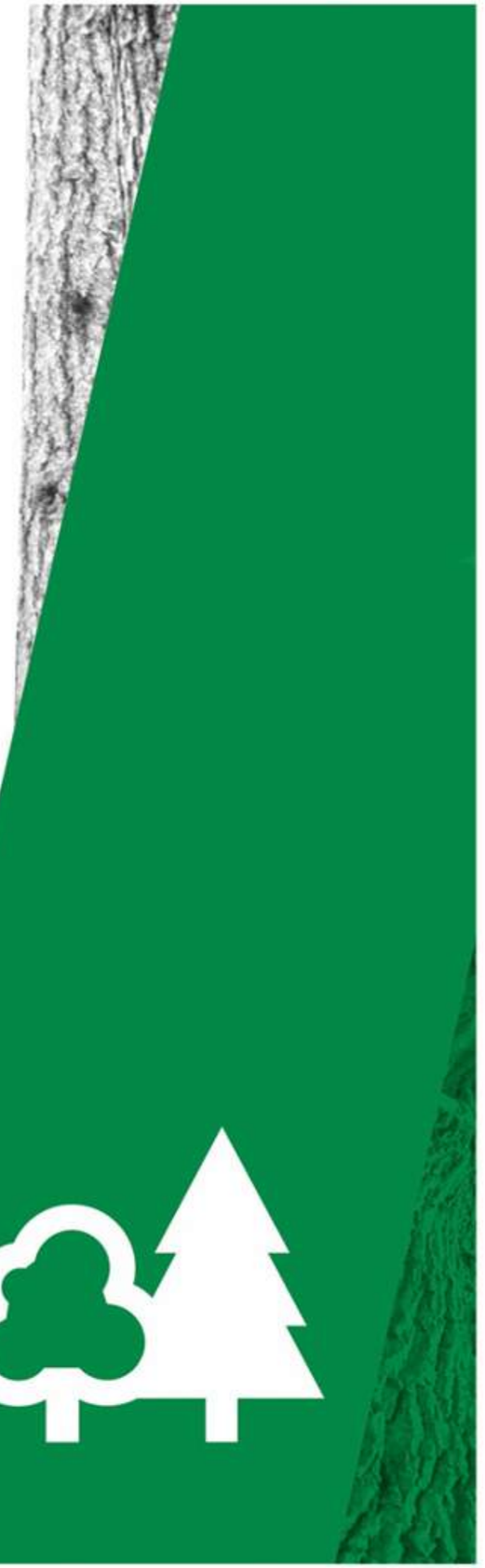
Forestry England

East Devon Forest Plan

2019 - 2029

West England Forest District



Ben Robinson

FE File Ref: OP10/63

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

Declaration by FE as an Operator.

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

Forestry England

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Summary

About

The East Devon Forest Plan area is situated south of Honiton between the regional towns of Ottery St Mary and Lyme Regis. The Plan area is made up of a number of scattered and fragmented woodland blocks close to the East Devon coast.

The forests are part of the public forest estate and stretch from East Hill in the west to Wyld Warren in the east.

The public forest here is a predominantly secondary woodland having been planted with conifer to address the national timber shortage of the early Twentieth Century. Some small areas of remnant ancient semi-natural woodland and areas of plantation on ancient woodland do remain and are either made up of oak and birch with ash and alder or coniferised with Douglas fir or Sitka spruce. Most of the Plan area is actively managed to provide timber for local and national businesses, and to improve the quality of the remaining trees.

The Plan area is rich with diverse ecological habitat such as Priority Wet Woodland and Lowland Mixed Deciduous Woodland used by otter, dormice, bats and nightjar as well as other important flora and fauna species.

The entirety of Morganhayes, Parehayne, Wyld Warren, Whitty and Hole Common and parts of Core Copse, Ofwell and Trinity Hill are all freehold open access. These woodlands and the rights of way which bisect them are popular for quiet cycling, riding and walking with views to the Jurassic Coast.

Objectives

The core aim of the Plan is to begin to progress the 50 Year Vision by producing woodlands with increased conservation, recreation and landscape benefits whilst maintaining a viable timber output. The long term aim of management is to continue to sustainably produce timber whilst providing a forest rich in wildlife, attractive to people and increasingly resilient to climate, pests and diseases.

The social, economic and environmental objectives of management are:

- The continued production of sustainable and marketable woodland products.
- To conserve, maintain and enhance cultural and heritage assets.
- Protect and enhance woodland and open habitats and their associated species
  - To protect and enhance areas of Ancient Semi-natural Woodland and restore areas of PAWs in line with ‘Keepers of Time’.
- The provision and maintenance of recreation facilities.
- Deliver well-designed forests that both protect and enhance the internal and external landscape in keeping with the AONB landscape character.

The current plan outlines management proposals including felling and restocking over several decades, with felling licence approval for operations up until 2029.

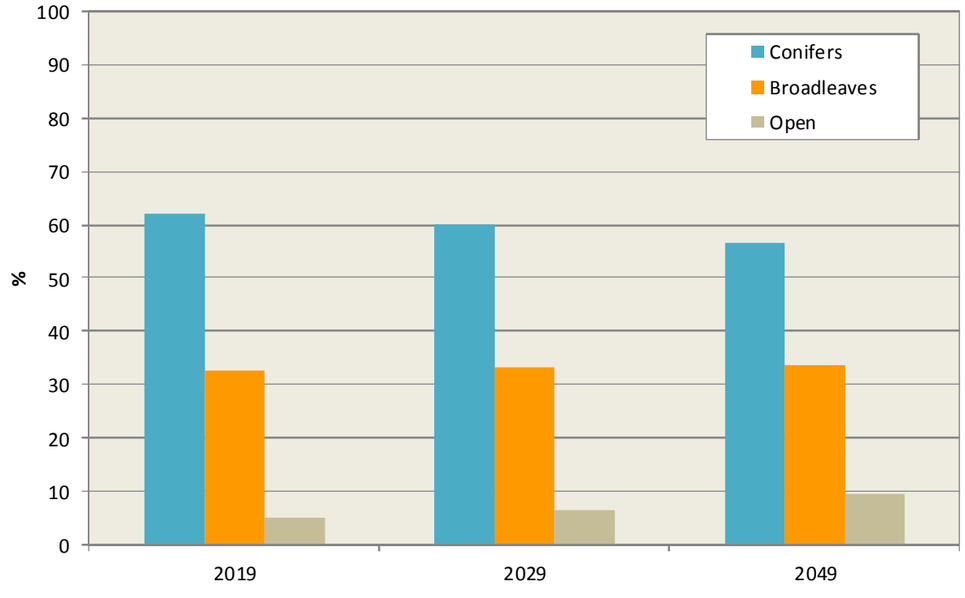
The Plan makes provision to ensure proposals are in keeping the AONB ambition to manage conifer plantations for sustainable timber production, recreation and wildlife, creating new green links to surrounding semi-natural habitats. Implementation and maintenance of an environmental corridor system will continue to increase diversity of habitat and internal landscaping.

The planned areas of clearfelling, restocking and permanent open space creation during the ten years to 2029 are summarised in the chart below.

HECTARES	Conifers	Broadleaves	Open space
Clearfelling	102.0	10.8	-
Restocking/Regeneration	86.9	10.8	15.1

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 period are shown in the bar chart. The increase in native broadleaves within the plan period and over time is indicated in the middle and right hand columns of the chart.

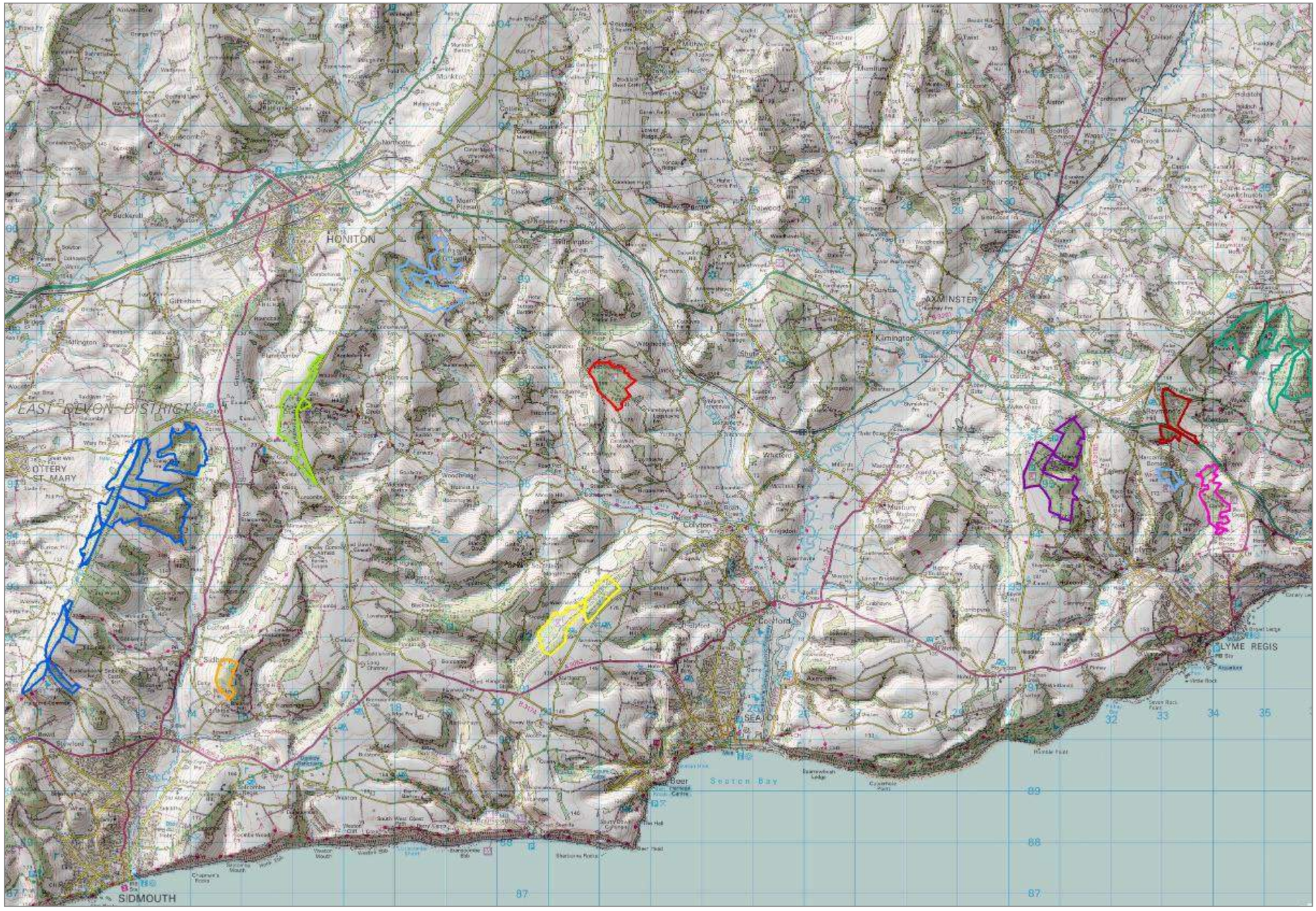


Location

The East Devon Forest Plan area is situated south of Honiton between the regional towns of Ottery St Mary and Lyme Regis. The Plan area is made up of a number of scattered and fragmented woodland blocks close to the East Devon coast.

The Plan area sits within a landscape of narrow, elevated, rolling ridges and steep wooded slopes which provide both a visual feature and recreational attraction for the surrounding area.

The majority of the land is at 60-250 metres above sea level and is undulating to steep in places. The climate is warm and moist influenced by the proximity to the sea. The average annual rainfall is between 1100mm-1400mm, a soil moisture deficit of around 130mm, and an accumulated temperature over 5°C of 1500°C. The soils across most of the East Devon Plan area are poor and dry typical brown earths and surface water gleys over greensand.



	Area	%
Buckley	19.9	2.3
East Hill	263.3	30.0
Farway	55.9	6.4
Hole Common	38.3	4.4
Monkton Wyld	36.9	4.2
Morganhayes	67.9	7.7
Offwell	84.1	9.6
Parehayne	47.4	5.4
Trinity Hill	103.7	11.8
Whitty Hill	9.0	1.0
Wyld Warren	150.1	17.1
Total	**876.2**	**100.0**

Miles
0 0.125 0.25 0.5 0.75 1

A 50 Year Vision

The Vision for the future of the Plan area is forward looking but in keeping with Forestry England's key strategic goals and the local and national value which is placed on the area. Set against the backdrop of the valuable Areas of Outstanding Natural Beauty and Landscape Character Area whereby *densely wooded steep scarp slopes of ancient oak with bluebells and primroses; and some conifer plantations extend onto the ridges,* this Vision looks to achieve an area which is a home to a wide variety of wildlife, fun and commercial interests. A 'Key Opportunity' of the Landscape Character Area (Devon County Council, 2008) is to *manage conifer plantations for sustainable timber production, recreation and wildlife, creating new green links to surrounding semi-natural habitats*. In 50 years time this Plan will look to have delivered a rich mosaic of robust habitats which supports a multitude of rare and common flora and fauna species as well as contributing to a low-carbon economy.

The conifer dominated forest will predominantly be managed through a mixture of clearfell and low impact silvicultural systems contributing to a vibrant woodland economy. Rare and common species such as invertebrates, dormice, otter and reptiles will continue to call the forest home. The forest will also be a popular and safe place to come exercise, learn and relax in a resilient natural environment. The trees will be valued not only for their ecological and social value but also as a timber product, water regulation and for carbon sequestration which as climate change takes effect will be of increasing importance. A diverse structure of young, thicket and maturing crops across the area will provide suitable continuous habitat over time. In addition to these, areas of conifer dominated forest managed through continuous cover forest techniques or clearfell/restock will become a home for numerous conifer and edge loving species such as bats, nightjar and raptors.

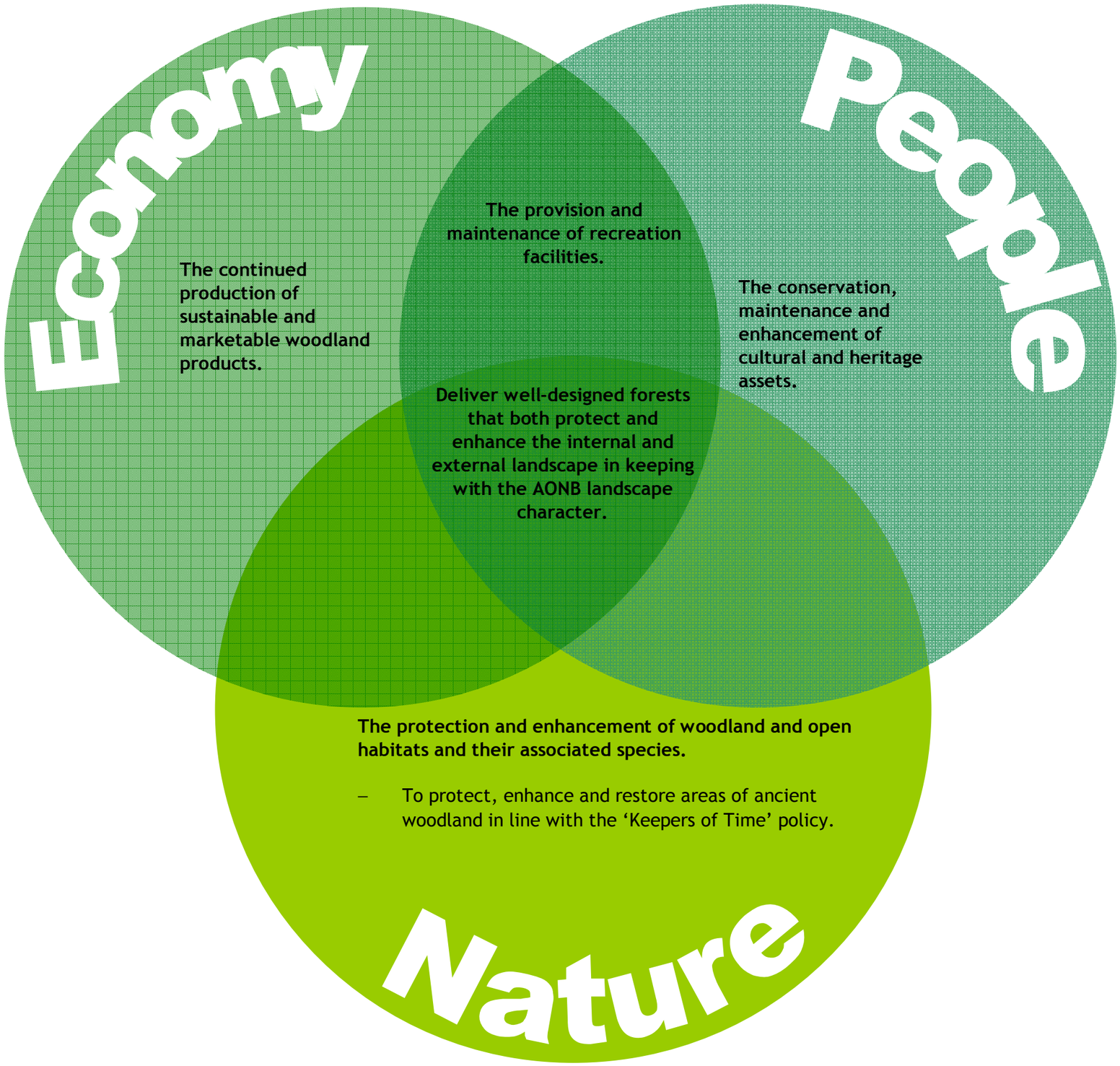
Mixed and broadleaf woodland will grow in size and improve in condition as restoration to native cover takes affect in certain areas. Managed more sensitively but still with productivity in mind through thinning, these more secluded areas will become a haven for a multitude of micro habitats, species and ecosystem functioning. Veteran, mature and future significant trees will be retained and allowed to breakdown providing deadwood habitat and nutrient cycling. Everything from dormice and butterflies to lichens and ground flora will enhance the contribution to ecology, cultural heritage and social value and to the wider landscape. Riparian areas will be enhanced through broadleaf intrusion and opened up to dappled shade to become invaluable to the quality and storage of water that passes through.

