

# Eastridge Shelve and Lodge Hill Forest Plan 2018 - 2028 West England Forest District



The mark of  
responsible forestry

Forestry Commission  
woodlands have  
been certified in  
accordance with the  
rules of the Forest  
Stewardship Council.



Promoting Sustainable  
Forest Management  
www.pefc.org

Francis Raymond-Barker

FCE File Ref: OP10/11

FS File Ref: GL/1/5/3.66 3.68 3.70

(following approval FS will adopt the FCE file ref)

Declaration by FC as an Operator.

All timber arising from the Forest Enterprise estate  
represents a negligible risk under EUTR (No 995/210).

### Application for Forest Plan Approval

Forest District:	West England FD	
Woodland or property name	Eastridge, Shelve and Lodge Hill	
Nearest town, village or locality:	Shrewsbury (north) Church Stretton (south) Minsterley (west) Pontesbury (west) Much Wenlock (east)	
OS Grid reference:	Black Marsh	SO32019976
	Shelve	SO33049933
	Buxton	SO35429996
	Eastridge	SJ38460324
	Gittinshay	SJ38900078
	Westcott	SJ40300176
	Lodge Hill	SO51809904
Local Authority	Shropshire County	
District/Unitary Authority:		
Plan Area:	482 ha	
Conifer Felling:	40 ha	
Broadleaved Felling:	3 ha	

Signed .....

Forest Management Director

Date .....

Signed .....

Area Director

Date of approval.....

1. I apply for Forest Plan approval for the property described above and in the enclosed Forest Plan.
2. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders that the FC agreed must be included. Where it has not been possible to resolve specific issues associated with the plan to the satisfaction of consultees, this is highlighted in the Consultation Record.
3. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.



Forestry Commission woodlands have been certified in accordance with the rules of the Forest Stewardship Council.



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## Location and Description

The Eastridge Forest Plan comprises of seven blocks of woodland that were previously split over 3 plans. From Black Marsh in the West to Lodge Hill in the East the plan is spread over 14 miles and lies 7.5 miles South of Shrewsbury, 12 miles West of Bridgnorth and only 4.5 miles from the Welsh border.

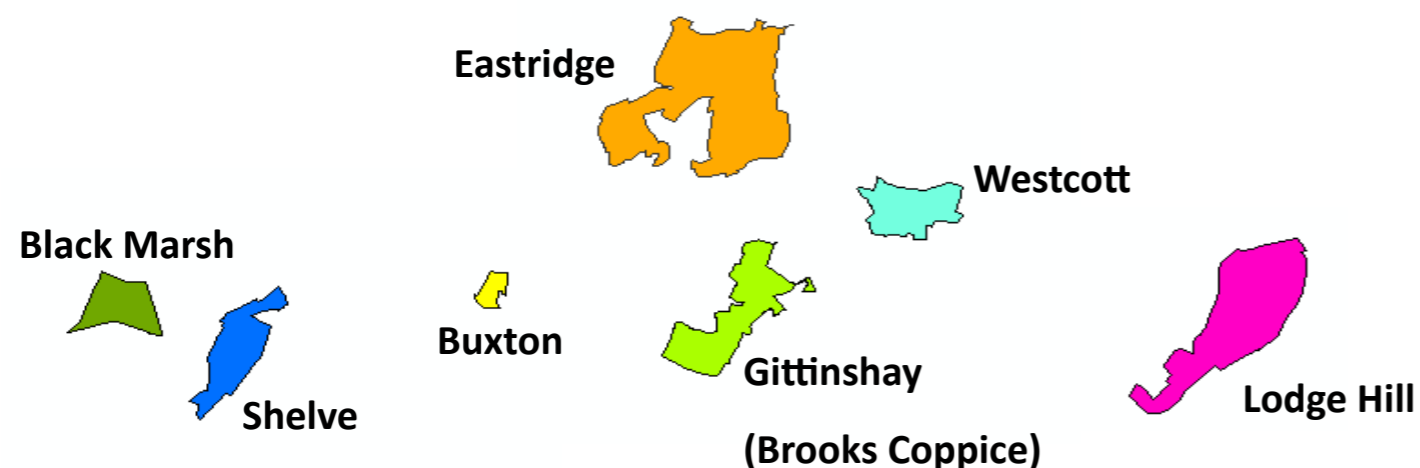
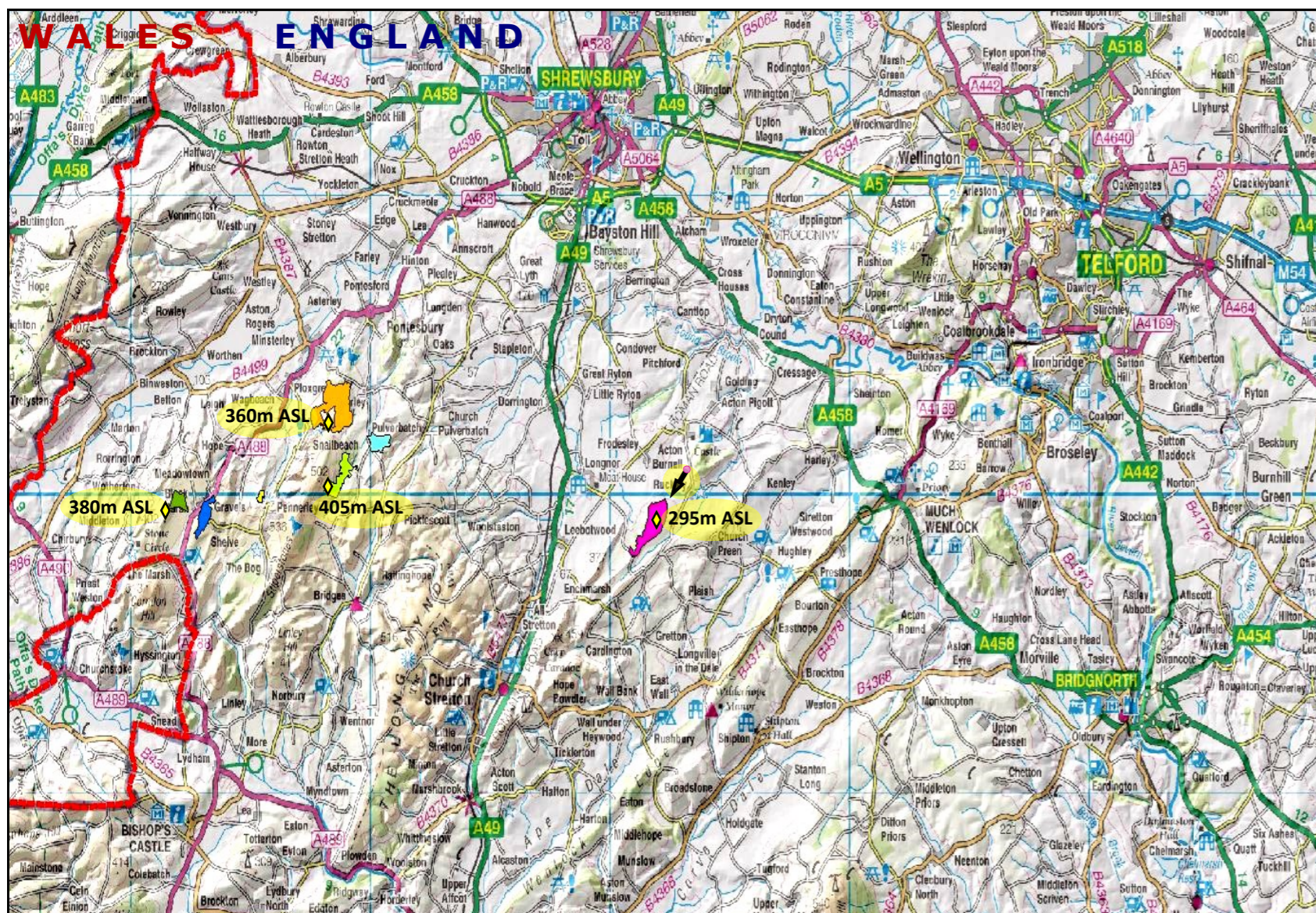
The plan area lies 4.5 miles Northwest of Church Stretton and The Long Mynd, resting within the Northern half of the Shropshire Hills AONB. Covering 482Ha the Forest Plan accounts for less than 1% of the AONB.

The majority of the plan area is very much a part of the visible landscape in which they sit, being well linked to the surrounding landscape through networks of well established mature hedgerows and smaller woodland copses that all lie within an agricultural landscape comprised of small arable farms, forming the Shropshire Hills Environmental Sensitive Area (ESA).

The woodlands form tree cover that cloak the distinctive ridges and hills that make up the topology of the wider landscape that have been heavily influenced by the glacial periods. As such the woodlands to the West occupy the higher elevations ranging between 360m and 410m asl that falls away eastward to 100m asl before rising again to Lodge Hill sat at 295m asl 7 miles from Westcott; with the plan area enjoying on average around 700-900mm of rainfall per year.

The plan comprises of mudstone, siltstone and sandstone geology banded in a north-to south orientation giving rise to rich soils that are predominantly brown earths with some surface water gleys occurring in Black Marsh, Westcott and Lodge Hill. These soil types generally enable growth rates for conifer to be achieved in the range of Yield Class 10-24 and for Broadleaves Yield Class of between 2-8 are achievable.

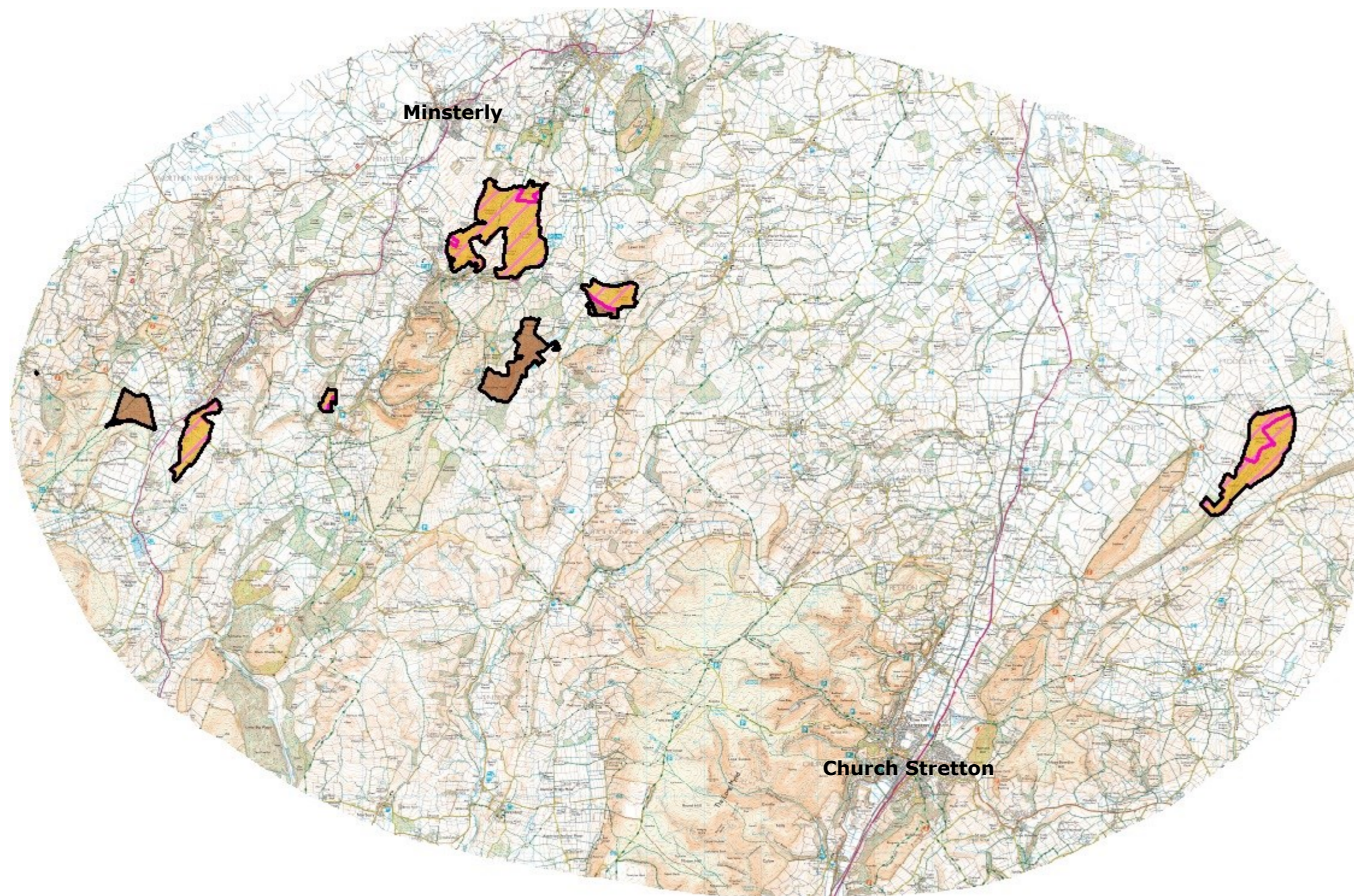
Having been heavily exploited for minerals in the past, the plan area has great cultural and heritage interest and enables a variety of habitats to be supported. This is well illustrated at Roman Gravels mine at Shelve, Huglith Mine in Westcott and the adjacent Hollies SSSI that forms part of the larger Stiperstones SSSI. All provide suitable habitat for bats, reptiles, lepidoptera and a wide range of flora.




Forest name	Area	% of plan area
Eastridge	175 Ha	36
Lodge Hill	113 Ha	23
Gittinshay	67Ha	14
Shelve	46 Ha	10
Westcott	42 Ha	9
Black Marsh	32 Ha	7
Buxton	8 Ha	2
<b>Total</b>	<b>483 Ha</b>	<b>100 %</b>

(Area given to the nearest Ha and percent to nearest %)





### Legend

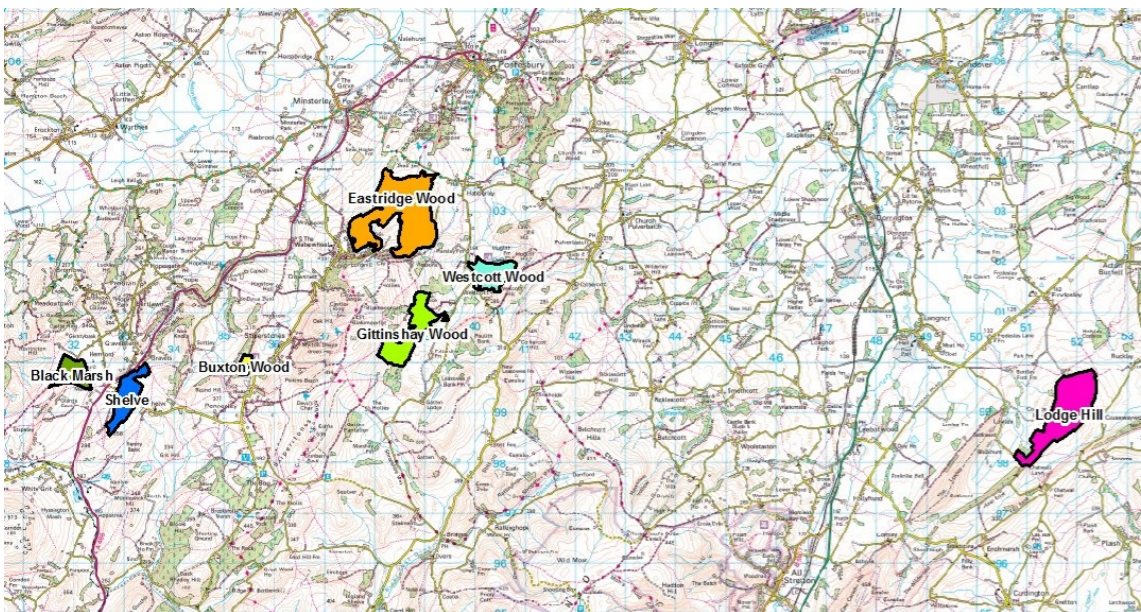
-  CROW Dedicated land
-  FC Freehold
-  Leasehold
-  Management Area

### Tenure & Management Agreements

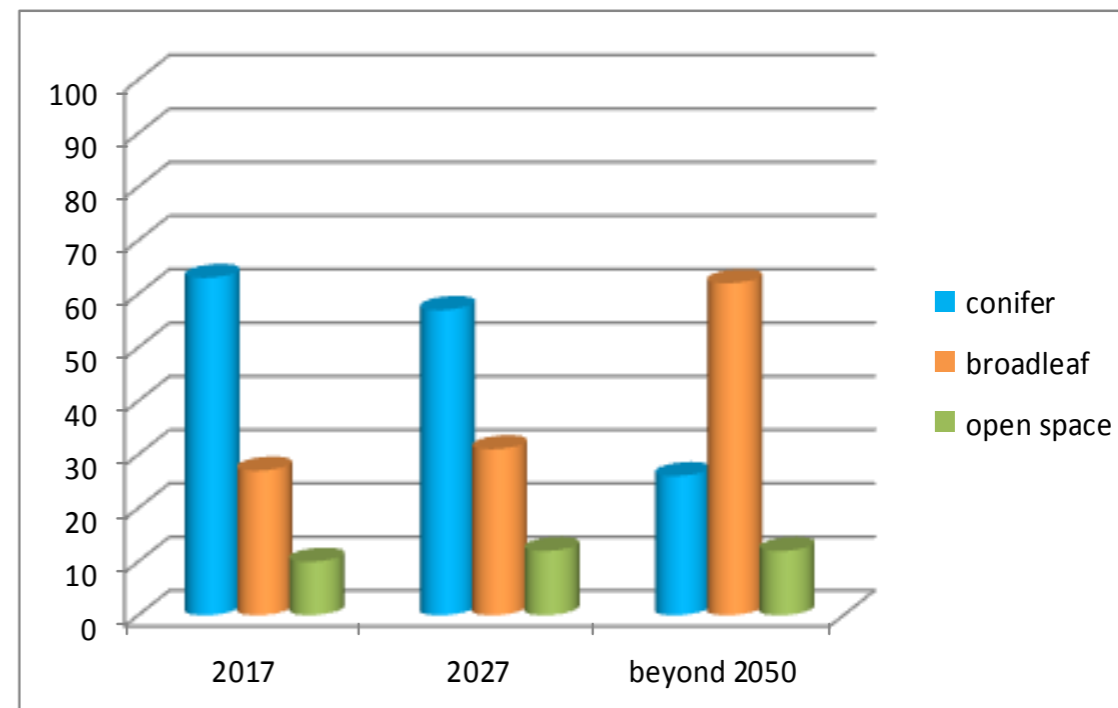
The whole of Black Marsh and Gittinshay and a strip along the southern boundary of Westcott (Huglith) are leasehold, amounting to 106Ha with the remaining 376Ha of the plan area being freehold.

There are minimal management agreements affecting the plan area, but within the leasehold woods of Shelve and Westcott the owners have reserved shooting rights.





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**About**

Being prominent within the landscape, with the woodlands enjoying the adjacency of The Stiperstones and The Lawley, the Forest Plan nestles in the northern reaches of the Shropshire Hills AONB. To the West of the Plan area are the woodlands of Black Marsh, Shelve and Buxton. Eastridge, Westcott (Huglith) and Gittinshay (Brooks Coppice) are situated centrally within the Plan area and with Lodge Hill lying to the East.

The plan accounts for 482Ha of mixed coniferous and broadleaved woodland within mid Shropshire, is situated just over a mile from the Welsh border and covers less than 1% of the AONB.

The woodlands are all within the Public Forest Estate of England with the majority being Freehold. Only Gittinshay and Black Marsh are leasehold and amount to 99Ha with a further 7ha in Westcott.

There is currently some 175Ha of conifer occurring on Ancient Woodland sites. The bulk of which lies within Eastridge, Westcott and Gittinshay with a small amount in Lodge Hill. By 2027 the Plan will see reversion of around 40Ha woodland back to a native broadleaf species through a mixture of clearfelling and 15 thinning.

The Plan area is rich in cultural heritage and contains cultural gems such as the closed Lead and Barite mines at Shelve (Roman Gravels) and Westcott (Huglith) that now provide valuable habitats for a variety of wildlife.

**Aims and Objectives**

The plan aims to protect and enhance existing habitats through sustainable management that is in context with the wider landscape and character whilst providing a sustainable flow of wood products to market throughout the plan duration. The objectives of the plan are:

- Deliver well-designed forests in keeping with the local landscape character.
- To protect, enhance and restore areas of ancient woodland in line with the 2005 'Keepers of Time' policy.
- Protect and enhance woodland and open habitats and their associated species.
- The protection and enhancement of veteran trees/trees of special interest (TSI) and recruitment of future generations of veteran trees/TSI.
- The continued production of sustainable and marketable woodland products.
- To conserve, maintain and enhance cultural and heritage assets.
- The management and restoration of statutorily designated areas such as Sites of Special Scientific Interest/ Special Area of Conservation/Scheduled Ancient Monuments or Key Wildlife Areas.

**What We'll do**

The current plan outlines management proposals including felling and restocking over several decades, with felling licence approval for operations up until 2028.

Crops will be managed for a mixture of objectives including timber production through the use of clearfelling and restocking supported with natural regeneration of native species. Some areas will be managed using continuous cover forestry prescriptions so as to create a diverse and resilient forest structure for the future.

Due to the threat of disease, the plan will start the process of reducing the quantity of larch through carefully landscaped clearfells that will be restocked with a mixture of conifer and broadleaf.

The plan will also enhance provision of open space habitats, especially in Black Marsh, Shelve and Eastridge. Implementation and maintenance of environmental corridors will continue to increase the diversity of habitat and the quality of internal landscaping with prescriptions that help integrate our work with wider landscape initiatives around woodlands and water.

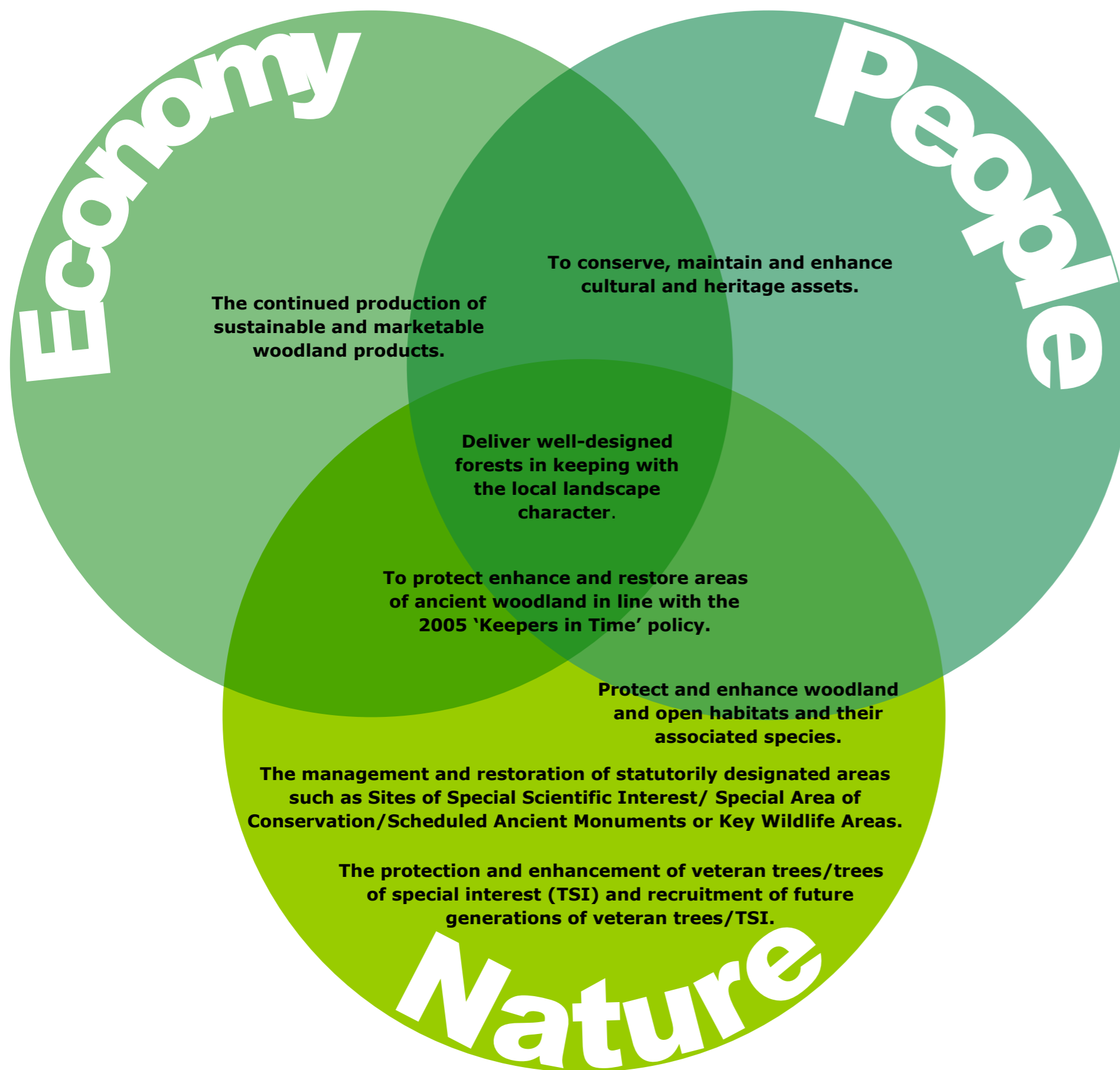
The planned areas of clearfelling, restocking and permanent/ transient open space creation during the ten years to 2028 are summarised in the chart below.

HECTARES	Conifers	Broadleaves	Open Space
Clearfelling	40	3	---
Restocking/Regeneration	10	22	11

In addition to these defined operations, ongoing thinning and selective felling of both conifers and broadleaves will be carried out in the plan area at five to ten year intervals.

The proportions of conifer and broadleaved woodland and open space at the beginning of the plan





## Management Objectives

### WEST ENGLAND FOREST DISTRICT

**PROTECTING AND EXPANDING ENGLANDS FORESTS AND WOODLANDS AND INCREASING THEIR VALUE TO SOCIETY AND THE ENVIRONMENT.**

The objectives of this Plan will, in part, deliver the *West England Forest District Strategic Plan (2013a)* and the national *Strategic Plan for the Public Forest Estate in England (2013b)*.

Sustainable management of the woodland will be to the standards required to maintain FSC and PEFC accreditation and therefore must deliver economic,

envi-



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ronmental and social objectives.

The meeting and monitoring of these objectives is outlined on the

**National Vision and Overall Goal:**  
To secure and grow the economic, social and natural capital value of the Public Forest Estate for the people of England.

**Meeting Objectives**



**District Strategy**

**Forest Plan Objective**

**Meeting Objective**

**Monitoring**

**Economy**

Maintain the land within our stewardship under FSC/PEFC certification.

Improve the economic resilience of our woods and forests.

Encourage and support business activity on the Estate

**People**

Maintain existing established consultation panels in the West England District and engage with other consultative bodies such as National Park Authorities and AONBs.

Provide high quality woodland based recreational opportunities for people and business focusing on the 3 principle Forest Centres.

**Nature**

Improve the resilience of the natural environment of the Estate under our stewardship.

Realise the potential of the Public Forest Estate for nature and wildlife.

Maintain and improve the cultural and heritage value of the Estate.

**The continued production of sustainable and marketable woodland products.**

Plan delivery achieved through thinning and clearfelling will continue to produce a mixture of wood products, both conifer and broadleaf that will be in keeping with and help progress and or enhance other management objectives.

Comparison of total production forecast with actual production at the Forest Plan (FP) five and ten-year review:  
2017-2022 = 13780m3 (2756 annually)  
2022-2026 = 11735m3 (2347 annually)  
Operational Site Planning (OSP) and contract supervision.

**To protect enhance and restore areas of ancient woodland in line with the 2005 'Keepers of Time' policy.**

Restoration of PAW sites will be a gradual process targeting removal of conifer crops and non-native regeneration through clearfelling & thinning to aid establishment of native species through regeneration and planting.

Analysis and comparison of naturalness scores derived from the Sub-Compartment Database (SCDB) through the FP review process.

**Deliver well-designed forests in keeping with the local landscape character that also protect and safeguard adjoining SSSI sites.**

Through a mixture of thinning & clearfelling the approach will be dependant upon steepness & awkwardness of terrain and prominence within the landscape. Operational site planning will help integrate the FP intentions minimising risk of adverse impact on the landscape and adjacent SSSI.

Fixed point photography will be used during the FP review process to help in the analysis of how the implementation of the plan is effecting external landscape and character. OSP will help identify opportunity for enhancement to character and identify safeguards for SSSI.

**The protection and enhancement of veteran trees (VT)/trees of special interest (TSI) and recruitment of future generations of veteran trees/TSI.**

These woodlands contain numerous scattered TSI & VT of varying description, including old lime coppice stools. OSP should record TSI and VT; updating GIS layer files for future reference. At the same time the process should promote the retention of both standing and fallen deadwood.

The FP review process at years 5 and 10 should check data held on GIS. Site visits and operational site plans will help in verifying appropriate TSI and VT management.

**Protect and enhance woodland, open habitats and their associated species.**

Through a mixture of clearfelling, thinning and coppicing the provision for open habitats and associated species will be enhanced. Opportunities should be highlighted in the OSP process where conservation benefits can be delivered. Appropriate reinstatement works will be carried out once operations have been concluded.

Monitored through review process, looking at local records for updated sightings.  
Analysis and comparison of SCDB open space through the Forest Plan review process.

