COED CADW
WOODLAND
TRUST

Wentwood

Management Plan
2016-2021

MANAGEMENT PLAN - CONTENTS PAGE

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MAPS

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 www.woodlandtrust.org.uk 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 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.

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.
4. 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:	Wentwood
Location:	Llanfair Discoed
Grid reference:	ST405937, OS 1:50,000 Sheet No. 172
Area:	353.36 hectares (873.17 acres)
Designations:	Planted Ancient Woodland Site, Scheduled Ancient Monument

2.0 SITE DESCRIPTION

2.1 Summary Description

The 353-hectare (873-acre) section of Wentwood owned by the Trust is part of a much larger area of forest, stretching over 1,000 hectares (2,500 acres). Once part of the hunting grounds of Chepstow Castle, it offers a wide variety of walks with some breathtaking views over the Severn Estuary. And its diversity of habitats means it’s home to some wonderful wildlife.

2.2 Extended Description

Wentwood forms part of the largest block of ancient woodland within Wales which is now mostly planted with exotic conifers, and is therefore a planted ancient woodland (PAWS). It is found within an area that has a concentration of ancient woodlands that runs between the rivers Usk and Wye. Its area is over 1000 hectares of continuous woodland, with The Woodland Trust owning 352ha. The remainder is managed by Cyfoeth Naturiol Cymru/Natural Resources Wales (NRW). A small area remains in private ownership. Both the NRW and Woodland Trust have an open access policy for quiet informal recreation and have joint approaches in some of their woodland management.

The recorded history of Wentwood extends to over a 1000 years, and today it is a mere relic of a far larger 'Coit Gwent' that formed a continuous woodland that stretched from the Usk to the Wye. Wentwood has a number of scheduled ancient monuments including Bronze Age burial mounds and World War II underground bunkers. It was a hunting preserve of Chepstow Castle since medieval

times, and with its ancient track ways, charcoal hearths and remains of an old mill gives us a clue to the past uses of the forest. Varying extents of open heathland with woodland and wood pasture are the likely landscapes through history, with people carrying out activities such as grazing, charcoal making and over-exploiting timber at various times.

Historically, considerable hardwood timber has been harvested, together with extensive removal of coppice products over the centuries. The first small areas of conifers were planted by 1760, some of the first in the United Kingdom, these being firs and larch. Larger scale planting subsequently occurred, and during the two world wars saw the remaining broadleaved trees felled, and by the 1960's all the woodland that is now in the Woodland Trust's ownership was planted with conifers. Ancient woodland remnants of surviving ground flora can be found throughout the site, with very good survival in some areas, especially under larch where extensive areas of Bluebell can be seen. Other areas, especially under the Norway spruce, survival is sporadic. Only a few areas have a significant broadleaved as either mature trees or as regeneration.

The same history of coniferisation has also affected those parts of Wentwood in other ownership. Conifer plantations on the NRW part of the forest are managed silviculturally, rather than being thinned towards broadleaved conversion, however all restocked compartments (particularly since clear-felling because of Phytophthora) are being stocked using native broadleaved species.

Despite the conifer planting, Wentwood is still a haven for wildlife, mostly because to its size that still contains a variety of woodland habitats. In spring many areas are carpeted with Bluebells, and surviving woodland flora can still be found in the deciduous larch plantations and long paths and plantation edges. Dormice are present together with adders, lizards, deer and many woodland birds including the willow tit, firecrest and nightjar. Woodland ants can be found, evidenced by their large nests that can be 3 to 4 feet high.

The Woodland Trust bought part of Wentwood to build on the interest that remains, restoring a range of habitats which will not only include ancient woodland but also open habitats such as heathland and wood pasture. It will be a long time before Wentwood is returned to its full former glory, but positive changes can be seen now. In the decade since the Trust's acquisition, the restoration of the ancient woodland has begun through gradual thinning of conifers, carefully removing thousands of tonnes of timber. Our original plan to also use Wentwood to demonstrate and contrast this alternative approach with traditional commercial silviculture has been much affected by the arrival of the tree disease Phytophthora ramorum which has necessitated the premature removal of large areas of larch. This rapid exposure has exposed remnant flora to further threats, but the areas have been swiftly restocked with native trees.

The wood has a number of access points and is crisscrossed by footpaths and bridleways and is used regularly by local people. Despite legal and physical barriers, unauthorised vehicular access continues to damage Wentwood's wildlife and historic value and mars the enjoyment of other visitors. Annually, forestry operations occur throughout the woodland when public safety notices may dictate restrictions on visitors.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus: There are several buses a day between Newport and Chepstow. The bus stop on Greenmeadow Drive, Parc Seymour, is less than a mile from the Wentwood Gate entrance.

By train: The nearest train stations are Newport (24km/15 miles) and Caldicot (7km/4.4 miles).

For up-to-date information on public transport, visit traveline.org.uk (0871 200 22 33) or traveline-cymru.org.uk.

By car: From Newport, take the A48 towards Llanfair Discoed, and then take the Usk Road. The Cadeira Beeches car park is on your left after around 4.8km (three miles), and the Forester's Oak car park is west of Forester's Oak. There is also unofficial parking for several cars at Little Oak and Highest Point.

3.2 Access / Walks

The main entrances are located at the two car parks: Foresters' Oaks and Cadira Beeches, on the road to Usk. There are a number of other entrances, including Wentworth Gate, which is closest to bus routes and to the ancient Curley Oak.

The forest has an extensive network of roads, tracks, footpaths and bridleways, with waymarking throughout, providing many walking routes. Paths are moderate with some short, steep climbs, and can be muddy in winter. The site is also a popular location for horse riding, orienteering and cycling, and includes the Wentwood Forest Downhill Trail for mountain biking.

The 77km (48-mile) Usk Valley Walk, from Caerleon to Brecon, passes through Wentwood. Download Wentwood walks (PDF, 0.3MB) for details of walking routes on the site.

4.0 LONG TERM POLICY

Wentwood will be managed for sustainable multiple objectives including public access, education, biodiversity conservation, community benefit and involvement, and for timber production, successfully working in partnership with Natural Resources Wales.