Ancient and native woodland, a key part of the Landscape Character, will feature more significantly in the area's makeup. Areas will be restored to oak dominated forest cover gradually to support the rare and protected flora and fauna species which populate these habitats. In addition, this Vision will deliver a 'Landscape Aim' of the new Landscape Character Assessment (2019) which is that *biodiversity should be enhanced through continued positive management of heathland, grassland and woodland/plantation habitats*.

The considerable rides and roadside network will be wider than currently and support common and protected butterflies and other rotational scrub loving species. These areas will also be invaluable to the enjoyment of the area for people, creating windows into the wider forest and out into the landscape.

The 50 Year Vision outlined in this Plan will be delivered in part over the next 10 years through the Objectives outlined on pages 7 and 8 with the proposal and prescriptions following.

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, environmental and social objectives.

The meeting and monitoring of these objectives is outlined on the following page.

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

The mark of responsible forestry

Promoting Sustainable Forest Management

Declaration by FE as an Operator.

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

Forestry England

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

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

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 if the Estate.

People

Maintain existing established consultation panels 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.

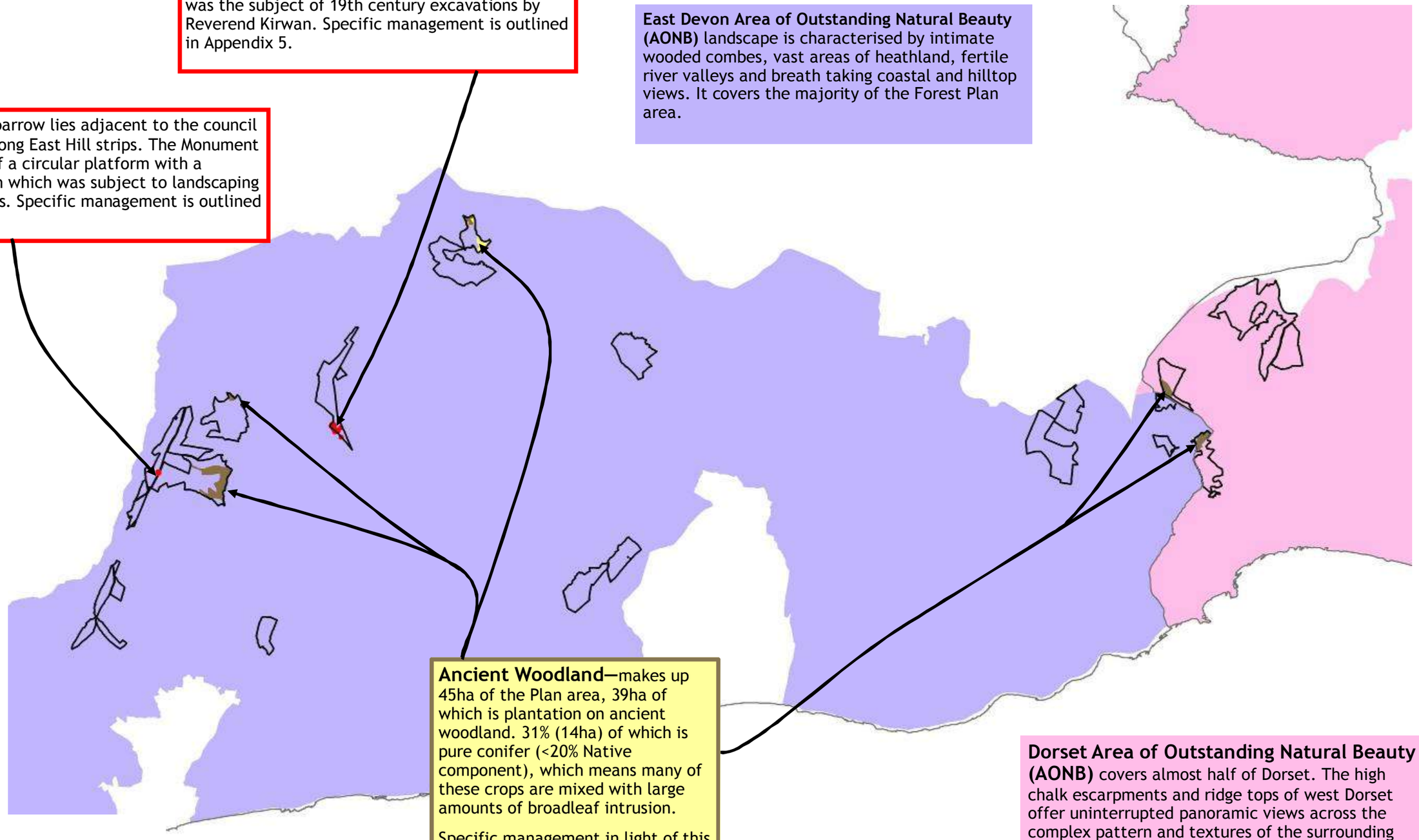
Forest Plan Objective	Meeting Objective	Monitoring
The continued production of sustainable and marketable woodland products.	The majority of the Plan area will remain productive through thinning yield. Some clearfell timber production of mature crops will occur, majority from the conifers.	Comparison of total production forecast yield 29,000m³ (2019-2024) and 68,000³ (2019- 2029) with actual production at the Forest Plan (FP) five and ten-year review.
The protection and enhancement of woodland and open habitats and their associated species. To protect, enhance and restore areas of ancient woodland in line with the 'Keepers of Time' policy.	Appropriate reinstatement works will be carried out once operations have been concluded. Protection and enhancement of water supplies and soil quality through sensitive implementation of operations and improved restocking practices. Restoration of ancient woodland through a gradual thinning process 15ha of open space creation at the time of restocking.	Operational site planning of harvesting and restocking operations will help monitor the effect of management. Ongoing monitoring of soil and water quality pre and post harvesting with input from outside stakeholders. Analysis of naturalness scores at Review stage Measured at Review stage through analysis of ongoing surveys and records.
The provision and maintenance of recreation facilities.	Visitor numbers will be maintained. Road and ride corridor and car park aesthetics enhanced and maintained. Felling together with a delayed restock program will continue to diversify stand and age structure. Viewpoints enhanced and maintained at time of intervention, where possible.	Visitor feedback comments, to be included in Review where appropriate.
Deliver well-designed forests that both protect and enhance the internal and external landscape in keeping with the AONB landscape character.	Implementation of proposals will soften and better integrate the woodland with the surrounding landscape	Fixed point photography analysis at Forest Plan review stage
The conservation, maintenance and enhancement of cultural and heritage assets .	Protect and enhance scheduled and unscheduled sites at the time of intervention.	Operational site planning of harvesting and restocking operations will help monitor the effect of management.

Designations

Farway Castle is a henge monument, dating from the Late Neolithic-Early Bronze Age. It lies at the heart of the Farway barrow complex which was the subject of 19th century excavations by Reverend Kirwan. Specific management is outlined in Appendix 5.

East Hill bowl barrow lies adjacent to the council road that runs along East Hill strips. The Monument takes the form of a circular platform with a surrounding ditch which was subject to landscaping in Victorian times. Specific management is outlined in Appendix 5.

East Devon Area of Outstanding Natural Beauty (AONB) landscape is characterised by intimate wooded combes, vast areas of heathland, fertile river valleys and breath taking coastal and hilltop views. It covers the majority of the Forest Plan area.



Ancient Woodland—makes up 45ha of the Plan area, 39ha of which is plantation on ancient woodland. 31% (14ha) of which is pure conifer (<20% Native component), which means many of these crops are mixed with large amounts of broadleaf intrusion.

Specific management in light of this designation and the objective to restore to native cover is outlined on pages 17-18.

Dorset Area of Outstanding Natural Beauty (AONB) covers almost half of Dorset. The high chalk escarpments and ridge tops of west Dorset offer uninterrupted panoramic views across the complex pattern and textures of the surrounding landscape. It covers the easterly extents of the Forest Plan area.

Legend

- Scheduled Monument
- Dorset AONB
- East Devon AONB
- Ancient Semi Natural Woodland
- Plantation on an Ancient Woodland Site

0 1 2 4 6 8 Miles

Analysis & Concept

East Hill

East Hill is located east of the town of Ottery St. Mary and north of Sidmouth. The block is made up of a string of woodlands along a ridge which is prominent in the landscape and can be viewed from the lower lying settlements, agricultural land and coastal areas. The vast majority of the woodland is made of pine along the ridge with larch and beech with fir and hemlock in the richer, more sheltered areas. The thin soils and high levels of exposure mean that the majority of wood is be managed under a clearfell and restock regime but development of CCF is feasible in some discrete areas. The woodland is a mixture of lease and freehold and with spectacular vantage points is a popular place to visit for locals and visitors alike. A number of formalised, but free car parks are found along the ridge along with a number of gateways and laybys. The woodlands lie adjacent to a number of small but intensively managed heathlands on the high ridges where soils are thin and nutrient availability low. Also some small areas of registered ancient woodland are found towards the periphery of Core Copse and Pin Hill. The main objective within the ancient woodland areas is restoration to native species cover and the associated ecosystem functioning in an economically efficient way. In other areas the continued production and diversification of timber species will be pursued whilst maintaining a woodland valued for biodiversity, recreation and amenity.

- Scheduled Monument
- Ancient Semi Natural Woodland
- Plantation on Ancient Woodlad
- High landscape impact
- Heathland
- Corsican pine
- Watercourse

Analysis: East Hill bowl barrow lies adjacent to the council road that runs along East Hill Strips. The Monument takes the form of a circular platform with a surrounding ditch which was subject to landscaping in Victorian times.

Concept: Management will be to preserve and enhance these features and other unscheduled features where possible. This will likely be through the widening and connecting of open space to improve the monument's setting under a cover of broadleaf woodland which incidentally enhances the woodland for ecology.

Analysis: The westward edges of the woodlands are very prominent on the landscape, particularly from Ottery St. Mary. Due to historic planting patterns some areas appear as a 'checkerboard' .

Concept: Proposals will be sympathetic to the high landscape impact of this edge and its role in the wider AONB landscape, through the targeted thinning and felling or crops which define the 'checkerboard'.

Analysis: Corsican pine diseased with Dothistroma Needle Blight is prevalent along the nutrient poor ridge.

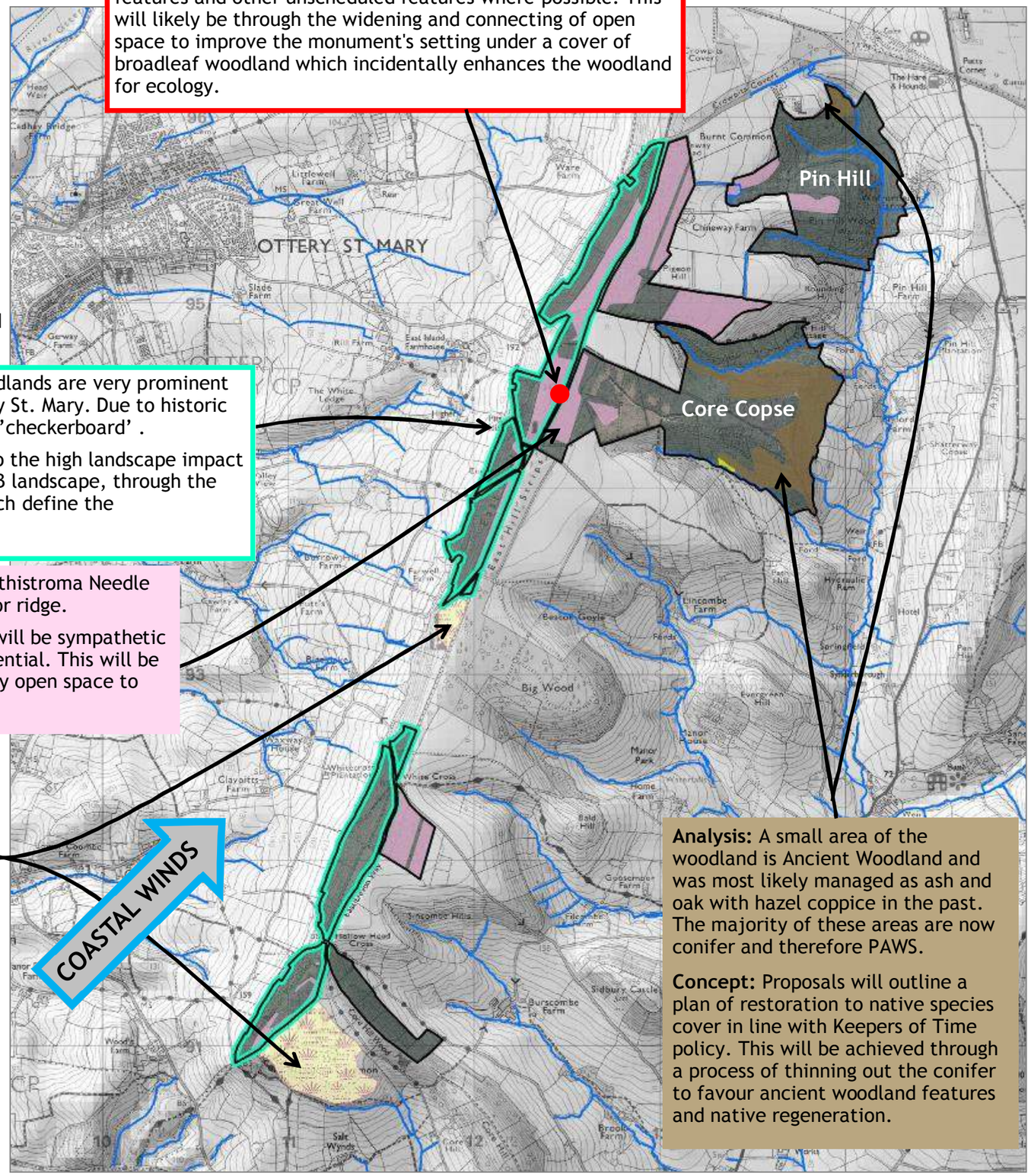
Concept: The management of this area will be sympathetic to ecosystem services and economic potential. This will be through the felling and creation of patchy open space to create space for underplanting.

Analysis: Remnant and restored lowland heathland is found within close proximity to the woodlands

Concept: Proposals will look to complement these valuable habitats at the time of restocking.

Analysis: A number of watercourses source within or close to the forest and feed then into the Rivers Sid and Otter. With the exception of Pin Hill and Core Copse limited riparian woodland exists due to the nature of the landform.

Concept: Prescriptions will be sensitive to the important part the forests play in water storage and management in the local catchments. This will through a mixture of carefully designed and programmed clearfekls, thinning and retention of protective and regulating crops.



Analysis: A small area of the woodland is Ancient Woodland and was most likely managed as ash and oak with hazel coppice in the past. The majority of these areas are now conifer and therefore PAWS.

Concept: Proposals will outline a plan of restoration to native species cover in line with Keepers of Time policy. This will be achieved through a process of thinning out the conifer to favour ancient woodland features and native regeneration.

0 0.075 0.15 0.3 0.45 0.6 Miles

Analysis & Concept

Buckley & Farway

Buckley and Farway are two discrete blocks situated in elevated positions along the catchment edge of the River Sid. The woodlands are prominent and typical of the surrounding landscape and can be viewed from the lower lying agricultural land, coastal areas and settlements, such as Sidmouth. The vast majority of Farway is made of pine along the ridge with larch and beech with Buckley the richer, more sheltered woodland made up of spruce and fir. Within Farway there are a number of features which make up the Farway Castle Scheduled Monument. Both woodlands are held under leases and as such access is only permitted along Public Rights of Way. The main objective will be the continued production and diversification of timber species whilst maintaining a woodland valued for biodiversity, heritage and amenity, ensuring that the natural capital and landscape value are protected.

