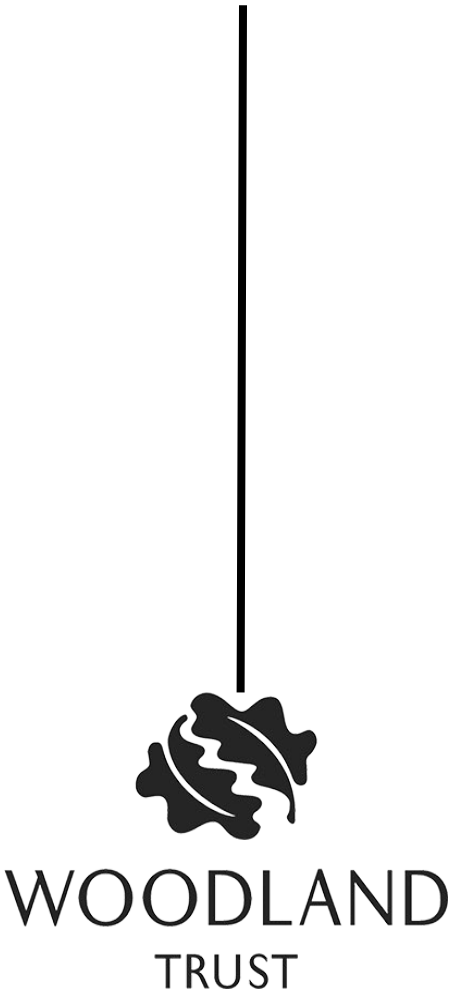
Kempston

(Plan period – 2023 to 2028)



Management Plan Content Page

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® (FSC®) 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 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 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

Kempston

Location:	Wood End, Kempston Grid reference: SP995470 OS 1:50,000 Sheet No. 153
Area:	16.24 hectares (40.13 acres)
External Designations:	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
Internal Designations:	N/A

2. SITE DESCRIPTION

Kempston Wood is one of the few larger ancient semi natural woods left in the Marston Vale Community Forest area. (more than 10ha). It is a also a County Wildlife Site close to Bedford, and has several large villages nearby to the wood. It is well connected to the existing public right of way network. This makes access by able bodied individuals easy and pleasant, but is unfortunately not suitable for push chairs or less able people due to the uneven nature of the paths and muddy slopes after any period of rain.

The surrounding land use is predominantly intensive arable fields, which border 3 sides of the wood. The southern side however is currently (2015) improved grassland, normally gazed by horses or sheep. The whole area sits on the upper-Jurassic layer of Oxford clay, which spans central Bedfordshire. This makes the soils quite poorly drained despite immediate topography.

The woodland itself is predominantly oak, ash woodland with notable field maple standards. The site is recorded as woodland as far back as the 14th century. Many of the Ash are large former coppice stools, now over-stood, but remain as clues to the intensive management for coppice materials which continued into the 19th century. The understory consists of a wide variety of species including hazel, hawthorn, midland hawthorn, blackthorn, dogwood, spindle, elder, wayfaring tree, wild privet, elm and crab apple.

There are many veteran trees within the wood; of particular note are those that occur on an old woodbank running just inside the present eastern boundary of compartments 1 and 2. This line of trees continues northwest into the main body of the wood and marks the boundary of compartments 2 and 3. The trees are mainly field maple and oak pollards, many of which are hollow. These, along with the ash coppice stools scattered throughout the compartments, are historically believed to have been features of Greater Kempston Wood, managed as wood pasture. The age class of individual compartments varies across the site, with younger Elm, ash and filed maple to the south, hazel coppice with mature oak and ash standards on the ridge of the hill in heart of the wood, and pole stage ash and oak to the northeast, alongside the veteran pollards.

Historical ecological data record the wood's rich ancient woodland flora including butterfly orchid, goldilocks buttercup, common spotted and early purple orchid, adders tongue fern, pendulous sedge, small teasel, twayblade, wood millet and ragged robin. Many of these species may still exist within the wood and there will be other species of interest not yet found, particularly those associated with the old trees.