Through gradual thinning of conifers, remnant ancient woodland components will be preserved and expanded creating a resilient woodland ecosystem where in future natural processes can occur. The woodland will change from the current conifer dominated stands to broadleaved dominated stands. This change mainly have will be achieved through the use of a range of Continuous Cover Forestry (CCF) techniques. Some broadleaved stands will have been created through planting after clear felling larch stands that became infected with Phythophthora ramorum. These methods and all woodland operations by Woodland Trust at Wentwood will demonstrate forest management techniques involved in Planted Ancient Woodland (PAWS) restoration. Opportunities to restore open habitats including heathland and wood pasture will be taken during the restoration of the planted ancient woodland, these habitats were once found more extensively in Wentwood.

Wentwood will be valued by visitors as a safe and welcoming location to enjoy quiet recreation, exploration and discovery. The cultural and natural history of Wentwood will be interpreted and accessible to all visitors. Wentwood will continue to be used as an open air classroom.

Local Communities and other key stakeholders will be engaged and involved in the management of Wentwood.

It will be the focal point of a landscape of interconnected woodlands and hedgerows stretching from the Usk to the Wye.

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 Planted Ancient Woodland Site

Description

Planted stands are made up of larch, Douglas fir and Norway spruce, with small areas of beech and oak, all planted mid to late 20th century. Whilst conifers predominate, surviving ancient woodland remnants occur in the form of broadleaved trees and a native woodland ground flora, particularly in the larch stands. Occasional broadleaved trees survive as veterans pollards around the boundaries of compartments and along ancient track ways, and also within stands, including the well known veteran, the Curley Oak in compartment 4a. Surviving oak coppice stools are present in some compartments. Natural regeneration occurs throughout, with the site largely entering a predominantly 'birch phase', mostly accompanied by rowan, cherry, goat willow, occasional yew and oak with some regenerating exotic conifers. Ancient woodland ground flora is surviving very well some areas, and though these remnants are assessed as being between secure and critical, the majority has now improved to threatened status after a decade of restoration thinning. Under larch and planted beech, extensive areas of bluebell can be seen. Ground flora is often supressed in the short term by bramble and bracken that has a resurgence post-thinning. There is very limited remaining standing deadwood. Clear-fells created by felling Phytophthora ramorum infected larch have been restocked with native broadleaves, predominantly oak and cherry, with shrubby species and unplanted areas creating open space.

Significance

Wentwood is the largest Ancient Woodland site in Wales and the third largest in England and Wales. It is also an important component of the ancient woodland concentration of the lower Wye Valley and a significant landscape feature. The whole of Wentwood has been part of a landscape that historically has been a mosaic of woodland and other habitat (e.g. heath and grassland). Whilst the degree of woodland cover and its nature have changed over the centuries, it remains one of the largest single blocks of woodland with ancient woodland origins in Wales. Conifer planting commenced in the mid C18th and conifers now dominate most of the area. Good ancient woodland remnants remain.

Opportunities & Constraints

Wentwood presents a unique opportunity to carry out large scale restoration of a PAWS site. The main threats to these remnants is prolonged detrimental shading and excessive exposure following clear-felling. The amount of seed bearing native broadleaved trees is small throughout the site, and may be causing a constraint, though this does not appear to be the case. Some areas have very poor ancient woodland remnant survival but many are adjacent to ancient semi-natural woodland so recovery can be expected given the correct silvicultural management. Non-scheduled archaeological features and badger setts are found throughput the site which act as a constraint to the methods of harvesting and extraction. The wood has been silvculturally managed as a conifer plantation since the 1960's, and thus presents a good place to demonstrate CCF conversion and building on this inheritance the opportunity is taken to demonstrate economic CCF based PAWS restoration. The site is large and robust thus allowing natural processes to occur post this high disturbance and initial thinning and felling phase. The Phytophthora ramorum infection of the larch from 2013 has led to the creation of clear-fells where new demonstration opportunities have been taken with restocking with native broadleaf and creation of temporary and permanent open space, though this has curtailed CCF demonstration in the previous larch stands. There are future opportunities to maintain managed open space through grazing, thus delivering landscape and biodiversity objectives at a landscape scale. Due to the intimate ownership of the site and the many shared objectives, opportunities exist to develop joint management objectives with NRW.

Factors Causing Change

Deer browsing impacts through ineffective culling. Excessive growth of bramble as a consequence of reduced shade from clear-felling and over-thinning/wind-throw. Increasing shade from surrounding conifers in the more recent conifer plantings. The Phytophthora ramorum infection of the larch from 2013 has led to clear-fell situations with its consequent effects on AW remnants due to lack of shade, but through natural regeneration and native broadleaf planting, has increased the overall percentage cover of broadleaved trees on site.

Long term Objective (50 years+)

All remnant ancient woodland components are secure and improving in condition. Woodland is restored / enhanced to native woodland dominated by a high diversity of predominantly site-native trees and shrubs and with typical field / ground flora and other ancient woodland characteristics. Depending on site evaluation, a natural processes and/or CCF system will evolve as appropriate.

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

All predominantly conifer stands to have a reduced level of shading threat to the ancient woodland remnants, excepting the ca.1ha non-intervention conifer stand that is retained in compartment 8a for demonstration purposes. All features such as streams, remnant broadleaved trees, and coppice stools will have shading threat reduced by Phase One (this has now largely been completed in 2016). Continue to thin all stands to a CCF prescription and monitor the shift of species and structural composition (tolerating some exotic species' regeneration) of the previously homogenous conifer areas using vegetation quadrats, to be repeat monitored during 2022-26 management plan period. Maintain effective deer control in response to monitoring results. All areas that have been recently re-stocked post Phytophthora ramorum will be managed to successful establishment, with varying methods of establishment monitored. Eliminate Himalayan balsam and Japanese knotweed from site. Develop a joint management agreement across all aspects of our work with NRW, particularly with regard to PAWS restoration and deer management.