Legend

- Farway Castle SM
- Pine crops
- Watercourses
- Fast public roads

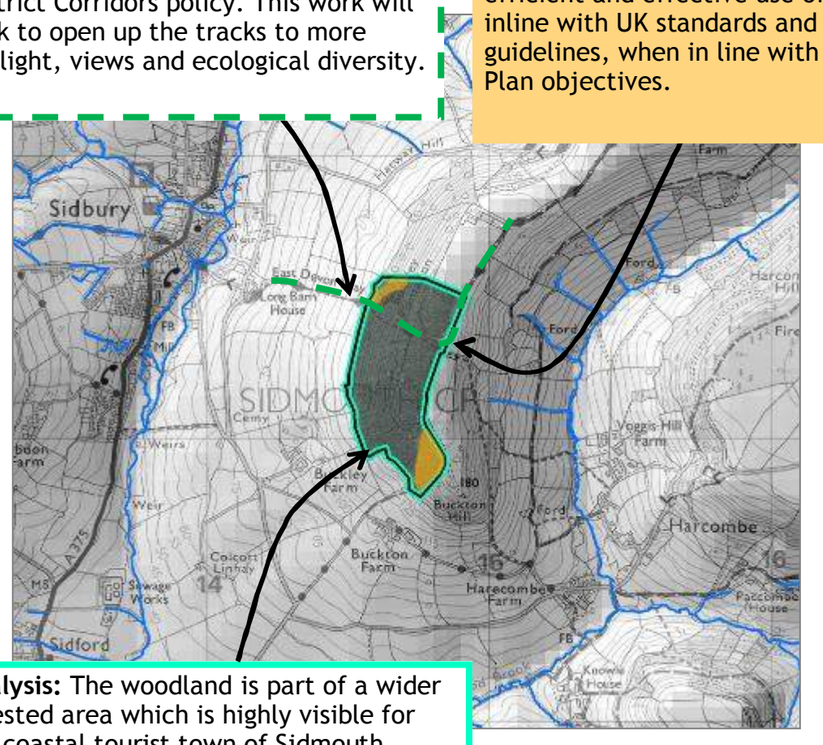
Buckley

Analysis: The East Devon Way is a popular walking route which traverses the eastern edge of the woodland.

Concept: This route as well as many of the other popular access tracks and trails will be managed in line with the District Corridors policy. This work will look to open up the tracks to more sunlight, views and ecological diversity.

Analysis: Recent fellings, within the last ten years are struggling to establish.

Concept: The Plan and future management will ensure that productive forest management is pursued where possible to ensure efficient and effective use of lands inline with UK standards and guidelines, when in line with the Plan objectives.



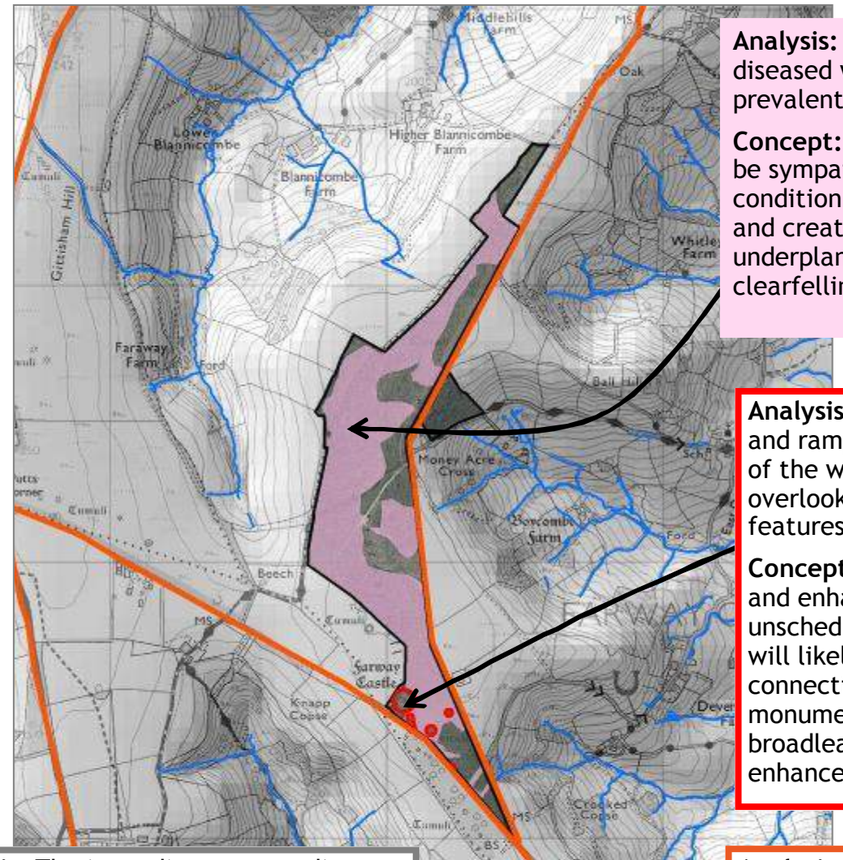
Analysis: The woodland is part of a wider forested area which is highly visible for the coastal tourist town of Sidmouth.

Concept: Proposals will outline a plan which takes in to consideration the landscape impact of any management and its affect on other ecosystem services, such as water management.

Legend

- East Devon Way
- High landscape impact
- Poor establishment
- Watercourse

Farway



Analysis: Mature pine some of which is diseased with Dothistroma Needle Blight is prevalent along the nutrient poor ridge.

Concept: The management of this area will be sympathetic to ecosystem services and soil condition. This will be through heavy thinning and creation of patchy open space to create underplanting positions after which clearfelling of the overstorey will occur.

Analysis: The castle and associated tumuli and ramparts are situated towards the south of the woodland in a commanding location overlooking the ground. Most of these features are free of tree cover.

Concept: Management will be to preserve and enhance these features and other unscheduled features where possible. This will likely be through the widening and connecting of open space to improve the monument's setting under a cover of broadleaf woodland which incidentally enhances the woodland for ecology.

Analysis: The immediate surrounding area is nutrient poor and used for low intensity agricultural purposes. Soils are relatively thin and rooting depth limited.

Concept: The majority of forest management will be delivered through clearfelling and restocking designed in a way to minimise risk to windblow and be in keeping with the surrounding landscape.

Analysis: A number of fast and busy public roads pass close to the woodland. In someways the woodland mirrors their straight and geometric shape.

Concept: Proposals will be live to the visual impact of management to these routes.

0 0.075 0.15 0.3 0.45 0.6 Miles

Analysis & Concept

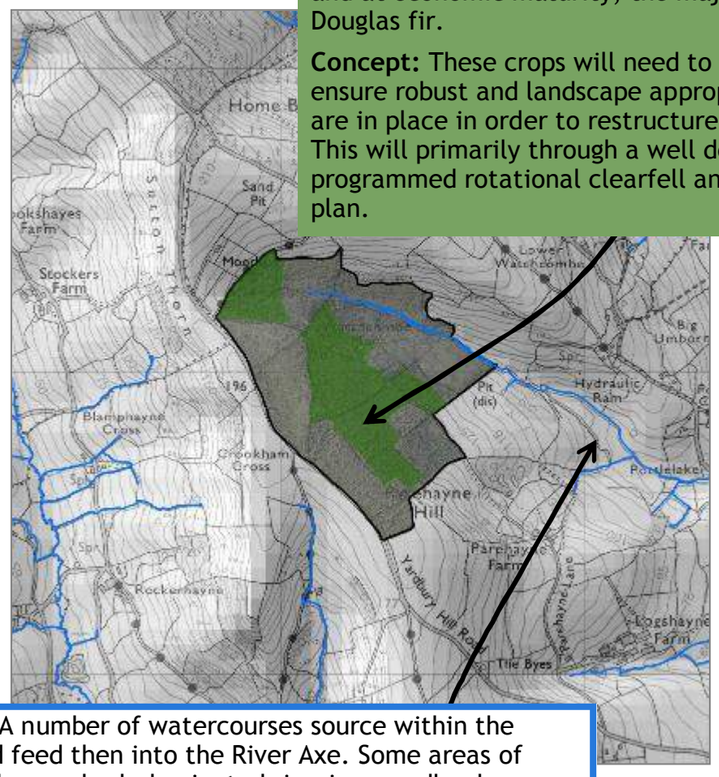
Parehayne & Offwell

Parehayne and Offwell are two more, discrete blocks situated in elevated positions within East Devon. They sit within the higher catchment of the River Axe. The woodlands are prominent and typical of the surrounding landscape and can be viewed from the lower lying settlements and agricultural land. The soils are rich and fertile with good moisture availability and therefore species diversity. Parehayne is a freeheld and open access woodland, quietly enjoyed by local residents. Whilst the majority of the areas of Offwell is leased the area of woodland that backs on to the hamlet of Offwell is permitted access and is widely used by local residents. It is also utilised in partnership with the Offwell Woodland and Wildlife Trust as a Woodland Education Centre. Some small areas of registered ancient woodland are found towards the periphery of Offwell. The main objective within the ancient woodland areas is restoration to native species cover and the associated ecosystem functioning in gradual, efficient and ecologically sensitive way. In other areas the continued production and diversification of timber species will be pursued whilst maintaining a woodland valued for biodiversity, recreation, education and amenity.

Parehayne

Analysis: Missed clearfell coupes mean that a significant proportion of the woodland is mature and at economic maturity, the majority of this is Douglas fir.

Concept: These crops will need to be managed to ensure robust and landscape appropriate measures are in place in order to restructure the woodland. This will primarily through a well designed and programmed rotational clearfell and restocking plan.



Analysis: A number of watercourses source within the forest and feed then into the River Axe. Some areas of alder, willow and ash dominated riparian woodland are situated along the stream sides.

Concept: Prescriptions will be sensitive to the important part the forests play in water management. This will be through targeted removal of some overly shade bearing conifers and management towards 50% open 50% dappled shade, provided by regenerated broadleaves.

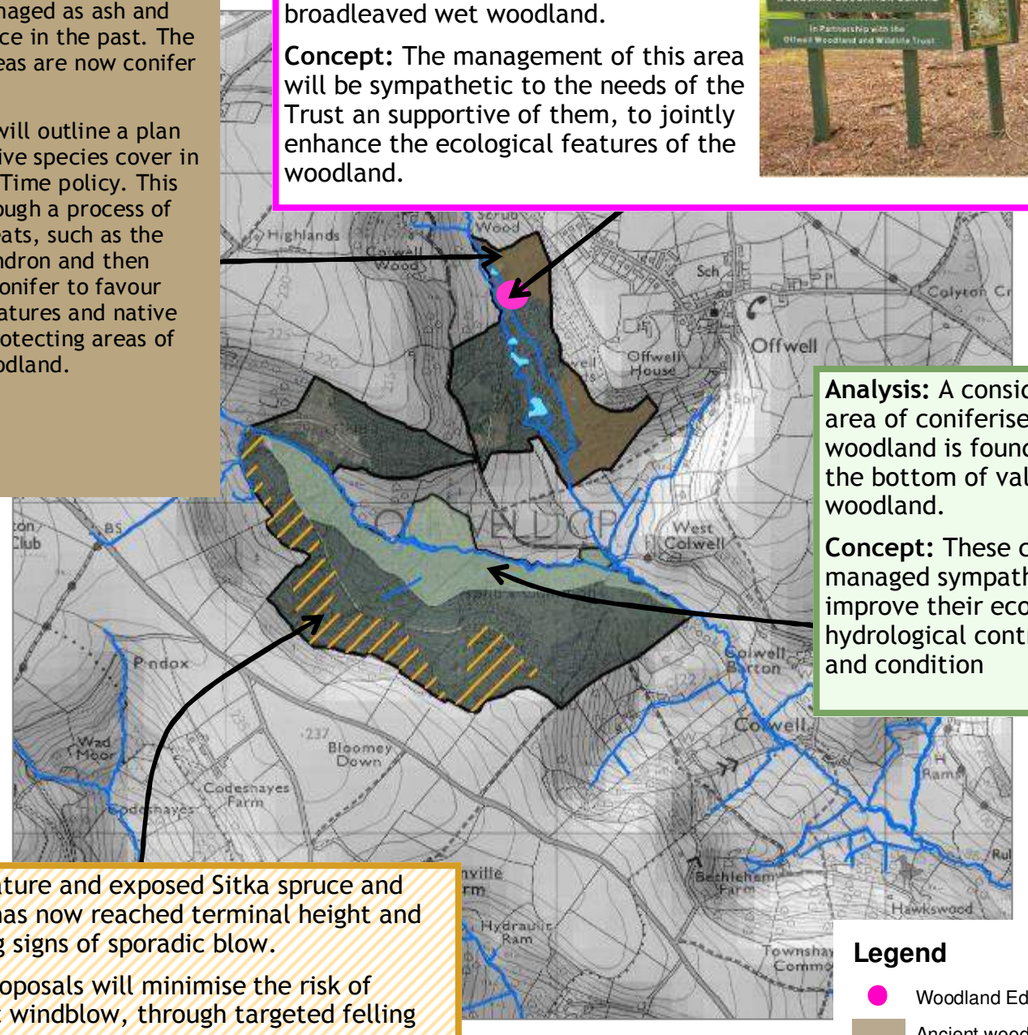
Offwell

Analysis: Two small areas of the woodland are Ancient Woodland and were most likely managed as ash and oak with hazel coppice in the past. The majority of these areas are now conifer and therefore PAWS.

Concept: Proposals will outline a plan of restoration to native species cover in line with Keepers of Time policy. This will be achieved through a process of removing of any threats, such as the hemlock or rhododendron and then thinning out of the conifer to favour ancient woodland features and native regeneration, and protecting areas of remnant ancient woodland.

Analysis: A Woodland Education Centre run by the Offwell Woodland and Wildlife Trust is located to the north of the woodland within a stand of mature Douglas fir and looking out on to broadleaved wet woodland.

Concept: The management of this area will be sympathetic to the needs of the Trust an supportive of them, to jointly enhance the ecological features of the woodland.



Analysis: A considerable area of coniferised riparian woodland is found through the bottom of valley and woodland.

Concept: These crops will be managed sympathetically to improve their ecological and hydrological contribution and condition

Analysis: Mature and exposed Sitka spruce and Douglas fir has now reached terminal height and now showing signs of sporadic blow.

Concept: Proposals will minimise the risk of catastrophic windblow, through targeted felling and restocking.

Legend

- Mature Douglas fir
- Watercourses

Legend

- Woodland Education Centre
- Ancient woodland
- Windblow risk
- Riparian corridor
- Open water
- Watercourses

0 0.075 0.15 0.3 0.45 0.6 Miles

Analysis & Concept

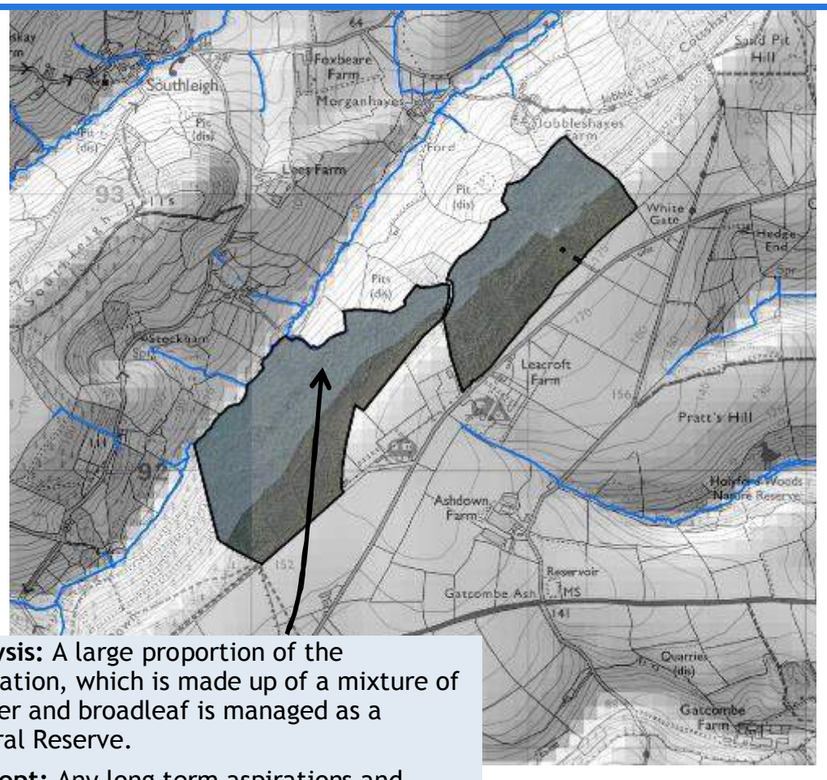
Morganhayes & Trinity Hill

Morganhayes and Trinity Hill are two large secondary woodland plantations situated in elevated positions close to the settlements of Colyton and Uplyme. The majority of the plantations are low fertility, sandy soils with poor moisture regimes. Therefore species diversity and yield is limited along the ridge and made up of pine, larch and beech with some smaller areas of richer, more sheltered woodland made up of spruce and fir. The thin soils and high levels exposure mean that majority of wood is managed under a clearfell and restock regime but development of low-impact silvicultural systems are feasible in some discrete areas. The woodland is a mixture of lease and freehold and close to popular coastal towns are a popular place to visit for locals and visitors alike. The plantation at Trinity Hill lies adjacent to a small but intensively managed heathland on the high ridges where soils are thin and nutrient availability low. The main objective will be the continued production and diversification of timber species whilst maintaining a woodland valued for biodiversity, heritage and amenity, complementing the surrounding ecosystem and landscape value.