**To conserve, maintain and enhance cultural and heritage assets.**

The identifying and recording of any unscheduled features is an on-going process aimed at improving the quality of existing data sets that subsequently feed into the OSP of harvesting and restocking sites that should identify features of interest and outline appropriate measures to avoid and minimise damage.

Monitoring will be achieved through the OSP and contract supervision and the Forest Plan review process.



**National Character Profile: 65 Shropshire Hills**

source: Natural England (April 2014)

A rugged and tranquil landscape of National importance influenced during the quaternary Ice Ages that is now characterised most strongly by the series of relatively wild hills and ridges with many smaller steep and rounded hills distributed across the area as a result of the glacial erosional and depositional processes that went on. Around half of the NCA area is designated an Area of Outstanding Natural Beauty, Hill slopes grade into gentler slopes characterised by arable and pasture land that often contain a strong presence of trees in hedgerows and alongside watercourses; there are isolated veteran trees in parkland with remnant apple and damson orchards. Overall the impression is of a landscape rich in boundary features.

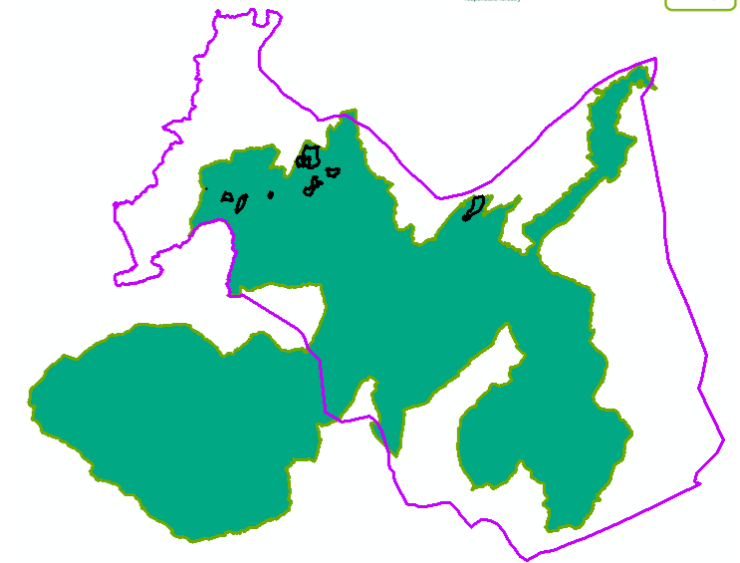
Priority habitats include upland and lowland heathland, wet woodland and lowland mixed deciduous woodland with the geology and history having had a key influence on industry and settlement patterns, as can be seen by the many ancient features such as the Offa's Dyke and the Iron Age Hill Fort of Caer Caradoc that still survive today. From the Hills and ridges extensive views can be found deep into Wales to the West and to the North, South and East there are extensive views over low-lying landscapes. All watercourses including the River Teme drain into the River Severn.

Semi-natural woodland scattered across the area are largely confined to slopes where Ash, Elm and Oak stands occur, with numerous conifer and mixed plantations.

**Statement of Environmental Opportunity (SEO) 2: Create (where appropriate) significant amounts of characteristic woodland, wetland and grassland habitats to enhance and extend the strong habitat network, and to improve soil quality and the regulation of water.** E.g. 1) Expanding broadleaved woodland and restoring plantations on ancient

woodland sites (PAWS). 2) Retaining veteran trees and deadwood in both woodlands and valley bottom woodlands, to conserve the important fauna associated with deadwood.

Forest Plan Management Area  
National character Area - 65 Shropshire Hills  
Shropshire Hills AONB



**LANDSCAPE CHARACTER ASSESSMENT (Character makes each part of the landscape distinct and gives each its particular sense of place, regardless of perceptions of quality or value)**

The importance of the landscape of the Shropshire Hills has long been appreciated and is formally recognised through its designation as an Area of Outstanding Natural Beauty (AONB). The area has one of the largest geological variations in the UK. This 'geodiversity' has in turn given rise to a complex array of soils and a range of different landforms. The county's ecology is correspondingly varied, and includes a broad assortment of nationally important habitats.

**2.6 - Pasture Hills** are prominent sloping landscapes that occur around the fringes of higher ground eg the western flanks of the Long Mynd and along Yell Bank northeast of Church Stretton. (*Forest Plan note: Yell bank overlooks Lodge Hill, see photos below*) Relict ancient Woodland is found throughout these landscapes particularly along watercourses and on the steeper slopes. Woodlands are often linked to this landscape type by further tree cover provided by scattered hedgerow trees, mainly Ash and Oak that are set within species rich hedgerow networks that define ancient, irregular field systems.



**2.6 - Pasture Hills**

The photos clearly demonstrate the linkage the woodlands have through the hedgerows and scattered trees that lie within the wider landscape.

**Far Left:-** view looking West towards Lawley from top of Lodge Hill

**2.7 - Principal Wooded Hills** enjoy prominent sloping topography that links woodland into the surrounding landscape including Pasture Hills and includes the likes of Eastridge Wood. Character of these wooded landscapes is heavily influenced by landform and in many places the steepness of the slopes makes them unsuitable for agriculture. The landscapes vary in scale from small and intimate with framed views inside the woodlands to medium scale with filtered views in the more open areas.



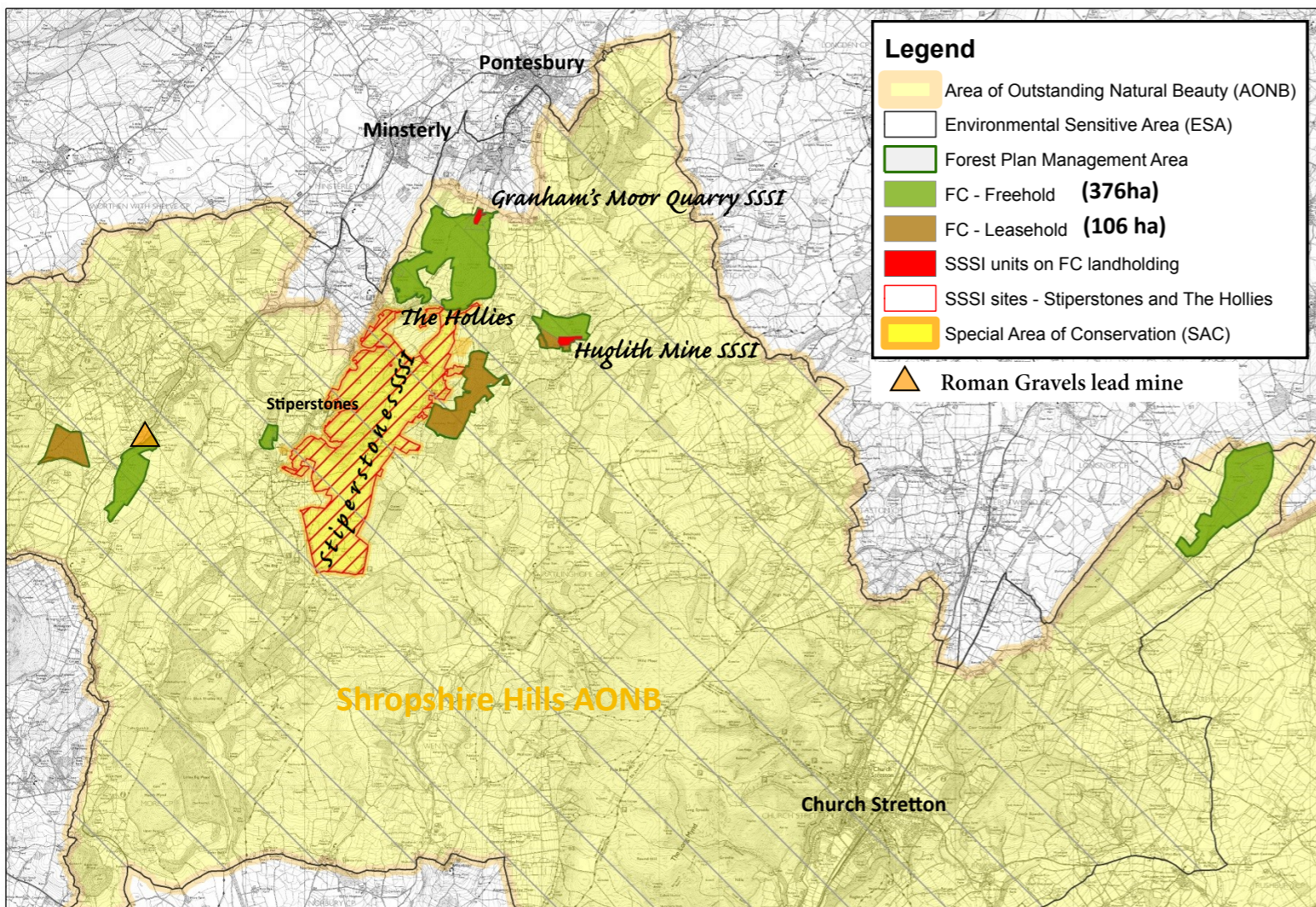
**2.7 - Principal Wooded Hills and 2.9 - Wooded Hills and Farmlands**

The photos clearly demonstrate the differences in topography between wooded areas and farm/pasture land, but also illustrate the pattern of enclosure

**Far Left:-** showing the south eastern corner of Eastridge an example of a Principal Wooded Hill with reflection of the field pattern within the woodland coupe shape.

**2.9 - Wooded Hills and Farmlands** are broadly similar to Principal Wooded Hills having the same sloping topography giving rise to medium to large scale landscapes often framed with sometimes filtered views. The landscapes tend to have complex and diverse histories often shaped through successive phases of enclosure and later with the establishment of coniferous woodland in the 19th and 20th Centuries.





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## Designations

The Forest Plan area sits completely within the Shropshire Hills

Area of Outstanding Natural Beauty (AONB) as well as the Shropshire Hills

Environmentally Sensitive Area (ESA)

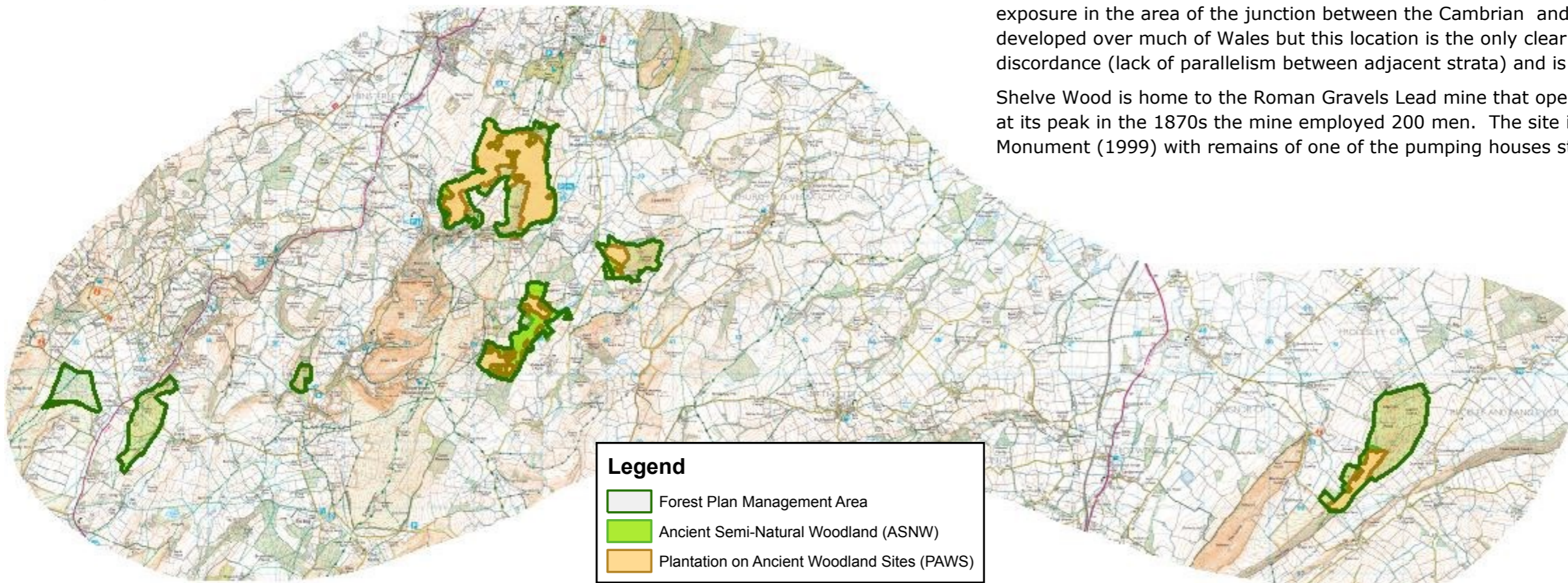
The plan area contains around 17% of Ancient Woodland equating to 85Ha with a further 75Ha of native woodland lying within Plantation Ancient Woodland (PAWs) making native woodland account for one third of the total Forest Plan area. The map at the bottom of the page shows the distribution of Ancient Semi-Natural Woodland (ASNW) and PAWs. See the section on Woodland Naturalness for further information.

Notified for supporting an extensive variety of heathland vegetation, Stiperstones SSSI is a National Nature Reserve and Special Area of Conservation (SAC). It is the northern end of this reserve within Stiperstones SSSI that adjoins Eaststridge and is known as "The Hollies" (see conservation page)

In Westcott, Huglith Mine was first worked for Copper in the early 19th Century, finishing Copper production in 1846. Today the mine carries SSSI status having been notified in 1993 for its geological features. Covering 10 hectares, the mine provides one of the best exposures of Barite mineralisation in red beds seen in Britain and was by far the biggest producer of Barium in West Shropshire, selected as the best and only example of a Barite deposit in this region and produced almost 300,000 tons of Barite between 1910-1945 before closing in 1947. The mines now provide a valuable habitat for bats to roost and hibernate, with the old managers office having been converted into a hibernacula too.

In Eaststridge, Granham's Moor Quarry was notified in 1985 and covering 2.75 hectares was notified for being an historically famous geological locality that provides the only clear exposure in the area of the junction between the Cambrian and Ordovician Systems, which developed over much of Wales but this location is the only clear exposure demonstrating discordance (lack of parallelism between adjacent strata) and is therefore a key geological site.

Shelve Wood is home to the Roman Gravels Lead mine that operated from 1788 to 1895 and at its peak in the 1870s the mine employed 200 men. The site is now a Scheduled Ancient Monument (1999) with remains of one of the pumping houses still surviving today. Further







## Analysis & Concept

**Analysis:** Whilst land to the east rises to over 500m asl, Buxton is still a prominent feature within the landscape cloaking a large drumlin shaped hill that rises to 330m asl and does not appear on the ASNW register although the woodland adjacent to Buxton to the north runs along the remaining part of the drumlin ridge and is ASNW. The villages of Tankerville and Stiperstones both lie within 0.5 miles of Buxton.

**Concept:** In the context of the landscape and visibility from the two villages, there should be an aspiration to revert Buxton back to native-semi-natural but is dependant on access arrangements and provision of suitable roading to facilitate uplift of harvested timber.

**Analysis:** The majority of PAW within the plan sits within Eastridge of which over a third is larch and a quarter is Scots Pine. Larch dominates the east and west slopes and is highly visible in the surrounding landscape from both westerly and easterly directions. Currently there are no issues with Phytophthora in the plan area.

**Concept:** Using a mixture of conventional clearfelling, thinning and alternative silvicultural practices, larch content will gradually reduce in prominence to favour native broadleaf species. Elements of Scots Pine and other conifer species such as Douglas Fir will form a component of future woodland composition.

**Analysis:** There is a strong native broadleaf component existing throughout in the main crop and as an understorey within areas of conifer. Westcott is just under half ASNW or PAWS and the remainder is Secondary Woodland. Both Westcott and Gittinshay are leased to the FC and the Estate owner uses the woods for rearing pheasants.

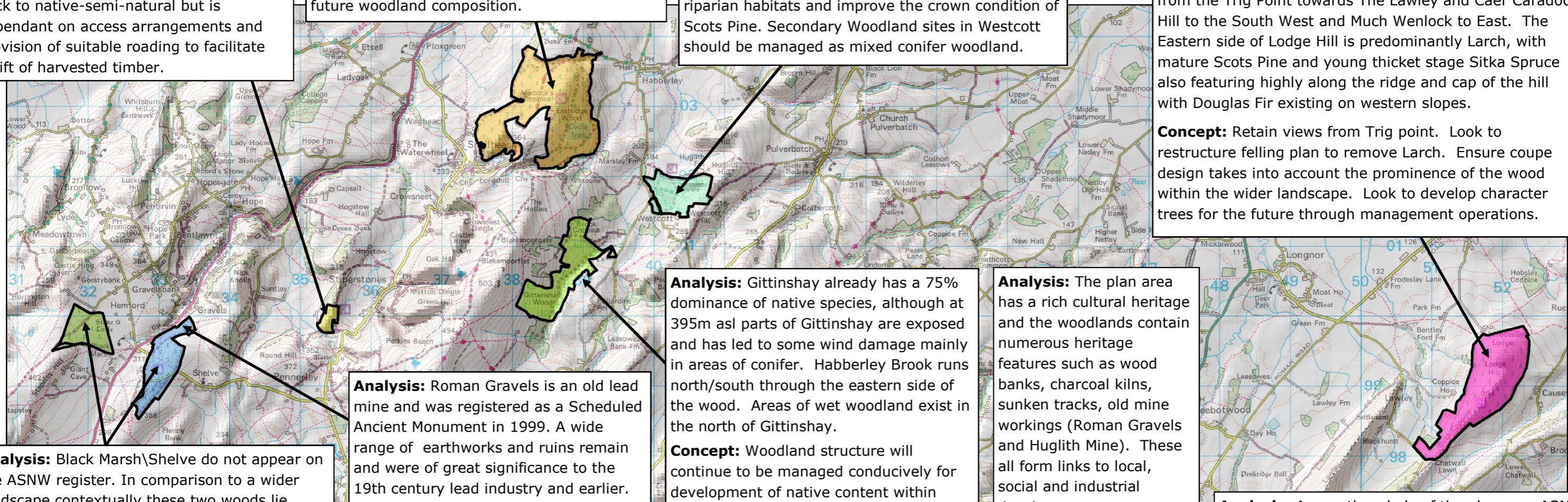
**Concept:** Woodland structure will continue to be managed conductively to develop native structure within PAW areas through employment of appropriate prescriptions such as coppicing. Thinning will enhance crown condition of broadleaf seed sources within PAW areas and recruit younger native understoreys as well as improve rideside and riparian habitats and improve the crown condition of Scots Pine. Secondary Woodland sites in Westcott should be managed as mixed conifer woodland.

**Analysis:** The whole of the plan area provides a variety of habitat types but lacks in the provision of open space habitat.

**Concept:** the plan will look to identify appropriate areas to be worked on to restructure crop edges and will work to create and enhance provision of habitat suitable for lepidoptera, dormice, reptiles, invertebrates and flora.

**Analysis:** Half PAWS and half Secondary woodland this woodland sits on a drumlin 295m asl with good views from the Trig Point towards The Lawley and Caer Caradoc Hill to the South West and Much Wenlock to East. The Eastern side of Lodge Hill is predominantly Larch, with mature Scots Pine and young thicket stage Sitka Spruce also featuring highly along the ridge and cap of the hill with Douglas Fir existing on western slopes.

**Concept:** Retain views from Trig point. Look to restructure felling plan to remove Larch. Ensure coupe design takes into account the prominence of the wood within the wider landscape. Look to develop character trees for the future through management operations.



**Analysis:** Black Marsh\Shelve do not appear on the ASNW register. In comparison to a wider landscape contextually these two woods lie relatively flat, with only oblique views visible from the A488 by Shelve. They are young thicket stage conifer woodlands with potential for providing conservational benefits such as Lepidoptera/reptile/invertebrate habitat alongside timber production.

**Concept:** To continue sustainable timber production into the future that takes opportunity to improve ride-side structure for Lepidoptera, Invertebrates and Reptiles. Enhance existing habitats such as the ponds in Black Marsh.

**Analysis:** Roman Gravels is an old lead mine and was registered as a Scheduled Ancient Monument in 1999. A wide range of earthworks and ruins remain and were of great significance to the 19th century lead industry and earlier. Recent clearfelling has re-exposed some of the old workings, with the soil being poor and skeletal at this end of the wood.

**Concept:** Keep the SAM and surrounding area as open space. By keeping it as open space with bare ground conditions and some scrub, it will continue to be an invaluable habitat suitable for a variety of lepidoptera, invertebrates, reptiles and flora as well as protecting the SAM.

**Analysis:** Gittinshay already has a 75% dominance of native species, although at 395m asl parts of Gittinshay are exposed and has led to some wind damage mainly in areas of conifer. Habberley Brook runs north/south through the eastern side of the wood. Areas of wet woodland exist in the north of Gittinshay.

**Concept:** Woodland structure will continue to be managed conductively for development of native content within PAW areas, to enhance and encourage the native condition and regeneration of native broadleaf species to become diverse in composition through a variety of means that may include group planting or under-planting.

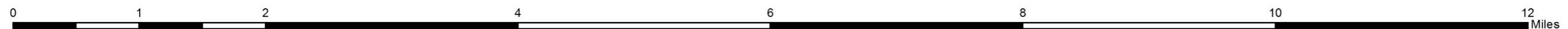
The woodland and riparian area either side of Habberley Brook will be managed to safeguard water quality with intervention being limited only to those where conservation benefits can be demonstrated.

**Analysis:** The plan area has a rich cultural heritage and the woodlands contain numerous heritage features such as wood banks, charcoal kilns, sunken tracks, old mine workings (Roman Gravels and Huglith Mine). These all form links to local, social and industrial development.

**Concept:** Management of the woods will continue to identify features not yet recorded and protect those heritage features that are, so that forest operations have minimal impact, and take opportunities to enhance their conservation and heritage value where ever possible.

**Analysis:** Across the whole of the plan area ASNW remnants occur in small fragmented blocks with scattered individual veteran or small groups of mature broadleaves in between.

**Concept:** Within PAW areas the plan should continue linking fragmented areas of ASNW, concentrating on areas where existing broadleaves occur aiding the establishment of further native content through encouragement of natural regeneration, group plantings or through clearfelling and restocking to ensure suitable robust and diverse species composition for the future.







**Legend**

- Evergreen Conifer
- Other conifer
- SP
- Larches
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other



**Eastridge**

**Species Distribution**

Note that woodland composition is based on the largest component of the subcpt and therefore will not fully reflect the actual content or distribution of conifer, broadleaf or open space.



**Westcott**

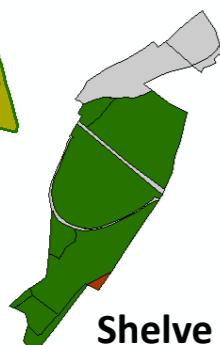


**Lodge Hill**

**Buxton**



**Gittinshay**



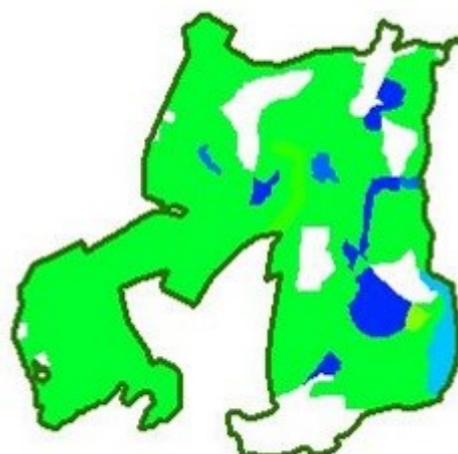
**Shelve**



**Black Marsh**

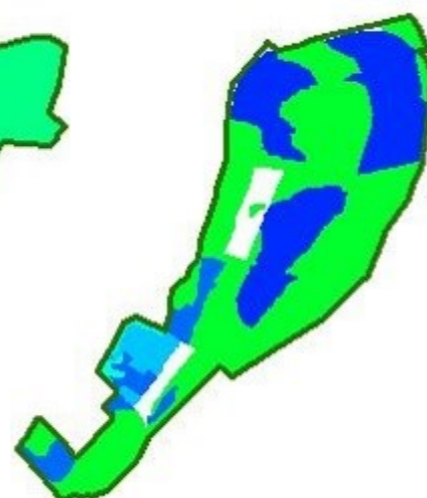
**Legend**

- Pre 1900
- 1901-1920
- 1921 - 1930
- 1931 - 1940
- 1941 - 1950
- 1951 - 1960
- 1961 - 1970
- 1971 - 1980
- 1981 - 1990
- 1991 - 2000
- 2001 - 2010



**Age Class Distribution**

Map shows age class distribution by decade



**Woodland Composition**

The plan area is dominated by conifer, of which Larches, Sitka Spruce, and Scots Pine account for 2 thirds (63% or 300Ha) of the plan area with Lodge Hill and Eastridge accounting for just under 70% (200<Ha) of all conifer within the plan area.

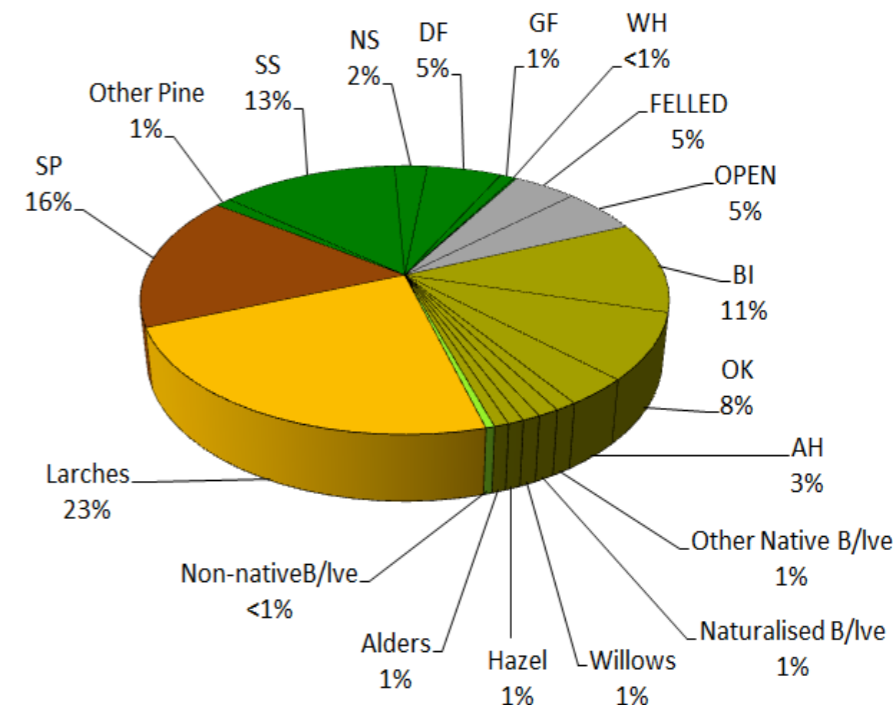
Broadleaf cover accounts for just over a quarter (27% or 130<Ha) of the overall Forest Plan area. The majority of broadleaf cover resides in Gittinshay where broadleaves account for 73% (48Ha) and equates to over a third of the broadleaves within the plan. Minor broadleaf species include Rowan, Cherry and Willow.

Conifer appeared with prevalence within the plan area just after World War II in the 1950's, but in dramatically smaller quantities since, whilst broadleaves have been continually planted in smaller more modest amounts since the 1900's they have never outpaced that of conifer.

A high proportion of the plan area will be reverted back to a native condition through the implementation of the Keepers of Time policy. Despite current high proportions of conifer cover, the plan area does support a high content of broadleaf regeneration that has been encouraged through silvicultural management<sup>1</sup> of the woodlands and the effects of this are beginning to affect woodland composition, especially in areas such as Eastridge where the majority of the restoration will need to occur.