5.2 Informal Public Access

Description

There is an extensive network of forest tracks, public roads, public footpaths, bridleways, restricted byways and informal paths within the site, with low-key way-marking throughout. Vehicular parking is available at Cadira Beeches car park (NRW managed), and a Newport Council run car park close to Wentwood Reservoir, and there are a number of parking places at the many woodland entrances. Wentwood has historically had open access on both NRW land and land now managed by the Woodland Trust, together with a small area in private ownership, and this continues. A range of outdoor leisure activities occur, including casual horse riding, cycling, walking, orienteering, wildlife watching and organised events e.g. annual mountain biking and horse riding weekend events. The majority of visitors are local people accessing the area for dog walking or quiet informal recreation. Schools from the surrounding have used the wood for extra curricular activities and as an outdoor classroom. Unauthorised recreational use includes an informal down hill mountain bike track that requires regular safety inspection by Woodland Trust, and there is also usage of the site by illegal vehicular access that includes 4WDs, ATV and motorcycle usage.

Significance

Wentwood is important locally for informal recreation. It is one of the few large areas within South Monmouthshire that has open public access and is an important resource for the full range of outdoor leisure pursuits. The area has retained a significant biodiversity interest, that attracts amateur naturalists.

Opportunities & Constraints

Opportunities have been taken to form a partnership with Monmouthshire CC and NRW and some local stakeholders (Access Steering Group), carrying out such tasks as creating a strategic steer on recreational management and for example, placing 100 numbered marker posts at ride/pathway junctions and a guide map produced that is available from dispensers at the car parks, thus aiding orientation; future recreational opportunities will no doubt evolve as required. Path surfacing and resurfacing opportunities have been taken, with considerable scope to further improve surfaces on wetter and more heavily used paths/intersections in an unobtrusive way. Restrictions on illegal vehicular access creates a constraint on easy horse carriage access on restricted byways; a Kent Carriage Gap is a way of allowing access whilst preventing motorised vehicle access. Sustrans are developing a cycle route through Wentwood to the north of Newport, creating the opportunity for more sustainable access to the wood. Illegal use such as fly tipping and the illegal use of tracks by motorised vehicles presents severe constraints on the enjoinment of the wood by legitimate users. There is the opportunity to manage these nuisance factors by working more closely with the Police, local councils, NRW and further exploring legal options to control this illegal use. A development of the Access Steering Group perhaps involving a volunteer enforcement group may be explored; a key constraint historically has been the lack of resources. Impacts on biodiversity

Factors Causing Change

Increased/varying site usage by respective user groups, leading to changes of emphasis on recreational management. Better enforcement of unauthorised/illegal use. A joint management agreement with NRW / local people with associated new directions and policies.

Long term Objective (50 years+)

Provide for site recreation that is low key with minimal on impact on biodiversity and is carried out in agreement with local people and NRW, and successfully prevent unauthorised usage.

Short term management Objectives for the plan period (5 years)
Maintain and improve the network of formal and informal paths, benches, way-markers and map guides to allow walkers, horse riders and cyclists and others to enjoy informal quiet recreation. Significantly reduce antisocial behaviour such as fly tipping and illegal off-road usage through an integrated plan and active participation with NRW and local people.

5.3 Archaeological Feature

Description

The site has two scheduled ancient monuments, bronze age burial mounds and other features that are of archaeological significance but are not scheduled. These include ancient track ways, charcoal hearths and further Bronze Age burial mounds. The recorded history extends over a 1000 years.

Significance

There are two scheduled ancient monuments and a range of locally important features such as further bronze age burial mounds, charcoal hearths and ancient trackways throughout the wood.

Opportunities & Constraints

The larger of the scheduled ancient monuments is close to one of the well used car parks and has scope for interpretation for visitors. However its location has resulted in considerable damage by motorcycles which use the area illegally. Other non scheduled features are damaged by 4WD vehicles, in particular the ancient trackways. The non-scheduled monuments require protection to prevent accidental damage during harvesting operation.

Factors Causing Change

Other - Illegal and damaging use by off road vehicles and horse riders. Natural regeneration of scrub and trees on monuments.

Long term Objective (50 years+)

All archaeological features are maintained at least in the present condition as far as reasonably possible. That the scheduled archaeological features are accessible to visitors.

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

Control damaging access to the scheduled archaeological features by horses, 4WD's and motorbikes. Take account of all archaeological features in planning and implementation of management works.

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	3.98	Japanese larch	1967	PAWS restoration	Archaeological features, No/poor vehicular access to the site, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Japanese larch previously silviculturally thinned, reasonably well spaced with some light penetration to woodland floor. Yew and holly in sub canopy occasional, and yew, holly, beech in ground layer is occasional. Bracken and bramble frequent. Stream to W includes broadleaves along margin. Ancient woodland remnants are secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum. Site level to moderately sloping. Three permissive footpaths run through this area. This compartment is poorly accessed for timber extraction and requires careful planning. Pre purchase Compartment ref Lot 1, 10b							
1b	1.05	Beech	1930	Min-intervention	Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Mixed broadleaf, predominantly beech with some oak and birch. Some beech in sub canopy (occasional) and in ground layer (occasional). Ground flora generally sparse, significant bluebell surviving on woodland edge. Some basal bark damage to beech. One of the few broadleaved stands in the Woodland Trust landholding at Wentwood. Ancient woodland remnants secure. Site moderate slope to level, flat. Access to soft surface forest ride. A PROW footpath runs along the southern boundary. Pre purchase compartment ref Lot 1, 10d1							