Morganhayes

Analysis: The plantation is part of a wider woodland escarpment which is secluded but significant in the local water catchment which feeds into the River Coly and then Axe.

Concept: Prescriptions will be sensitive to the important part the forests play in water management. This will be through targeted removal of some overly shade bearing conifers and management towards 50% open 50% dappled shade, provided by regenerated broadleaves. This may in places be achieved through the clearfelling of mature conifer crops on stream sides.



Analysis: A large proportion of the plantation, which is made up of a mixture of conifer and broadleaf is managed as a Natural Reserve.

Concept: Any long term aspirations and management of this area will be for the benefit of the ecological significance of this site.

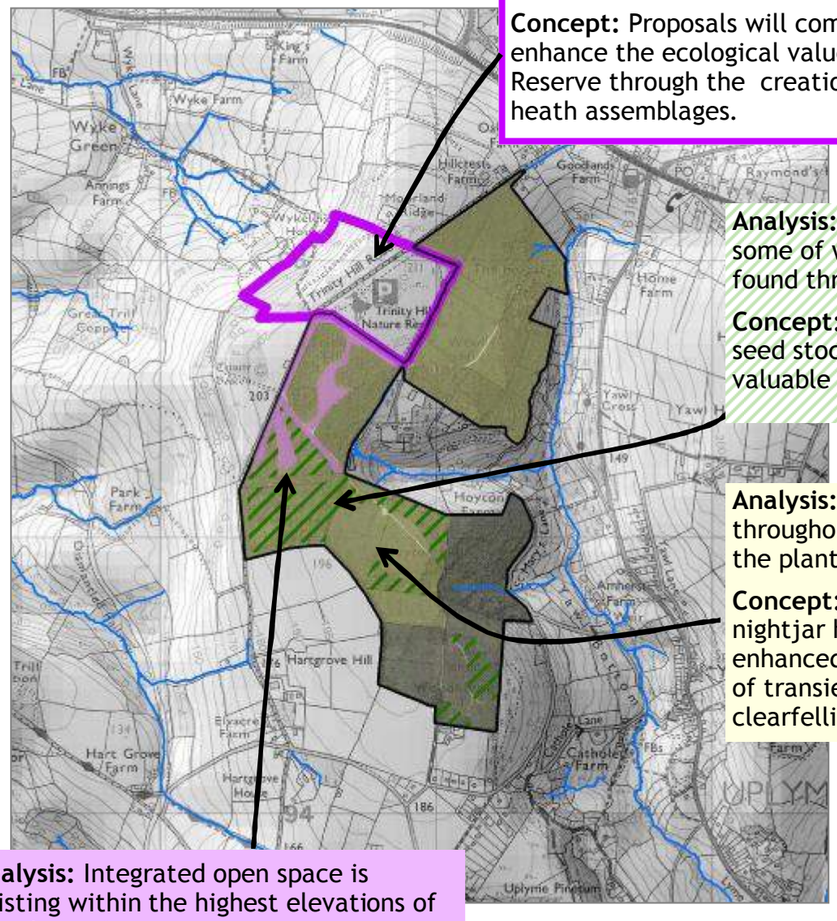
Legend

- Natural Reserve
- Watercourses

Trinity Hill

Analysis: The Trinity Hill Nature Reserve managed by East Devon District Council is surrounded on three sides by the pine plantation. This Nature Reserve is particularly valued for its heathland assemblage and associated fauna.

Concept: Proposals will complement and where possible enhance the ecological value of the neighbouring Nature Reserve through the creation of patchy open space and healthy heath assemblages.



Analysis: Western hemlock of poor form, some of which is seeding profusely is found throughout the woodland.

Concept: Proposals will look to improve seed stock and minimise seeding threat to valuable features.

Analysis: Nightjar are known to nest throughout the higher, heathier areas of the plantation.

Concept: Proposals will ensure that the nightjar habitat is maintained and enhanced, through a continued delivery of transient open space as a result clearfelling

Analysis: Integrated open space is existing within the highest elevations of the plantation.

Concept: Proposals will ensure that this habitat is maintained and enhanced.

Legend

- Trinity Nature Reserve
- Integrated open space
- Western hemlock
- Nightjar habitat
- Watercourses

Miles
0 0.075 0.15 0.3 0.45 0.6

Analysis & Concept

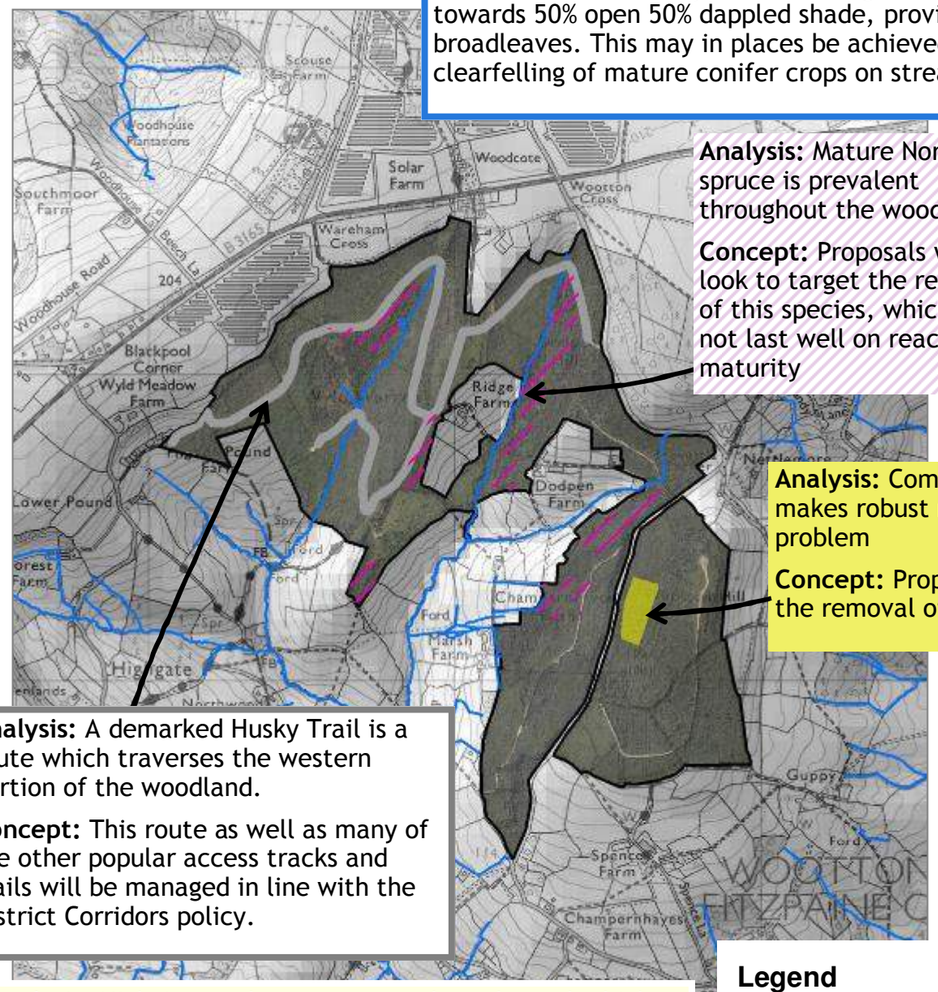
Wyld Warren, Monkton Wyld & Hole Common

The cluster woodlands which sit between the towns of Lyme Regis and Axminster lie in the upper catchments of the Rivers Axe and Char. The woodlands, as are the catchments, are dissected by the main Dorchester to Honiton road, the A35. Despite this the woodlands are relatively inaccessible and therefore experiences little public access. The exception to this is Wyld Warren which experiences quiet and informal but regular public usage. The majority of soils are rich and fertile with good moisture availability and therefore species diversity. Some small areas of registered ancient woodland are found within Monkton Wyld and Hole Common. The main objective within the ancient woodland areas is restoration to native species cover and the associated ecosystems. In other areas the continued production and diversification of timber species will be pursued whilst maintaining a woodland which delivers and is valued for biodiversity, recreation and amenity.

Wyld Warren

Analysis: A number of watercourses source within the forest and feed into the River Char. Some areas of alder, willow and ash dominated riparian woodland are situated along the stream sides.

Concept: Prescriptions will be sensitive to the important part the forests play in water management. This will be through targeted removal of some overly shade bearing conifers and management towards 50% open 50% dappled shade, provided by regenerated broadleaves. This may in places be achieved through the clearfelling of mature conifer crops on stream sides.



Analysis: Mature Norway spruce is prevalent throughout the woodland.

Concept: Proposals will look to target the removal of this species, which does not last well on reaching maturity

Analysis: Steep gradients and loose geological conditions make this area liable to landslip.

Concept: The management of this area will be sensitive to the ground instability and make provision to re-stabilise ground conditions where possible.

Analysis: Complex historical planting makes robust management and yield a problem

Concept: Proposals will look to target the removal of these crops.

Analysis: A demarked Husky Trail is a route which traverses the western portion of the woodland.

Concept: This route as well as many of the other popular access tracks and trails will be managed in line with the District Corridors policy.

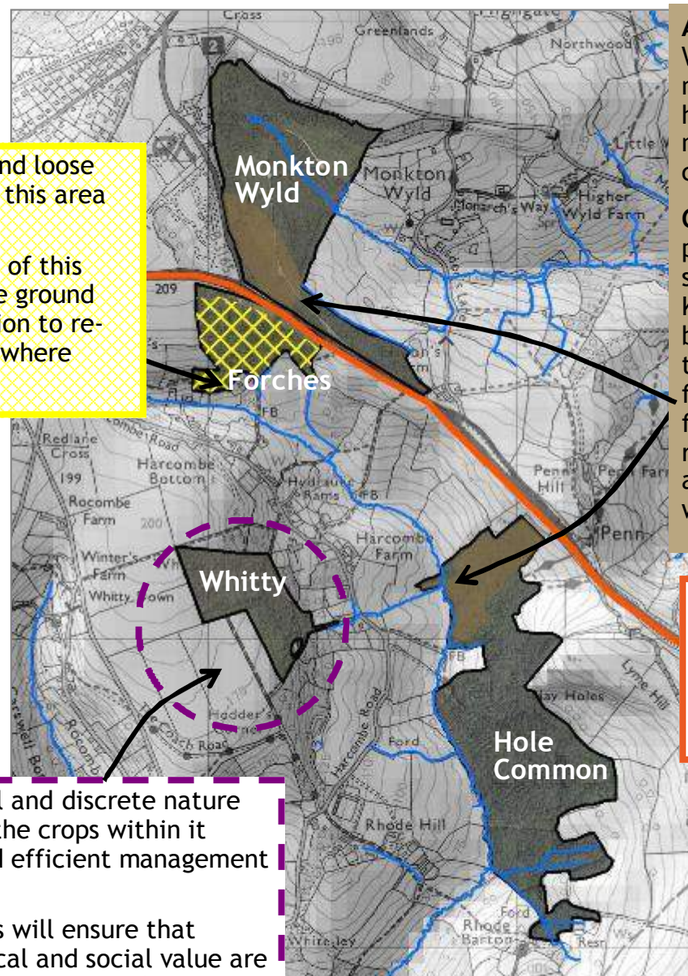
Analysis: Nightjar are known to nest throughout the higher areas of the woodland in areas recently felled.

Concept: Proposals will ensure that the nightjar habitat is maintained and enhanced, through a continued delivery of transient open space as a result clearfelling

Legend

- Mature Norway spruce
- Complex crop structure
- Husky trail
- Watercourses

Monkton Wyld & Hole Common



Analysis: Two areas are Ancient Woodland and were most likely managed as ash and oak with hazel coppice in the past. The majority of these areas are now conifer and therefore PAWS.

Concept: Proposals will outline a plan of restoration to native species cover in line with Keepers of Time policy. This will be achieved through a process of thinning out the conifer to favour ancient woodland features and native regeneration, and protecting areas of remnant ancient woodland.

Analysis: The busy A35 passes close to the woodlands.
Concept: Proposals will be live to the visual impact of management to these routes.

Analysis: The small and discrete nature of Whitty Hill and the crops within it make effective and efficient management complex.

Concept: Proposals will ensure that landscape, ecological and social value are not compromised despite complexities.