The key Features on tis site are:
- Informal Public access
- Ancient semi-natural woodland
- Veteran Trees

3. LONG TERM POLICY

In 50 years, Kempston wood should remain a native broadleaved high forest with ancient woodland characteristics. There will be a diverse species and age composition from seedlings through to over-mature and veteran standards. Standing and lying deadwood will be retained throughout the wood, where safe to do so, adding to the overall site biodiversity. Species composition will be broader than it is now to improve resilience in the face of climate change and other threats and pressures such as pests and diseases. Although the site is traditional ash/oak lowland woodland on clay, this composition is under threat in the east of England, with AOD (acute oak decline) and Chalara dieback of ash noted nearby. Restocking certain areas may be undertaken if large areas of ash are lost to ADB and regeneration levels are poor. These would include a mixture of native broadleaves to further diversify species composition on site.

Veteran trees will be maintained along the wood bank with occasional selective felling as required to protect them should they become over shaded by more vigorous growth of surrounding trees. This will also promote a more varied range of age class throughout the wood.

The site will be regularly visited and valued by local people for quiet informal recreation, with signs and furniture in good condition and the path network will be clear, easy and safe to follow.

4. KEY FEATURES

4.1 f1 Ancient Semi Natural Woodland

Description
Straddling a clay ridge in the Marston Vale with gravel/loamy soils at its northern and southern extremities, Kempston Wood is predominantly oak and ash with much of the ash of coppice origin. There are also a number of large mature field maples. The understory consists of hazel, hawthorn, midland hawthorn, blackthorn, dogwood, spindle, elder, wayfaring tree, wild privet, elm and crab apple. The wood is recorded as having a rich ground flora layer including butterfly orchid, goldilocks buttercup, common spotted and early purple orchid, adders tongue fern, pendulous sedge, small teasel, twayblade, wood millet and ragged robin. There are areas of good ash regeneration of about 20 years of age but there is also evidence of deer damage to many stems and to the ground layer. The site is recorded as woodland as far back as the 14th century and was intensively managed for coppice materials until the mid 19th century.
Significance
One of the few ancient woods of any size left in the community forest area, past records suggest it has been rich in ancient woodland flora and may still support many of these previously known species. ASNW's have been in existence for many hundreds of years and unfortunately are a declining resource. As well as being a traditional feature in the landscape they support an abundance of plants, mammals, birds, insects and fungi. It is one of the Trust's main objectives to ensure no further loss of ASNW. They take centuries to evolve and are irreplaceable.
Opportunities & Constraints
Constraints: Local parking is difficult and access across the field to the wood can get very muddy. Management access into the central part of the wood is good but there are no vehicle routes into other parts of the wood. Opportunities: Bedfordshire has a good network of local naturalists and ecologists able to provide up to date wildlife information and advice on management. The site lies within the Marston Vale Community Forest and this would help support any linking and buffering schemes.
Factors Causing Change
- Impact of ash dieback and other pests and disease (such as acute oak decline) - Effects of climate change - more regular extremes of weather, increased pests & disease. - Senescence of veteran coppice/ pollards.

- Invasive species.
- Management 'right of way' is within 4m of our boundary and is impacted by shrub encroachment
- Herbivore impacts on regeneration levels

Long term Objective (50 years+)

In 50 years, Kempston wood should remain a native broadleaved high forest with ancient woodland characteristics. There will be a range of age classes from seedlings through to over-mature and veteran standards, with everything in-between. Standing and lying deadwood will be retained throughout the wood adding to the overall biodiversity. Species composition should be broader than it is now to improve resilience in the face of climate change. Although the site is traditional ash/oak lowland woodland on clay, this composition is under threat in the east of England, with (acute Oak decline) AOD and Chalara dieback of ash noted near by. With few neighbouring seed trees of different species, increasing diversity will inevitably involve gradually introducing this variety manually. (see short term policy)

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

Monitor general woodland tree health and deer pressure on natural regen through regular (at least every 36 months) visual inspection by SM and HIAs and act accordingly.