2a	18.81	Douglas fir	1967	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Mostly Douglas fir planted 1967 and 1969. Little or no sub canopy or shrub layer. Stream dissecting compartment adds interest in terms of broadleaf content - oak, ash, hazel, rowan, birch, sycamore; there is a significant broadleaf component in parts of the stand. Ground flora in stream/broadleaf area includes wood spurge, dogs mercury, violet, wood sorrel, and large areas of dominant bramble, particularly under the Douglas fir. Ancient woodland remnants threatened. Minor natural regeneration of beech near stream. Most of larch removed 2015. Site moderately sloping, steeper in places e.g. where dissected by stream. Remains of stone quarry/charcoal pits. Old trackway to SW. A restricted highway runs along the northern boundary, with a PROW along the southern boundary, with many permissive footpaths linking these. Pre purchase compartment refs Lot 1, 8c, 9c, 9c1, 9d							
2b	3.70	Western red cedar	1967	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Mostly Western hemlock or Western red cedar, with some Douglas fir. Planted 1967 and 1969. No significant sub canopy, shrub layer or ground flora. Some broadleaf to ride sides - oak, beech, occasional holly. Ancient woodland threatened. Site level to moderately sloping, mostly flat. A PROW is present in the southern end of the site and there are two permissive paths, one leading in from the east, that is a well surfaced 3m track way. Pre purchase compartment refs Lot 1 9l, 10f, 10l.							
2c	0.88	Beech	1960	Min-intervention	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	
Mixed broadleaf from 1960s to mature trees to woodland margin. Includes mature beech. Ancient woodland components secure. A PROW (footpath) crosses this compartment.							

3a	10.54	Japanese larch	1968	PAWS restoration	Archaeological features, Gullies/Deep Valleys/Uneven/ Rocky ground, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Compartment contains Japanese larch with some Douglas fir in mixture in places. Planted 1967 to 1970. Sub canopy and regeneration at ground level variable including small amounts of Douglas fir, holly, oak, beech and birch. Broadleaves present on adjacent ride to west and in small pockets in NW of compartments. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum. Site moderately sloping to level, mostly flat, but with depressions/borrow pits in parts. There is a restricted highway on the eastern boundary of this comp't, and some permissive paths crossing it in the south. A defined mountain bike track seems to be running N-S, though seems lightly used. Pre purchase compartments refs Lot 1 6b, 6h.							
3b	1.05	Douglas fir	1970	PAWS restoration		Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Douglas fir planted 1970 with some larch present. Densely stocked with dark conditions at ground level. Obvious previous lapsed thinning, hence stand in recovery after thinning interventions since under WT management. Sub canopy largely absent (birch rare); no shrub layer; ground flora mostly absent fern ((rare). Some broadleaf to compartment margin including beech, birch, rowan. Ancient woodland remnants threatened. Site moderately sloping deeply rutted in parts along boundary. Pre purchase compartments ref Lot 1 6c.							
3c	1.43	Douglas fir	1970	PAWS restoration		Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Douglas fir planted 1970. Densely stocked not recently thinned, so some recovery is to be expected but not for some time. Little or no sub canopy, shrub layer or ground layer. Obvious previous lapsed thinning, hence stand in recovery after thinning interventions since under WT management. Some broadleaf to margin along trackside (birch, beech, rowan). Ancient woodland remnants threatened.

Site moderate slope.

Pre purchase compartments ref Lot 1 06c1

4a	7.35	Norway spruce	1968	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Norway spruce plantation containing remnant veteran tree (Curley Oak), springs, stream with riparian broadleaf remnants. Planted 1966 and 1969. Broadleaf content concentrated along stream which dissects compartment flowing south. Sub canopy of broadleaf consists of occasional beech, oak, birch, and holly, with ash, alder, willow present along riparian zone. Ancient woodland remnants threatened. Ancient woodland remnants threatened.

Site moderately sloping , flat. Access to main hard surface forest ride running N-S. The stream is dammed at the extreme southern extremity of compartment, and was possibly a water-powered sawmill. A restricted byway follows the western boundary and permissive footpaths run N-S through the site and follow eastern boundaries.

Pre purchase compartment refs Lot 1 5a, 5a1

4b	1.22	Douglas fir	1966	PAWS restoration		Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Douglas fir with small amount of Japanese larch in mixture. No sub-canopy and limited shrub layer, but responding to thinning with broadleaf (mostly birch) regeneration. Ancient woodland remnants threatened.

Site moderately sloping towards stream, generally flat with some humps and depressions. Restricted byway along N boundary.

Pre purchase compartment ref Lot 1 5g.

5a	17.39	Mixed native broadleaves	1967	Wood establishment	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Larch clear-felled in 2017/2018. Re-stock with native broadleaves and natural regeneration Japanese larch plantation planted 1967, with small admixture of Douglas fir in parts with an overall relatively light canopy. Occasional broadleaves within stand, but most to stand margins along grassy ride e.g. beech or short section of stream to W e.g. ash. Limited shrub/ground layer dominated by bracken and light bramble. Grassy in places. Minor natural regeneration of beech and birch noted in places. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum. Site gently to moderately sloping, generally flat. Internal access to unmade tracks to W and E. Restricted byway along S boundary, with two permissive path leading N from it. Pre purchase compartment refs Lot 1 5b, 7b							
5b	6.67	Douglas fir	1966	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Mixed plantation containing Douglas fir (c.56%) and Japanese larch (c.44%). Late rotation crops reasonably well thinned (line & intermediate) with moderate light levels, particularly in areas where JL present. Sub canopy includes birch and rarely oak. Shrub layer forming. Ground flora generally sparse include fern, moss, light bramble, grasses. Occasional natural regeneration including holly, and some DF/JL. Ancient woodland remnants threatened. Site level to gently sloping. Access to internal track to W and another path that links this to a public highway along E boundary. Pre purchase compartment refs Lot 1 7c, 7g.							
5c	0.61	Beech	1967	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Small roadside compartment predominantly beech planted 1967. Thinned to waste Winter 2006/07. Ancient woodland remnants secure. Pre purchase compartment ref Lot 1 7d							
6a	6.35	Japanese larch	2001	PAWS restoration	Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
A more recent restock site with Japanese larch planted in 2001. High success rate with canopy closure. Regenerating birch, rowan, willow, and hazel present sparsely spread throughout stand and a 10m broadleaf strip along the E comprised of mature beech, ash, birch, acting as a natural seed source. Ancient woodland remnants critical due to shade. Planted open mosaics plots with planted native broadleaves and sweet chestnut throughout site (maybe 25 plots) that were initially weeded up to 2010, and since then have had larch trees removed from edges to allow more light in (2014-16). Site moderately sloping, mostly flat. A metalled forestry track way follows the N boundary and a public highway follows the E boundary. Pre purchase compartment ref Lot 1 4b.							
6b	3.95	Douglas fir	2001	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
A more recent restock site with Douglas fir planted in 2001. Successfully established with canopy closure. Birch, rowan, willow, hazel thinly occur in canopy throughout compartment. Adjacent patches of mature broadleaf in other compartments may act as seed source (beech, birch, ash). Ancient woodland remnants critical due to shade. Public highway along E boundary; permissive footpaths on W and N boundaries.							