Legend

- Ancient Woodland
- Landslip risk
- Watercourses
- A35

0 0.075 0.15 0.3 0.45 0.6 Miles

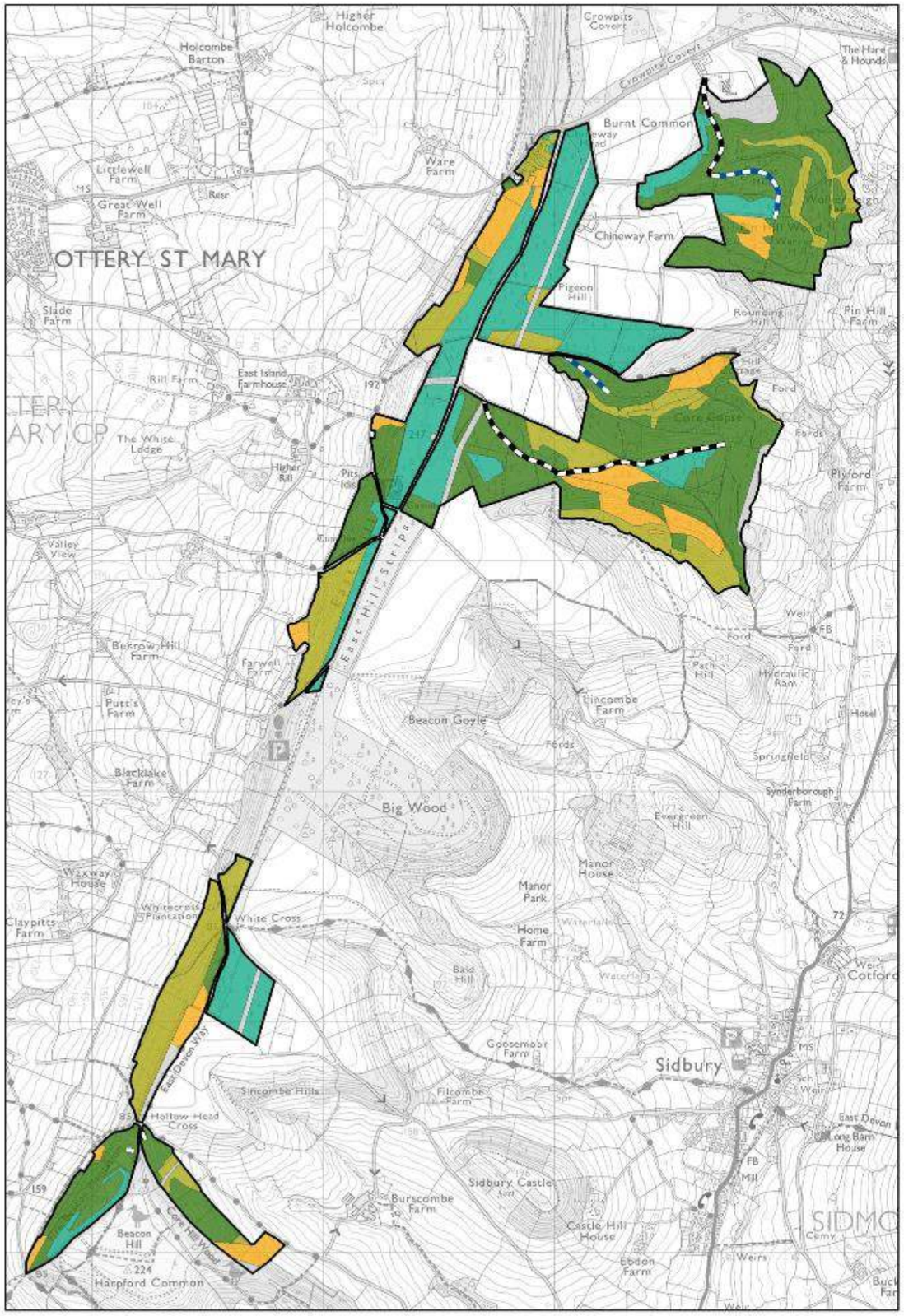
Woodland Composition

0 0.125 0.25 0.5 0.75 1 Miles

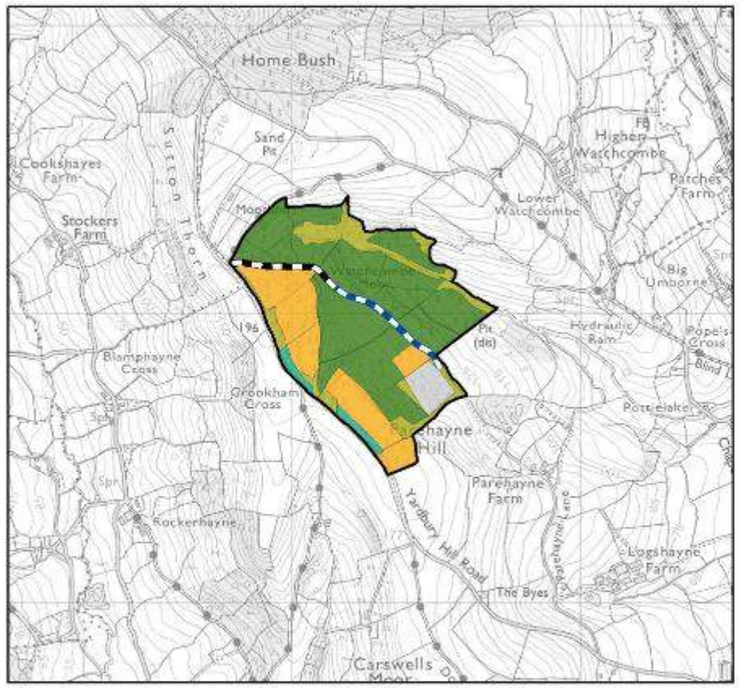
Legend

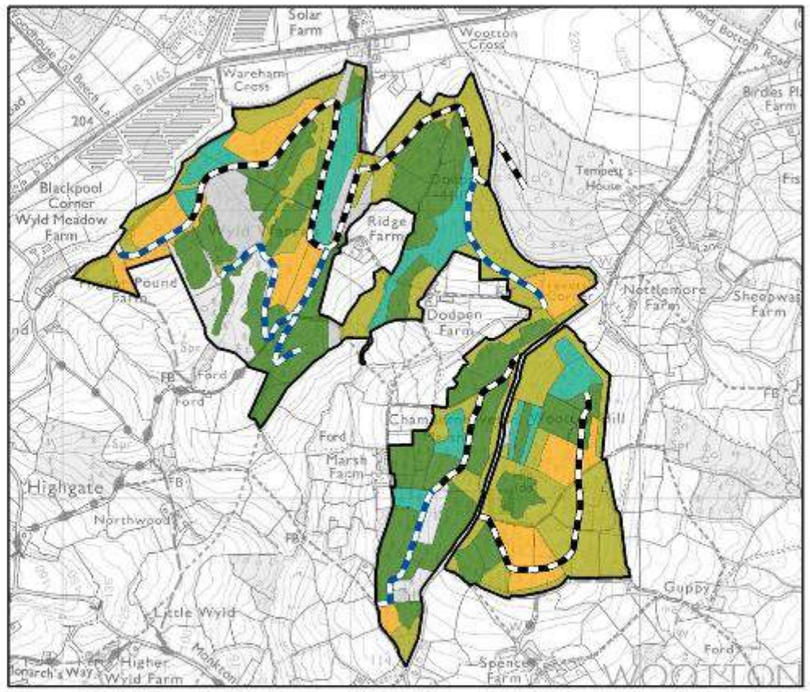
- Evergreen Conifer
- Pines
- Larches
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other

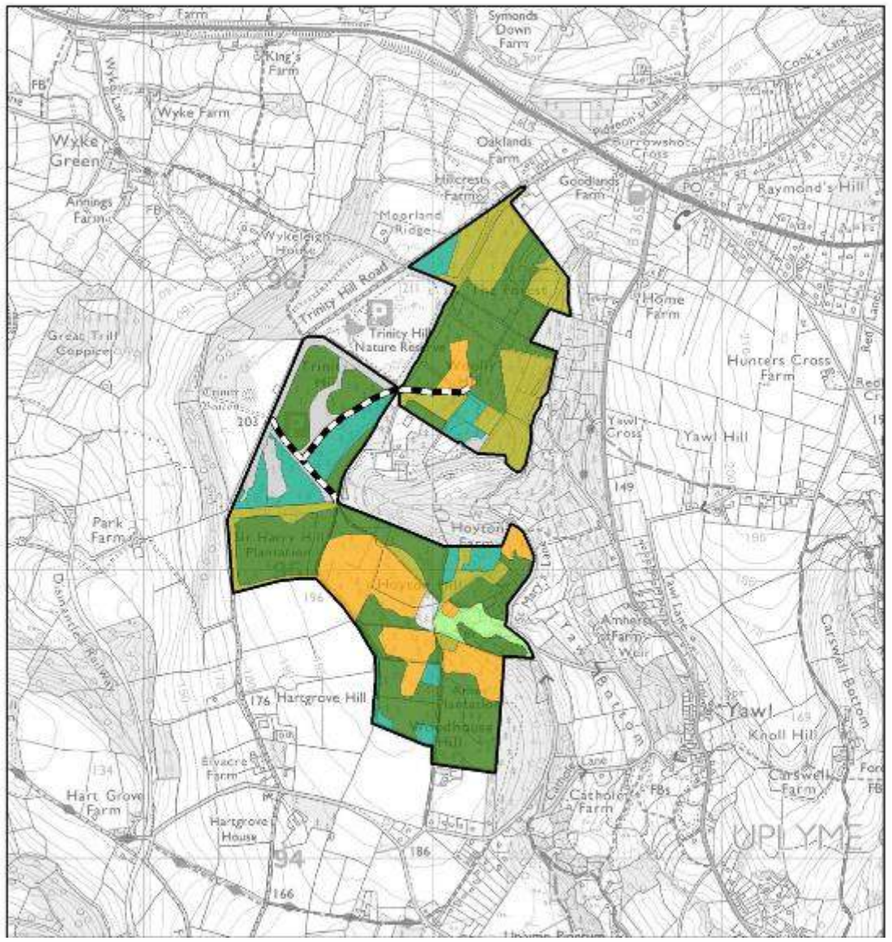
Note: Beech, sycamore and sweet chestnut are considered to be not within their native range but are considered to be 'naturalised'

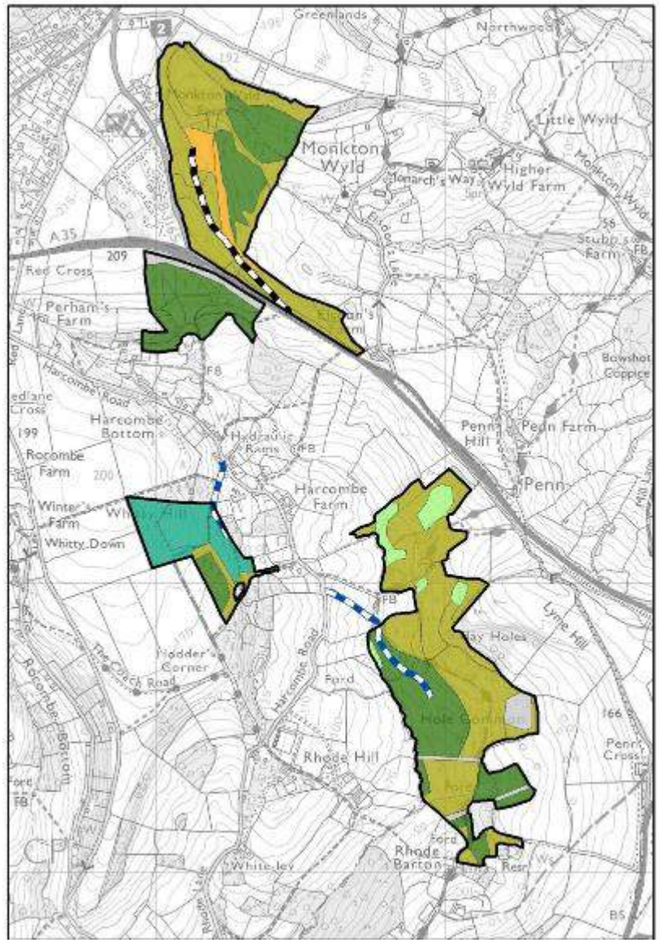


Woodland Composition





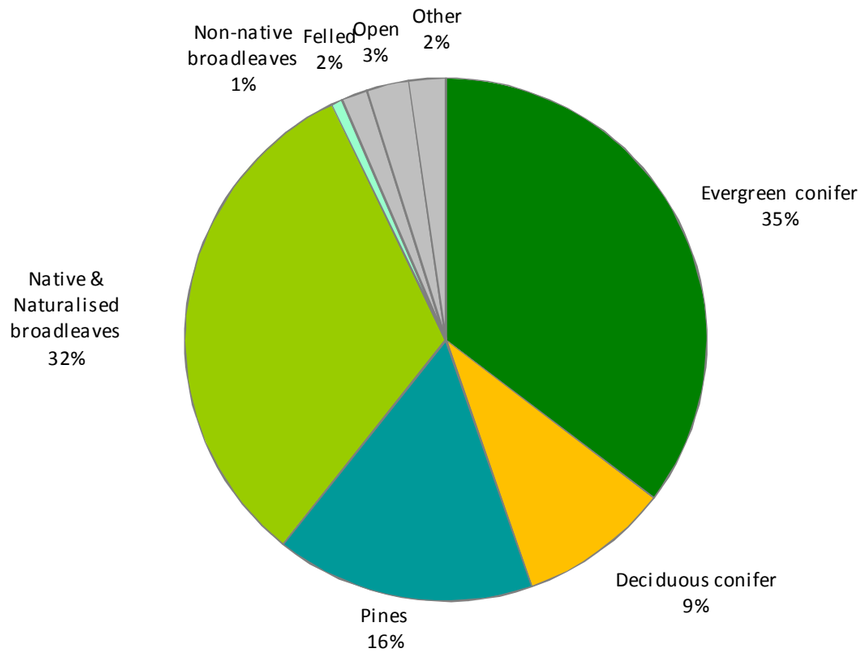




The Plan area is dominated by conifer, the majority of which is made up of quality of Douglas fir (152ha), Corsican pine (83ha) and Sitka spruce (80ha). After Douglas fir, beech is the second largest component (93ha) and is often in mixture with Scots pine.

The age of crops is spread between peaks of considerable planting having occurred in the 1960s and 70s and then in the early 2000s. The thinning of conifer crops has ensured that understorey development is beginning to establish, which in time will deliver a more structurally diverse woodland composition.

The broadleaf components of the Plan area comprise a mixture of beech, oak, ash and birch. Ash, birch, alder and willow are evident as pioneer species within discrete areas of the Plan area. The majority of stands are simple structured with understory development evident but not always establishing as a secondary crop. Where broadleaf features within conifer crops, these have been favoured and halo thinned where appropriate to assist crown development.



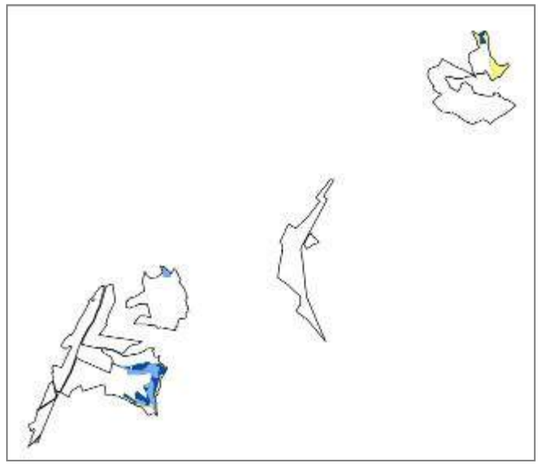
Naturalness on Ancient Woodland

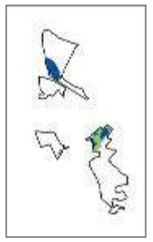
Class 1 – Semi-Natural Woodland
(> 80% site native species)

Class 2 – Plantation Woodland
(50 - 80% site native species)

Class 3 – Plantation Woodland
(20 - 50% site native species)

Class 4 – Plantation Woodland
(< 20% site native species)



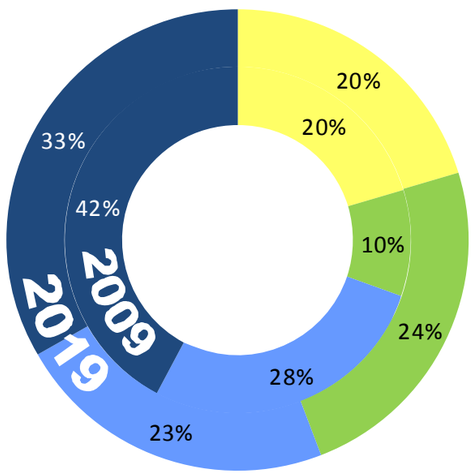


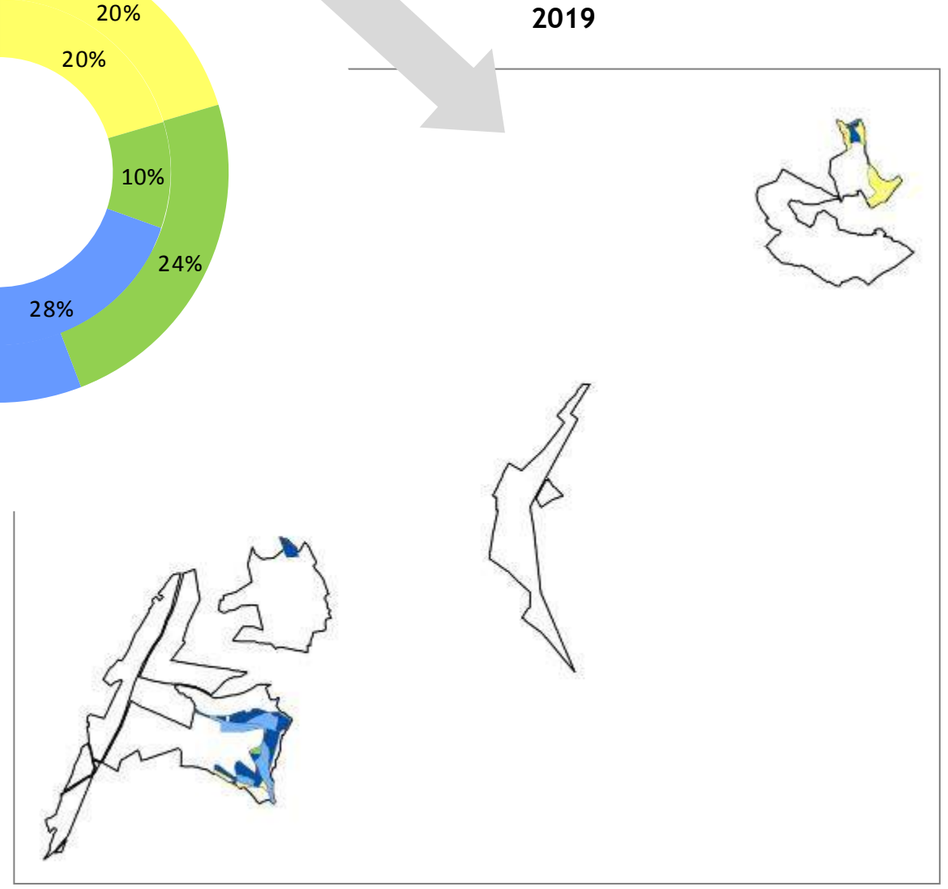
Naturalness is the measure to show the percentage of site native tree species in a given area. This measure is used to record and monitor the naturalness and restoration of Ancient Woodland Sites previously planted with non-native species. For this reason secondary woodland sites (i.e. Trinity Hill, Morganhayes, Parehayne and Wyld Warren) have been omitted from this chapter.

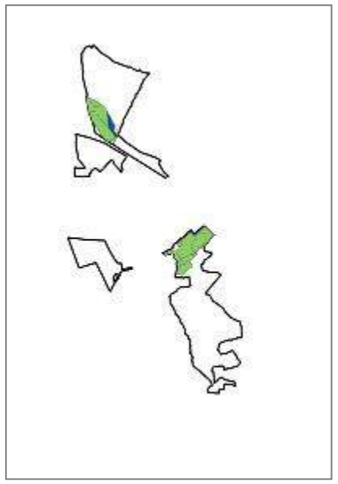
Classes 2, 3 and 4 are classified as Plantations on Ancient Woodland Sites (PAWS). Areas of Semi-Natural Woodland (Class 1 - > 80% site native species) are mostly found towards the bottom of valleys, in wetter riparian areas where the soils are richer.

The transformation of Classes 2, 3 and 4 AWS towards Class 1 is a key objective of this Plan and is in line with Forestry England, *Keepers of Time* Policy (Forestry Commission, 2005).

These maps and chart show the transition in naturalness across the ancient woodland in the Plan Area between 2009 and 2019.







0 0.125 0.25 0.5 0.75 1 Miles

Legend

- Class 1 - > 80% Site Native Species
- Class 2 - 50-80% Site Native Species
- Class 3 - 20-50% Site Native Species
- Class 4 - <20% Site Native Species

Transition Zone

The indicative proportion of native tree species is 50% or more of the crop. Removal of remaining conifer will be achieved through repeated thinning operations.

The establishment period to predominantly native woodland within this category is anticipated to be 20 – 30 years but is dependant on successful regeneration and establishment although maybe sooner depending on the level of conifer needing to be removed. Scattered individual conifers or small groups may remain.

Preparation Zone

Areas within this category contain less than 50% of native tree species but have a proportion greater than 20% of the crop and the area neighbours an area of significant native species cover which can be utilised as a seed source. Enhancement of native content will continue through thinning of the conifer content.