<sup>1</sup>Including regeneration fellings, thinning and planting

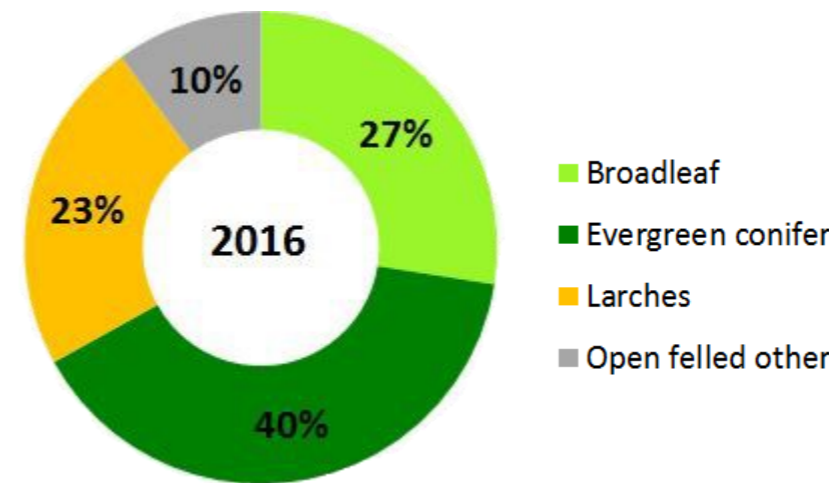
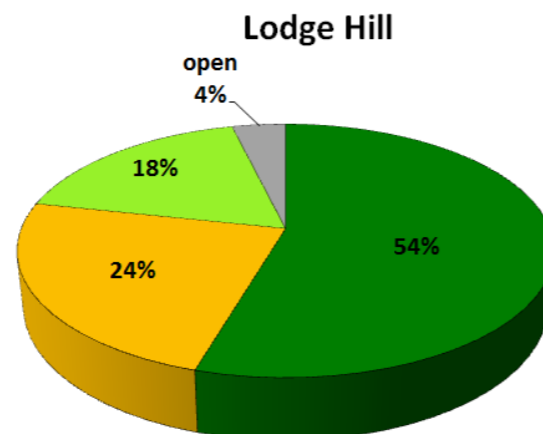
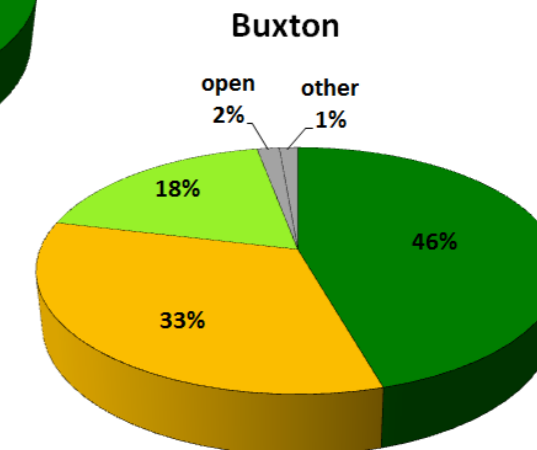
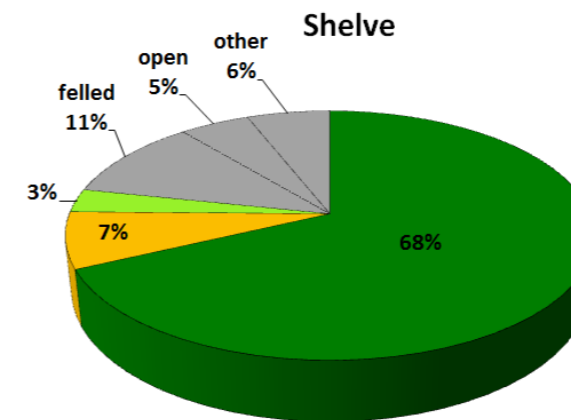
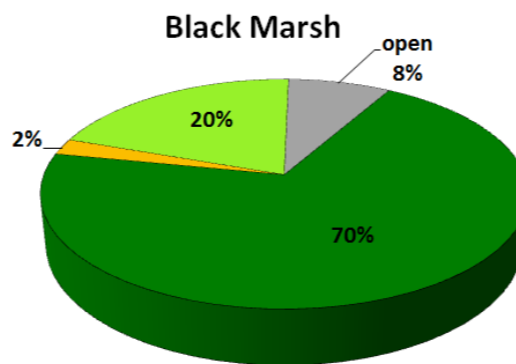
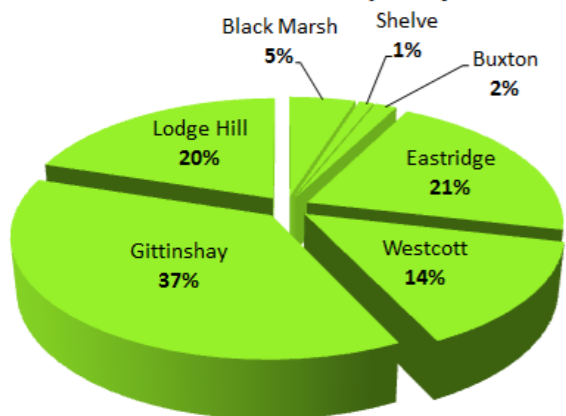
**Woodland Composition 2016**



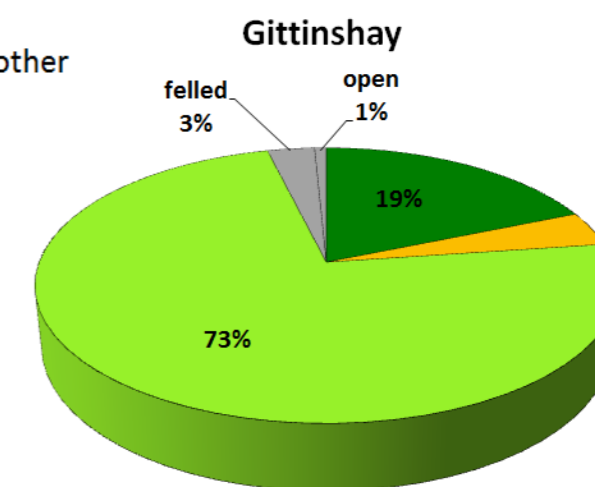
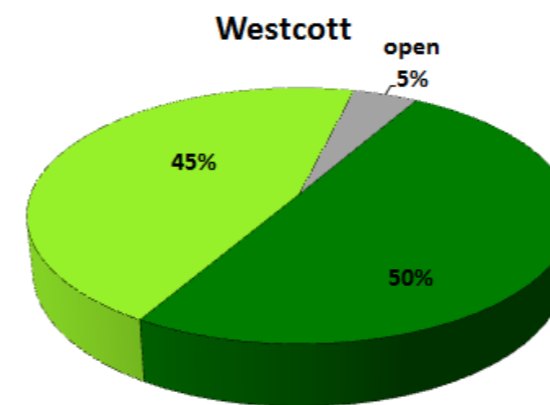
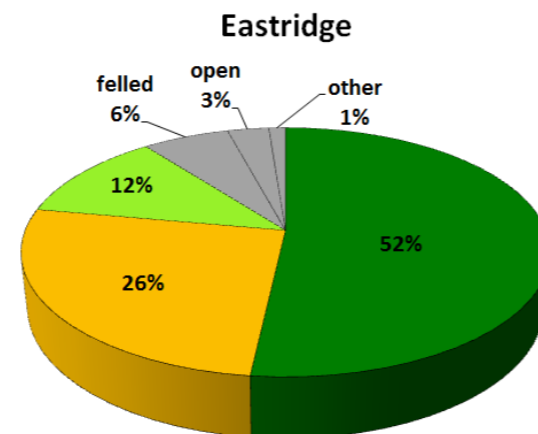
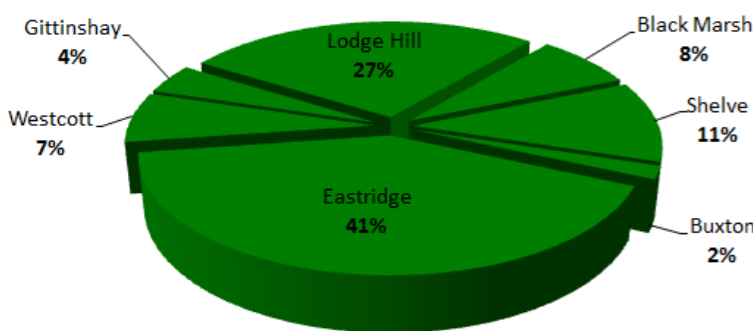




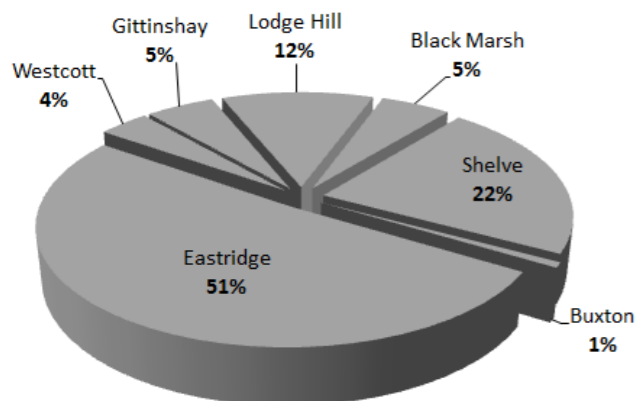
**broadleaf cover within FP split by woodland**



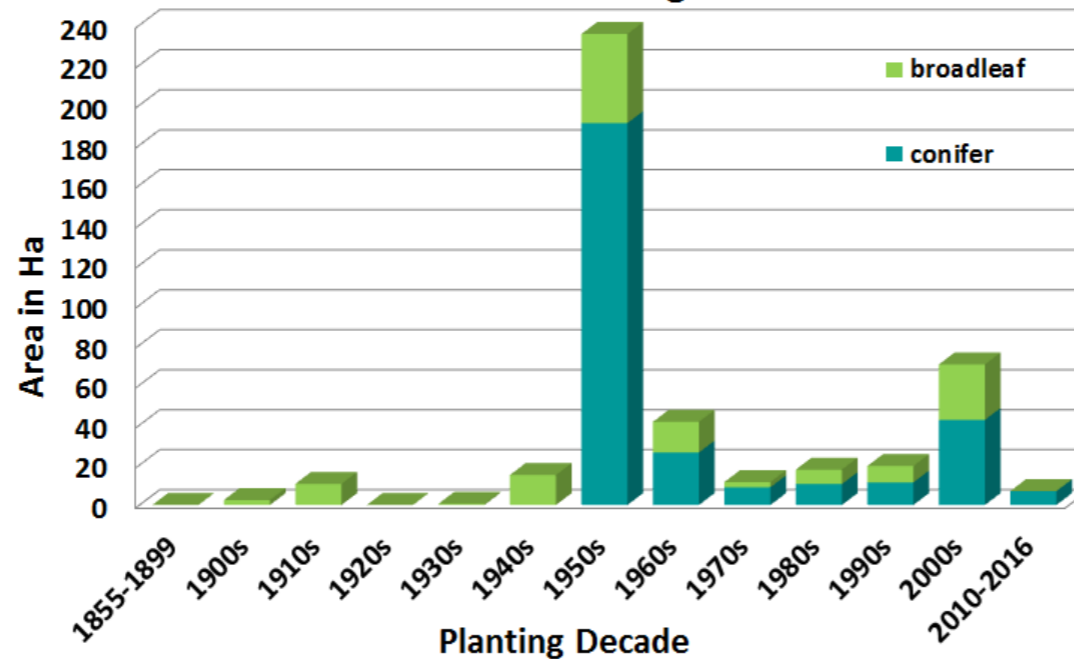
**conifer cover within FP split by woodland**



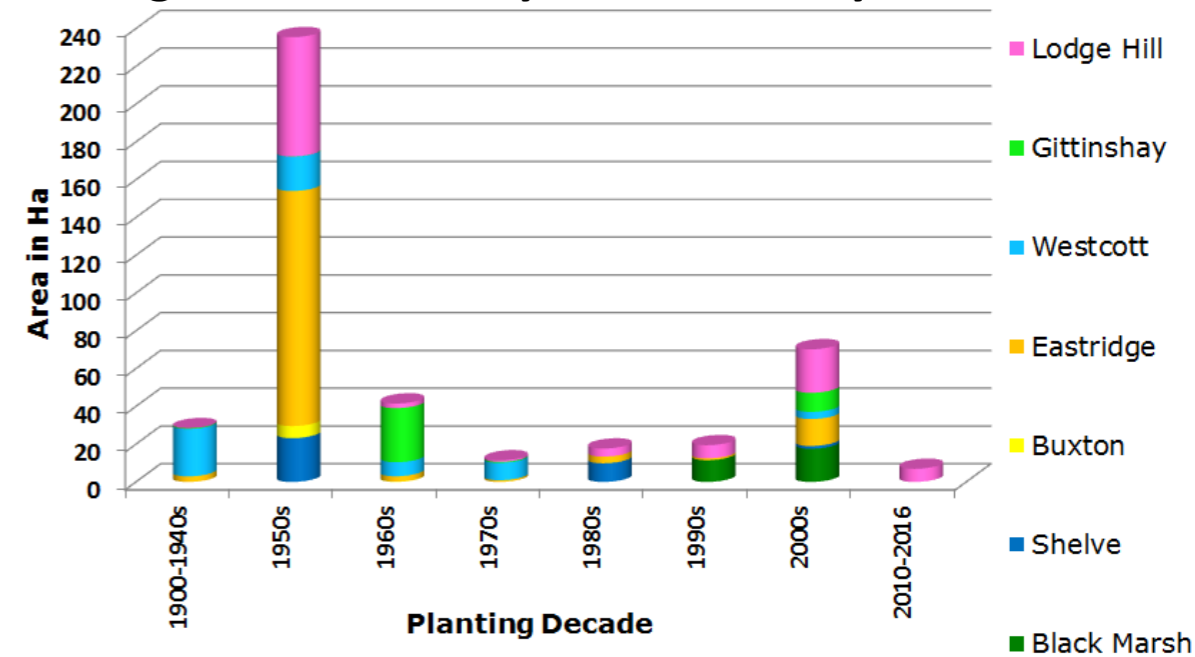
**Overall Open/felled ground within FP area split by woodland**



**Conifer and Broadleaf age class distribution**



**Age class shown by decade and by woodland**







**Class 1 – Semi-Natural Woodland**



**Class 2 – Plantation Woodland**

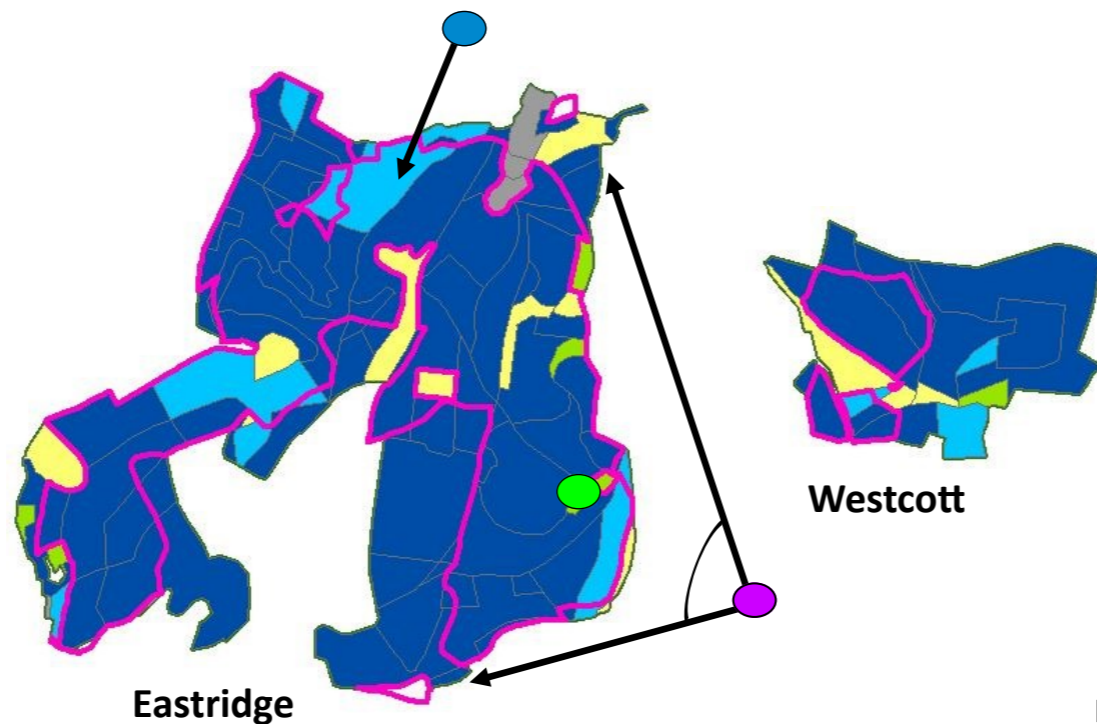
(50 - 80% site native species)



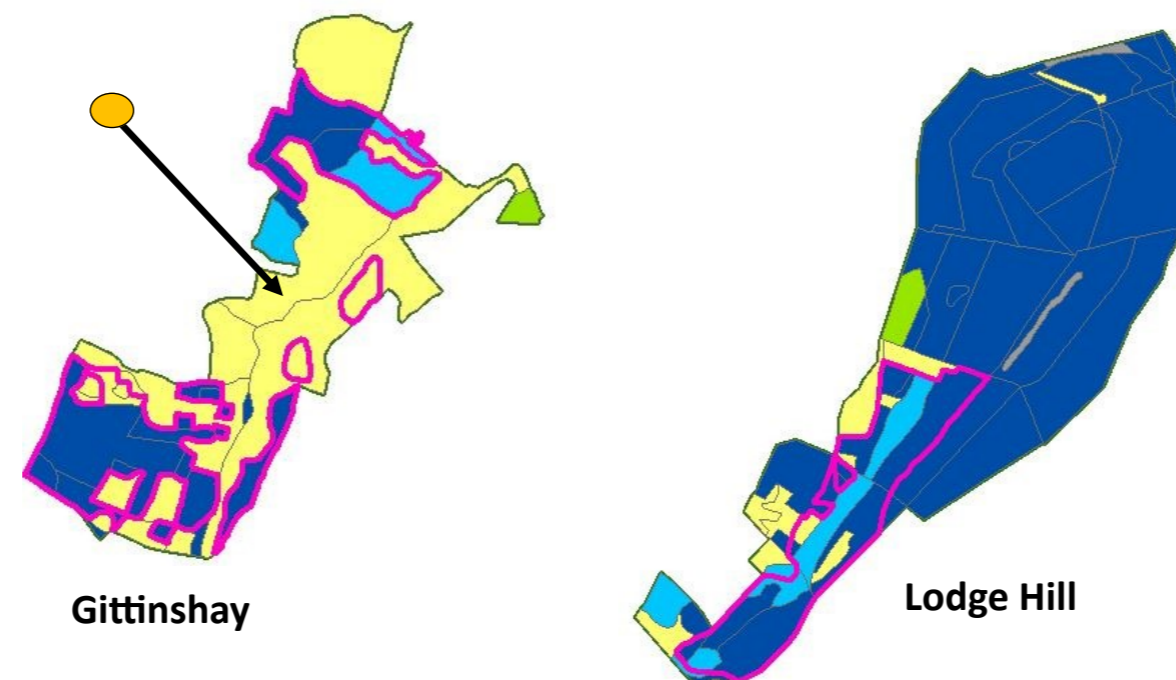
**Class 3 – Plantation Woodland**



**Class 4 – Plantation Woodland**



The woods of Black Marsh, Shelve and Buxton are not shown on the ASNW register and are assumed to be secondary woodland.

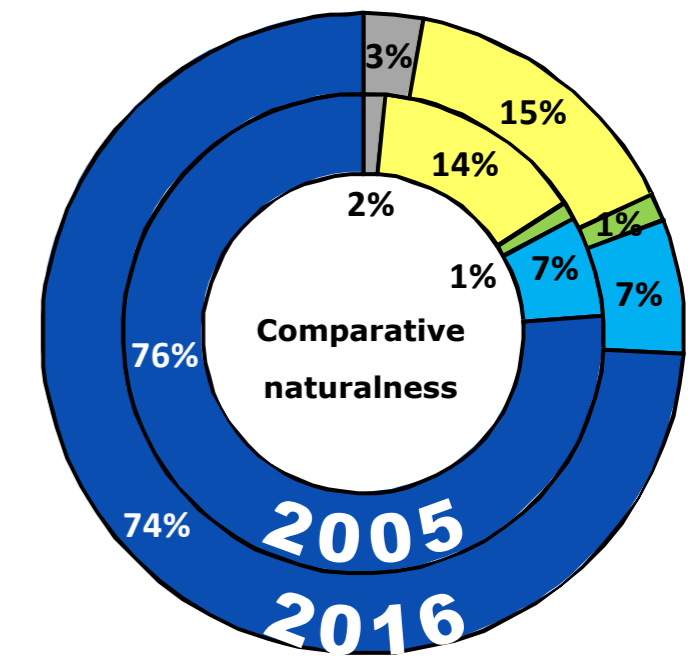


**Woodland naturalness**

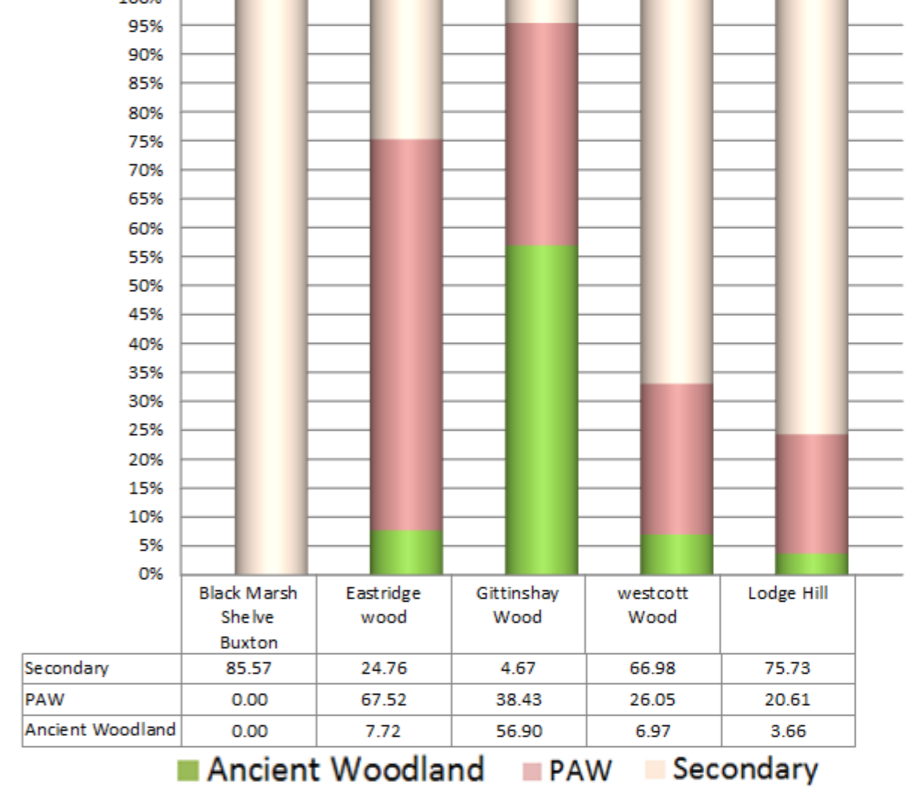
Naturalness is the measure to show the percentage of site native tree species in a given area. This measure is used to record and monitor the condition and restoration of Ancient Woodland Sites.

Classes 2, 3 and 4 are classified as Plantations on Ancient Woodland Sites (PAWS) the majority of which can be found in Eastridge. Areas of Semi-Natural Woodland (Class 1) contain >80% site native species and are mostly found in Gittinshay.

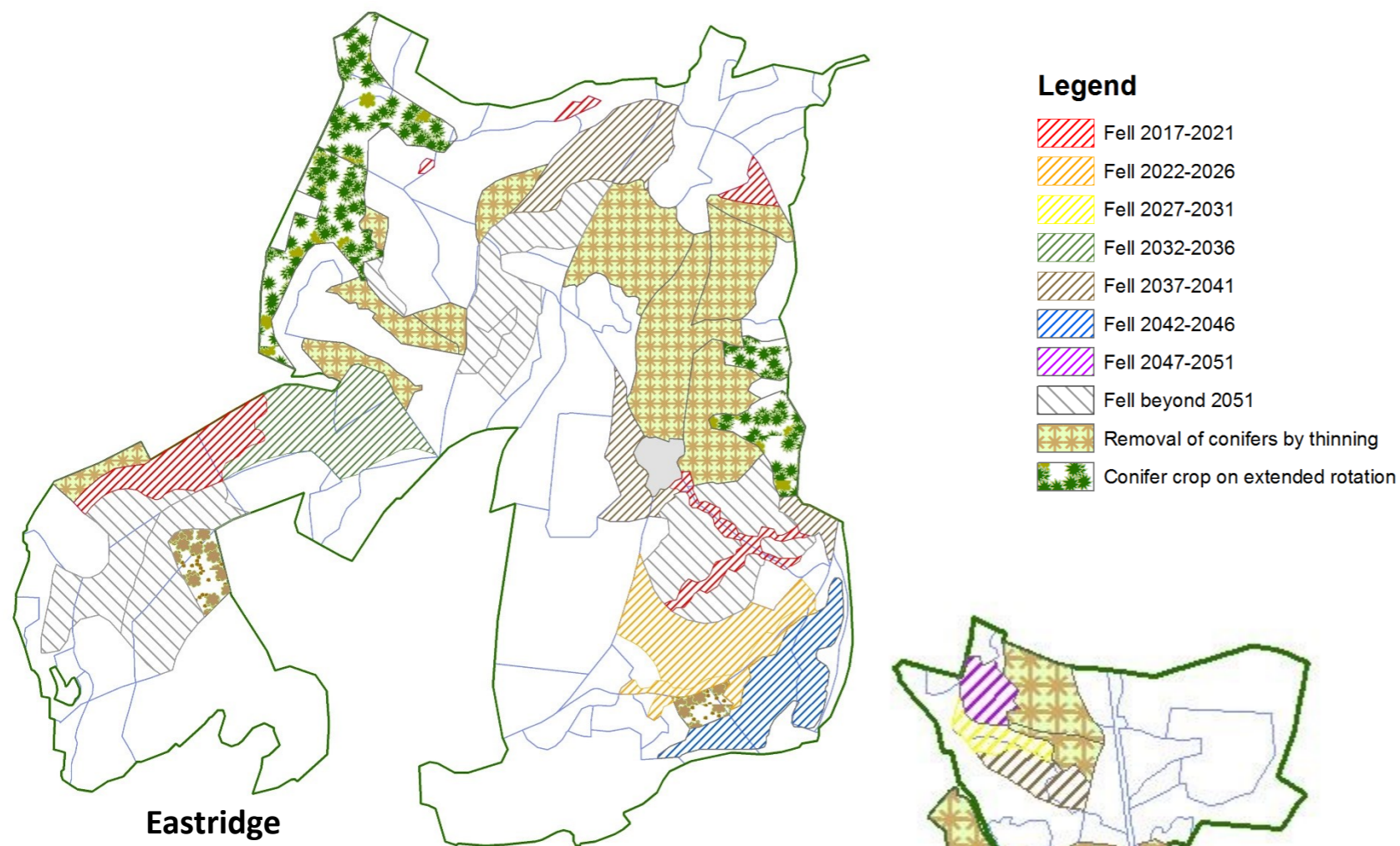
Whilst transformation of Classes 2, 3 and 4 PAWS towards Class 1 is an objective of this Plan, restoration will take place through thinning and targeted clear felling achieving a steady and gradual transition over a number of years.



ASNW register shown by percentage of woodland area



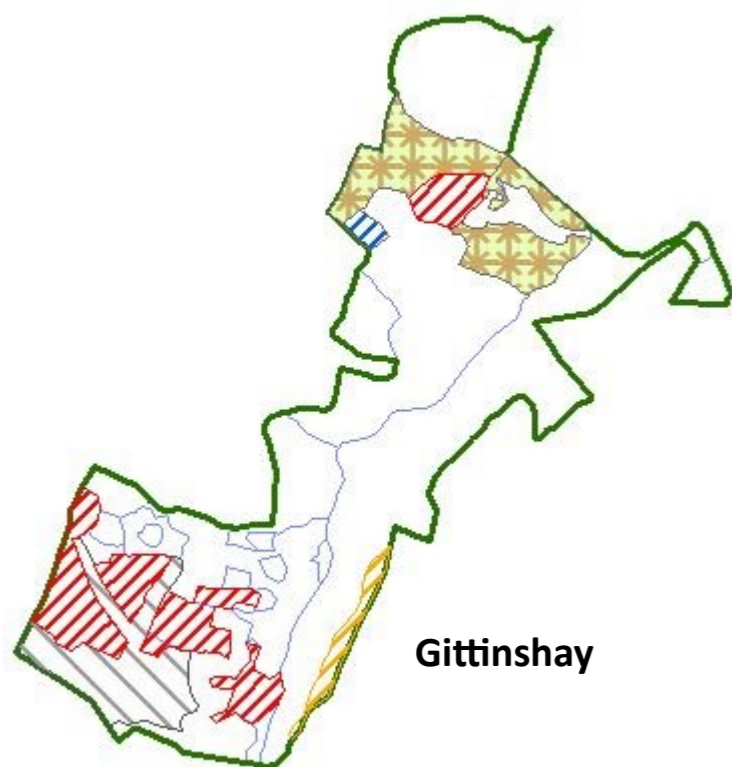




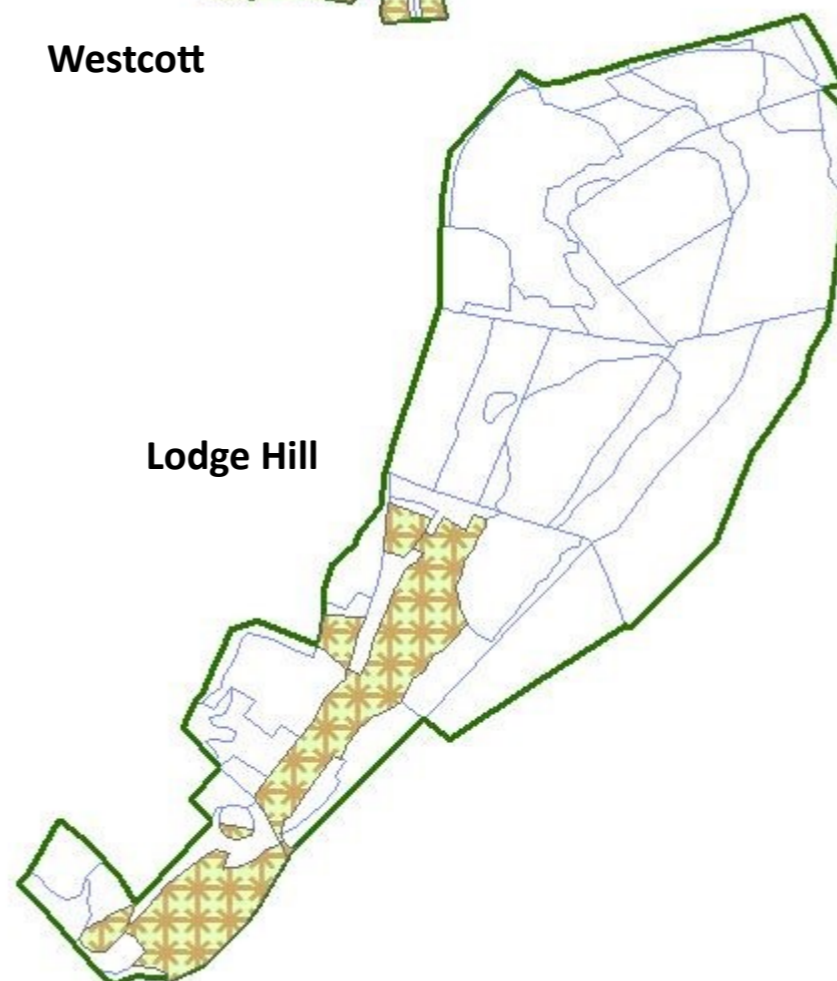
**Eastridge**



**Westcott**



**Gittinshay**



**Lodge Hill**

**Legend**

- Fell 2017-2021
- Fell 2022-2026
- Fell 2027-2031
- Fell 2032-2036
- Fell 2037-2041
- Fell 2042-2046
- Fell 2047-2051
- Fell beyond 2051
- Removal of conifers by thinning
- Conifer crop on extended rotation

**PAWS Management**

Restoration of Plantations on Ancient Woodland Sites (PAWS) has already begun through thinning and felling during the previous plan period. Over time restoration of PAWS areas will continue towards a native condition through the use of thinning and targeted clearfelling. This will enable the development of the understory and may take a considerable amount of time/resource due to native remnants being fragmented and limited in places. But also in part to the terrain that in some places makes work extremely difficult and awkward, sometimes prohibitive. Therefore a proactive yet realistic approach will be used to transform PAWS sites over a period of time with an eventual aim of transitioning them to one that contains 80% or more of native species. This will be a gradual process that will help achieve:

- a varied age structure with varying ratios of high canopy, secondary canopy and understory through out.
- transition that ensures a minimum future content of 3 native species, with 4 to 5 species being the preferable target.
- Minimal reliance on broadleaf monocultures to be encouraged especially of Birch, Ash, Oak or Willow. Within existing mid rotation broadleaf crops or in SN class 4 woodland where conditions are favourable and risk to wind damage is low, this objective may mean considering either under-planting or group felling at the time of thinning surrounding areas and then group planting.