7a	3.89	Douglas fir	2001	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
A more recent restock site with Douglas fir planted 2001. Now well established with a closed canopy. There is a substantial broadleaf component, with a band ranging from 5m to 10m wide N-S running along a minor cutting/old track way. Species include beech, ash, holly, oak, hazel, birch. Birch is a frequent component throughout the stand, with willow and elder. No shrub & ground layer due to shading. Ancient woodland remnants are critical due to lack of shade. Site gently sloping, mostly flat. Good access with surfaced forest road along N boundary. Restricted byway E boundary, permissive path SW boundary. Pre purchase compartment ref Lot 1 8b.							
7b	3.49	Norway spruce	1966	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Dominated by Norway spruce with some Douglas fir and Japanese larch. Post thinning reasonable light levels at ground level. Broadleaf content in sub-canopy includes halo thinned oak, ash, wych elm. Small patch of wind blow on W edge of compartment (c.0.1ha) now an area of successful broadleaved regeneration (mostly birch). Ancient woodland flora threatened. Site gentle to moderate slope, mostly flat. Good access to main hard surface ride to N, minor ride to W. wet and prone to rutting at western end; extract in easterly direction.							
7c	16.03	Douglas fir	1966	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Principally Douglas fir. Response to thinning is that there are some good areas localised areas of natural regeneration, including Douglas fir and hemlock. Large veteran sweet chestnut that is a lapsed coppice present on the western boundary with 7b. Ancient woodland components threatened.

Site gently sloping. Flat. Forest track metalled road along the N boundary; permissive paths s boundary and running through N-S.

Pre purchase compartment ref Lot 1 3c 4c.

7d	2.42	Japanese larch	1967	PAWS restoration	Archaeological features, Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Plantation of Japanese larch, planted in1967. Thinned 2006 remains well stocked, small amount of post thinning wind snap. Sub canopy sparse includes broadleaf, mostly holly, oak with developing shrub-layer. Ground flora includes spares holly regeneration, light bramble, honeysuckle, ivy, wood sorrel, bluebell, moss. Ancient woodland remnants threatened. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum.

Site gently sloping. Access good to main hard surfaced track to N.

Pre purchase compartment ref Lot 1 4b1.

8a	9.77	Norway spruce	1966	PAWS restoration	Archaeological features, People issues (+tve & -tve), Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Plantation of Norway spruce, planted 1966. SAub canopy and shrub layer generally absent. Sparse ground layer with some moss. Ecological survey notes bilberry adjacent to paths. Ancient woodland remnants threatened.

Site gently to moderately sloping. Mostly flat rough in places. Wet and prone to rutting at western end. Restricted byway follows N boundary and branches S dissecting compartment.

8b	14.75	Japanese larch	1968	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Plantation containing Douglas fir and Japanese larch in varying degrees of mixture. Planted 1965 to1967. Areas thinned with some variation of degree and timing. Sub canopy generally absent (well 'weeded' prior to WT ownership), light shrub layer includes bramble, and holly. Ground layer variable according to light conditions, includes ivy, grasses, sedges, moss. Viola noted. Ecological survey notes bilberry, wood sorrel, bluebell, greater stitchwort. Broadleaves to compartment along margins only. Ancient woodland remnants secure - perhaps threatened in places. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum, however Easternmost 10ha area clear felled in 2014 due to Phytopthora ramorum, replanted 2015/16. Site moderately sloping, mostly flat. Adjacent to main hard surfaced access track to S with compartment dissected by restricted byway running SW-NE and several minor tracks running N-S. Pre purchase compartment refs Lot 2 compartments 2a1, 2a, 2b, 2j, 2k.							
8c	11.25	Mixed broadleaves	2014	Wood establishment		Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Felled in 2014 as served a Plant Health Notice from NRW. Previously part of Compartment 8b. Planted with 600 Quercus robur in 2016 due to extensive natural regeneration. Site moderately sloping, SSE aspect. Adjacent to main hard surfaced access track to S with compartment. Permissive foot path running along east boundary with NRW.							
9a	31.21	Norway spruce	1966	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Plantation of Norway spruce, planted 1966. Thinning operations have resulted in wind blow trees, though generally stable. Broadleaves present in places e.g. oak, birch and beech at western end of compartment and along rides. Adjacent woodland to NW contains mature beech. Limited broadleaf in sub canopy. Shrub layer generally absent. Ground flora sparse or absent, but with occasional harts tongue fern, moss. Ecological survey notes bilberry and wavy hair grass along rides. Ling noted in 2005. Wood ant nests common especially on woodland edges with S aspect. Ancient woodland components threatened in all areas. Site Level to moderately sloping. Ground frequently undulating and steep in places. There are frequent permissive paths throughout, with restricted byways on both northern and southern boundaries of the compartment. An unauthorised downhill trail is monitored by WT as part of safety management.							
9b	3.41	Norway spruce	1966	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Larch selectively felled in 2017/2018 - limited re-stocking only of lareg canopy gaps as spruce cover is still good. Mixed plantation containing approximately 50/50% Norway spruce and Japanese larch, planted in 1966. Thinned 2006, subsequent next scheduled thin delayed due to Phytophthora ramorum. Previously line and intermediate thinned. Occasional Scots pine, oak, beech, ash, birch, holly in sub canopy. Shrub layer limited although some beech regeneration present. Ground layer includes ferns, some ivy, moss, and bilberry. Ancient woodland remnants threatened. Site gently to moderately sloping, mostly flat, rough in parts. Access to minor track that dissects compartment N-S, and to track on SE of compartment. Pre purchase compartment ref Lot 2 1e.							
9c	1.27	Beech	1966	Min-intervention	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Small compartment predominantly beech and birch with occasional Scots pine and Norway spruce. Un-thinned with noticeable squirrel damage. Shrub layer largely absent. Ground flora sparse but with bluebell. The area provides a broadleaf extension of the adjacent ASNW to north. Ancient woodland components secure. Site gently sloping, flat. Access to un-surfaced (rutted) track to N or to track in adjacent compartment to S. Pre purchase compartment ref Lot 2 01d1.							
9d	0.96	Beech	1966	High forest	Archaeological features, Housing/infrastructure, structures & water features on or adjacent to site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Uniform stand of beech with occasional Scots pine and Japanese larch. High proportion of beech squirrel damaged at base. Stand shows signs of previous lapsed thinning. No sub canopy or shrub layer; ground layer continuous uniform bluebell. Site level to gently sloping. Flat. Woodland remnants secure. Highway passes to the east, with restricted byway to the south including a woodland entrance that is used as a car park for 4-5 vehicles. Note - adjacent to memorial site for local person. Pre purchase compartment ref Lot 2 1d							
9e	0.79	Open ground		PAWS restoration		Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	
Small area of mostly open ground adjacent to one of the main public entrances. Tree cover including willow, ash, sycamore, hazel, Norway spruce. Ground/Shrub layer includes bramble, dog rose, bracken, grasses, moss and mixed herbs. Pre purchase compartment ref Lot 2 1z.							