These areas will be thinned heavily to release ancient woodland remnants and features and to encourage natural regeneration and intrusion in to the non-native crop.

The anticipated time scale for establishment of predominantly native species is expected be around 50 – 60 years or so, but could be as long as 70 - 80 depending on success of establishing the future crop.

Non-native Zone

The proportion of native tree species within a management area is less than 20% of the crop.
Thinning in both these sub-categories should encourage crown development of broadleaf components. Progress will be monitored and crops moved into the Preparation zone depending on development of stand structure and the response of natural regeneration.

Clearfell Zone

A number of clearfells will be used to convert PAWS in the coming years. This is felling of Western hemlock or is required to ensure the integrity of the coupe which is predominantly secondary woodland. This will be restocked with site suitable native species.

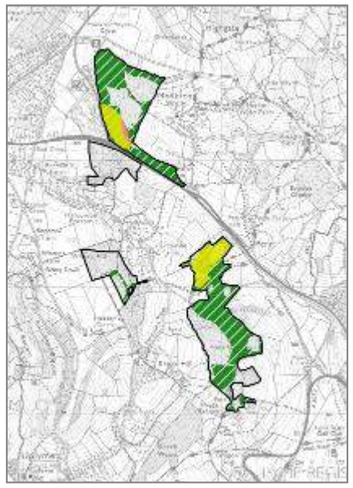
PAWS Management

Restoration of Plantations on Ancient Woodland Sites (PAWS) has already begun and this continued restoration is going to take a considerable amount of time and resource because of the limited native remnants from which sites can regenerate.

Therefore a proactive yet realistic approach will be used to transform these sites over a period of time.

The aim of the transitional period to woodland containing 80% or more of native species should be to achieve:

- a varied age structure with varying ratios of high canopy, secondary canopy and understory throughout.
- transition that ensures a minimum future content of 3 native species, with 4 to 5 species being the preferable target.
- a minimal reliance on monocultures especially of birch, ash, hazel or oak. In practice this may involve either underplanting or group felling and planting within existing mid rotation broadleaf crops.
- restoration of beech and sweet chestnut stands will not be prioritised as these species are to be naturalised and offer greater broadleaf diversity and therefore resilience.
- If adequate regeneration is not evident in the 'Transition' and 'Preparation' zones after 10 years a reappraisal of the prescription will be needed.



Legend

- Building Block (native seed source)
- Transition Zone
- Prepartion Zone
- Non-native Zone
- Clearfell

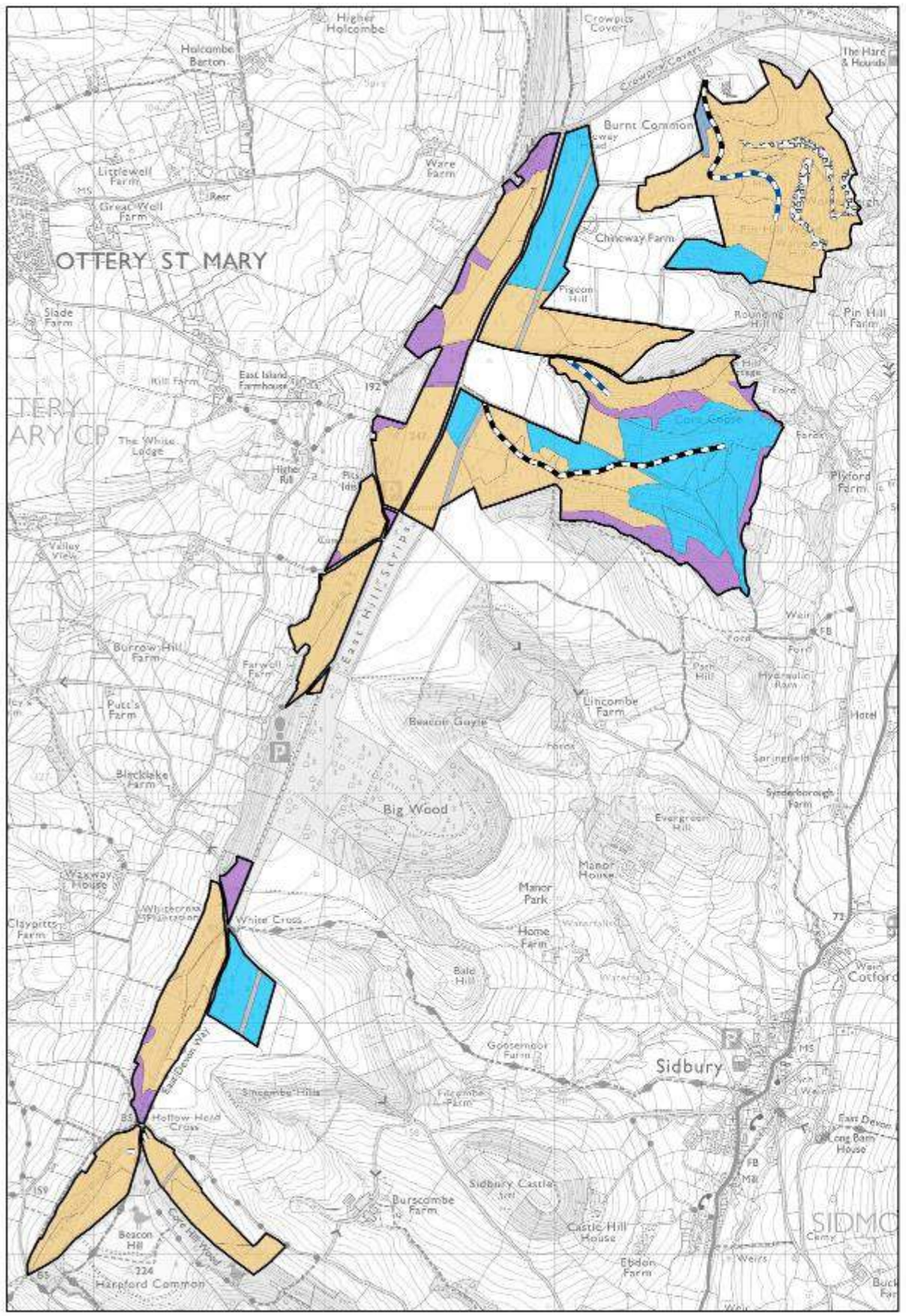
0 0.125 0.25 0.5 0.75 1 Miles

Silviculture

Clearfell coupes will simply be managed through clearcutting (of over 0.25ha) and restocked either through natural regeneration, replanting or a combination.

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

Minimum Interventions are predominantly inaccessible or ecologically valuable areas where intervention will only occur to protect and ensure the future succession of key habitats and species.



Legend

- Clearfell
- Long Term Retention
- Shelterwoods
- Selections
- Open
- Minimum Intervention
- Natural Reserve

0 0.125 0.25 0.5 0.75 1 Miles

Open space is managed to ensure forest cover does not exceed 2m in height, a tolerance of 20% forest cover will be accepted on some lower priority sites.

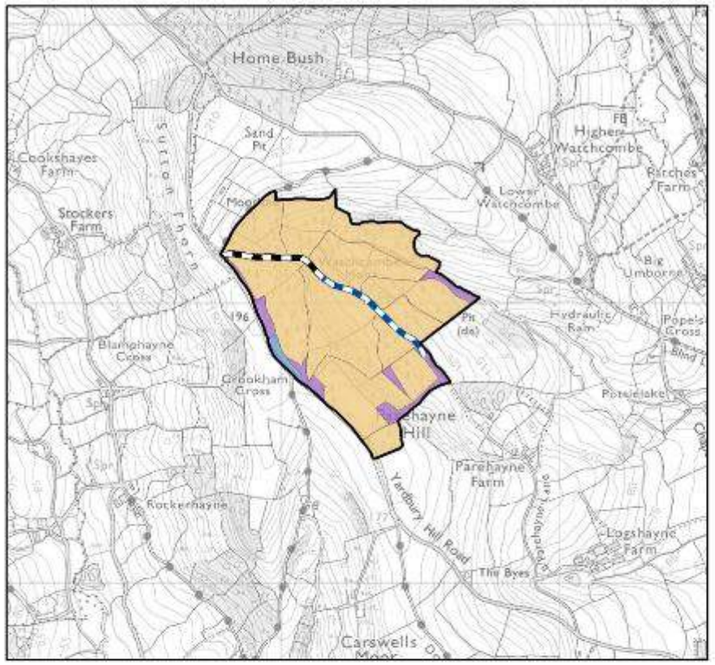
Uniform shelterwoods are predominately broadleaved dominated and ASNW sites which will be managed using seeding fellings with possible under planting of site suitable species to control light levels and develop good timber quality. Small coppice coupes of less that 0.25ha may be used to inject diversity into the broadleaf woodland

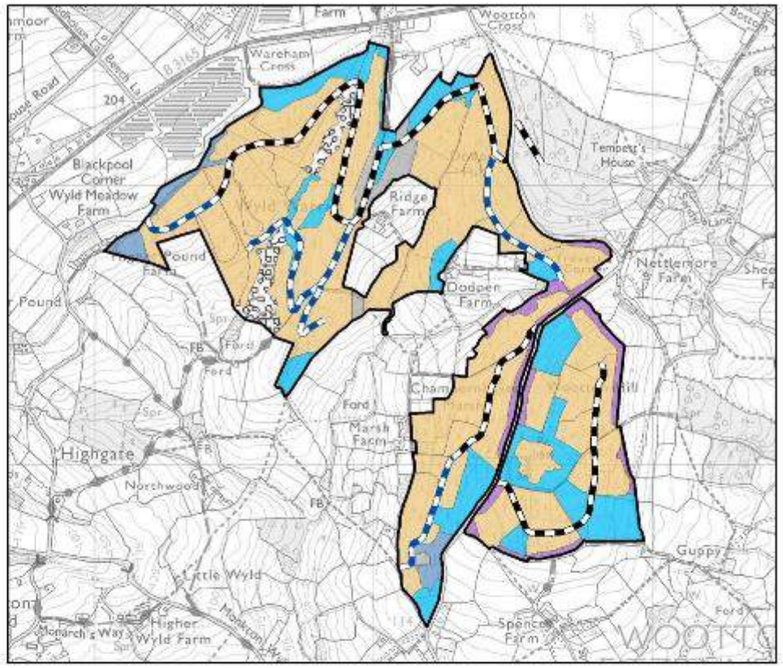
Irregular shelterwoods will look to develop a complex structure through the identification and thinning towards quality final crop trees for the future.

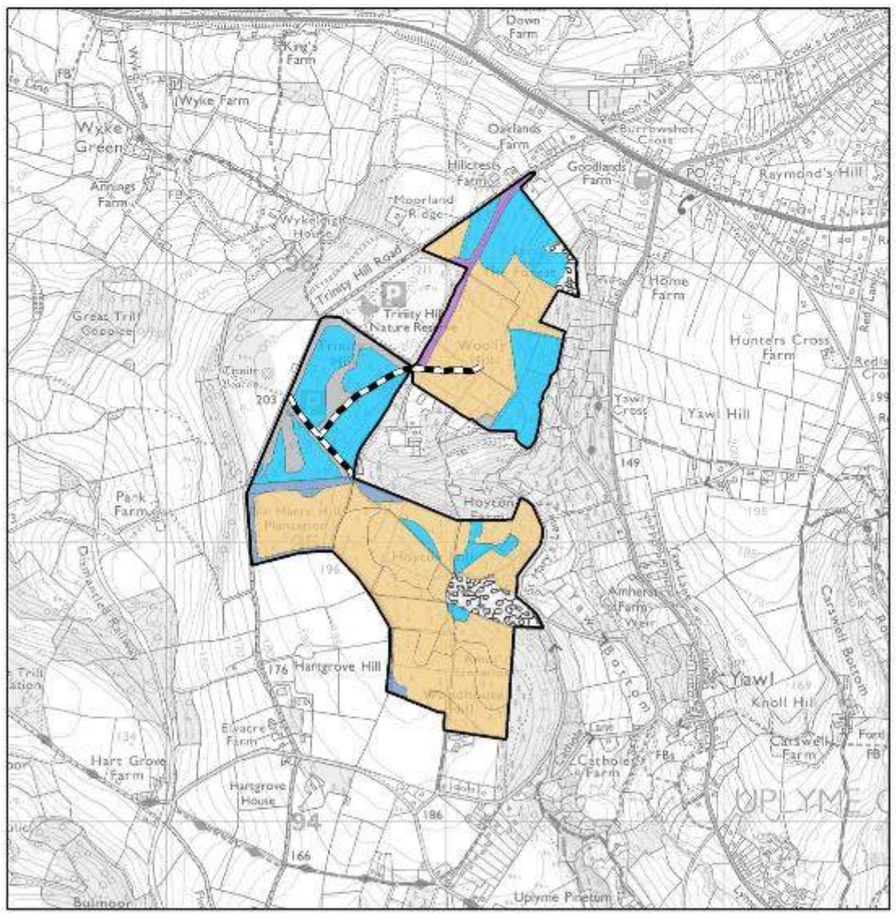
Group shelterwoods are used on windfirm, accessible crops to proactively diversify the woodland structure and composition, possibly through the use of enrichment replanting.

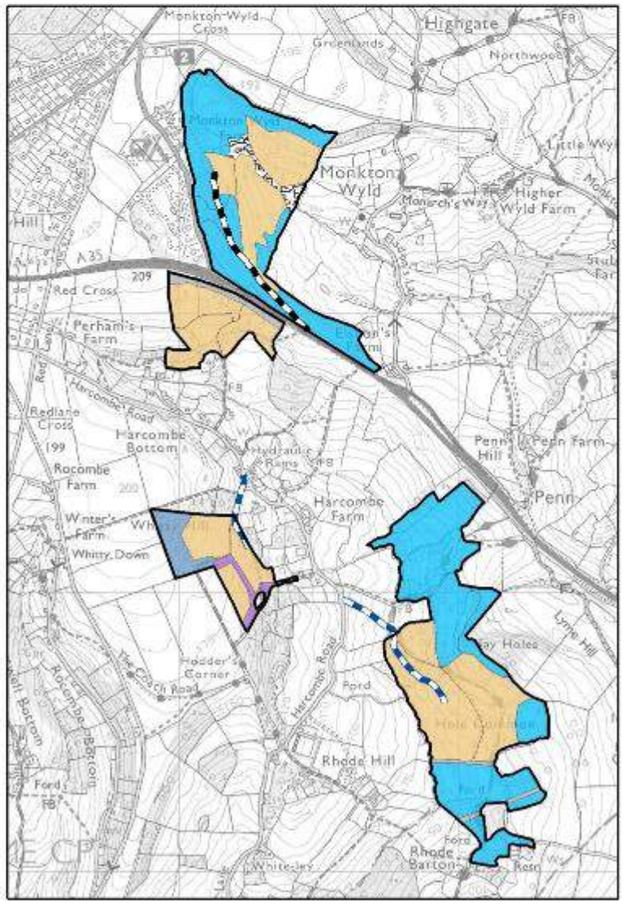
Selections are used on windfirm, accessible crops to proactively diversify the woodland structure and composition through group fellings or in established complex systems where single-tree selection will achieve management objectives whilst maintaining production. Group selections are mainly used for landscape purposes to create a complex matrix of transient open space and high forest. Single tree selections are used on established complex old age crops with an established understorey where the overstorey is intended to be retained.

Silviculture









Thinning

Areas will be assessed and approved for thinning on a site-by-site basis by the local Beat Team. As attempts to improve the structural diversity of the crops are made, initiation of thinning may be made early (uneconomic) or later to address windfirm concerns. The intention to intervene every 5 years as well as on multiple occasions may not be appropriate and therefore will be administered in an adaptive approach by the Beat team.

Conifer Thinning

Areas of conifer are assessed for thinning every 5 years with the targeted removal of larch species a key objective. 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 regeneration also impacting on how many trees are marked for removal.

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.