Remove ash (and other species) threatening visitor safety following prescriptions from the tree safety surveys. Monitor levels of ash decline and regeneration response and consider restocking with a mixture of broadleaves if large areas are lost and regeneration is poor. Appropriate potential native species to further diversify woodland composition include Bird Cherry, Rowan, Alder (in wetter areas), hornbeam and Wild Cherry. If planting is deemed as required, overstock to compensate for likely losses. If increasing levels of decline are observed in the north-west of the site, where there are high levels of ash, consider closing the permissive footpath in that area.

Improve structural and species diversity and vary light levels via ride-side coppicing within the main east to west ride between compartments 1 and 2. Do around 1/6 of ride every 2 years (total of 12 years cycle).

Ensure hedge is regularly trimmed (every two years) to allow vehicles to access management gate whilst keeping within 4m of our boundary (and not encroaching into neighbouring arable land).

4.2 f2 Veteran Trees

Description

There are many old trees within the wood. Of particular note are those that occur on the old woodbank running just in side the present eastern boundary of compartment 1 and 2. The trees are mainly field maple pollards and oak, many of which are hollow. In addition are the hundred or so large over-stood ash coppice stools scattered throughout all compartments. Historically the wood was part of Greater Kempston Wood managed as wood pasture and internal wood banks and dry ponds in cpt 3 may point to this area previously being under such management.

Significance

Interesting locally cultural feature which should be conserved. Veteran trees can be a vast reserve for many rare and uncommon species of fungi/insects. The trees and the banks on which they stand is of archaeological interest.
Opportunities & Constraints
Constraints: Management options on old pollards and coppice stools are very limited and potentially risky. Management access can be difficult Opportunities: Within Forest of Marston vale providing opportunities for funding and collaborative work.
Factors Causing Change
Overtopping by surrounding trees Disease and storm damage Senescence
Long term Objective (50 years+)
All Veteran pollards will be retained and their welfare actively maintained as long as possible (wherever safe to do so).
Short term management Objectives for the plan period (5 years)
Visual inspection of veteran pollards made by site manger (at least every 36 months), checking for "over shading" by surrounding trees. Halo thinning to be undertaken as required following WT best practice for managing ancient trees.

4.3 f3 Informal Public Access

Description
One of the few ancient woods of any size left in the Marston Vale community Forest area with public access. It is close to Bedford and has several large villages nearby. The wood is accessible for able-bodied people from the local Public Right of Way which abuts the wood in the east. Parking is roadside only, with space for just one or two cars.
Significance
The wood is valued by people in the immediate area and is connected to the existing rights of way system. There are good views from the wood of the rest of the vale.
Opportunities & Constraints
Constraints: Not suitable for less able access due to the distance from the road and the muddiness of many of the paths. There is no easy car parking near the wood. Opportunities: Within the Marston Vale Community Forest and is connected into the PROW network.

Factors Causing Change
Excessive vegetation growth blocking paths. Changes in drainage causing excessive waterlogging. Increased level of use causing erosion to paths.
Long term Objective (50 years+)
The whole wood will remain open to the public for quiet informal recreation on un-surfaced but maintained paths, appropriate to type of site and rural location.
Short term management Objectives for the plan period (5 years)
-Maintain existing paths by cutting twice a year to at least 2m wide. -Regular tree safety inspections - at least every 36 months, with remedial works undertaken as required. -Cut back vegetation to maintain path width (min 2m). Works to be identified through regular visual inspection by SM (at least every 36 months) and carried out as required. -Ride edge coppice central ride as required to maintain the full width (up to and including ditches) - works identified following inspection by SM. Bramble growth will be controlled through biennial cutting. -Signage and furniture maintained in good condition at all times to latest WT standards. Remedial works informed by regular inspection by SM (at least every 36 months).