10a	10.26	Oak (pedunculate)	2014	Wood establishment	Archaeological features, Services & wayleaves	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Japanese larch was clear-felled in 2013 due to Phytophthora ramorum, revealing occasional well-developed birch, beech, holly remnants. Re-planted in 2014 with mixed native broadleaves. An electricity supply line passes through the compartment and has broadleaf fringes in places with mature oak, birch, birch, gorse. Edges of compartment contain bluebell, ivy, wood sorrel, moss, honeysuckle, fern. Site level to gently sloping to flat. Public highway to the north and a forest track that is a highway used by vehicles to the south. A permissive footpath divides this compartment with 10b to the east and there is a permissive footpath through southern section. Pre-purchase compartment refs Lot 3 1c, 1d; 1a, 1f.							
10b	2.19	Oak (pedunculate)	2014	Wood establishment	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Japanese larch was clear-felled in 2013 due to Phytophthora ramorum, revealing occasional well-developed birch, beech, holly remnants. Re-planted in 2014 with mixed native broadleaves. Site level to gently sloping to flat. Public highway to the north and a forest track that is a highway used by vehicles to the south. A permissive footpath divide this compartment with 10a to the west and there is a permissive footpath along the southern boundary. Pre purchase compartment ref Lot 3 1e.							
10c	2.36	Beech	1875	Min-intervention	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site, Scheduled Ancient Monument

Broadleaves, predominantly mature beech planted 1850 to 1900, with small area of recent mixed broadleaf planting (1996) containing beech, birch, oak, holly. Mature trees have some beech regeneration beneath in places, elsewhere open. AW remnants in ground flora include bluebell, wood anemone, and wood sorrel. Site generally flat to gently sloping to the north. Easy vehicular access long the public access forest track along southern boundary. Combined with the round barrows, this makes an attractive recreational area. Pre purchase compartment refs Lot 3 1b, 1g, 1h.							
11a	4.40	Norway spruce	1990	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Currently consists a complex of varied and relatively small stands including planted 1986 and 1993 Douglas fir, planted 1982 Norway spruce, some more mature broadleaf and conifer and mixed broadleaf regeneration. No easy forestry nor public access, a footpath runs along eastern boundary. Due to patchiness of stands and some wind-blow impact since last thin this stand would not require a thin during this management plan term. Ancient woodland components threatened.							
11b	7.69	Douglas fir	1993	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Douglas fir plantation, planted 1986 and 1993. Significant broadleaf component in parts. No sub canopy or shrub layer. Limited ground layer (moss, occasional bilberry, holly). Ancient woodland components threatened. Forestry access via track over NRW land to the east.							
11c	1.11	Mixed native broadleaves	1963	PAWS restoration	Archaeological features, No/poor vehicular access to the site	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Larch clear-felled in 2017/2018. Re-stock with native broadleaves and natural regeneration

Are of windblow occupying around 1/3 of eastern end. Re-stocking not possible as wiblow not cleared out so left to regenerate naturally.

Plantation of European larch, with a strip of Norway spruce, planted 1963. Sub canopy and shrub layer largely absent. Bracken, moss, light bramble at ground layer, some bilberry. No natural regeneration. Ancient woodland remnants secure under larch, critical under Norway spruce. Due to Phytophthora ramorum, thinning works postponed in 2014.

Site level. Adjacent to public highway to the south, where access is not possible for forestry purposes. Forestry access via track to the east via 11b.

Pre purchase compt ref Lot 4 2a.

12a	8.14	European larch	1966	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Plantation of Japanese larch, planted 1966. Poorly developed sub-canopy. Shrub layer contains sparse beech and holly regeneration, with light to moderate bramble cover and some bracken. Ecological survey notes wavy hair grass and bilberry. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum.

Site moderately sloping. Flat. Adjacent to public highway to the north, hard surfaced forest road along part southern boundary.