0 0.125 0.25 0.5 0.75 1 Miles

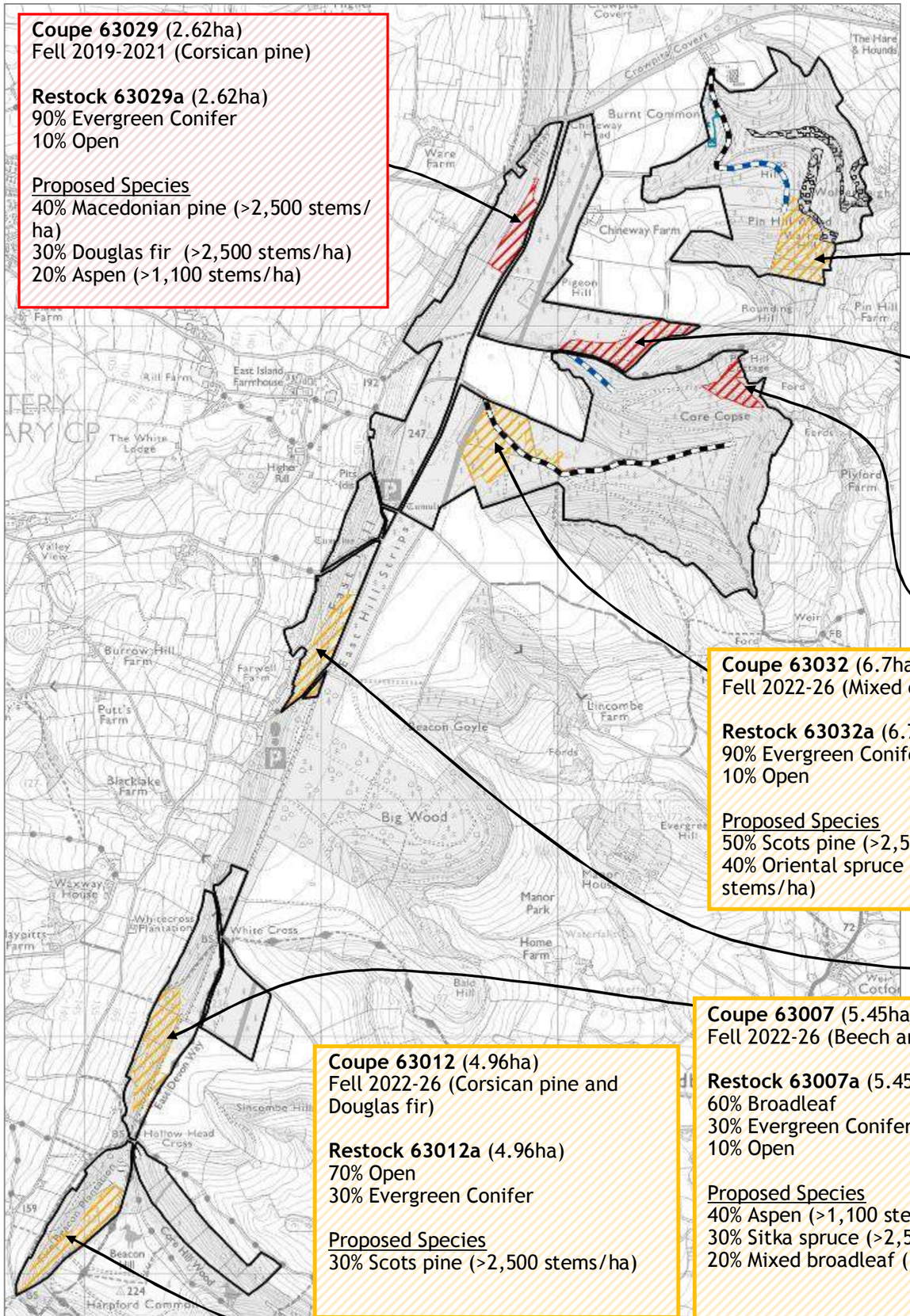
Legend

- Clearfell
- Long Term Retention
- Shelterwoods
- Selections
- Open
- Minimum Intervention
- Natural Reserve

Felling and Restocking

East Hill

2019 - 2029



Coupe 63029 (2.62ha)
Fell 2019-2021 (Corsican pine)

Restock 63029a (2.62ha)
90% Evergreen Conifer
10% Open

Proposed Species
40% Macedonian pine (>2,500 stems/ha)
30% Douglas fir (>2,500 stems/ha)
20% Aspen (>1,100 stems/ha)

Coupe 63015 (6.05ha)
Fell 2022-26 (Douglas fir & Sitka spruce)

Restock 63015a (6.05ha)
90% Evergreen Conifer
10% Open

Proposed Species
60% Oriental spruce (>2,500 stems/ha)
20% Noble fir (>2,500 stems/ha)
10% Mixed broadleaf (regeneration)

Coupe 63051 (4.43ha)
Fell 2019-2021 (Corsican pine)

Restock 63051a (4.43ha)
90% Evergreen Conifer
10% Open

Proposed Species
50% Sitka spruce (>2,500 stems/ha)
40% Western hemlock (>2,500 stems/ha)

Coupe 63054 (2.03ha)
Fell 2019-2021 (Douglas fir & Sitka spruce)

Restock 63054a (2.03ha)
90% Evergreen Conifer
10% Open

Proposed Species
50% Sitka spruce (>2,500 stems/ha)
40% Western hemlock (>2,500 stems/ha)

Coupe 63032 (6.7ha)
Fell 2022-26 (Mixed conifer)

Restock 63032a (6.7ha)
90% Evergreen Conifer
10% Open

Proposed Species
50% Scots pine (>2,500 stems/ha)
40% Oriental spruce (>2,500 stems/ha)

Coupe 63037 (4.46ha)
Fell 2022-26 (Beech & Scots pine)
Birch and oak to be retained

Restock 63037a (4.46ha)
45% Broadleaf
25% Evergreen Conifer
30% Open

Proposed Species
25% Maritime pine (>2,500 stems/ha)
25% Beech (>1,100 stems/ha)
20% Aspen (>1,100 stems/ha)

Coupe 63007 (5.45ha)
Fell 2022-26 (Beech and Scots pine)

Restock 63007a (5.45ha)
60% Broadleaf
30% Evergreen Conifer
10% Open

Proposed Species
40% Aspen (>1,100 stems/ha)
30% Sitka spruce (>2,500 stems/ha)
20% Mixed broadleaf (regeneration)

Coupe 63012 (4.96ha)
Fell 2022-26 (Corsican pine and Douglas fir)

Restock 63012a (4.96ha)
70% Open
30% Evergreen Conifer

Proposed Species
30% Scots pine (>2,500 stems/ha)

Legend

- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2029
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Other/Open land
- Class A/B Roads
- Class C Roads

Detailed coupe prescriptions as a result of felling and restocking 2019-29 are outlined on page 36.

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

Declaration by FE as an Operator.

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

0 0.075 0.15 0.3 0.45 0.6 Miles

Felling and Restocking

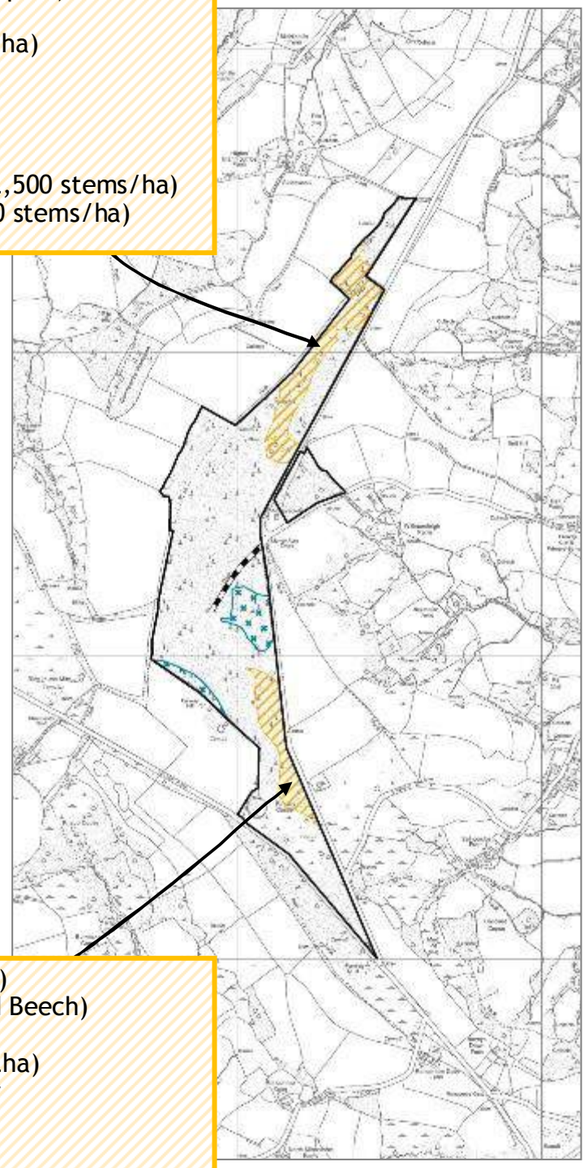
Farway and Buckley

2019 - 2029

Coupe 63096 (5.83ha)
Fell 2022-26 (Corsican pine)

Restock 63096a (5.83ha)
90% Evergreen Conifer
10% Open

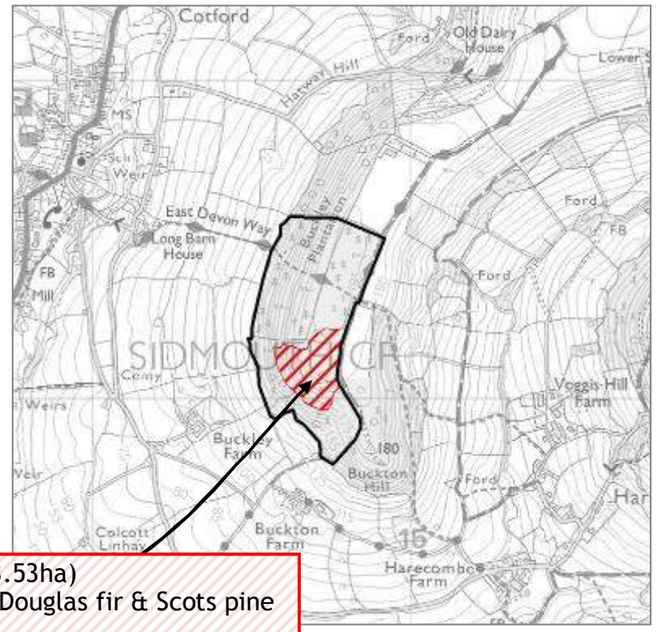
Proposed Species
50% Monterey pine (>2,500 stems/ha)
40% Scots Pine (>2,500 stems/ha)



Coupe 63087 (3.22ha)
Fell 2022-26 (Pine and Beech)

Restock 63087a (3.22ha)
70% Evergreen Conifer
20% Broadleaf
10% Open

Proposed Species
35% Scots Pine (>2,500 stems/ha)
35% Oriental spruce (>2,500 stems/ha)
20% Aspen (>1,100 stems/ha)



Coupe 63024 (3.53ha)
Fell 2019-2021 (Douglas fir & Scots pine

Restock 63024a (3.53ha)
90% Evergreen Conifer
10% Open

Proposed Species
50% Douglas fir (>2,500 stems/ha)
40% Coast redwood (>2,500 stems/ha)

Legend

- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2029
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Other/Open land
- Class A/B Roads
- Class C Roads

Detailed coupe prescriptions as a result of felling and restocking 2019-29 are outlined on page 36.

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

Declaration by FE as an Operator.

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

0 0.075 0.15 0.3 0.45 0.6 Miles

Felling and Restocking

Offwell and Parehayne

2019 - 2029

Coupe 63088 (0.52ha)
Fell 2019-21 (Western hemlock)

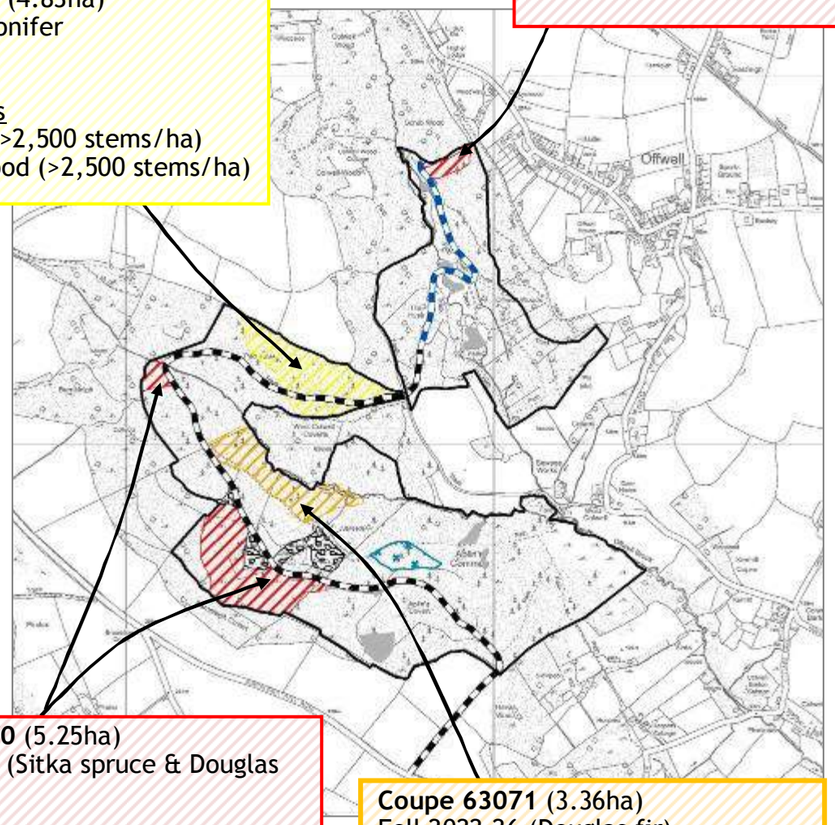
Restock 63088a (0.52ha)
90% Native broadleaf
10% Open

Proposed Species
50% Oak (>1,100 stems/ha)
20% Hornbeam (>1,100 stems/ha)
20% Wild service (>1,100 stems/ha)

Coupe 63094 (4.83ha)
Fell 2027-2029 (Douglas fir)

Restock 63094a (4.83ha)
90% Evergreen conifer
10% Open

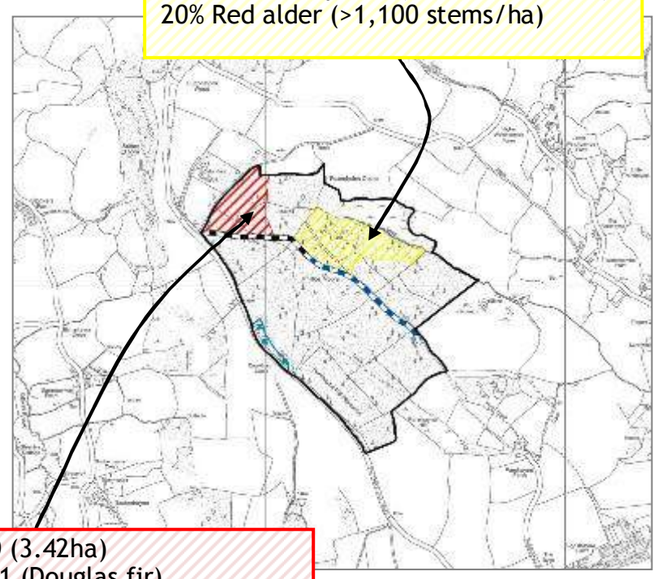
Proposed Species
50% Douglas fir (>2,500 stems/ha)
40% Coast redwood (>2,500 stems/ha)



Coupe 63044 (4.71ha)
Fell 2027-2029 (Douglas fir & Sitka spruce)

Restock 63044a (4.71ha)
90% Evergreen conifer
10% Open

Proposed species
70% Oriental spruce (>2,500 stems/ha)
20% Red alder (>1,100 stems/ha)



Coupe 63090 (3.42ha)
Fell 2019-2021 (Douglas fir)

Restock 63090a (3.42ha)
90% Evergreen conifer
10% Open

Proposed Species
50% Douglas fir (>2,500 stems/ha)
40% Coast redwood (>2,500 stems/ha)

Coupe 63070 (5.25ha)
Fell 2019-21 (Sitka spruce & Douglas fir)

Restock 63070a (5.25ha)
90% Evergreen conifer
10% Open

Proposed Species
50% Douglas fir (>2,500 stems/ha)
40% Coast redwood (>2,500 stems/ha)

Coupe 63071 (3.36ha)
Fell 2022-26 (Douglas fir)

Restock 63071a (3.36ha)
60% Evergreen conifer
30% Broadleaf
10% Open

Proposed Species
50% Sitka spruce (>2,500 stems/ha)
30% Red alder (>1,100 stems/ha)

Legend

- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2029
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Other/Open land
- Class A/B Roads
- Class C Roads

Detailed coupe prescriptions as a result of felling and restocking 2019-29 are outlined on page 36.

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

Declaration by FE as an Operator.

