	1c	Thin	0.54	28	15
2030	1c	Thin	0.54	37	20

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. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

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

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

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