Some areas may take longer to restore than others due to their composition and recent clearfelling activity but thinning practice will reflect the condition of the crops and how individual sites are responding to previous interventions. The key is flexibility as to the speed of restoration; with well established understories being recruited during thinning to form part of the future crop; giving opportunity for the development of an irregular structure that is both diverse in age class and species.

Remnant fragments of Western Hemlock will be prioritised for clearfelling or earliest removal through thinning and reversion to native woodland. By 2027 areas clearfelled and reverted back to a native condition will amount to around 25Ha. A further 15-20Ha will be managed through thinning aiming to achieve a native content of 80%+ by 2027. The remaining conifer PAW areas will take longer; containing predominantly younger conifer crops they too will be managed through thinning until economic age for clear felling is reached. Other areas contain mature larch that will be scheduled for clearfelling due to concerns over *Phytophthora ramorum*. Removal of this Larch will be spaced over the next 30-40 years to ensure restructuring imparts a stable and sustainable timber flow over future years.

Some sites may go on to be classed as long-term retention and in the mean time thinning will focus on areas of existing mature broadleaves as seed sources as well as opening up any natural regeneration for recruitment into the future crop.





## Broadleaf Management

These sites will be managed using shelterwood/selection systems or as in Westcott, coppicing. The new crop will be instigated and recruited through thinning operations that will favour the best seed trees in order to promote natural regeneration. Or in the case of coppice using a mix of simple coppice and coppice with standards.

Thinning operations may also be used to provide opportunities for enrichment planting in order to diversify the species composition within and surrounding broadleaf areas. Light levels and grazing pressure from deer will be managed to minimise weed encroachment and regeneration predation following thinning operations. In some instances fencing may need to be considered. Under-planting and enrichment planting with species such as Oak, Lime, Hornbeam and Cherry may be considered to provide resilience to climate change and on Ash dominated sites to ensure greater resilience to ***Hymenoscyphus fraxineus***, the new name for *Chalara fraxinea*.

Where natural regeneration is struggling to become established, the site will be monitored and enrichment planting will be considered. It maybe that further intervention is required through thinning to develop the broadleaf components before regeneration is successful or that there are limited seed sources available. Group felling and planting might be beneficial in some instances. Each site will be assessed on its own merits before deciding if under-planting, enrichment planting or further thinning and monitoring is appropriate.

Broadleaf areas will be thinned to develop their crowns and seeding potential in order to provide a more robust and viable seed source for surrounding conifer crops that are on PAWs. This will help encourage the spread of broadleaf regeneration into the surrounding conifer crops. This maybe a slow process and will be monitored. At some point in the future one may have to consider enrichment planting to ensure a diverse broadleaf composition is achieved.

Monitoring of these crops for regeneration will be an integral part of routine pre-thinning assessment and should inform how the crop is thinned; in combination with the Forest Plan review process.

Broadleaf areas in Gittinshay will be managed through a mixture of Minimum intervention and broadleaf shelterwood. Woodland adjacent to Habberley Brook provide good habitat for the likes of Dormice, Reptiles, Invertebrates, Lepidoptera and in future will offer good assemblages of Veteran trees and Deadwood, further improving the habitat value.

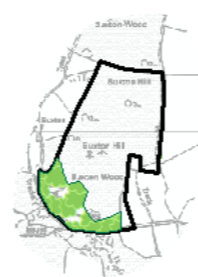
Westcott offers good wet woodland habitat with opportunities to develop transitional habitats through coppicing using short to medium length coppicing cycles suitable for the production of firewood.



Eastridge



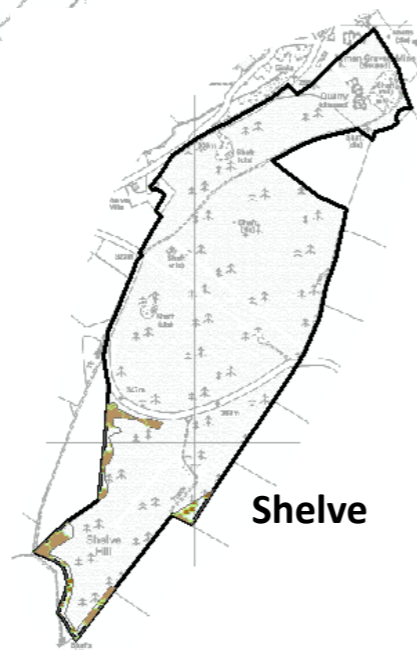
Westcott



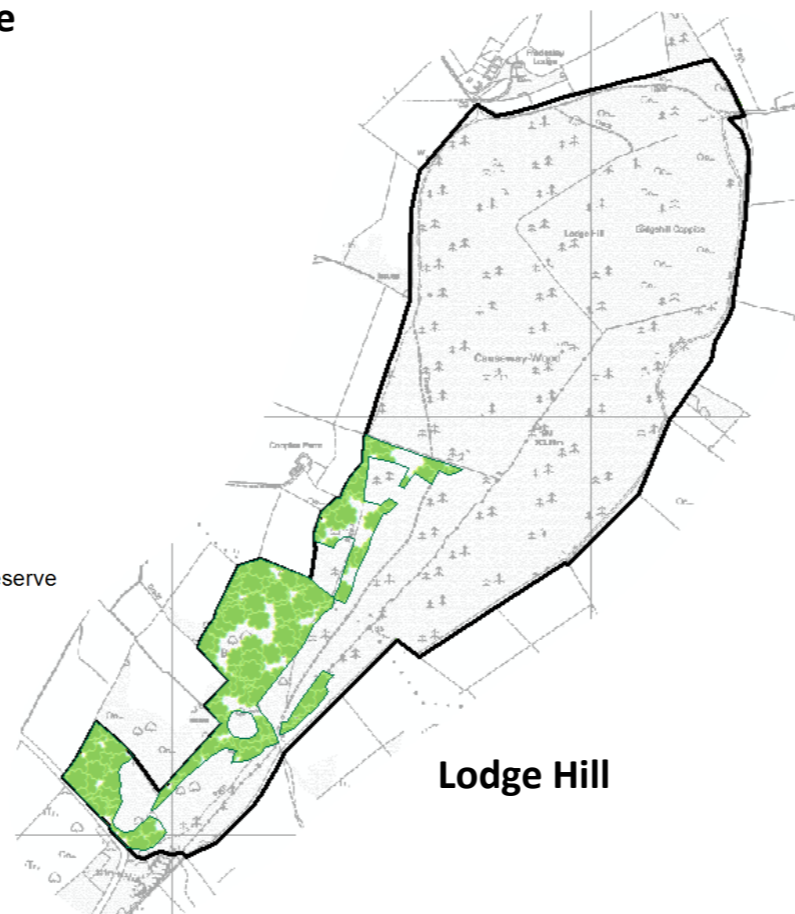
Buxton



Black Marsh



Shelve



Lodge Hill

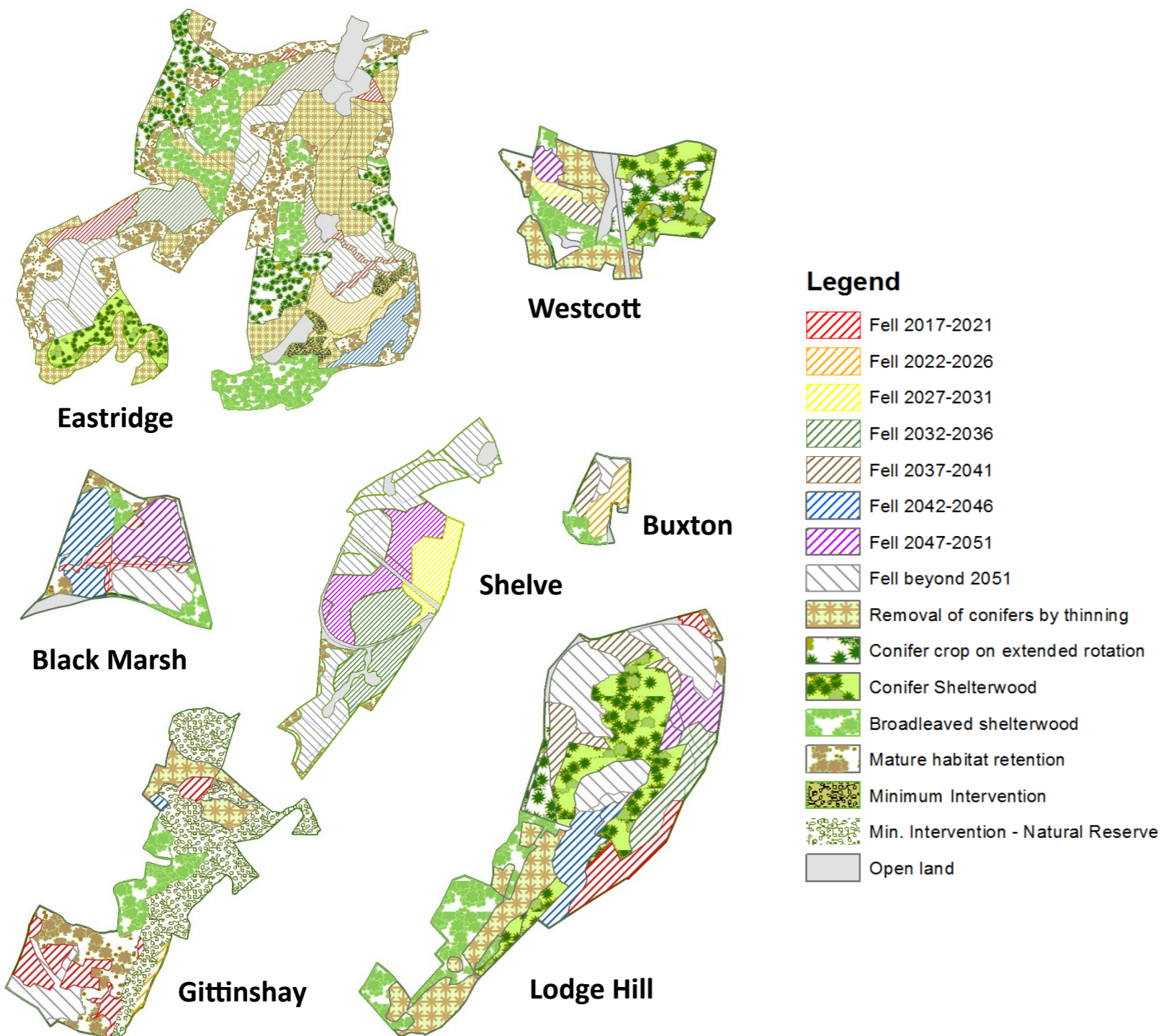


Gittinshay

### Legend

- Fell 2027-2031
- Fell 2037-2041
- Fell 2047-2051
- Fell beyond 2051
- Broadleaved shelterwood
- Mature habitat retention
- Minimum Intervention
- Min. Intervention - Natural Reserve
- Management Area





## Silviculture

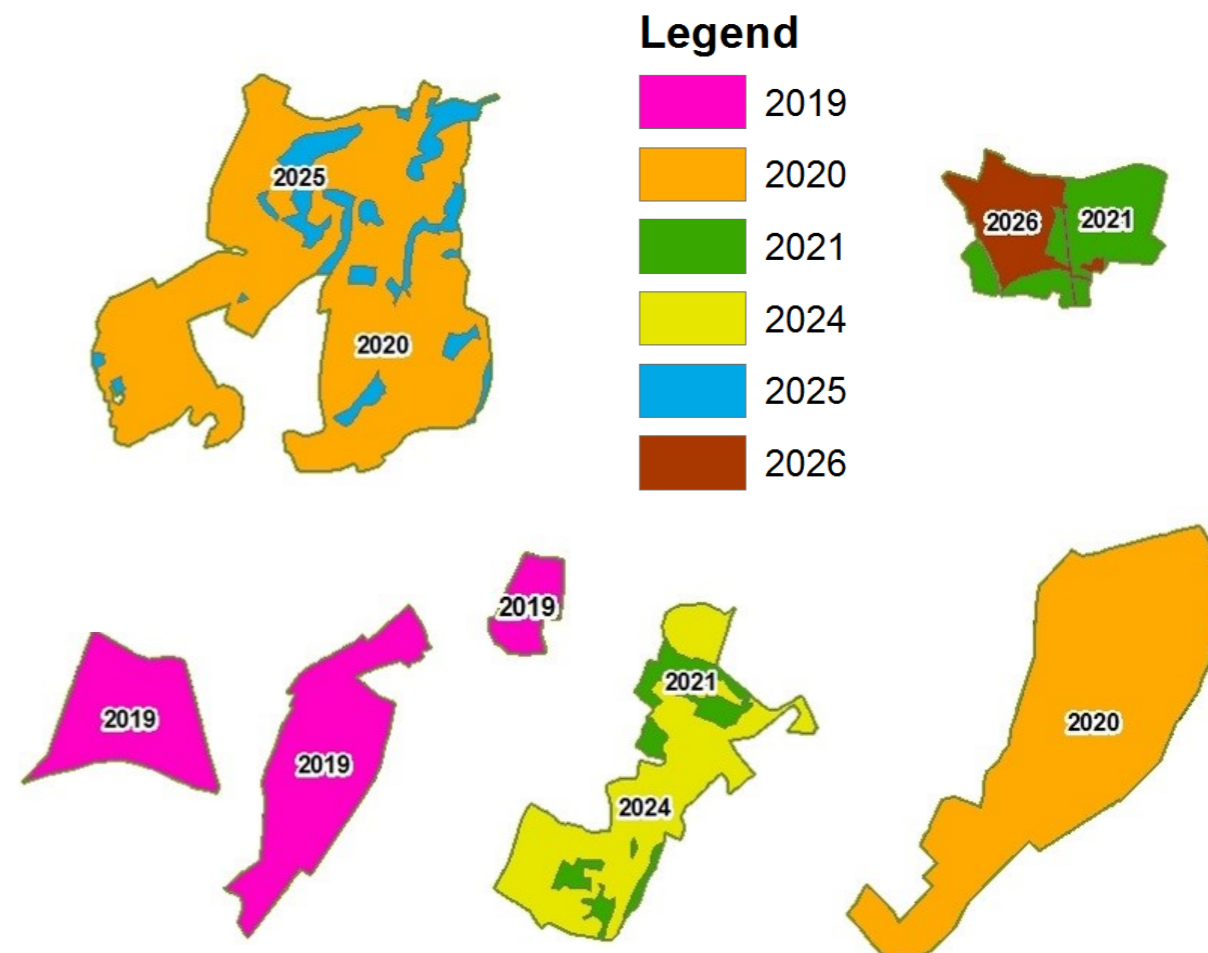
### Broadleaf Thinning

Broadleaf high forest will be assessed for thinning every 10 years with a visual inspection of the stand. Thinning will allow sub-dominant broadleaves sufficient light and space to mature or will release existing advanced regeneration. Younger patches of regeneration can be thinned to favour site native species with trees of good form and vigour being retained. Where broadleaves consist primarily of a single species, it may be possible to enlarge natural gaps through irregular thinning rather than create new gaps through group felling. However, in all cases the size of gap will be dependent on slope, aspect and site fertility and must not be detrimental to crop stability. Gaps will vary in size between 0.25-0.5Ha and offer opportunity for natural regeneration to develop or for enrichment planting to take place that will use a mix of native species other than those occurring in the overstorey to give both additional structure and diversity to the woodland, rather than total reliance on natural regeneration to achieve this objective.

### Conifer Thinning

Areas of conifer are assessed for thinning every 5 years with the targeted removal of larch species and invasive species like Western Hemlock a key objective for this plan period. Other factors such as the quantity, condition, age and distribution of any broadleaf content, will also help decide if an area of conifer is to be thinned or not, with light levels, existing ground vegetation and any evidence of natural

### Date of next thinning



**Clearfell** coupes will simply be managed through clearcutting (of over 0.25ha) and restocked either through natural regeneration, replanting or a combination of the two. In some cases, clearcutting will remove the overstorey but only once broadleaf content has developed through recruitment of natural regeneration or planting that will minimise the visual impact of removing of the conifer overstorey.

**Minimum Interventions** are predominantly inaccessible or ecological valuable areas where intervention will only occur to protect and ensure the future succession of key habitats and species. E.g. Habberley Brook in Gittinshay that has a variety of valuable habitats for: Lepidoptera, Invertebrates, Reptiles, Newts as well as providing good deadwood and protecting water quality as Habberley Brook feeds north into Pontesbury SSSI.

**Long term retentions** are in place where the landscape value of the woodland is of value.

**Single-tree selections** are used on existing complex structured stands or sensitive sites often important for amenity value.

**Open space** is managed to ensure forest cover does not exceed 2m in height, with 20% forest cover being acceptable.

See page 17, "Alternatives to Clearfell"





## Silviculture (cont)

### Alternatives to Clearfell (ATC)

PAWs managed under ATC systems will be thinned to favour broadleaf components. This, together with the targeted removal of larch and invasive species will increase the potential for employing natural regeneration or enrichment planting and will move sites towards having greater native broadleaf cover.

Broadleaf stands will generally be managed irregularly through thinning. Irregular shelterwoods on PAWs which will look to favour the development of native broadleaves and target the removal conifer components. Group selections will be used on windfirm, accessible crops on PAWs to proactively diversify the woodland structure and composition, possibly through the use of enrichment replanting with native broadleaves.

Areas of predominantly Douglas Fir and some stands of Scots Pine in Lodge Hill and Westcott will be managed on long-term retention as irregular shelterwoods with the aim of producing complex CCF with a mixed woodland structure, for PAWs sites this means a mix of 80% native broadleaf and 20% Douglas Fir and on non PAWs sites upto 20% native broadleaf would be acceptable with the remaining 80% being conifer such as Scots Pine Both likely to be achieved beyond 2047. With older complex structured stands or those managed for an amenity purpose maintained through single tree selections.

**Single-tree selections** are used on existing complex structured stands or sensitive sites often important for conservation or amenity value.

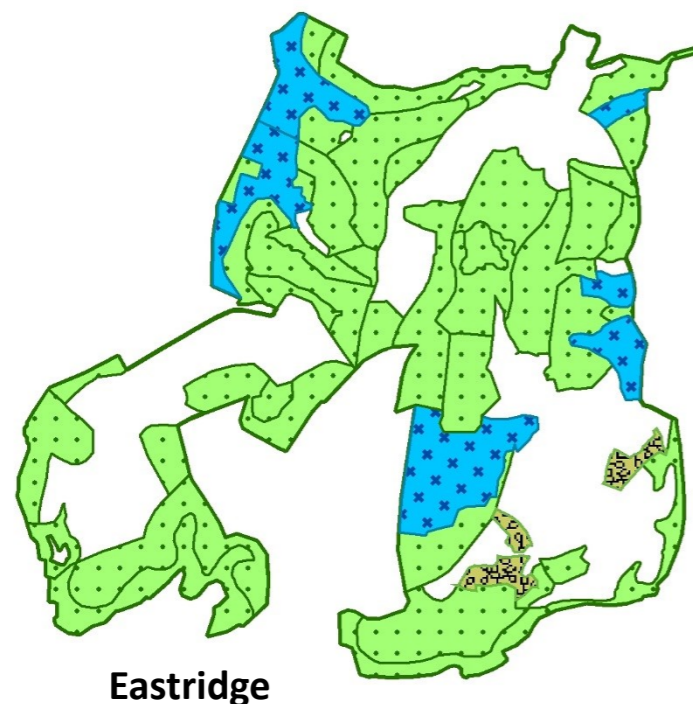
**Group selections** are used on windfirm, accessible crops and will proactively diversify the woodland structure and composition.

**Uniform shelterwoods** are predominately sites which will be managed using seeding fellings with possibilities for under planting of site suitable species to control light levels and develop good timber quality.

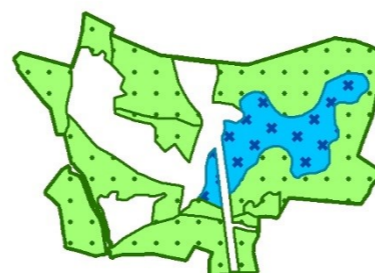
**Irregular shelterwoods** will look to develop a complex CCF structure through the identification of final crop and seed trees and thinning to gain quality trees for the future.

**Strip shelterwoods** It is most likely that uniform or irregular shelterwoods will be used but on wind vulnerable sites strip shelterwood may be used and can be regenerated through a combination of natural regeneration and planting.

All of the above methods of ATC can be employed in conifer or broadleaf and can utilise natural regeneration and or where required enrichment planting can be used ensuring a diverse species composition of desired nature is achieved for the following rotation.







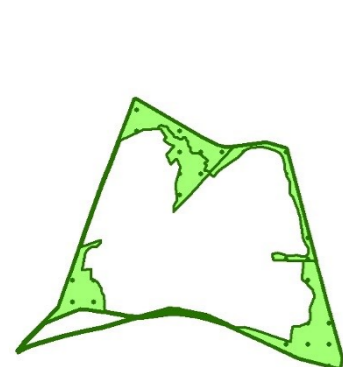
Eastridge



Westcott

### Legend

-  Alternatives to Clearfell
-  Retention
-  Minimum Intervention
-  Min. Intervention - Natural Reserve



Black Marsh



Shelve



Buxton



Gittinshay

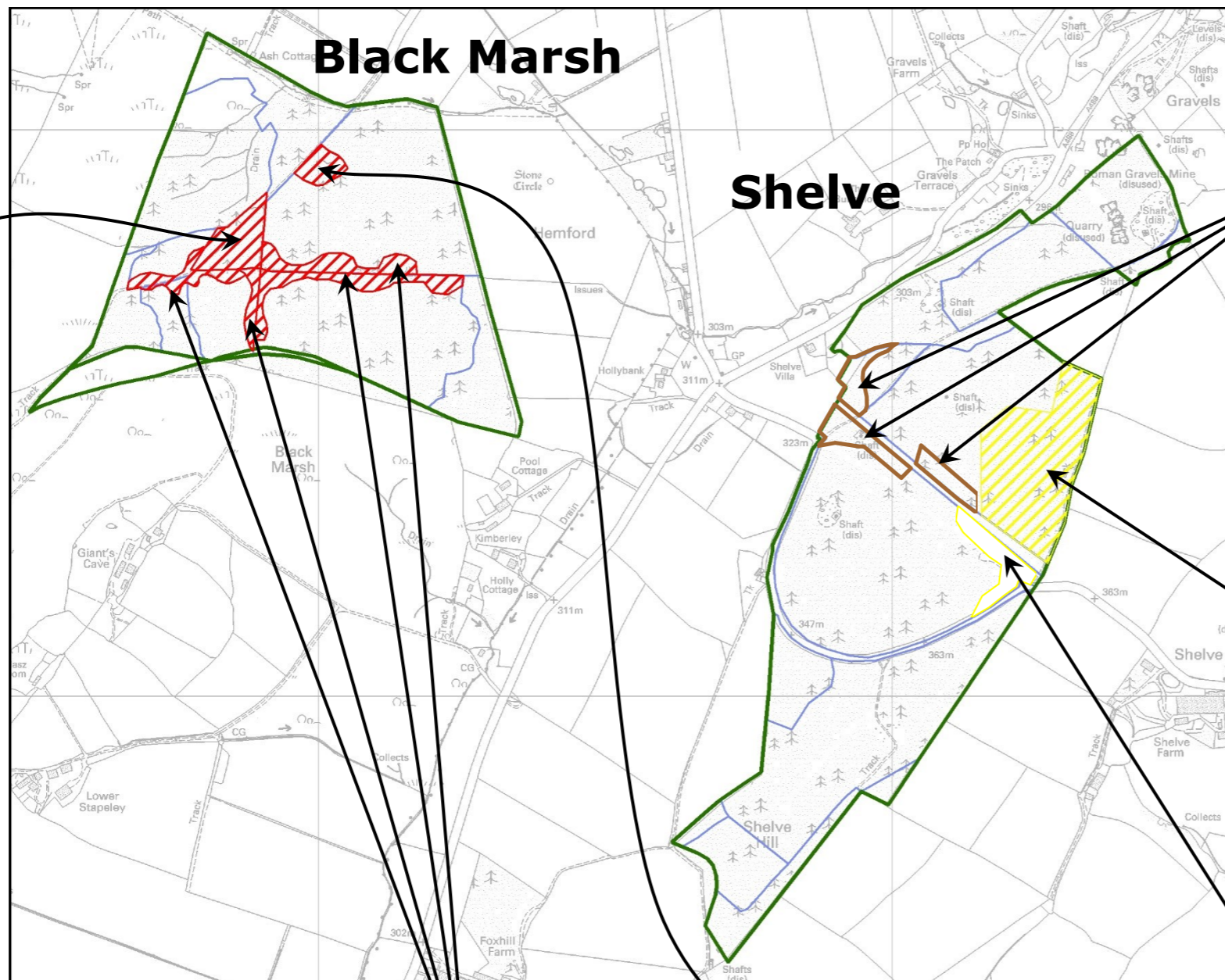


Lodge Hill



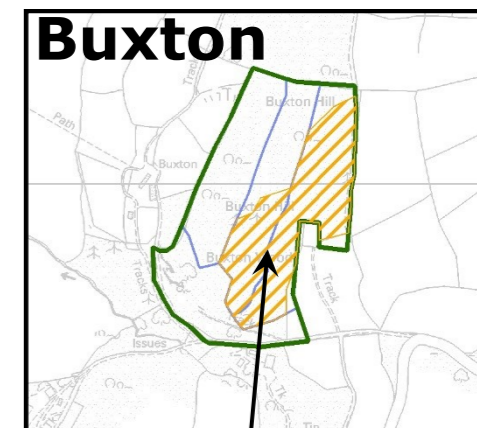


**Felling and Restocking  
2018 - 2028**



**Felling Coupe:**  
11014, 11876 and 118074  
**Fell period:** 2027-2031  
**Area:** 1.4 Ha  
**Restock Coupe:** -----  
**Propagation:** Nat regen  
Birch 20%  
OPEN 80%  
**Description:**  
Habitat linkage OHP to Roman Gravels - see prescriptions.

**Felling Coupe:** 11431  
**Fell period:** 2027-2031  
**Area:** 4.3Ha  
**Restock Coupe:** 11431a  
**Propagation:** Planted  
Scots Pine 50%  
Weymouth Pine 20%  
Italian Alder 20%  
OPEN 10%  
**Description:**  
Intimate planting of Alder as a soil improver



**Felling Coupe:** 11020  
**Fell period:** 2022-2026  
**Area:** 3.0Ha (2.2Ha larch)  
**Restock Coupe:** 11020a  
**Propagation:** Planted  
Mixed Broadleaf 100%  
**Description:**  
Planting should consist preferably of three native species and could also include minor species too such as Hawthorn, crab-apple, holly and rowan.

**Felling Coupe:** 11007  
**Fell period:** 2017-2021  
**Area:** 0.9Ha  
**Restock Coupe:** 11007a  
**Propagation:** Null  
OPEN 80%  
Birch 10%  
Willow 10%  
**Description:**  
Enhancing open habitats along ride edges with a wood pasture type effect. Max of 25% of willow, Birch and Mixed broadleaves across whole site.