Pre purchase compartment refs Lot 6 compartments 3 and 4a

12b	2.91	Japanese larch	1990	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Recent plantation of Japanese larch, planted 1990 and successfully established. Cleaning of birch and willow has been carried out though some remains. Sub canopy contains some birch, willow, holly, with occasional Sweet chestnut. Shrub layer developing. Ground layer includes light to moderate bramble, foxglove, grasses, fern, moss. Ecological survey notes small amount of ling heather and bilberry to S of compartment. Ancient woodland remnants secure. Thinned to waste as a Colleg Gwent training area 2012-15. Site level to gently sloping. Access to main hard surfaced ride to north. Pre purchase compartment ref Lot 6 4b							
12c	2.04	Norway spruce	1984	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Norway spruce planted 1984. Fully stocked and dark at ground layer. Poorly developed sub canopy. Shrub layer absent. Sparse ground layer includes moss, light bramble in lighter patches and honeysuckle. Some coppice stools surviving in stand. Ancient woodland components threatened. Site moderately sloping. Good access with surfaced forestry track along southern bounndary. Pre purchase compartment ref Lot 6 4c							
12d	12.76	Mixed broadleaves	2000	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
More recent Douglas fir restock site planted in c.2000. Plantation not well established with much crop-failure. Birch naturally established with small amounts of ash and willow. Ecological survey notes ling heather at southern and NW edge of compartment. Ancient woodland remnants (including scattered oak coppice stools and maiden oaks) are threatened due to shading from pole-stage trees, however this stand is becoming more secure in the long term due to being predominantly comprised of broadleaf. Some re-spacing of Douglas fir and birch has taken place 2014/15, favouring other species including oak. Site gently sloping. Flat. Access to main surfaced forest track along northern boundary, and a footpath along the south boundary. Pre purchase compartment ref Lot 6 5a.							

12e	8.03	Oak (pedunculate)	1974	Wood establishment	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Previously a plantation of Japanese and hybrid larch that was clear-felled in 2013 due to Phytophthora ramorum, revealing occasional beech and birch. Re-planted in 2014 with mixed native broadleaves. Some ancient woodland remnants may be threatened by exposure or excessive bramble in the short term, however the stand is now exclusively comprised of broadleaves. This stand is subject of a trial of 50% chemical spot weeding and 50% hand weeding (eastern end). Site moderately sloping. E end of compartment adjoins public road to N. Main access to hard surfaced track to south. Pre purchase Compartment ref Lot 6 5a, 6a.							
12f	19.65	Japanese larch	1958	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Japanese larch plantation with some European larch that was planted 1950's. Now mature and beyond 'economic rotation' age. Trees widely spaced, with reasserting broadleaved sub canopy comprised of holly, beech, birch, oak with Japanese larch also regenerating in places. Shrub layer sparse includes bramble, holly. Ground layer includes bracken, bramble, grasses, fern, moss, ivy, some bluebell. Ecological survey notes ling heather, bilberry in places. Also small teasel and invasive exotic Himalayan balsam. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum. Site level to moderately sloping. Mostly flat. Good access with main tracks surfaced through most parts of the stand. Footpath running from NE corner through stand. Pre purchase compartment refs Lot 6 6b, 7a, 7b, 8a, 8b, 8c							
12g	6.25	Hybrid larch	1967	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Hybrid larch plantation, planted 1967; at 'economic rotation' age. Sub canopy sparse, includes holly, beech to compartment margins (mature beech nearby on ride). Good regeneration is found in specific patches throughout the stand. Ground layer includes bramble, bracken. Bluebell robust throughout compartment. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum.

Site level to gently sloping. Adjacent to hard surfaced access tracks to N, E, SE with permissive path running along eastern boundary.

Pre purchase compartment ref Lot 6 9

13a	5.26	Mixed broadleaves	2005	Min-intervention	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Recent restock site planted 2004 and 2005. Mixed broadleaf including oak, ash hazel. Birch establishing naturally, and probably a mostly failed broadleaf plantation. Light bracken and bramble present. Bluebell surviving in places. East boundary includes veteran beech. Ancient Woodland remnants secure.

Site moderately sloping. A PROW runs through the NE corner of the site from neighbouring farmland.

Pre purchase compartment ref Lot 6 10b 10c.

13b	1.08	Norway spruce	1969	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Norway spruce planted 1982. Early line thinning carried out 1:5. Dark, sub canopy, and shrub layer absent. Grass and moss present in extraction racks. Mature beech adjacent to main ride. Ancient woodland remnants critical. Very light manual thin in 2015 to attempt to bring back into a normal thinning regime after previously lapsed thinning.

Site moderately sloping, undulating. Spring rises developing small stream which dissects compartment. Forest road at W end of compartment.

Pre purchase compartment ref Lot 6 10a.

13c	2.81	Mixed native broadleaves	1960	Wood establishment	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Larch clear-felled in 2017/2018. Re-stock with native broadleaves and natural regeneration Area of mature Japanese larch plantation, planted 1960 and due to 'weeding' prior to WT ownership a shrub layer largely absent, only occasional hawthorn. Light bramble and bracken. Bluebell, wood sorrel and wild daffodil form part of the ground layer. Ancient woodland remnants secure. Scheduled thin in 2014-15 was delayed due to Phytophthora ramorum. Site level to gently sloping, flat. Access good to main hard surfaced ride to west. Footpath situated across compartment, running approximately east-west. Pre purchase compartment ref Lot 6 10c							
14a	13.57	Norway spruce	1969	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Plantation of Norway spruce, planted 1969. Sub canopy and shrub layer absent. Sparse ground layer includes ivy and moss. Band of broadleaf c. 10m wide to western edge of compartment. Wood ant nests present. Ancient woodland remnants threatened. Site gently to moderately sloping. Generally flat. Small stream dissects compartment with some riparian flora, particularly at the E end. Forest road along the W boundary and footpath along southern boundary. Pre purchase compartment refs Lot 6 11, 12a							
14b	3.25	Norway spruce	1986	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Norway spruce/Douglas fir plantation, planted 1986. Planted in mixture. Broadleaf component along stream side to N and woodland margin. Wood ant nests present. Ancient woodland remnants threatened. Underwent two thins 2012 & 15 to try and rectify some lapsed thinning issues.

Slopes to N margin of compartment steep to stream. Moderate to steep sloping. Access to track to SE. Note presence of sluice, pipework and small stone/brick bridge/culvert to NE of compartment.

Pre purchase compartment ref Lot 6 12b

15a	11.44	Mixed native broadleaves	1969	Wood establishment	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Larch clear-felled in 2017/2018. Re-stock with native broadleaves and natural regeneration

Plantation of European larch, with strip of Norway spruce planted through, planted 1969. Sub canopy and shrub layer absent under Norway spruce, but developing well in places under larch and, most unusually with large amounts of yew. Bramble, bracken, and bluebell at ground layer, only under larch. Wood and nests to compartment margins N & SE. Ancient woodland remnants secure, threatened under narrow strip of Norway spruce. Scheduled thin in 2014-15 was delayed due to Phytophthora ramorum.