5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date
2024	SL - Tree Safety Works - Zone B	Work associated with planned tree safety works alongside routes such as paths and rides within the woodland	February
2024	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	February
2025	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	February
2024	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	April
2025	SL - Tree Safety Works - Zone B	Work associated with planned tree safety works alongside routes such as paths and rides within the woodland	November
2025	WMI - Coppice Restoration	Works associated with the initial restoration of redundant/out of cycle coppice such as initial cutting, protective fencing, etc	December
2026	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	February

APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	6.5	Ash	1940	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
Compartment 1a comprises predominantly oak standards established around 1900 with many ash standards and large ash coppice stools from two distinct age bands, 1940s and 1960s. Field maple makes up a high proportion of sub canopy. Understory consists of coppiced ash, hazel, hawthorn, midland hawthorn, blackthorn and elder; with dogwood, dogrose, wayfaring tree and guelder rose toward the wood edge. Also contained within the understory are occasional naturally regenerating ash. The compartment has a moderate south-easterly aspect and contains patchy bramble and sedge as well as large patches of bluebell and dogs mercury. In the southerly corner is an area of predominantly dense elm scrub. Other species include oak and ash coppice, which is estimated to have last been felled around 1975. The whole of this compartment is reasonably wet, with a high proportion of dead and decaying matter. Two small paths run from the south eastern entrance to join the only wide ride in the wood which forms the northern compartment boundary. A hawthorn hedge marks the western external boundary. A major feature of this compartment is the indistinct remains of a wood bank with several large pollarded oak and field maple running 4-5 metres inside the eastern boundary.						
2a	5.75	Ash	1940	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
This compartment has a north-westerly aspect draining down to a stream on the northern boundary. The highest parts of the compartment are heavy poorly drained clay with a ground layer of bluebell, dogs mercury, pendulous sedge and bramble. Nearer the stream the ground layer is ranker and is dominated by nettles, docks and cleavers with large areas of bramble. The canopy composition is fairly uniform throughout the stand which comprises oak and ash standards established around 1900 and 1940 respectfully. Large ash coppice is also present within the main canopy. The compartment understory generally consists of frequent coppiced ash, hazel, hawthorn, blackthorn and elder. Towards the division of compartment 1 and 2 the understory is denser and consists of a number of mature hazel, hawthorn and field maple coppice stools along with occasional crab apple. Also contained within the understory is naturally regenerating ash. The most important feature of this compartment is a number of pollarded oak and field maple located along the						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
internal woodbank on the boundary between compartments 2 and 3. This feature runs on into compartment 1. Two recently created paths run through the compartment from the northern entrance to join the central ride which forms the southern compartment boundary. Hawthorn hedges mark the extent of the wood. There is evidence of moderate deer activity, not enough to excessively damage regen.						
2b	0.5	Ash	1920	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
Sub compartment 2b is a small area which has been coppiced in 1999 which was fenced against deer until 2005. Canopy composition consists of oak standard established around 1900, and over mature ash coppice last cut around the 1920s and with a smaller proportion cut around the 1960s.						
3a	3.25	other oak spp	1900	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
The western boundary with the rest of the wood is clearly demarcated by the wood bank which contains old oak and field maple pollards. There is also a change in structure and composition between compartment 2 and 3. Compartment 3a has fewer large over-stood coppice stools and there are more frequent naturally regenerating ash, established around 1990. Generally the canopy comprises oak and ash standards established around 1900, as well as a proportion of oak and ash coppice stems last cut around 100 years ago. Understory consists of frequent to abundant coppiced hazel, hawthorn, blackthorn and elder. Sub compartment 3a has a moderate north-westerly aspect and contains little evident ancient woodland ground flora. A small brook runs the length of the north-western boundary. There are a number of internal banks and hollows in the compartment.						
3b	0.5	other oak spp	1940	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc)
The area is predominantly made up of naturally regenerating ash and elm, with a small proportion of young ash coppice. Ash stems established around 1987 and consist of well over 2500 stems per hectare.						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Several oak standards do exist within the stand estimated to have been established around 1900 and the 1940s. Ground flora consists of patchy bramble with little other than the occasional elder in the understory.						

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.