**Felling Coupe:**  
11036 /11309 /11906 /11922  
**Fell period:** 2017-2021  
**Area:** 0.5/0.2/0.9/0.7Ha  
**Restock Coupe:**  
11036a /11309a /11906a /11922a  
**Propagation:** Null  
OPEN 100%  
**Description:**  
Fell at first thinning to create open rideside margin for lepidoptera

**Felling Coupe:** 11918  
**Fell period:** 2017-2021  
**Area:** 0.4Ha  
**Restock Coupe:** 11918a  
**Propagation:** Nat-regen  
Willow 60%  
OPEN 40%  
**Description:**  
Existing pond with associated open habitat

**Felling Coupe:** 1192499  
**Fell period:** 2027-2031  
**Area:** 0.7Ha  
**Restock Coupe:** 1192499a  
**Propagation:** Null  
OPEN 100%  
**Description:**  
Improve landscape issues caused by overhead powerline

**NOTE:-** Future species given on this page are only indicative and operational site assessment nearer the time of planting may dictate more suitable species are available.

**Declaration by FC as an Operator.**  
**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210).**





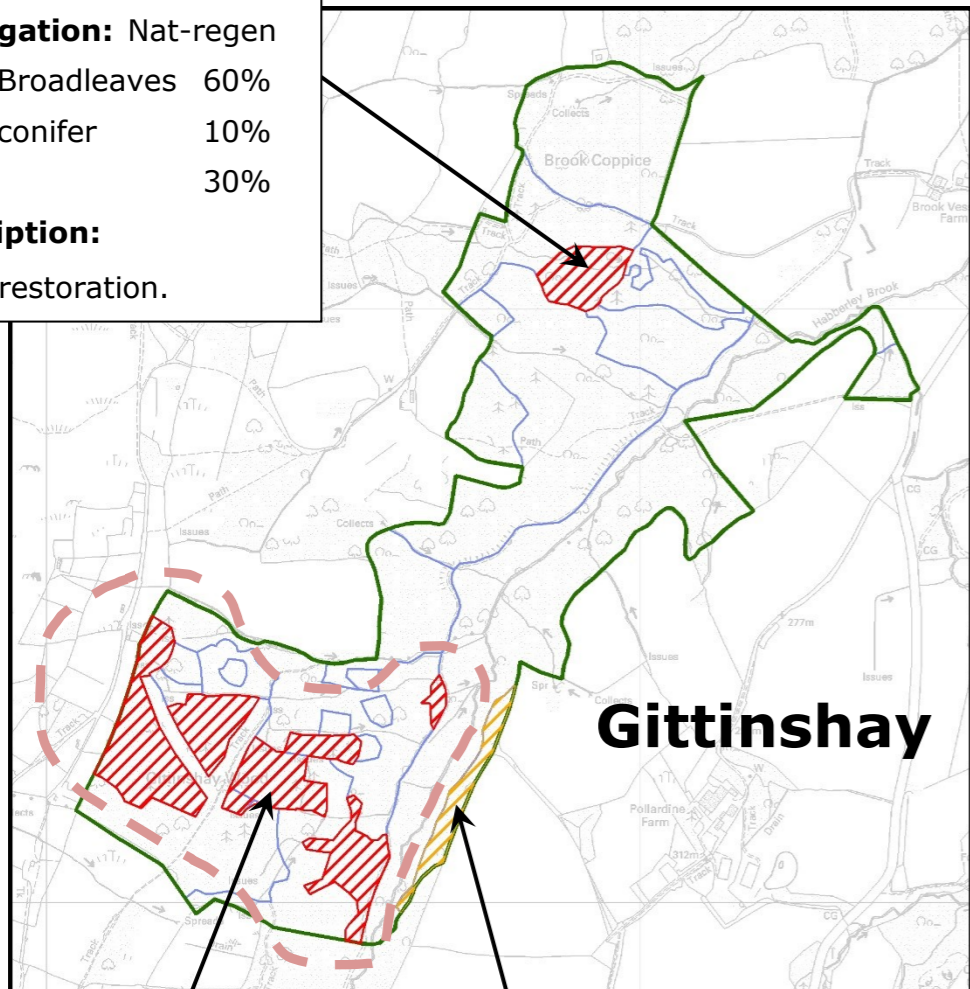
## Felling and Restocking 2018- 2028

**Felling Coupe:** 11691  
**Fell period:** 2017-2021  
**Area:** 1.2Ha  
**Restock Coupe:** 11691a  
**Propagation:** Nat-regen  
 Mixed Broadleaves 60%  
 Mixed conifer 10%  
 OPEN 30%  
**Description:**  
 PAWS restoration.

**Felling Coupe:** 11991  
**Fell period:** 2017-2021  
**Area:** 3.2Ha  
**Restock Coupe:** 11991a  
**Propagation:** Planted  
 Oak 40%  
 Hornbeam 20%  
 Mixed Broadleaf 20%  
 Hazel 10%  
 OPEN 10%  
**Description:**  
 PAWS restoration adjacent to ASNW

**Felling Coupe:** 11645  
**Fell period:** 2017-2021a  
**Area:** 1.4Ha (all larch)  
**Restock Coupe:** 11645a  
**Propagation:** N/A  
 OPEN 100%  
**Description:**  
 Fell at first thinning to create open rideside margin for lepidoptera.

**Felling Coupe:** 11438  
**Fell period:** 2017-2021a  
**Area:** 0.8Ha  
**Restock Coupe:** 11438a  
**Propagation:** Nat-regen  
 Mixed Broadleaves 80%  
 OPEN 20%  
**Description:**  
 PAWS restoration.

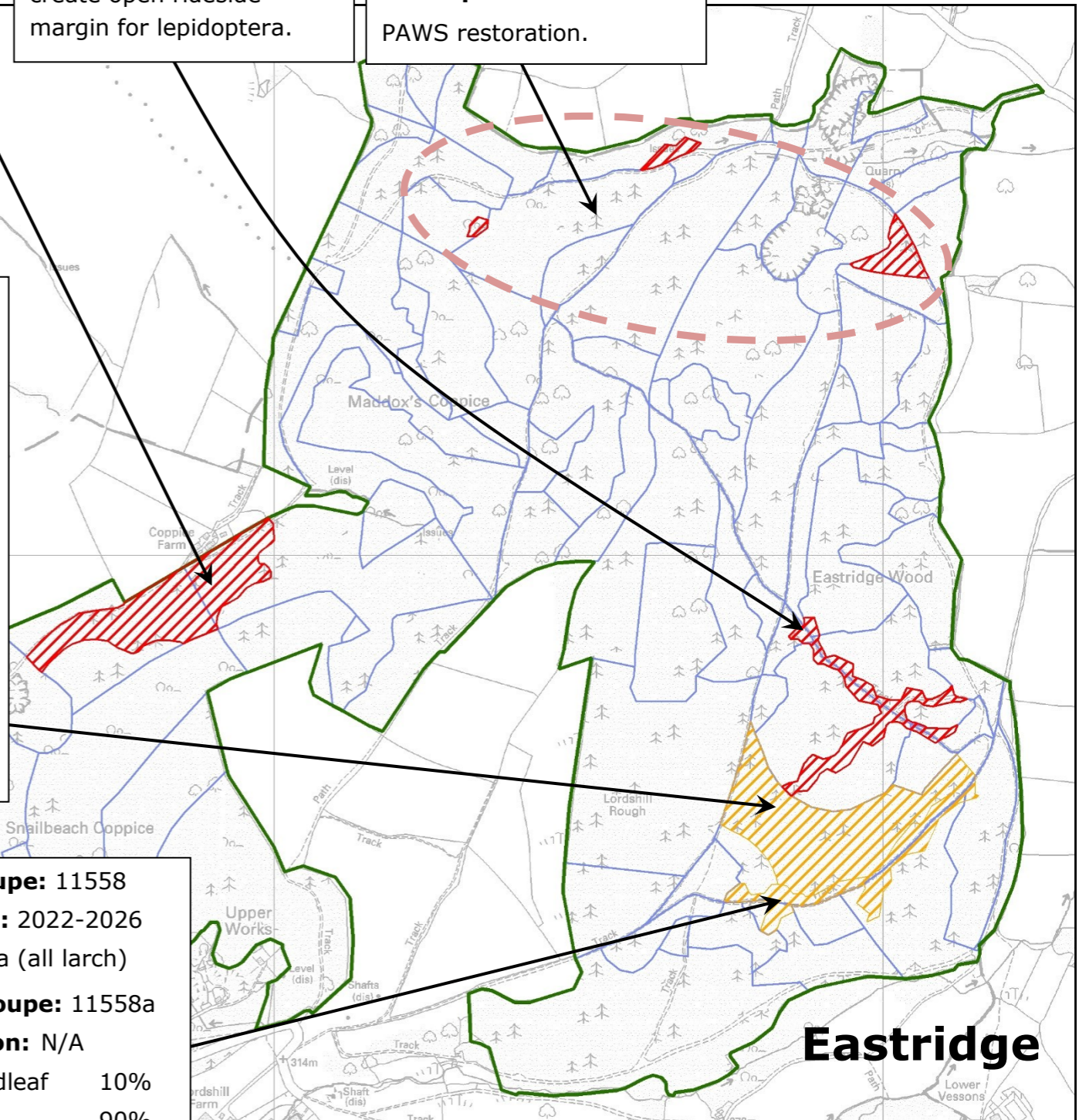


**Felling Coupe:** 11680  
**Fell period:** 2022-2026  
**Area:** 4.4Ha  
**Restock Coupe:** 11680a  
**Propagation:** planted  
 Oak 40%  
 Hornbeam 20%  
 Hazel 20%  
 Mixed Broadleaf 10%  
 OPEN 10%  
**Description:**  
 PAWS restoration

**Felling Coupe:** 11021  
**Fell period:** 2017-2021  
**Area:** 7Ha  
**Restock Coupe:** 11918a  
**Propagation:** Planted  
 Mixed Broadleaves 80%  
 OPEN 20%  
**Description:**  
 PAWS restoration.

**Felling Coupe:** 11096  
**Fell period:** 2022-2026  
**Area:** 1Ha (all larch)  
**Restock Coupe:** 11096a  
**Propagation:** Nat-regen  
 Oak 60%  
 Mixed Broadleaves 30%  
 OPEN 10%  
**Description:**  
 PAWS restoration. Some group planting may be required to establish requisite species mix.

**Felling Coupe:** 11558  
**Fell period:** 2022-2026  
**Area:** 1.4Ha (all larch)  
**Restock Coupe:** 11558a  
**Propagation:** N/A  
 Mixed Broadleaf 10%  
 OPEN 90%  
**Description:**  
 Create open rideside margin and structure for lepidoptera.



**NOTE:-** Future species given on this page are only indicative and operational site assessment nearer the time of planting may dictate more suitable conifer or broadleaf species are available. (like for like - i.e. conifer restock species will remain conifer and broadleaf will remain broadleaf.)

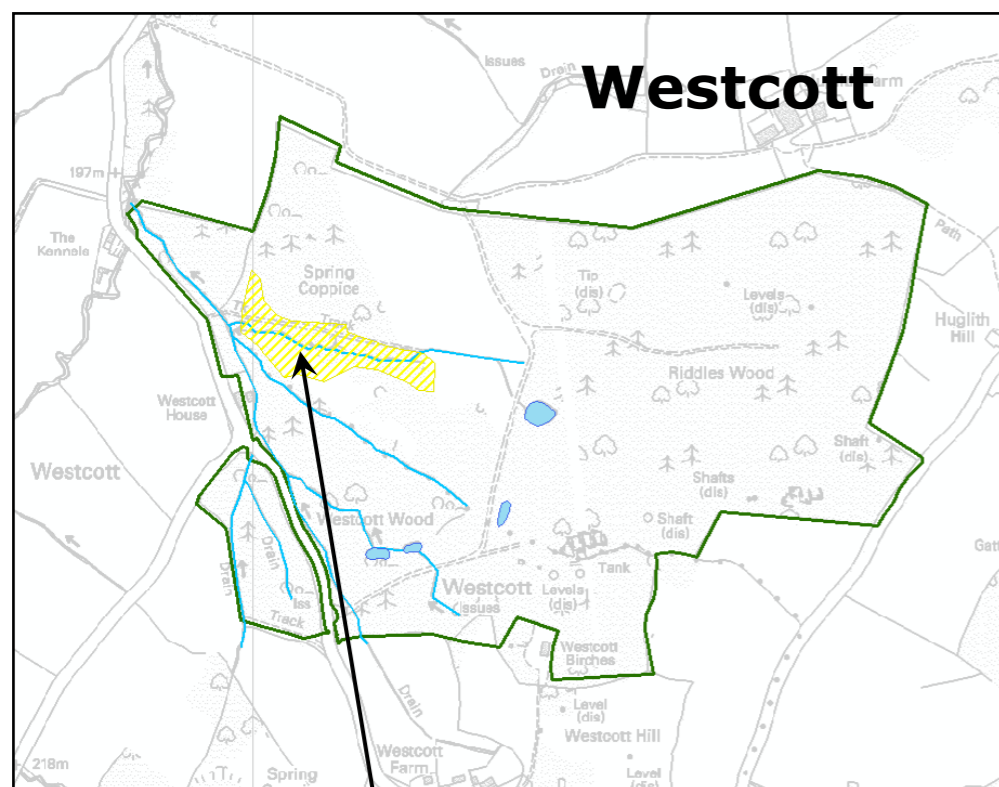
**Declaration by FC as an Operator. All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210).**



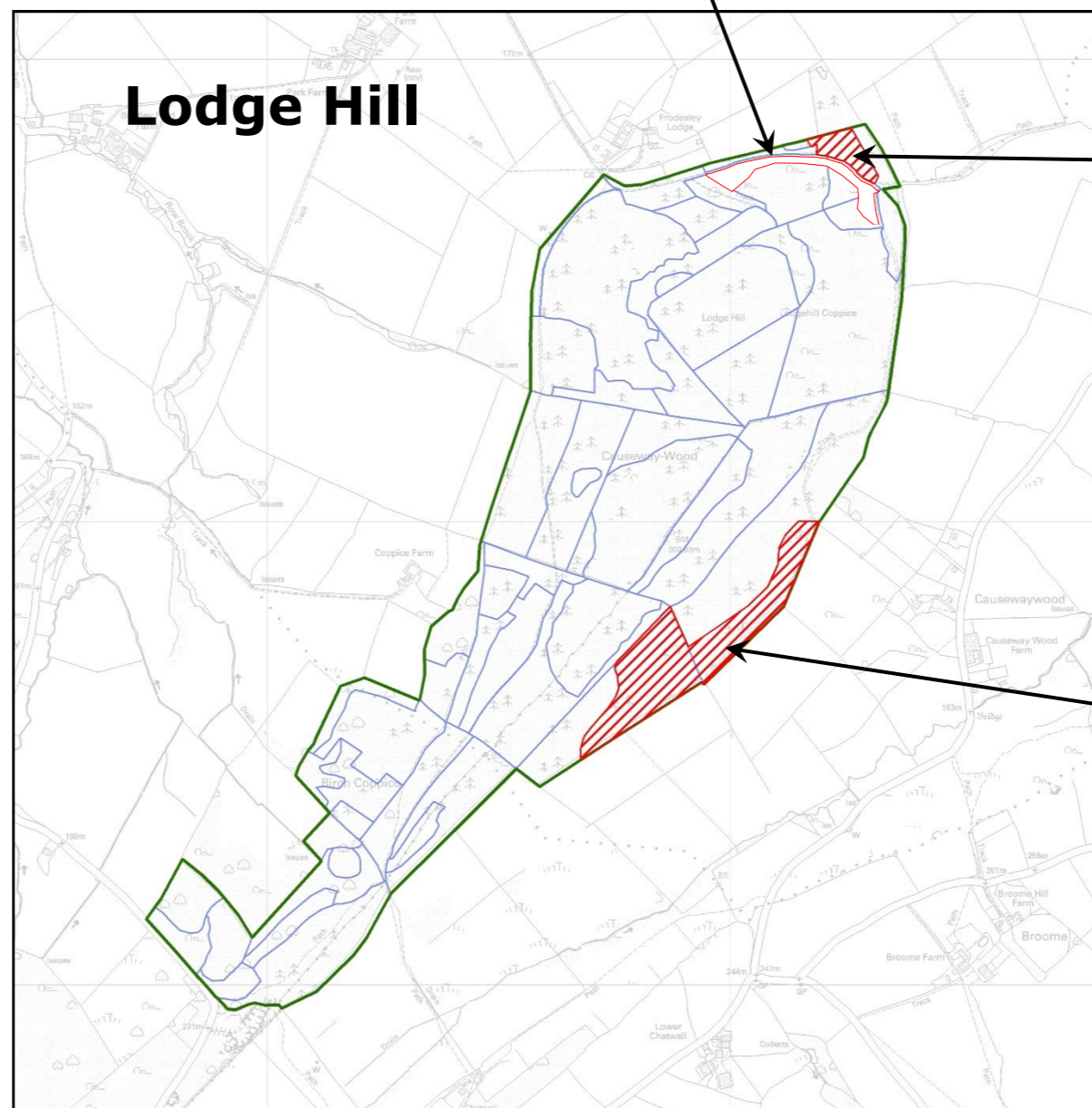


## Felling and Restocking

Liase with local butterfly group and Butterfly Conservation about felling coupe 1153893 on South side of forest road for Argent Sable moth and Dingy Skipper, establish through Natural Regeneration (50% birch coppice and 50% open) - also see management prescriptions



**Felling Coupe:** 11517  
**Fell period:** 2027-2031  
**Area:** 1.3Ha  
**Restock Coupe:** 11517a  
**Propagation:** Coppice  
 Mixed Broadleaves 10%  
 OPEN 90%  
**Description:**  
 Riparian management




**Felling Coupe:** 11951  
**Fell period:** 2017-2021  
**Area:** 0.8Ha  
**Restock Coupe:** 11951a  
**Propagation:** planted  
 Hornbeam 30%  
 Pedunculate Oak 30%  
 Mixed broadleaves 20%  
 OPEN 20%  
**Description:**  
 Felling of landscape anomaly as per FP review. Leave open space along road edge.

**Felling Coupe:** 11474  
**Fell period:** 2017-2021  
**Area:** 5.8Ha (all larch)  
**Restock Coupe:** 11474a  
**Propagation:** Planted  
 Douglas Fir 50%  
 Scots Pine 20%  
 Oriental Spruce 20%  
 Mixed Broadleaves 10%  
**Description:** none

**NOTE:-** Future species given on this page are only indicative and operational site assessment nearer the time of planting may dictate more suitable conifer or broadleaf species are available. (like for like - i.e. conifer restock species will remain conifer and broadleaf will remain broadleaf.)

**Declaration by FC as an Operator.**  
**All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210).**






 Fell 2017-2021

**Coupe Prescriptions**



Wood	coupe	area	existing crop	Rationale/Prescription	Restock Area	Composition	rationale/Prescription
<b>Black Marsh</b>	11007	0.9	BI/ROW OPEN 2000/1990	maintain 80% open space	11007a 0.9	20% Native broadleaf	Area is to be managed as transitory open habitat
	11036			Opening up rideside edges at time of first thinning	11036a		
	11309 11906	2.3	SS/HL 1992/2000	to improve ride edge structure and transition, improving habitat value in doing so.	11309a 2.3 11906a	100% Open	Creation of much needed open ride structure. Areas will be maintained through flailing with
	11922				11922a		upto 10% native species being permissible.
	11918	0.4	SS/HL 1992	Clearance of young conifer and low grade broadleaf to open up pond and improve surrounding habitat.	11918a 0.4	60% Native broadleaf 40% Open space	Maintenance of surrounding pond habitat. Maintenance should continue in following years to maintain an equilibrium of open space and dapple shade around the pond ensuring stable habitat conditions are maintained.
<b>Gittinshay</b>	11021	7.0	EL/GF/SS 1970	Area of mature conifer that has suffered windblow in the past. The area is classified as PAWS. Opportunity is to be taken to clear remaining conifer from this area and revert it back to a native condition. Native broadleaf will be retained.	11021a 7.0	80% Native broadleaf 20% Open space	This area will be allowed to naturally regenerate with some group planting to ensure future species composition is not reliant on birch alone. It is estimated that upto 20% of site will remain as open space in the form of being unplatable or bare.
	11691	1.2	BI/SS	Area of mature conifer in PAWS on a wet woodland Site. Native broadleaf will be retained. Conifer that Is difficult to remove without damage to wet woodland Habitat should be felled and left in situ, to improve Quantity and type of deadwood.	11691a 1.2	60% Native broadleaf 10% Mixed conifer 30% Open space	This area will be left to regenerate naturally with the matrix of wet open habitat that develops being accepted. Regeneration is likely to include species such as Alder, willow and birch.
	11991	3.2	JL/OK/BI/SP	Felling will begin the restructuring of the western side of Eastridge that overlooks Minsterley. Felling will also begin the removal of Larch susceptible to Phytophthora Ramorum. Any mature native species along with any mature Scots Pine will be retained.	11991a 3.3	90% Native broadleaf 10% Open space	This area will be planted with a mix of native species including OK/Hornbeam and other native species with open space along roadside.
<b>Eastridge</b>	11438	0.8	WH/NS	Removal of mature conifer fragments within mature	11438a 0.8	80% native broadleaf	Natural regeneration possibly some group



 Fell 2017-2021  Fell 2022-2026  Fell 2027-2031

**Coupe Prescriptions**



Wood	coupe	area	existing crop	Rationale/Prescription	Restock	Area	Composition	rationale/Prescription
<b>Lodge Hill</b>	11951	0.8	DF	small block of mature Douglas Fir identified in Forest Plan review for removal to resolve Landscaping anomaly.	11951a	0.8	90% Native broadleaf 10% Open space	PAWs restoration, remedying a landscape anomaly.
	11474	5.8	JL	Felling will begin the restructuring of the eastern flank of Lodge Hill through the removal of Larch susceptible to Phytophthora Ramorum. Any mature native species	11474a	5.8	100% Mixed conifer	Site is not on ASNW register and will be planted with a mix conifer such as Douglas Fir, Scots Pine and Oriental Spruce.
<b>Buxton</b>				along with any mature Scots Pine will be retained.				
	11020	3.0	JL/HL/SP	Felling will begin the restructuring of Buxton through the removal of Larch susceptible to Phytophthora Ramorum. Any mature native species along with any mature Scots Pine will be retained.	11020a	3.0	100% Native broadleaf	The coupe is planted on the southern part of a drumlin that overshadows the villages of Tankerville and Stiperstone. It is secondary woodland in a prominent position within the wider
<b>Gittinshay</b>								landscape; the northern end of the drumlin (not FC) is native woodland. It therefore makes sense to return this coupe back to native woodland to resolve the landscape anomaly.
<b>Eastridge</b>	11096	1.0	EL/OK	Removal of last conifer within area of Minimum Intervention. Larch susceptible to Phytophthora Ramorum.	11096a	1.0	90% Native broadleaf 10% Open space	Remnant mature Oak planted in 1900 to be retained. Establishment will be through natural regeneration. Some planting would be prudent to ensure a diverse mix of native species is present.
	11680	4.4	JL	Felling will continue the restructuring of the Eastern side of Eastridge. Larch susceptible to Phytophthora Ramorum.	11680a	4.4	90% Native broadleaf 10% Open space	Site will be planted to enhance diversity of native species composition.
<b>Shelve</b>	11558	1.4	JL	Felling rideside edges. Larch susceptible to Phytophthora Ramorum.	11558a	1.4	90% Open space 10% Native broadleaf	Site will create open ride habitat and structure for lepidoptera and reptiles. Should be able to manage through swiping and flailing.
	11431	5.0	SS	Clearfelling will continue the restructuring of Shelve.	11431a	4.3	70% Mixed conifer 20% broadleaf 10% Open space	Italian alder will be planted in intimate mix on this site as a soil improver.



## Management Prescriptions 2018 - 2028

Black Marsh is very much a monoculture of Sitka Spruce. The young Sitka Spruce will continue as productive forest, being thinned routinely, perhaps on a reduced thinning cycle, given the woodland is WHC4-5. Early first thinning is imperative to ensure the best chance of encouraging stable crop

Area of wet woodland with pond. Once clearfell is completed management will sympathetically manage the site to ensure dappled shade is maintained.

Site of Archaeological, historical and conservation interest. Area should remain open. Clearance work should be undertaken if tree cover exceeds 20%. This potentially could be done by volunteer groups. Site is a known Grayling site.

Access for harvesting needs to be arranged and is dependant on investing in and developing an access to the wood to enable harvesting and uplift of timber stock.

The areas hatched red will be felled and maintained as open space,, improving rideside structure and providing habitat for lepidoptera, reptiles and create opportunity for floral assemblages to develop.

Opportunity at the time of thinning (if windfirm) or at time of restocking should be taken to increase road edge structure and open space

If remaining crops would be considered stable enough then coupes along OHP (identified in brown, 11014, 11876 and 118074) should be felled at same time as coupe 1192499 (hatched in yellow 2027) if not the case then leave and fell with their original coupe at original timing. Felling these coupes facilitates the linkage of open habitat through this woodland and will be of benefit to a wide range of Lepidoptera.



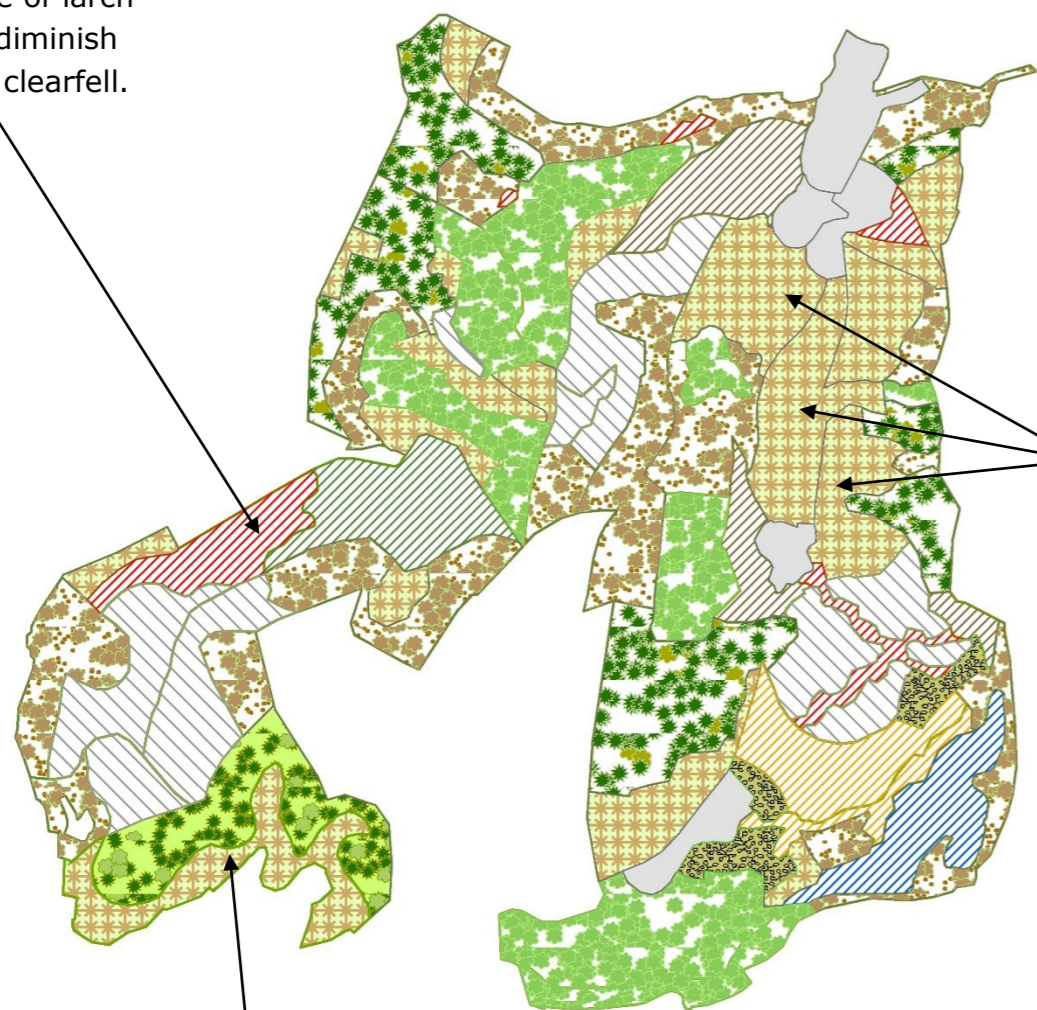
### Legend

- Fell 2017-2021
- Fell 2022-2026
- Fell 2027-2031
- Fell 2032-2036
- Fell 2037-2041
- Fell 2042-2046
- Fell 2047-2051
- Fell beyond 2051
- Removal of conifers by thinning
- Conifer crop on extended rotation
- Conifer Shelterwood
- Broadleaved shelterwood
- Mature habitat retention
- Minimum Intervention
- Min. Intervention - Natural Reserve
- Open land



## Management Prescriptions

Predominance of larch will begin to diminish with the first clearfell.



Thinning will target removal of larch components

Over a period of 20 years the western side of Westcott will be felled and bought into coppice rotation, with subsequent management on a medium term rotation of around 20yrs. The yellow phase coupe is within a riparian zone and will therefore be managed as short rotation coppice of around 3-5 years.

Conifer will be removed from this area adjacent to Snailbeach.

The area will become a mosaic of open space and low grade broadleaf and scrub. Opportunities here to manage the open space by volunteers.



Areas not on the ASNW register will be treated as secondary woodland. These sites will retain a dominant conifer character.

Thinning will remodel sub compartment boundaries softening them to be more in keeping with the landform.