Site level to gently sloping. Flat. Access to main ride to W, secondary rides to N and SE. Forest track along W boundary and bridleway along the E boundary.

Pre purchase compartment refs Lot 6 13a, 13b.

16a	8.44	Norway spruce	1964	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site

Norway spruce plantation. Planted 1963 and 1964. Poor sub canopy, very limited shrub layer (rare yew, beech, holly) Ground layer sparse moss, ivy, fern. Wood ant nests to southern margin. Ecological survey notes bilberry and ling heather to S margin. Ancient woodland remnants threatened. Very wet site at far northern section, hindering extraction in wet conditions.

Site flat to gently sloping. Footpaths along all boundaries, forest road at the northern most tip provides access. Unmade access ride to S, access track to E.

Pre purchase compartment ref Lot 5 14a, 14b.

17a	8.88	Douglas fir	1998	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Predominantly Douglas fir plantation planted 1998 with some p1998 mixed broadleaf. Margin of mature mixed broadleaf, to stream to south. Mature larch to west margin. Main body of Douglas fir now well established, sub canopy/shrub layer present in places and to margins include birch, ash, alder, holly, gorse, broom, bramble. Large numbers of oak coppice stools have been thinned around and Douglas fir line thinned. This area excluded from PAWS assessment, though it would most closely be aligned to threatened. Footpath along northern boundary. Vehicle access very difficult. Pre purchase compartment ref Lot 5 15a.							
17b	6.48	Mixed native broadleaves	2005	Min-intervention	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Planted with Douglas fir that has almost completely failed and stand now comprised of mixed broadleaf. Ling heather, bilberry frequent. Area identified within ecological survey as suitable for heathland restoration, though this not pursued. Not included in PAWS mapping assessment. Bridleway along SW boundary that has been resurfaced.							
17c	5.58	Japanese larch	1968	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Area predominantly two distinct areas of larch plantation, divided by a stream. Mature larch with gaps with reasserting native broadleaf sub canopy of holly, with some oak and birch. Ancient woodland remnants secure. Scheduled thin in 2014-15 delayed due to Phytophthora ramorum. Access to compartment to the N of stream very difficult. Footpath running along east boundary.							

18a	7.71	Japanese larch	1953	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Japanese larch, planted 1953. Well thinned and open spaced in the past but with little sub canopy or shrub layer. Occasional oak and holly present. Ground layer bramble (light), bracken, moss. Ancient woodland remnants secure. Scheduled thin in 2014-15 was delayed due to Phytophthora ramorum. Site level, flat. Access to public road to W. Internal un-surfaced ride to N. internal hard surfaced ride to SE. Pre purchase compartment ref Lot 5 17a.							
18b	1.07	Sitka spruce	1950	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Small area of mature Sitka spruce plantation. Planted 1950. Additional small area of mature European larch planted 1927. Large mature trees. Very sparse sub canopy/shrub layer and little ground layer vegetation (some ivy and bramble). A visually impressive stand, where future thinning should favour most impressive specimens. Site moderately sloping. Flat. Access to hard surfaced ride to SE. Forest track running along SE edge. Pre purchase compartment ref 17b							
18c	6.29	Japanese larch	1964	PAWS restoration	Archaeological features	Archaeological Feature, Informal Public Access, Planted Ancient Woodland Site	Planted Ancient Woodland Site
Predominantly plantation of Japanese larch, planted 1964. Small pocket of Norway spruce (0.2ha) to N and area of oak (0.4ha) to S. Larch well established and well thinned. Little or no understorey or shrub layer. Ground layer bramble, bracken, grasses, ivy. Ancient woodland remnants secure. Scheduled thin in 2014-15 was delayed due to Phytophthora ramorum. Site level to gently sloping. Flat. Access to hard surfaced ride along NW boundary.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	9b	Clear Fell	3.41	76	259
2017	11b	Thin	7.69	44	341
2017	11c	Clear Fell	1.51	221	334
2017	12a	Thin	8.14	50	404
2017	12b	Thin	2.91	20	58
2017	12c	Thin	2.04	44	90
2017	12f	Thin	19.65	45	888
2017	12g	Thin	6.25	47	296
2017	13b	Thin	1.08	24	26
2017	13c	Clear Fell	2.99	218	652
2017	15a	Clear Fell	11.98	281	3371
2017	17c	Thin	5.58	28	154
2017	18a	Thin	7.71	55	423
2017	18b	Thin	1.07	56	60
2017	18c	Thin	6.29	55	347
2018	5a	Clear Fell	11.50	300	3450
2019	1a	Thin	3.37	73	245
2019	2b	Thin	0.95	76	72
2019	3a	Thin	11.17	63	704
2019	4a	Thin	3.96	94	374
2019	5b	Thin	6.67	50	333.5
2019	6a	Clear Fell	3.92	64	250
2019	7b	Thin	3.49	50	174.5
2019	7d	Clear Fell	2.37	257	609
2019	8a	Thin	8.85	80	708
2019	8b	Clear Fell	6.05	145	875
2019	9a	Thin	26.00	80	2080
2019	9d	Thin	0.96	21	20
2019	12a	Clear Fell	7.45	264	1966
2019	12b	Clear Fell	2.78	201	558
2019	12d	Thin	12.76	0	0

2019	12f	Clear Fell	18.27	208	3808
2019	12g	Clear Fell	6.19	162	1003
2019	18a	Clear Fell	7.11	227	1611
2019	18c	Clear Fell	5.80	232	1344
2020	2a	Thin	18.75	50	940
2020	6b	Thin	3.95	0	0
2020	7a	Thin	3.89	0	0
2020	7c	Thin	16.03	50	801.5
2020	14a	Thin	13.57	50	678.5
2020	14b	Thin	3.25	50	162.5
2020	16a	Thin	8.44	50	422

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.