### Legend

- Fell 2017-2021
- Fell 2022-2026
- Fell 2027-2031
- Fell 2032-2036
- Fell 2037-2041
- Fell 2042-2046
- Fell 2047-2051
- Fell beyond 2051
- Removal of conifers by thinning
- Conifer crop on extended rotation
- Conifer Shelterwood
- Broadleaved shelterwood
- Mature habitat retention
- Minimum Intervention
- Min. Intervention - Natural Reserve
- Open land



## Management Prescriptions

Characteristic Scots Pine will be managed through shelterwood to develop crowns. Some conifer underplanting may be considered to diversify the conifer content, but the Pine will remain a dominant feature. This will become a mixed conifer wood with minor broadleaf component of upto 10%.

Areas of Oak on western side of Gittinshay will be managed as productive broadleaf shelterwood.

Northern end extremely wet and once conifer has been removed will be managed for wet woodland habitat.

The presence of Argent Sable moth and Dingy Skipper has been previously recorded in Lodge Hill during 2014 and 2015. The felling of the strip along the southern edge of the road maybe carried out after further consultation with the local butterfly group and Butterfly Conservation (See the Forest Plan consultation). Future composition would be through Natural Regeneration consisting 50% birch to be managed as short rotation coppice and 50% open space.

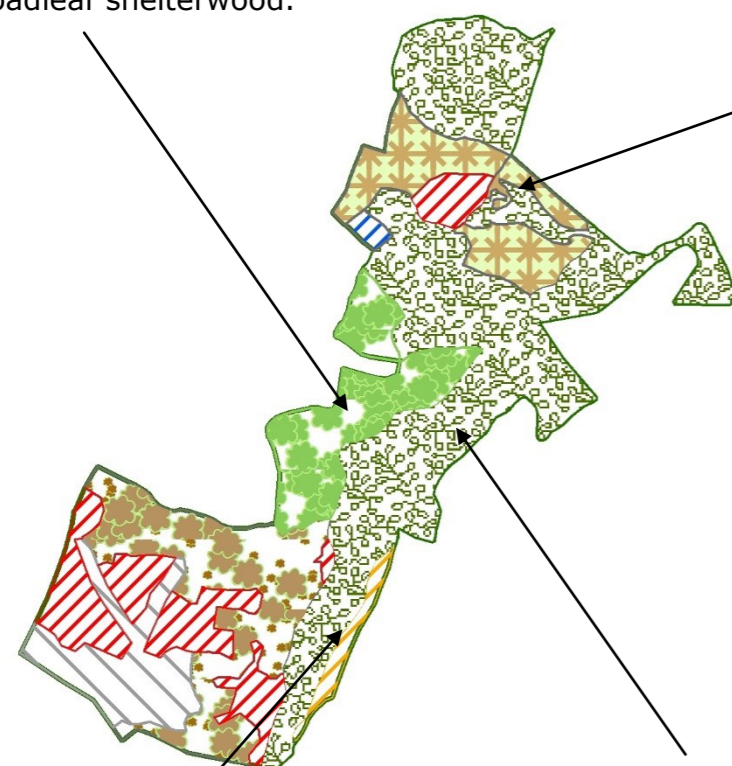
Predominance of larch along the eastern banks of Lodge Hill will begin to diminish with the first clearfell.

Natural reserve along the Habberley Brook will promote a variety of deadwood habitat.

Remnant larch to be removed and coupe merged with Habberley Brook natural reserve.

Trig Point - well frequented and will be opened up and subsequently maintained as open space.

Productive conifer elements within Lodge Hill will be retained and managed through a mixture of clearfell and shelterwood.



### Legend

- Fell 2017-2021
- Fell 2022-2026
- Fell 2027-2031
- Fell 2032-2036
- Fell 2037-2041
- Fell 2042-2046
- Fell 2047-2051
- Fell beyond 2051
- Removal of conifers by thinning
- Conifer crop on extended rotation
- Conifer Shelterwood
- Broadleaved shelterwood
- Mature habitat retention
- Minimum Intervention
- Min. Intervention - Natural Reserve
- Open land





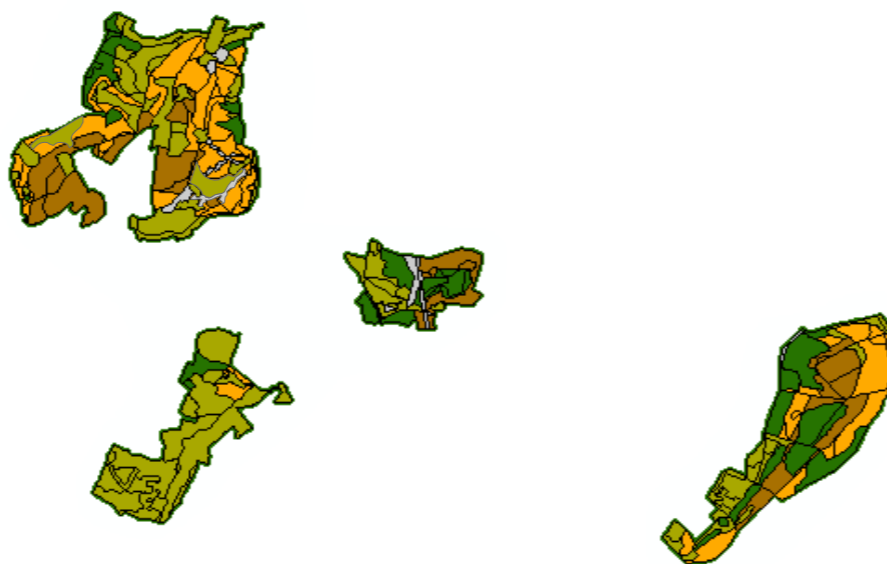
### Indicative Future Species at 2028 and beyond 2050

The projections made are indicative of species composition in ten and fifty years time. They do not constitute a guarantee and merely serve to indicate a general vision for direction woodland composition will move towards within the plan area that will be delivered over time in keeping with FC policies.

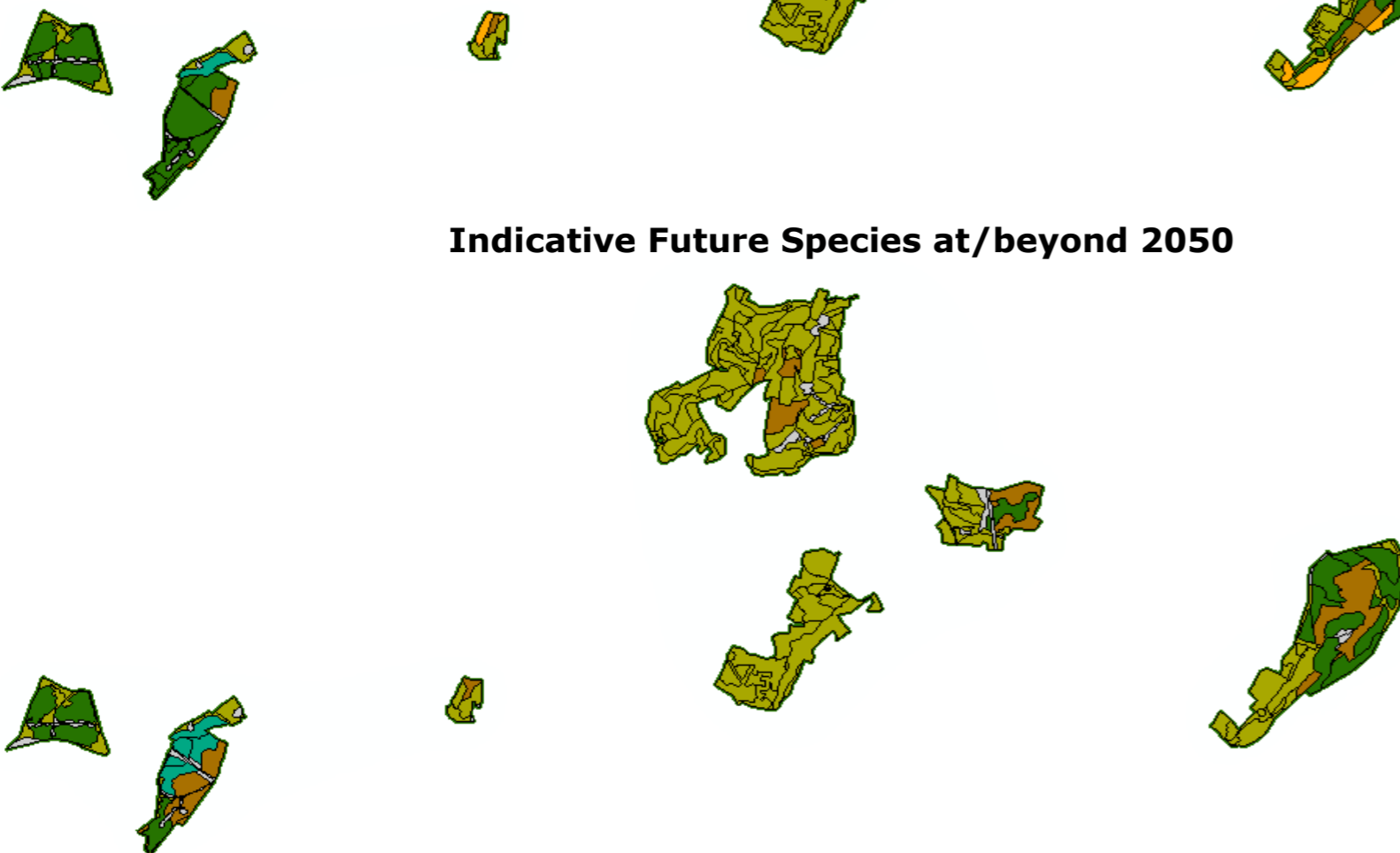
In reality, greater larch removal is anticipated equal to around 25% of all Larch across the plan area, amounting to around 28Ha by 2027 (15ha from clearfelling and around a further 13Ha through thinning) and some other conifer species too with a greater balanced mix of conifer and broadleaves being suggested for restocking and establishment of following crops due to the potential threat of *Phytophthora ramorum* and other possible future threats from both biotic and climatic factors.

### Indicative Future Species at 2027

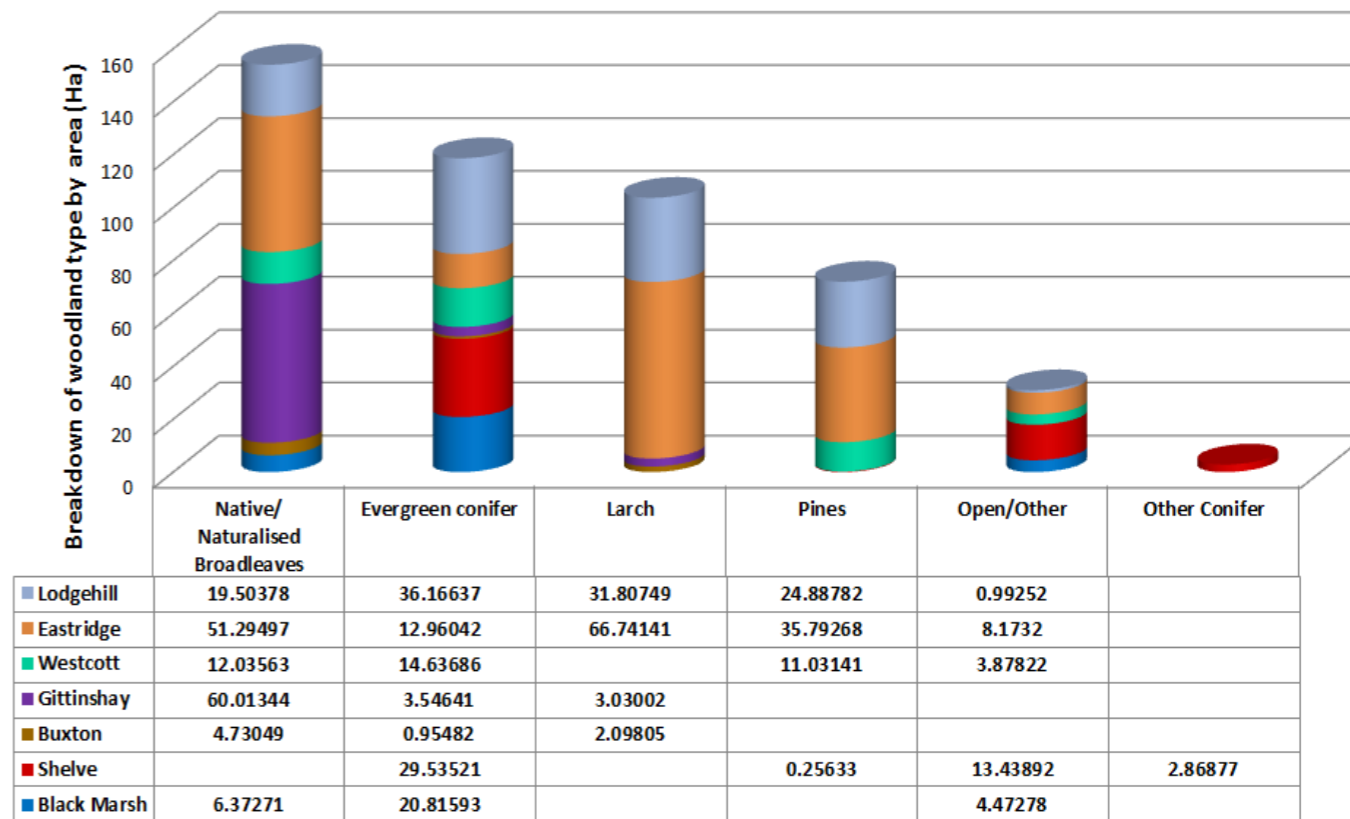
If an SPHN is issued then restocking of the site would be carried out as per the Forest Plan Coupe Prescriptions and Coupe Boundaries laid out within the Forest Plan would be adhered to. Where adjacent coupes require clearfelling then the decision to stagger the timing of restocking by 3-5 years maybe considered and would enhance availability of temporary open habitat. Where PAWS is an objective staggering the timing of restocking would also apply and natural regeneration, planting or a mixture of both will be considered.



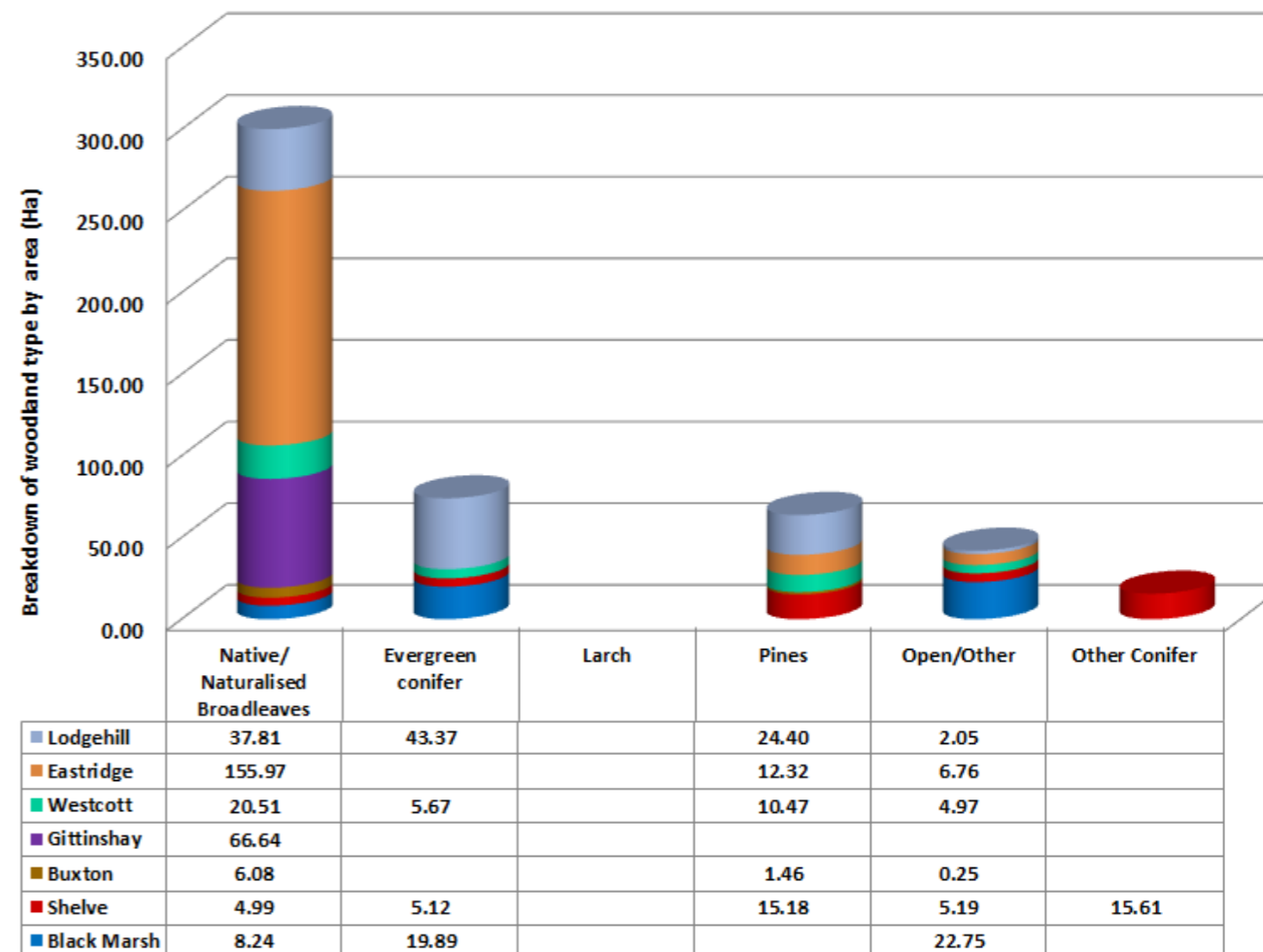
### Indicative Future Species at/beyond 2050



### Indicative woodland composition in 2027 by woodland type



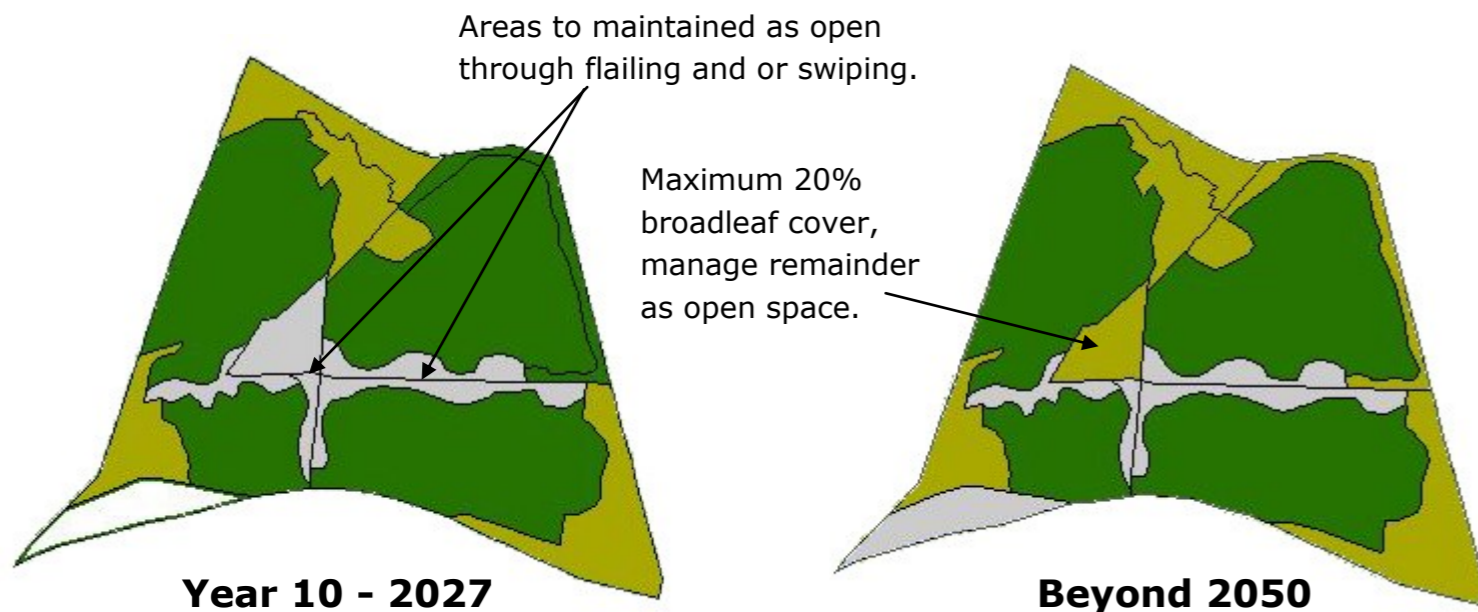
### Indicative woodland composition by woodland type at/beyond 2050



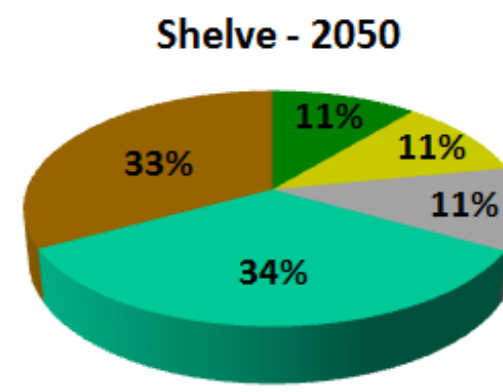
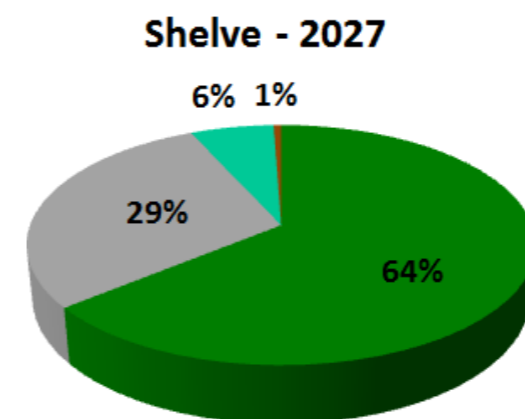
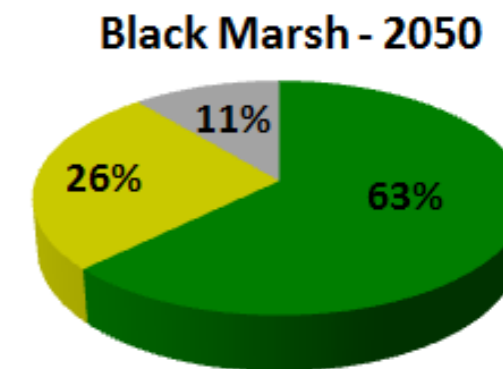
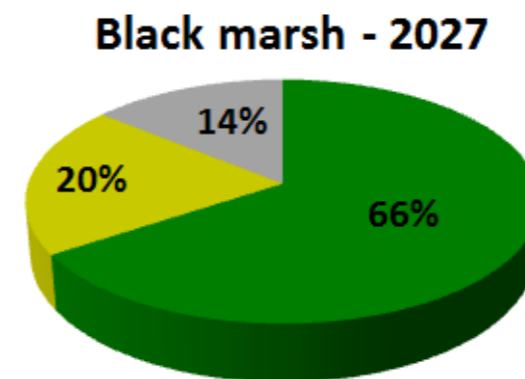




## Black Marsh

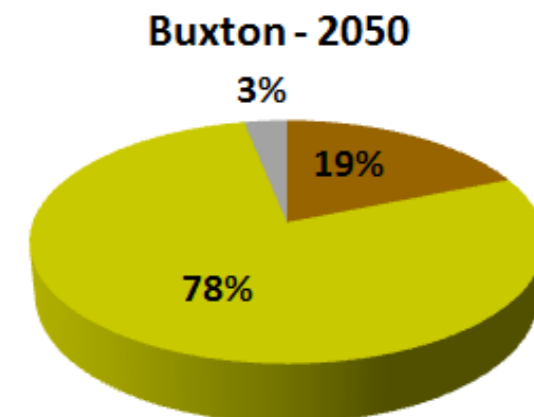
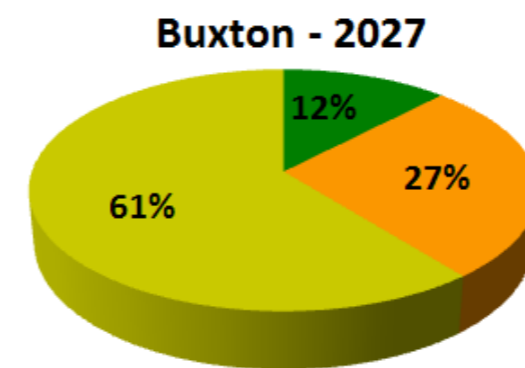
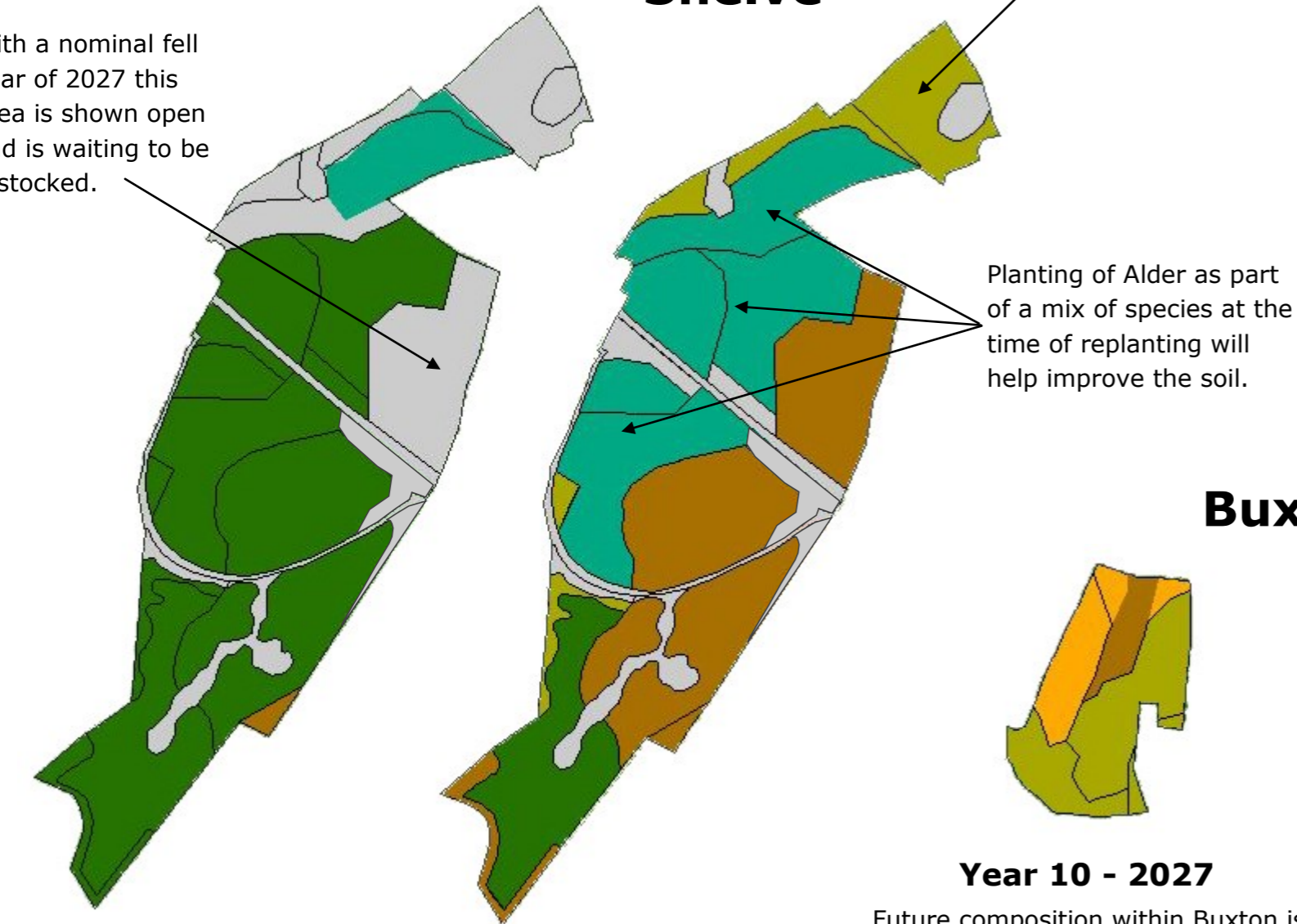


## Indicative Future Species at 2028 and beyond 2050



With a nominal fell year of 2027 this area is shown open and is waiting to be restocked.

## Shelve



## Buxton

Future composition within Buxton is dependant on investing in and developing an access to the wood to enable harvesting to take place.

### Legend

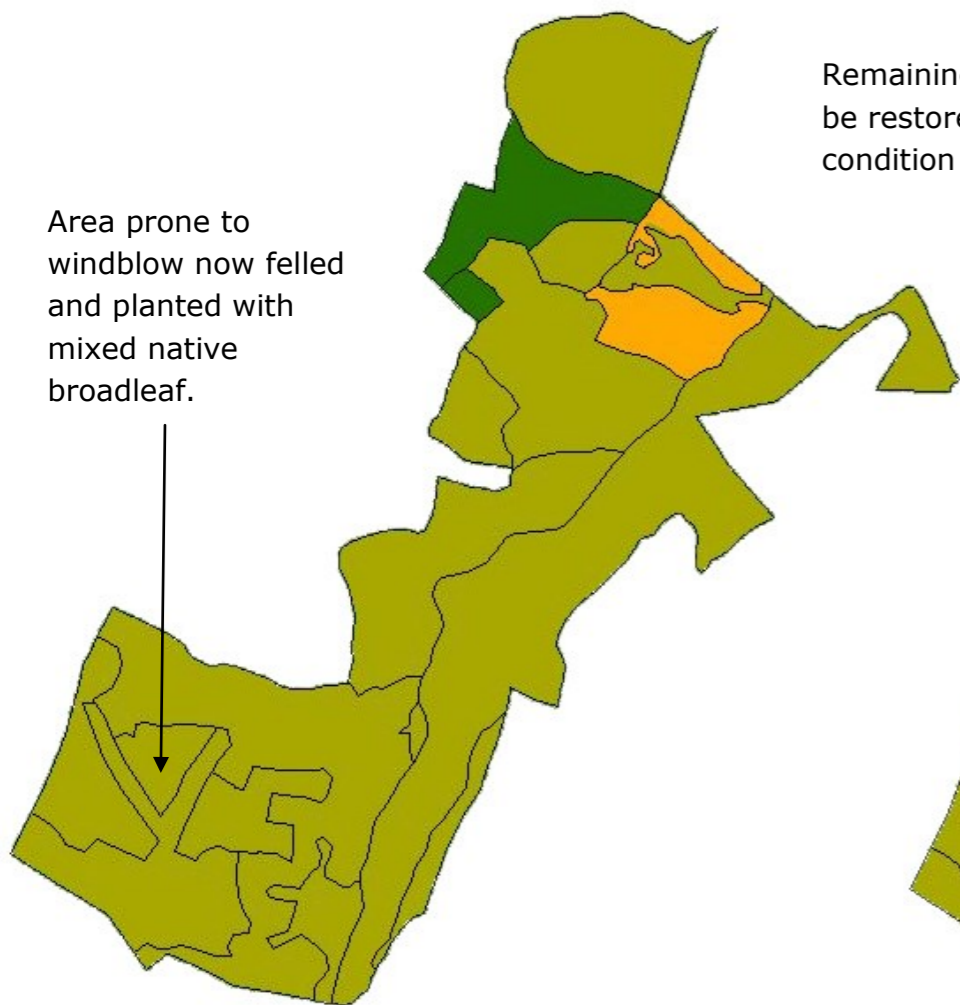
- Evergreen Conifer
- Other conifer
- Pines
- Larches
- Native and naturalised broadleaves
- Non-native broadleaves
- Open/other

**Year 10 - 2027**

**Beyond 2050**

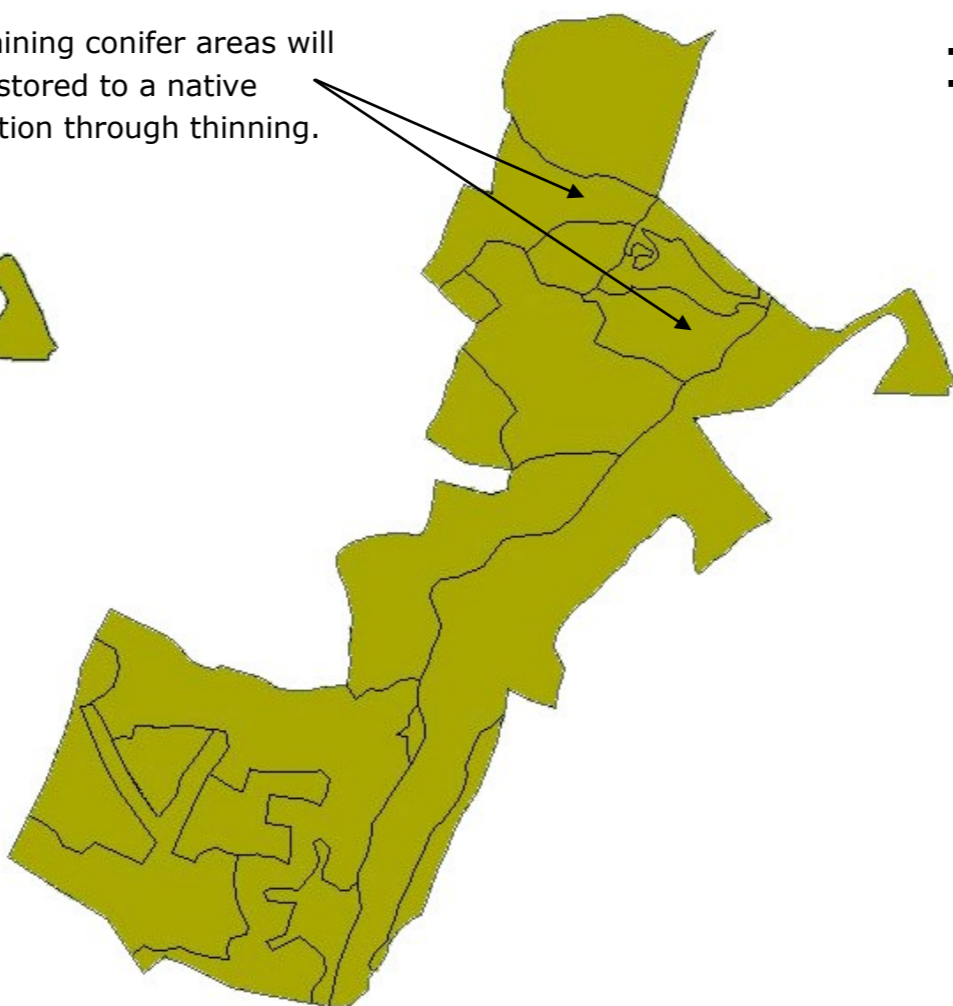


## Gittinshay



Year 10 - 2027

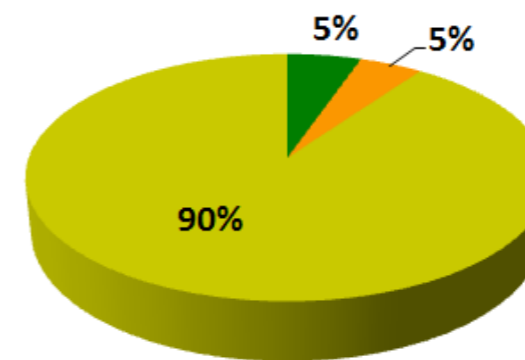
Remaining conifer areas will be restored to a native condition through thinning.



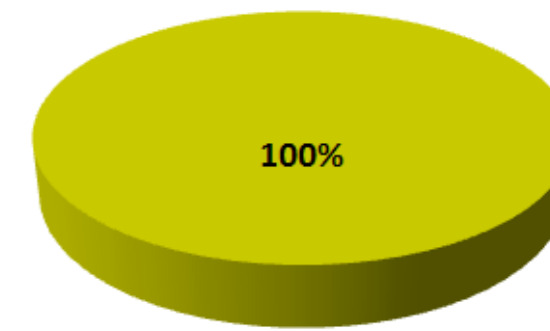
Beyond 2050

## Indicative Future Species at

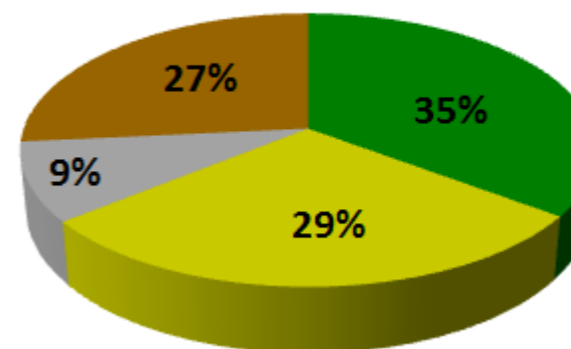
Gittinshay - 2027



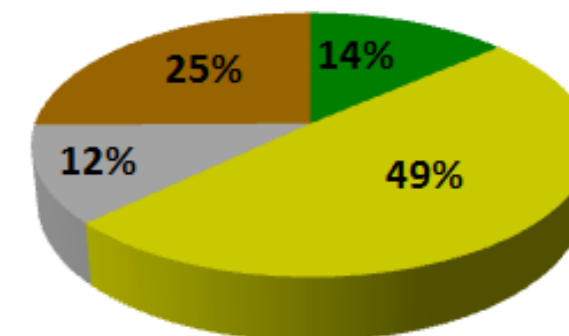
Gittinshay - 2050



Westcott - 2027

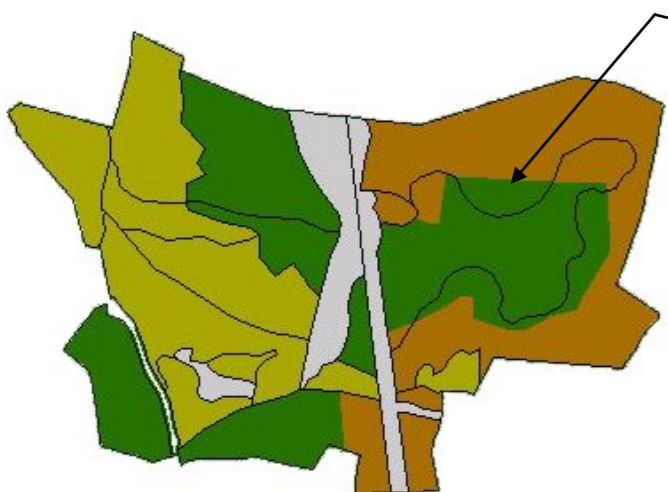


Westcott - 2050

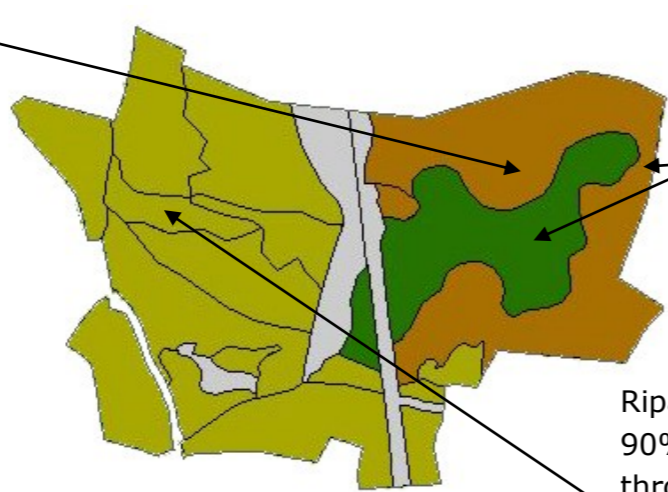


## Westcott

This coupe has been re landscaped to be more favourable to the topology and landform of the wider landscape.



Year 10 - 2027



Beyond 2050

Area will be managed through regenerative thinnings. The composition here will remain predominantly conifer with a minor broadleaf content. Invasive species such as Western Hemlock will be removed and opportunities to diversify species composition through planting may be taken advantage of through the manipulation of canopy density achieved through thinning.

Riparian zone will be managed through coppicing, maintaining upto 90% open space with some standards that should be managed through a longer coppicing cycle than the rest of the site. This coupe could potentially be an ideal site for volunteer work. The remaining adjacent broadleaf areas to north and south will be managed on longer coppicing cycle for firewood.

### Legend

- Evergreen Conifer
- Other conifer
- Pines
- Larches
- Native and naturalised broadleaves
- Non-native broadleaves
- Open/other



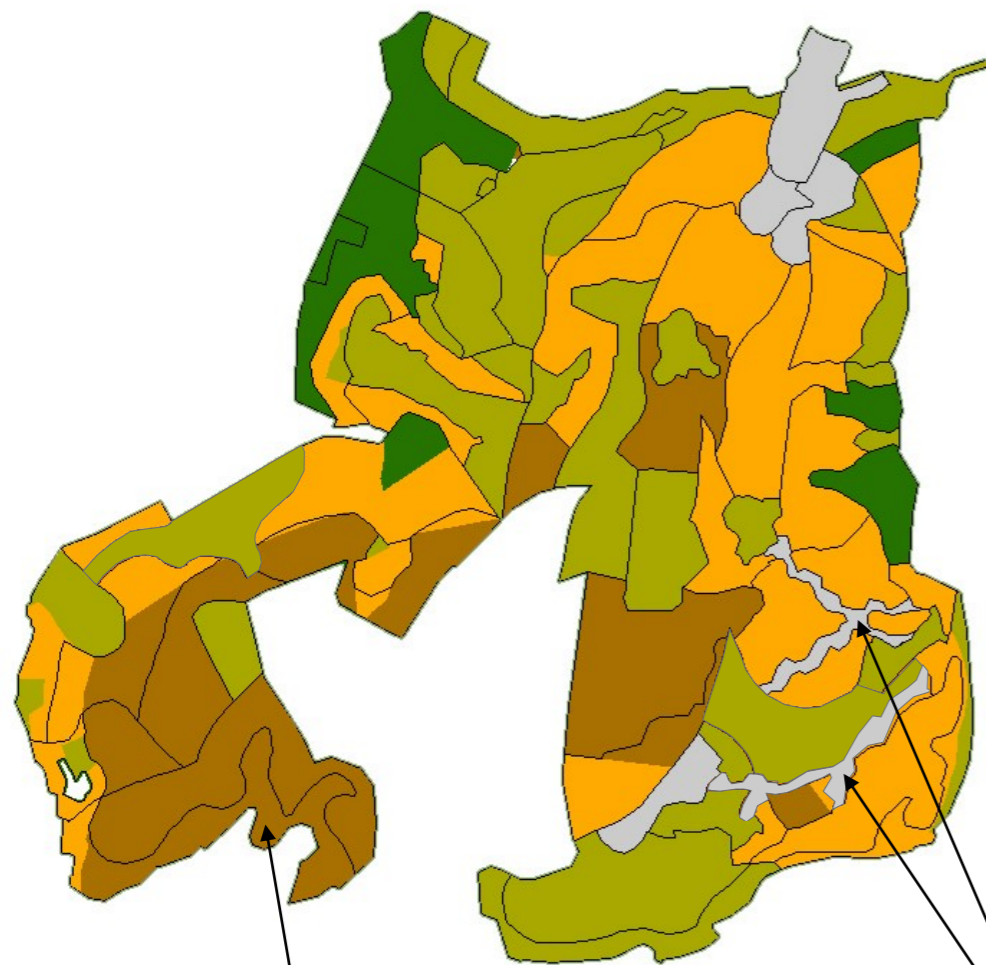
# Eastridge

## Indicative Future Species at 2028 and beyond 2050

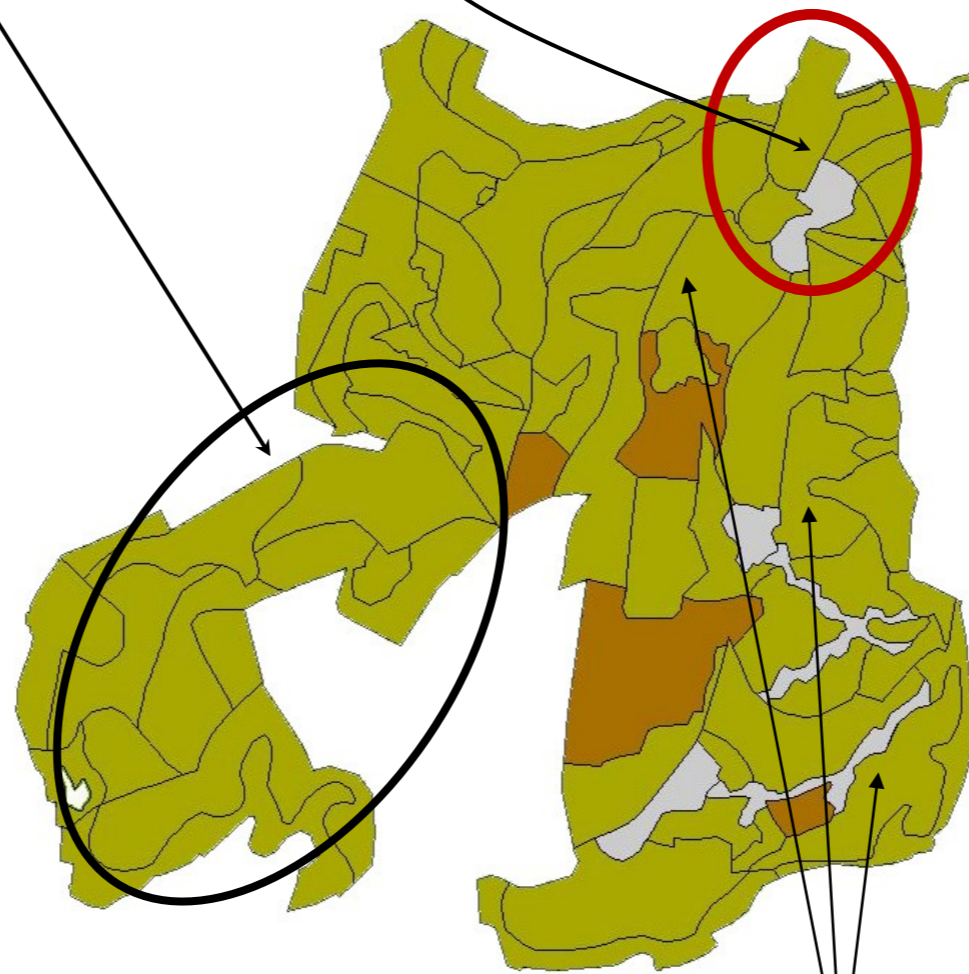
With awkward terrain, this area of Eastridge is likely to continue to contain small proportions of Scots Pine and during thinning Scots Pine will be favoured over Lodgepole Pine.

Granham's Moor Quarry and surrounding area will be a mosaic of open space and Native broadleaf.

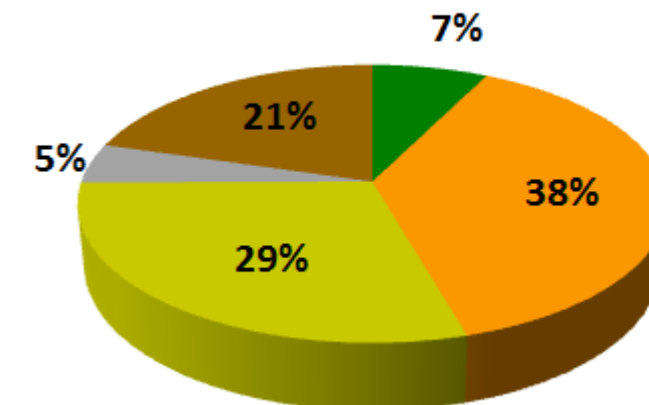
**Year 10 - 2027**



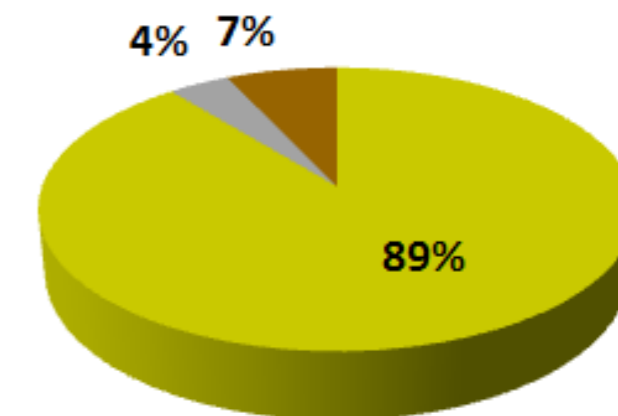
**Beyond 2050**



**Eastridge - 2027**



**Eastridge - 2050**



This area is steep and awkward to work. A margin has been landscaped into the Forest Plan proposals along the southern boundary adjacent to residential areas and the old Snailbeach lead mines. This margin will be thinned heavily where operationally possible to create a mosaic of open habitat and woodland. Thinning will concentrate on the removal of Lodgepole Pine and favour retention of native broadleaves and Scots Pine that will result initially in around 60% open space and 40% mixed woodland. The open space element is likely to be transitory moving to a composition of native scrub woodland. However there is aspiration to maintain an element of open space within this margin that is likely to settle at around 40%. The slope is south facing and on steep ground, so would be good for invertebrate, lepidopteron and reptile habitat and will complement the Stiperstones SSSI.

The eastern side of Eastridge is more sheltered and during first thinning of young crops this should be taken advantage of to create a much needed open rideside structure. Within older crops an open ride structure will be built in at the time of replanting following clearfelling.

Areas of larch will gradually diminish over time in favour of native broadleaves. This will be achieved through the use of thinning where there is minimum to moderate Larch content and where Larch forms a primary component then removal will be achieved through the use of clear felling and replanting that will ensure a varied and robust species composition for the future.

### Legend

- Evergreen Conifer
- Other conifer
- Pines
- Larches
- Native and naturalised broadleaves
- Non-native broadleaves
- Open/other



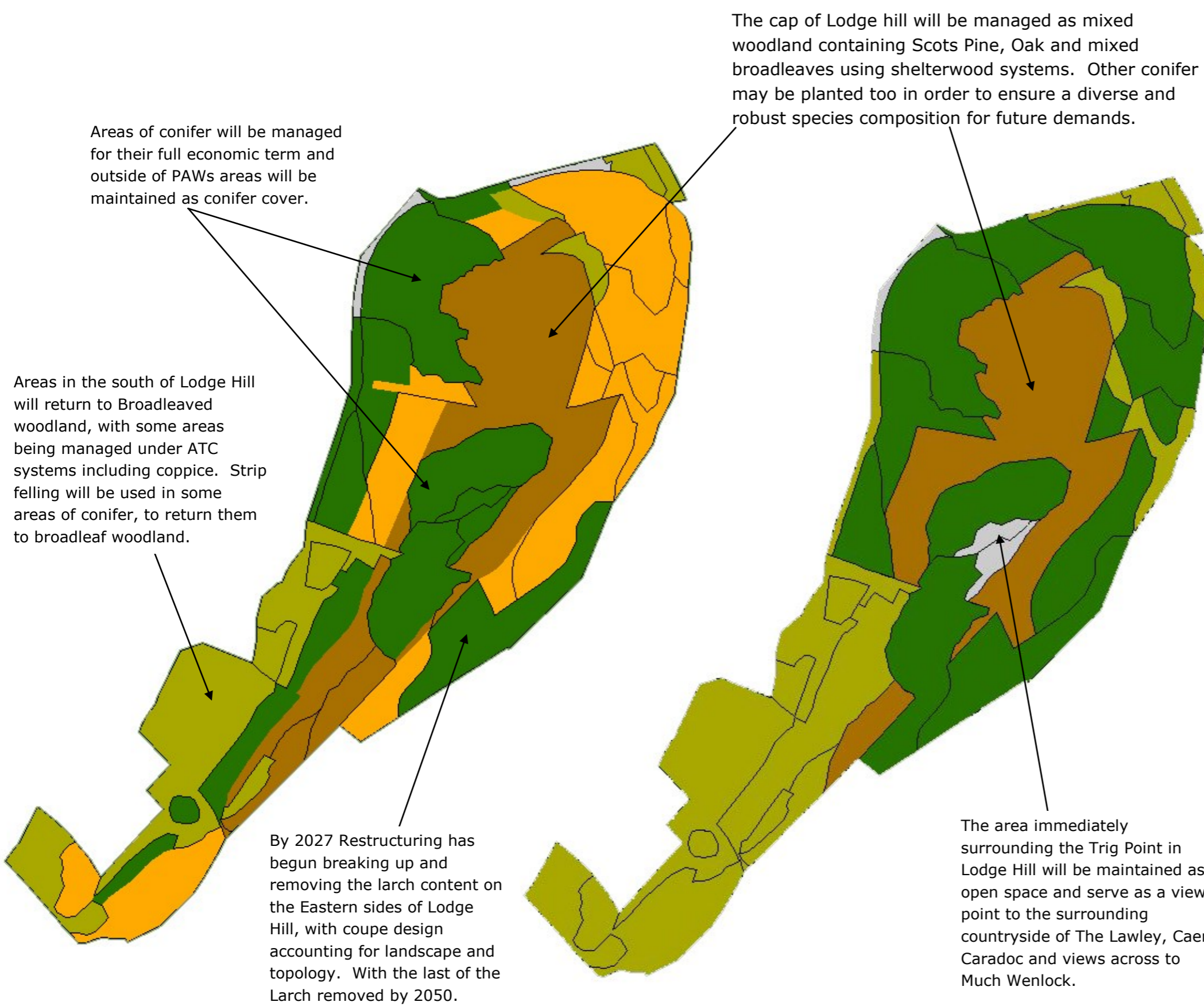


# Lodge Hill

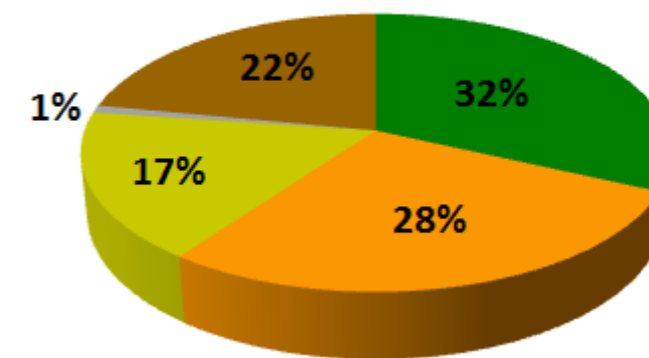
# Indicative Future Species at

**Year 10 - 2027**

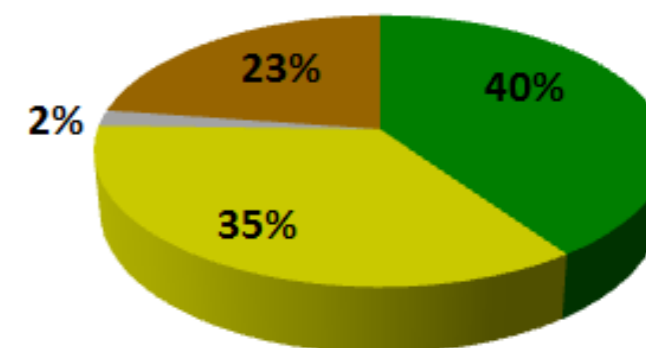
**Beyond 2050**



**Lodge Hill - 2027**



**Lodge Hill - 2050**





## Legend

- Evergreen Conifer
- Other conifer
- Pines
- Larches
- Native and naturalised broadleaves
- Non-native broadleaves
- Open/other

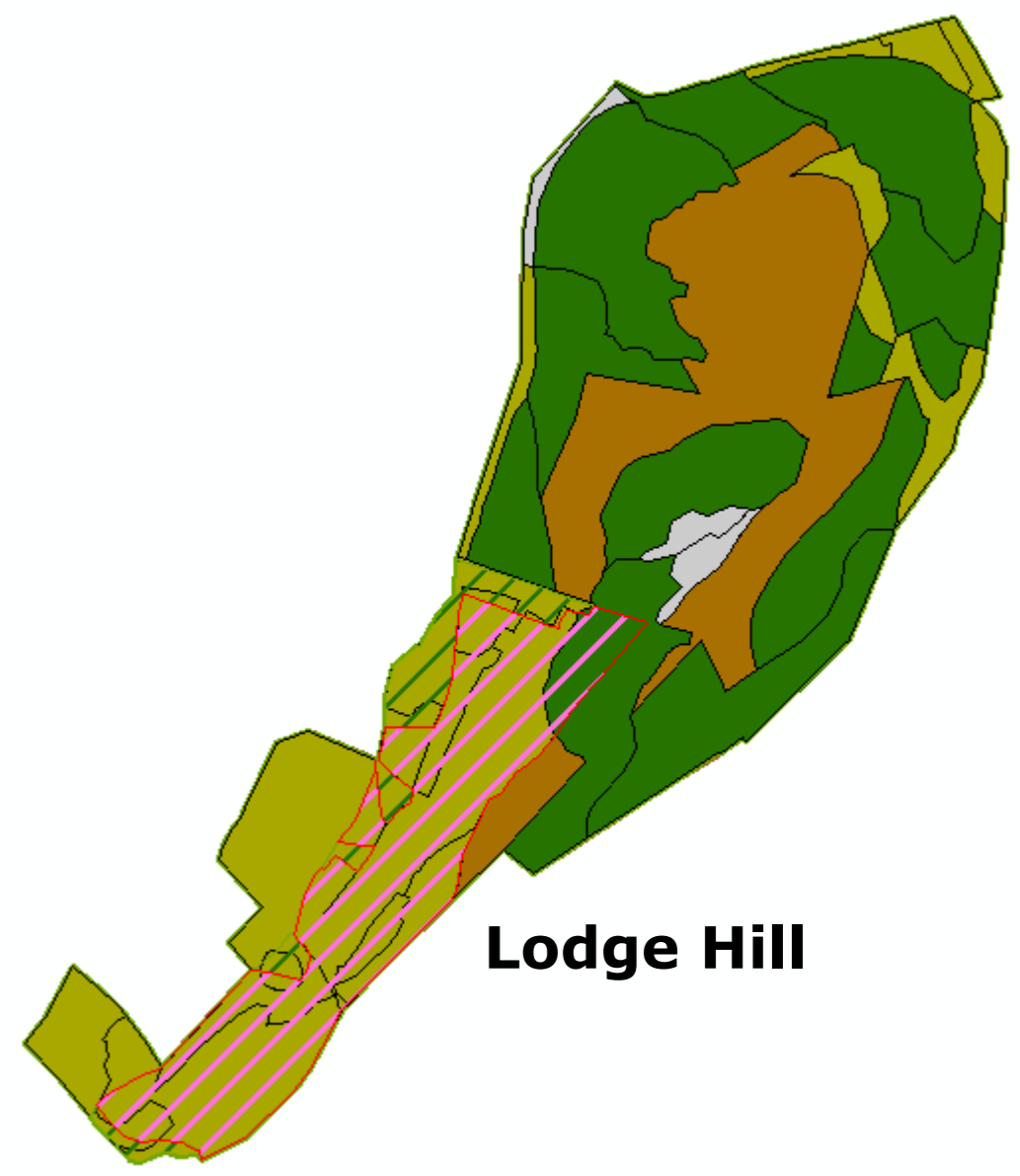
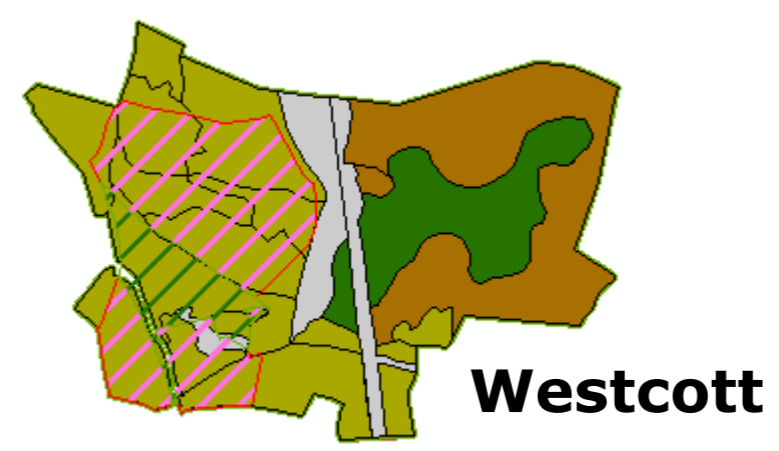
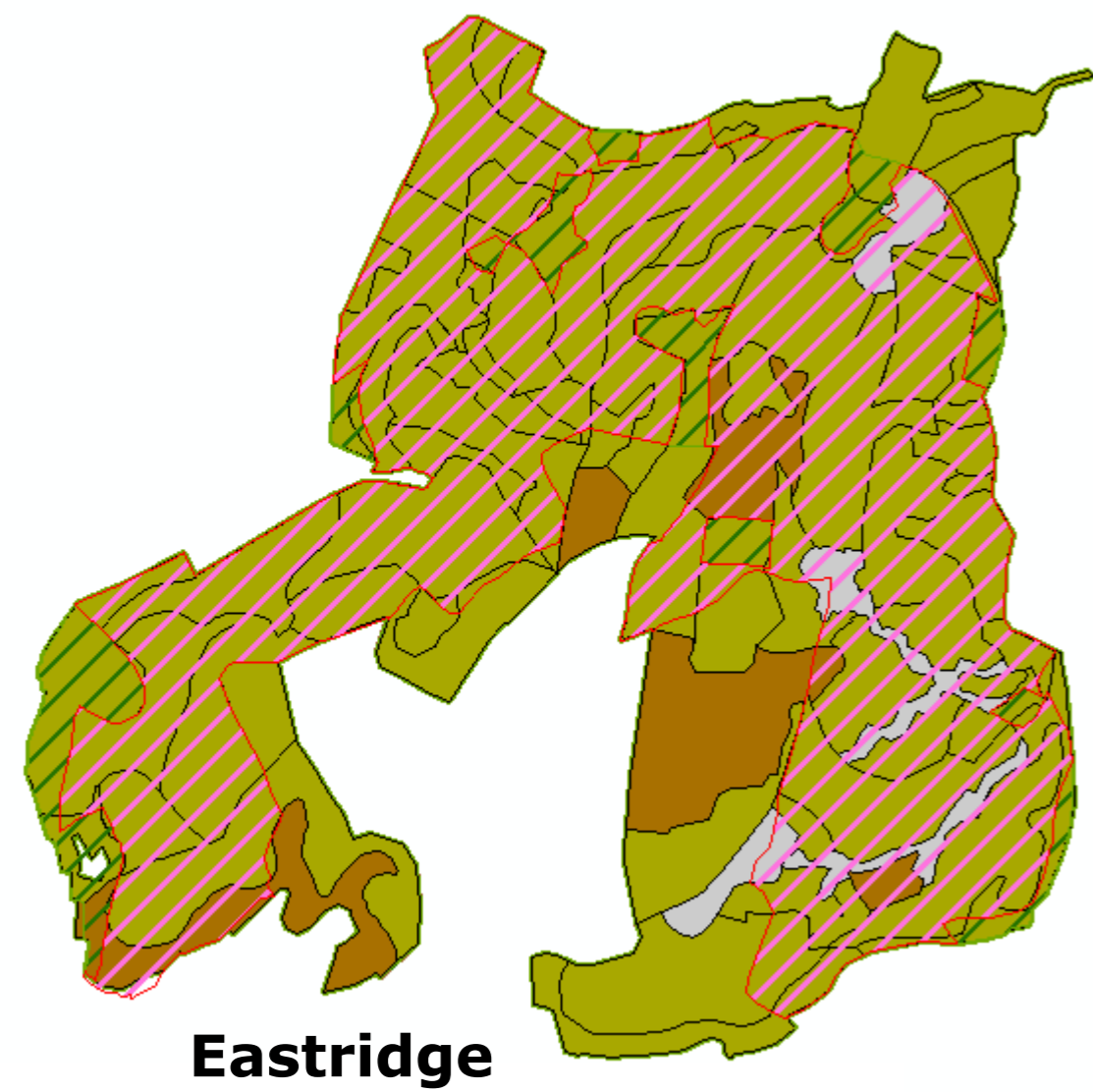











**Indicative Woodland composition in 2050  
in relation to PAWS restoration**

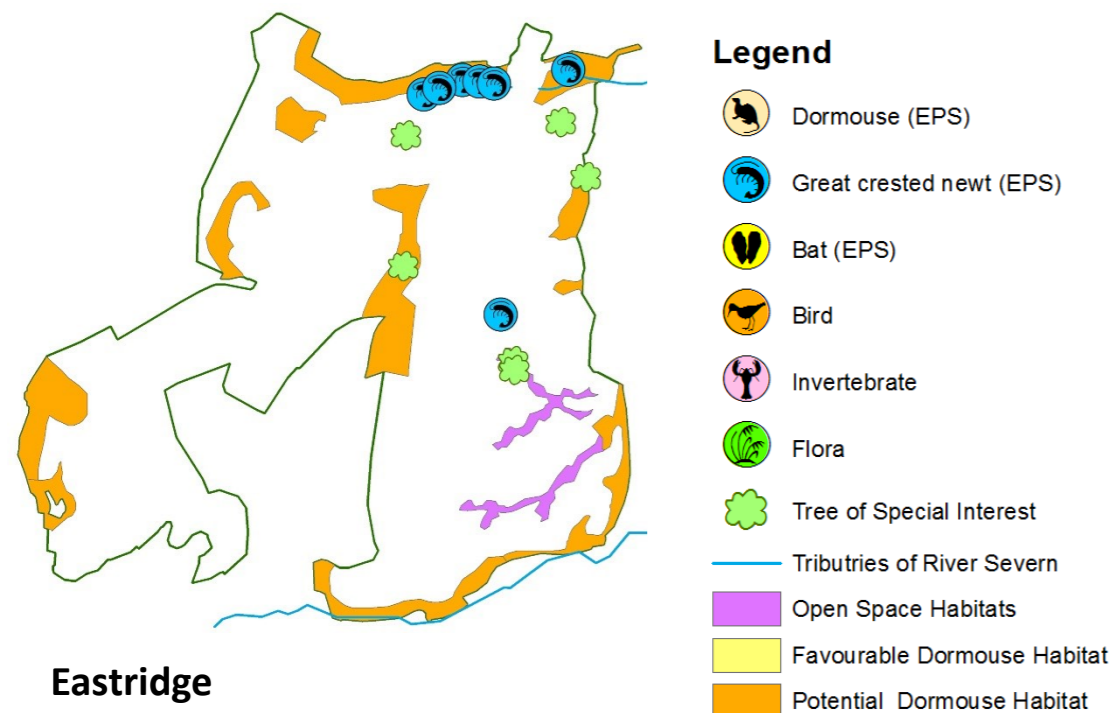
-  ASNW
-  PAWS

The ASNW register is overlaid to provide an illustration of restorational progress within PAWS areas.



-  Evergreen Conifer
-  Other conifer
-  Pines
-  Larches
-  Native and naturalised broadleaves
-  Non-native broadleaves
-  Open/other





Conservation - Features

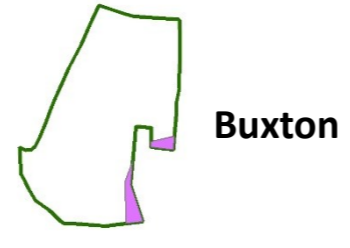
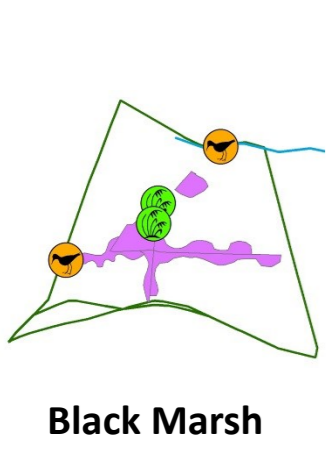


**Dormouse** favourable habitat is found predominantly in Gittinshay, although potential habitat is found across the Plan area. Removal of remaining conifer from this wood and establishing coppice rotations in woods nearby such as those in Westcott will enhance habitat availability. Clearfalls programed alongside rides and roads will improve rideside structure too ensuring appropriate habitat provision. Management will be in line with Best Practice Guidance for EPS species laid out by FC & NE in 2007.

Eastridge

Westcott

Lodge Hill



Black Marsh

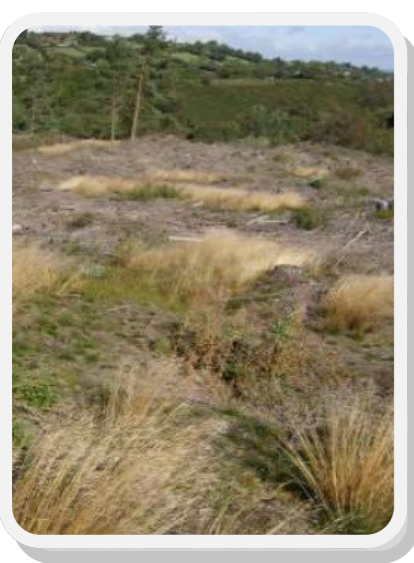
Shelve

Buxton

Gittinshay



**OTTER** Some woodlands have watercourses that are potentially within the territory of foraging or resident otters. Favourable habitat is found predominantly in Gittinshay along Habberley Brook, although potential habitat can be found across the Plan area. Management will be in line with Best Practice Guidance for EPS species laid out by FC & NE in 2007.



**Open space** at Roman Gravels at Shelve, is an area of fallow open ground left open originally for the archaeology interest but could provide suitable habitat for Lepidoptera, reptiles and ground nesting birds.



**Trees of significant Interest** - A variety of significant trees can be found throughout the plan area and will be retained in perpetuity, some are sizable for their species like this Rowan tree (pictured left with clip board for scale) in the southeast of Eastridge may have been derived from coppice. Others like the Beech tree in Lodge Hill (pictured far left) are large and will provide a variety of habitats throughout its lifespan. During the planning of Forest Operations, these types of trees will be identified, recorded so they can be protected in line with FC guidance Ops No 31.



**Raptor** Notably Goshawk (above) and Buzzard are known to nest and hunt within the forest areas. Many of the species choose to rest in high well branched conifer trees and then feed over surrounding open ground making the forests ideal raptor habitat in an otherwise varied landscape. The management of appropriate large or potentially large trees for long-term retention will ensure that habitat provision is maintained.





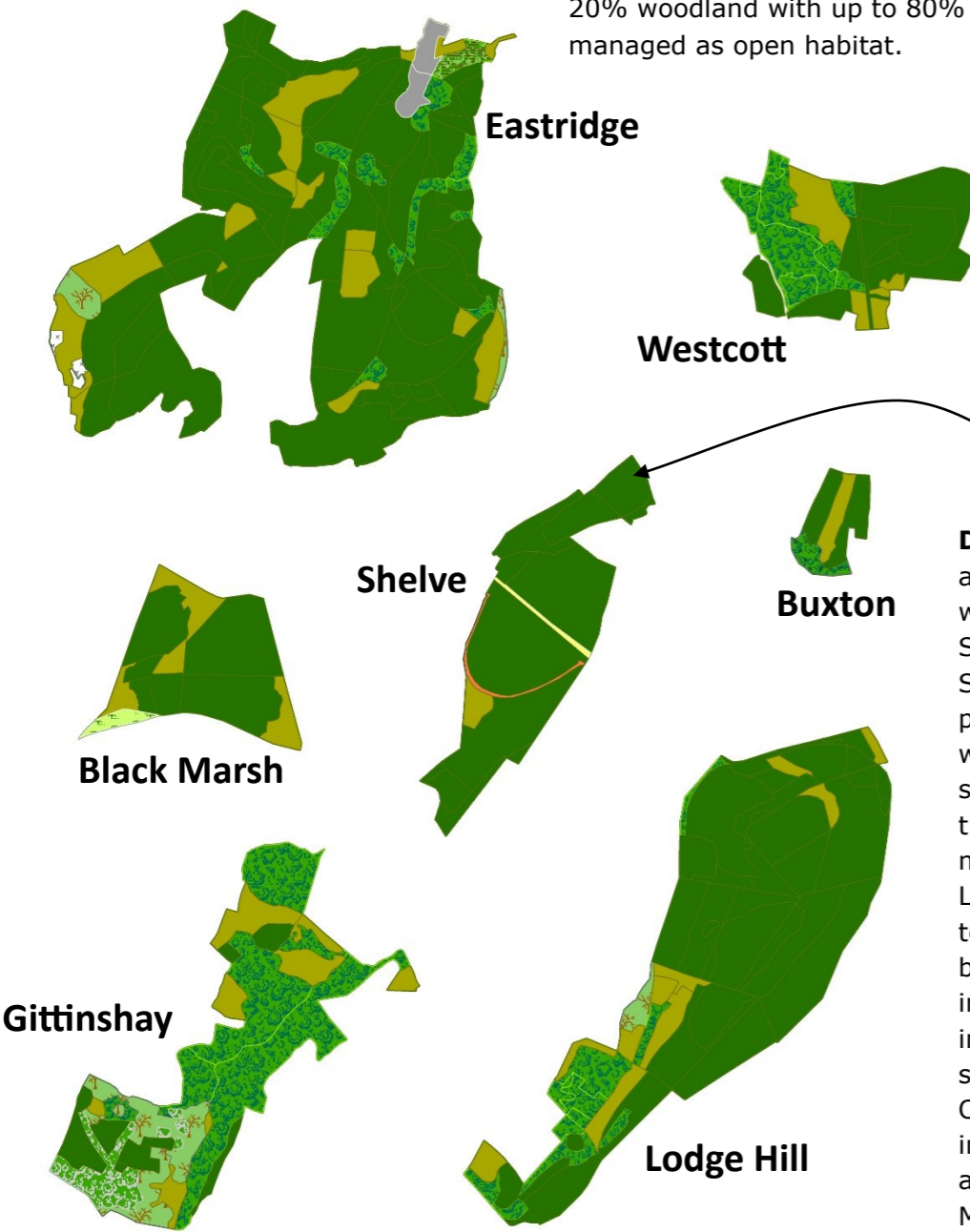
**Legend**

**Broad Habitat Type**

- BROADLEAVED; MIXED/YEW WOODLANDS
- CONIFEROUS WOODLANDS
- BOUNDARY & LINEAR FEATURES
- ACID GRASSLAND
- BRACKEN
- INLAND ROCK
- Not Surveyed

**Priority Habitat Type**

- Upland Oakwood
- Wet woodland
- Lowland mixed deciduous woodland
- Upland birchwoods



**Granham's Moor Quarry SSSI** is notified for its geology but the surrounding native broadleaf woodland both provides and contains a variety of habitats for a variety of flora and fauna alike. Some areas are wet woodland in which Great Crested Newt have been recorded. Since 2000 the SSSI has been in Favourable condition with NE giving assent to a management plan for the period 2013-2023. Although the site was reassessed in October 2017 as being in Unfavourable declining condition, the SSSI plan should see Favourable condition being retained and is mainly concerned with removal and control of vegetation and scrub.

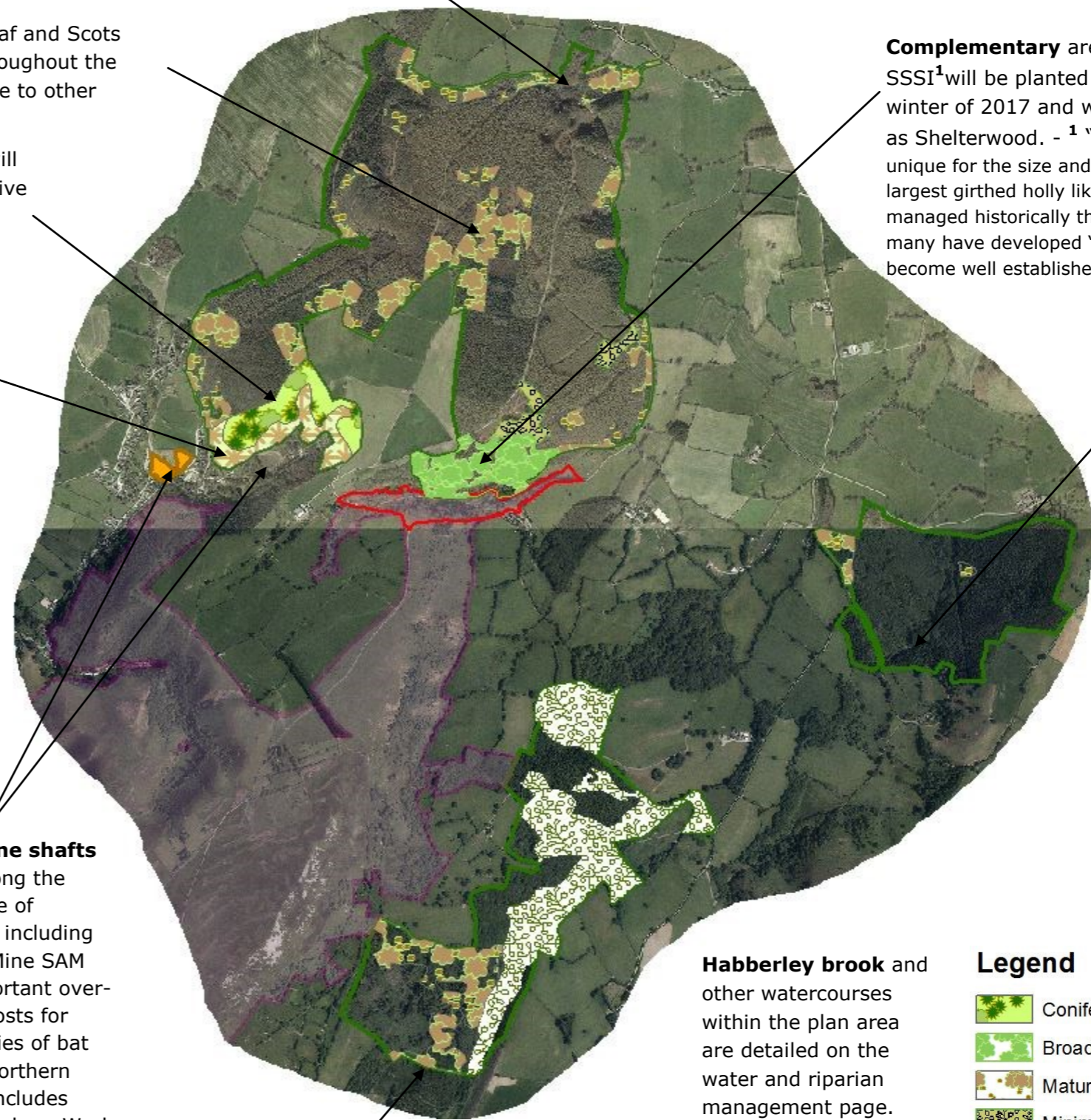
**Mature Habitat** consists of native broadleaf and Scots Pine. Mature habitat is well distributed throughout the wood providing valuable habitat and linkage to other parts of the wood.

**Lodgepole Pine and larch** components will be removed through thinning to favour native Scots Pine with future composition being a mixture of Scots Pine and Oak.

**Woodland edge** will be softened with conifer being removed through thinning to complement Stiperstones SSSI and Snailbeach. Future composition will be around 20% woodland with up to 80% managed as open habitat.

**Derelict mine shafts** and adits along the western edge of Stiperstones including Snailbeach Mine SAM provide important over-wintering roosts for several species of bat that, at its northern most limit, includes Lesser Horseshoe. Work to soften the woodland boundary will see an increase woodland edge, improving the surrounding habitat. Other important sites include Roman Gravels at Shelve and Huglith Mine at Westcott.

**Conservation Habitats**



**Complementary area** adjacent to The Hollies SSSI<sup>1</sup> will be planted with native broadleaf in the winter of 2017 and will subsequently be managed as Shelterwood. - <sup>1</sup> "The Hollies" is considered to be unique for the size and age of holly trees, with the largest girthed holly likely to be over 300 years old and managed historically through pollarding. As a result many have developed 'crutches' in which rowans have become well established.

**Huglith Mine** closed in 1947 and the mine and surrounding adits that served the mine now provide superb habitat for bats. The old managers office pictured below has now been converted into a hibernacula for bats.



**Habberley brook** and other watercourses within the plan area are detailed on the water and riparian management page.

**Gittinshay** adjoins the eastern side of Stiperstones SSSI. By 2027 over 85% of the woodland should consist of native species. Areas managed as Mature Habitat will sympathetically link Stiperstones SSSI with the eastern edge of Gittinshay, where the woodland either side of Habberley Brook will be managed as Natural Reserve enhancing and protecting valuable dormouse habitat and enhancing opportunities to accrue important deadwood habitat in a variety of forms and conditions.

**Legend**

- Conifer Shelterwood
- Broadleaved Shelterwood
- Mature Habitat Retention
- Minimum Intervention
- Min. Intervention - Natural Reserve
- Transition to open Woodland Habitat
- Open land
- Snailbeach Mine SSSI
- The Hollies SSSI (part of Stiperstones)
- Stiperstones SSSI











## Heritage Features

**Snailbeach Lead Mines** give a reminder of how economically important this area was and the cultural and social heritage it left behind that is still very visible to this day. The photos to the left show the old crushing and compressor houses, whilst old ironwork and building remains can often be found being reclaimed by nature in the surrounding woodland. Remnants such as those from will often enhance the conservation value by providing a variety of habitats. E.g. overwintering Bat hibernacula or bare ground suitable for the likes of Grayling or ponds that attract dragonflies. Plan proposals look to complement and sympathetically protect any remnants.

### Legend

-  Charcoal hearth
-  Stone well
-  Suspected Roman Causway
-  Stone wall
-  Heritage feature area
-  Scheduled Ancient Monument (SAM)

### Heritage management

The Forest Plan acknowledges that within the plan area lies a variety of culturally and historically important features, that are diverse in nature and range from impressive features such as those at Snailbeach or Roman Gravels to the more subtle features such as stone walls or the well located in Lodge Hill or the charcoal hearth in Westcott.

Through the Ops 1 planning process Forest Operations will aim to identify and record heritage features so that Forest operations can protect and where possible look to enhance heritage features.

Where necessary advice from the County Archaeologist will be sort and their recommendations followed.

**Roman Gravels lead mine** (on FC land) is one of a group of lead mines in the area which were of great significance in the lead industry of the 19th century and earlier. The discovery by miners in the 19th century of earlier shafts containing pottery and wooden shovels, as well as the discovery of Roman coins and lead pig (ingot) in spoil, and the presence of Roman-style open cuts, suggest that the area was first mined during the Roman period, possibly around AD 120. Mining was certainly taking place by the 12th century, and during the 13th century the mine provided lead for Glastonbury Abbey. The mine eventually closed for the last time in 1895. Surface remains include a very large opencut thought to be Roman in origin along with smaller cuts of the same date. The 18th and 19th century remains include the New Engine Shaft, and the associated engine house which survives as a collapsed slate building. The buried remains of pumping rods and a smaller ginged<sup>1</sup> shaft also survive nearby. Further remains include the Old Engine House where a Boulton and Watt steam engine was installed in 1788, and associated buildings including a winding house. *(Text courtesy of Historic England)*

<sup>1</sup>The dressed stonework around the top parts of a shaft holding up the loose ground.

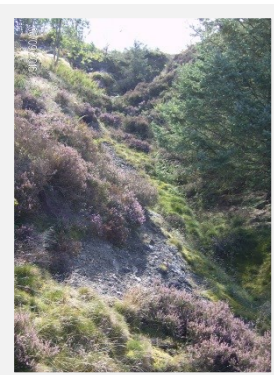
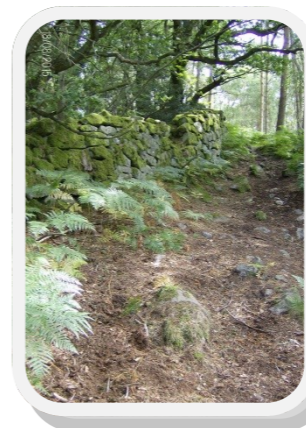
Photos: courtesy of Gwyn Norrell.co.uk



**Right:** Westcott Woods also locally known as Huglith contains remains of a very successful copper and Barite mine. See section on "Designations" for further info.



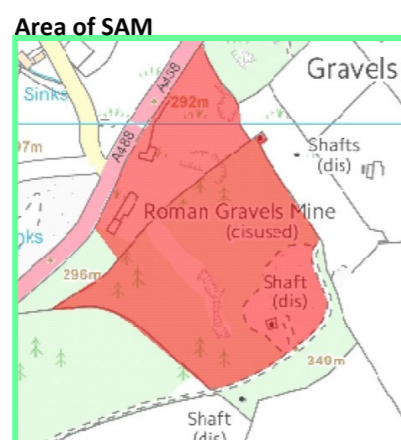
**Far Right** are two examples of stone walling in Lodge Hill shown right. One can tell the walls have substantial age given the Rowan, Holly and other native broadleaves growing on them.



**Left:** An example of an opencut at Shelve.



**Below:** Example of old tips at Roman Gravels.



Source: Historic England



**Above:** The old engine house for Ladywell Lead mine. (SAM) but not FC





## Recreation and Public Access

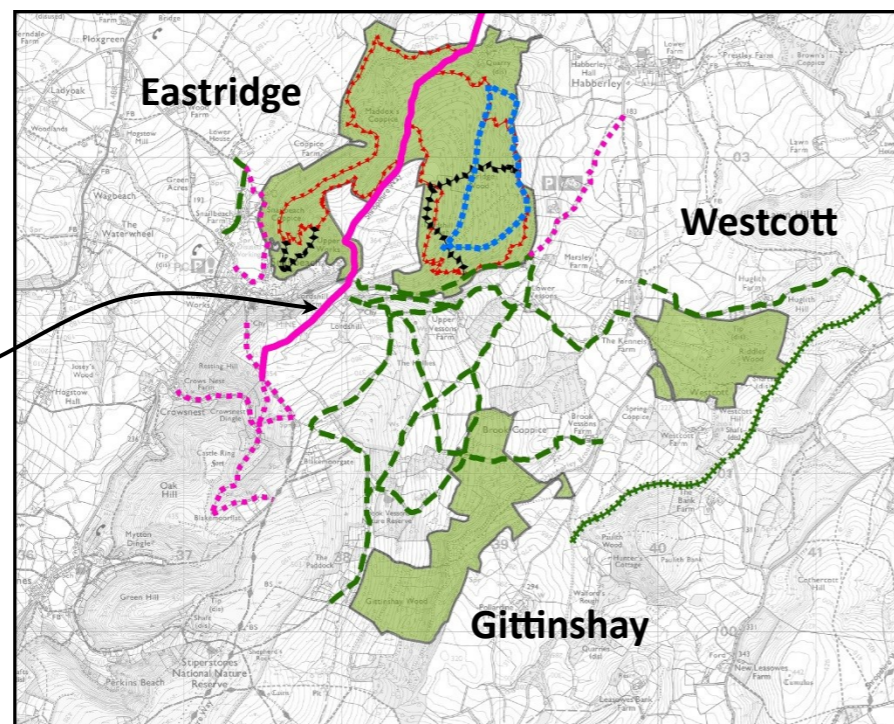
With Stiperstones and The Lawley on it's doorstep, the plan area attracts large numbers of walkers, horse riders and mountain bikers. This is supported within the Forest Plan area by an extensive network of Public Rights of Way and includes the Shropshire Way that passes through Eastridge on route 14 that totals 10 miles from the Stiperstones to Exfords Green. Other Public Rights of Way form links to the other woodlands within this plan area.

Eastridge is becoming well known for its mountain bike trails being managed in partnership with an autonomous MTB group who enjoy a good relationship with the Forestry Commission.

All woodlands are well frequented too by local residents, although parking in some places, for example at Buxton is somewhat limited, so receives few visitors and public access into Gittinshay (Brooks Coppice) and Westcott (Huglith) is also limited to existing Public Rights of Way due to the lease agreements under which the woodlands are managed.

Horse riding is ever popular within the Plan area and surrounding countryside. Ride UK consists of several routes following Bridleways and Byways. Route 6 circumnavigates Eastridge Wood Whilst route 10 passes through Lodge Hill. (see map below) Many routes are interlinked and join with the Jack Mytton Way, a 100 mile long distance horse trail through the Shropshire AONB.

At this point in time it is not envisaged to provide additional parking facilities, and all MTB and horse riding routes will be taken into account during the planning and



### Legend

- ..... Public footpath
- Bridleway;
- Byway (BOAT/RUPP)
- CYCLING**
- ..... Green - Easy
- ..... Blue - Moderate
- ..... Red - Difficult
- ..... Black - Severe
- ..... Orange - Bike Park
- ..... Forest road or similar