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

0 0.075 0.15 0.3 0.45 0.6 Miles

Felling and Restocking

Morganhayes and Trinity Hill
2019 - 2029

Coupe 63048 (4.04ha)
Fell 2027-2029 (Douglas fir & Corsican pine)

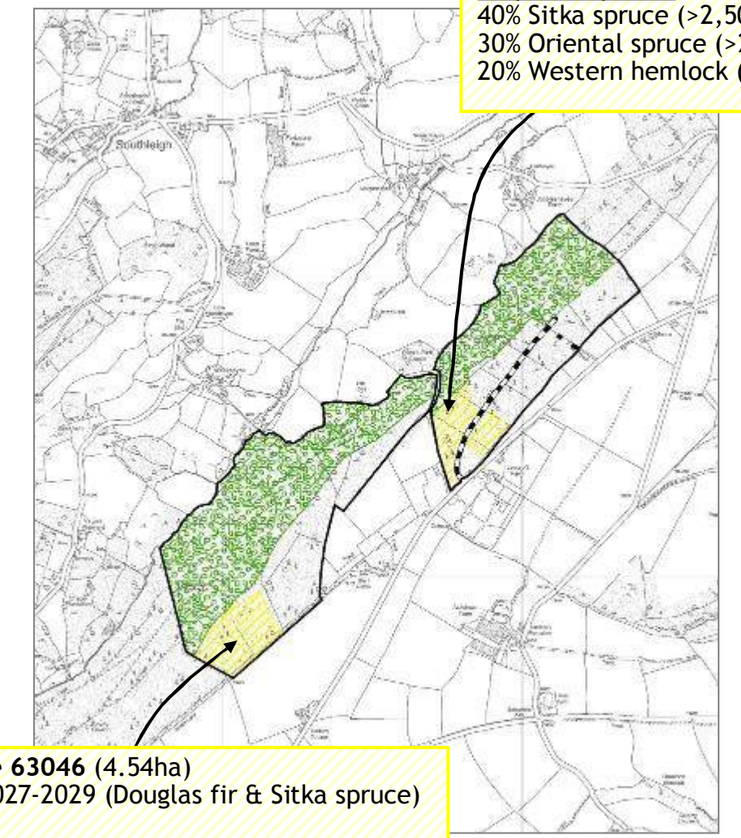
Restock 63044a (4.04ha)
90% Evergreen conifer
10% Open

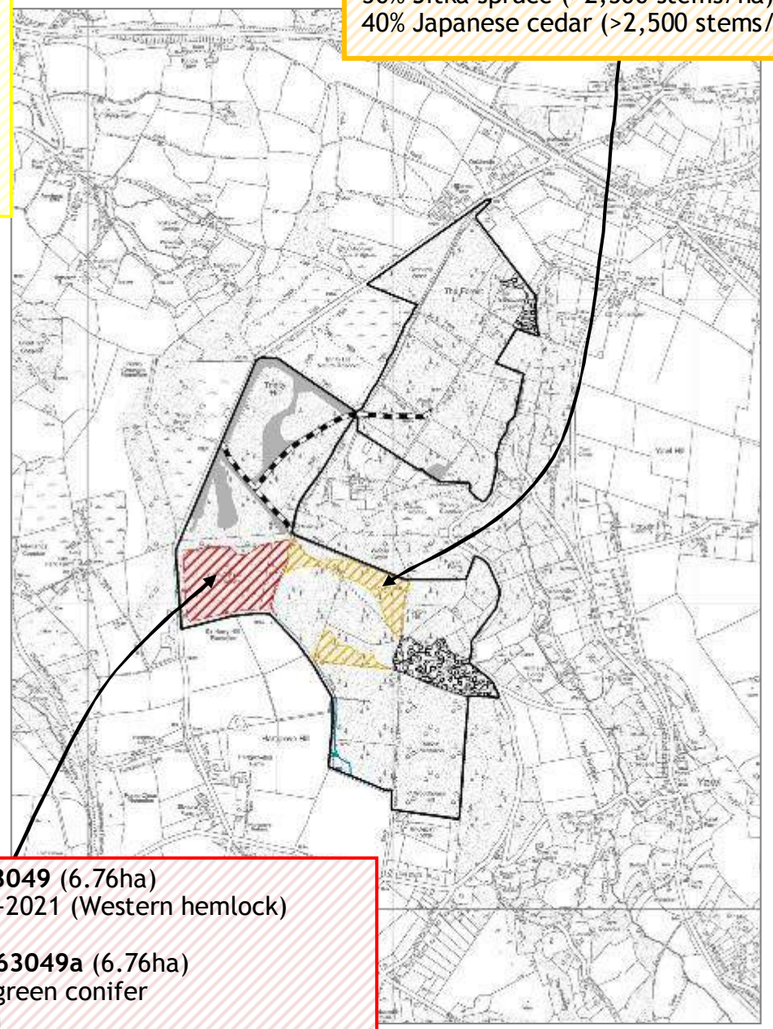
Proposed species
40% Sitka spruce (>2,500 stems/ha)
30% Oriental spruce (>2,500 stems/ha)
20% Western hemlock (>2,500 stems/ha)

Coupe 63066 (4.53ha)
Fell 2022-26 (Western hemlock)

Restock 63066a (4.53ha)
90% Evergreen conifer
10% Open

Proposed Species
50% Sitka spruce (>2,500 stems/ha)
40% Japanese cedar (>2,500 stems/ha)





Coupe 63046 (4.54ha)
Fell 2027-2029 (Douglas fir & Sitka spruce)

Restock 63046a (4.54ha)
90% Evergreen conifer
10% Open

Proposed species
50% Douglas fir (>2,500 stems/ha)
30% Western red cedar (>2,500 stems/ha)
10% Broadleaf (regeneration)

Coupe 63049 (6.76ha)
Fell 2019-2021 (Western hemlock)

Restock 63049a (6.76ha)
90% Evergreen conifer
10% Open

Proposed Species
40% Scots pine (>2,500 stems/ha)
40% Japanese cedar (>2,500 stems/ha)
10% Broadleaf (regeneration)

Legend

- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2029
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Other/Open land
- Class A/B Roads
- Class C Roads

Detailed coupe prescriptions as a result of felling and restocking 2019-29 are outlined on page 36.

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

Declaration by FE as an Operator.

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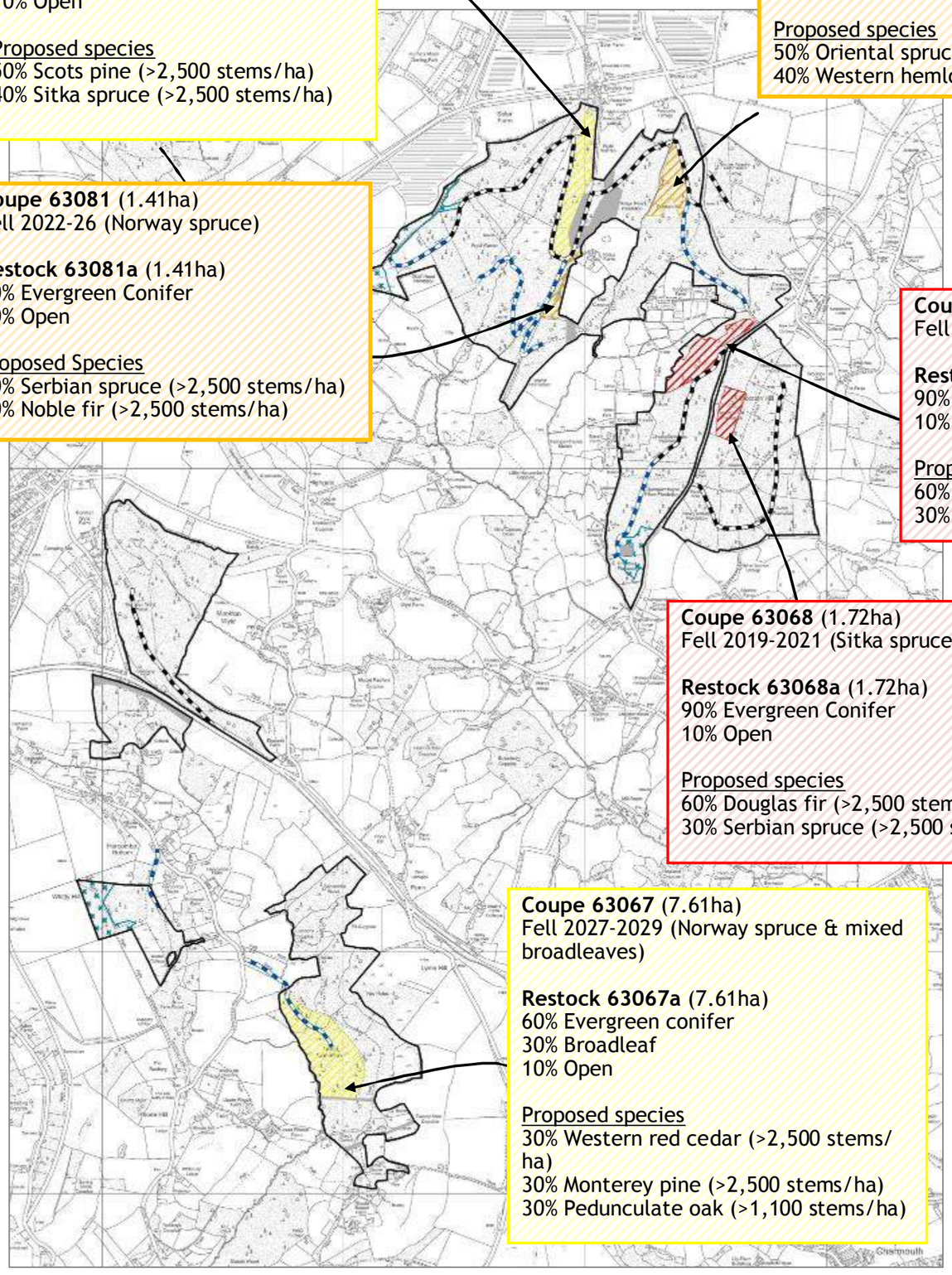
0 0.075 0.15 0.3 0.45 0.6 Miles

Felling and Restocking

Wyld Warren, Monkton Wyld & Hole Common

2019 - 2029



Coupe 63076 (4.21ha)
Fell 2027-2029 (Corsican pine)

Restock 63076a (4.21ha)
90% Evergreen Conifer
10% Open

Proposed species
50% Scots pine (>2,500 stems/ha)
40% Sitka spruce (>2,500 stems/ha)

Coupe 63074 (2.69ha)
Fell 2022-26 (Norway spruce)

Restock 63074a (2.69ha)
90% Evergreen Conifer
10% Open

Proposed species
50% Oriental spruce (>2,500 stems/ha)
40% Western hemlock (>2,500 stems/ha)

Coupe 63081 (1.41ha)
Fell 2022-26 (Norway spruce)

Restock 63081a (1.41ha)
90% Evergreen Conifer
10% Open

Proposed Species
50% Serbian spruce (>2,500 stems/ha)
40% Noble fir (>2,500 stems/ha)

Coupe 63072 (3.37ha)
Fell 2019-2021 (Sitka spruce & Norway spruce)

Restock 63072a (3.37ha)
90% Evergreen Conifer
10% Open

Proposed species
60% Douglas fir (>2,500 stems/ha)
30% Serbian spruce (>2,500 stems/ha)

Coupe 63068 (1.72ha)
Fell 2019-2021 (Sitka spruce & Scots pine)

Restock 63068a (1.72ha)
90% Evergreen Conifer
10% Open

Proposed species
60% Douglas fir (>2,500 stems/ha)
30% Serbian spruce (>2,500 stems/ha)

Coupe 63067 (7.61ha)
Fell 2027-2029 (Norway spruce & mixed broadleaves)

Restock 63067a (7.61ha)
60% Evergreen conifer
30% Broadleaf
10% Open

Proposed species
30% Western red cedar (>2,500 stems/ha)
30% Monterey pine (>2,500 stems/ha)
30% Pedunculate oak (>1,100 stems/ha)

Legend

- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2029
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Other/Open land
- Class A/B Roads
- Class C Roads

Detailed coupe prescriptions as a result of felling and restocking 2019-29 are outlined on page 36.

NB. Whilst 'Restock Proportion' is often prescribed at 100% Evergreen Conifer the use of suitable broadleaves to build in resilience and utilise site conditions is anticipated and in places is proposed.

Declaration by FE as an Operator.

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

0 0.075 0.15 0.3 0.45 0.6 Miles

Management Prescriptions

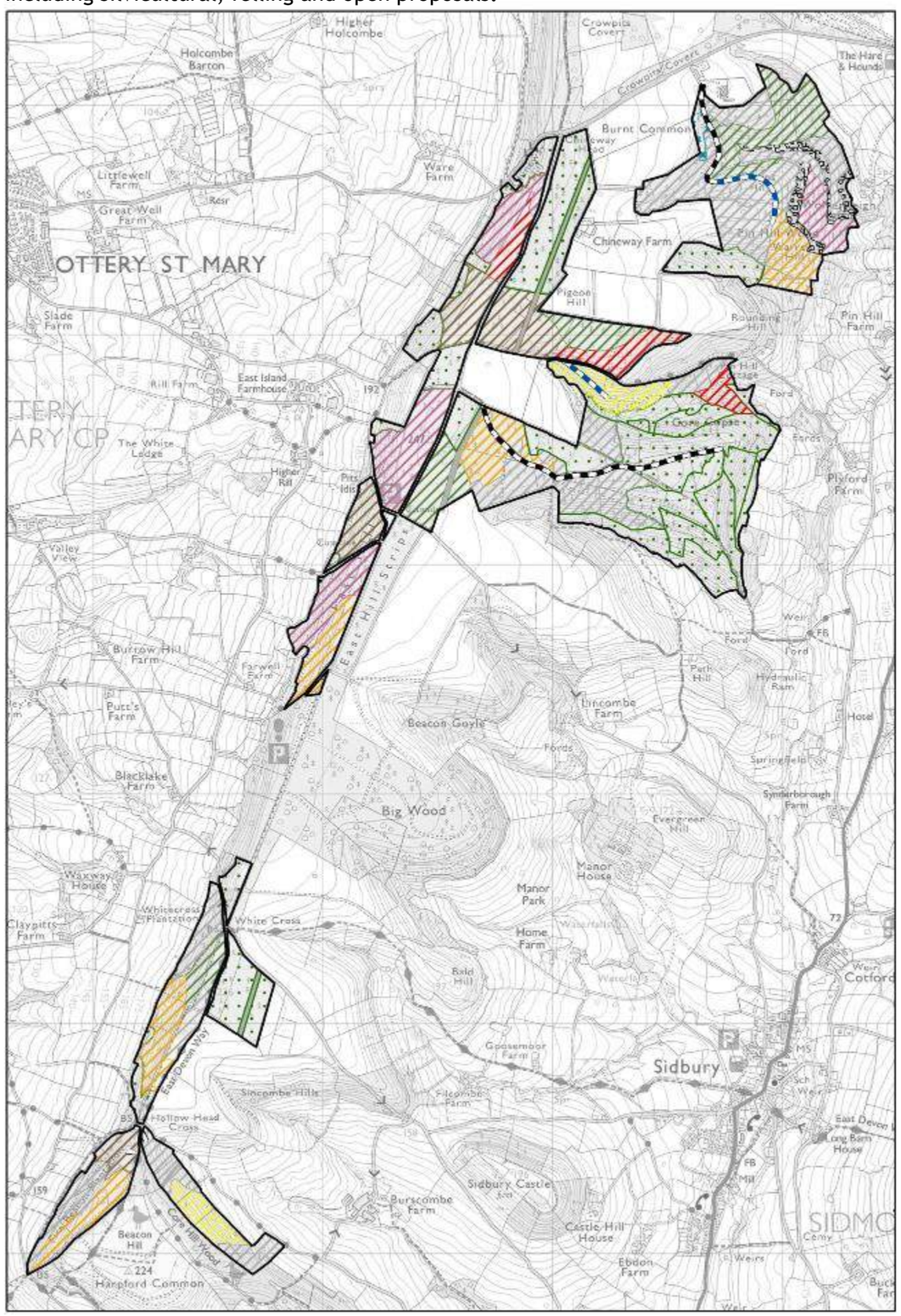
2019 - 2048

An outline of the intended management prescriptions for the Plan area for the next 30 years, including silvicultural, felling and open proposals.

Legend

- Alternatives to Clearfell
- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2031
- Fell 2032 - 2036
- Fell 2037 - 2041
- Fell 2042 - 2046
- Fell post 2046
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Open

0 0.125 0.25 0.5 0.75 1 Miles

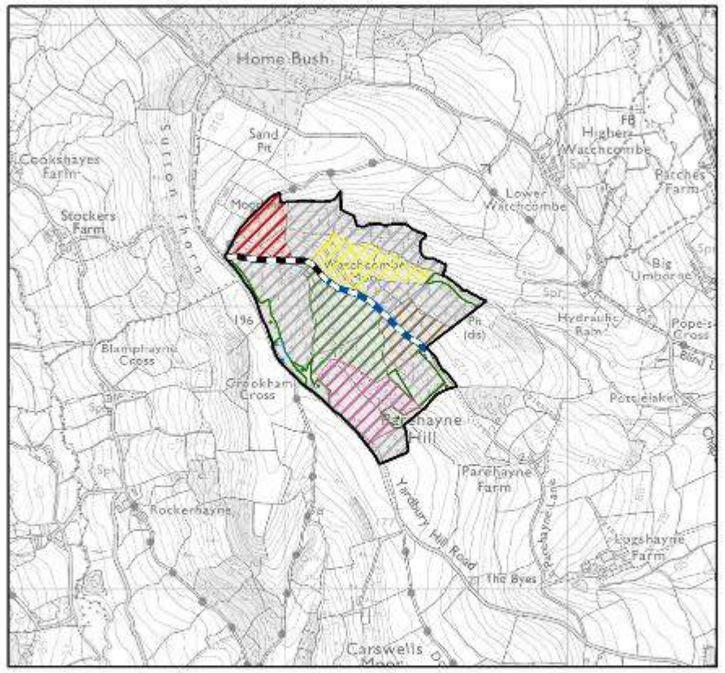


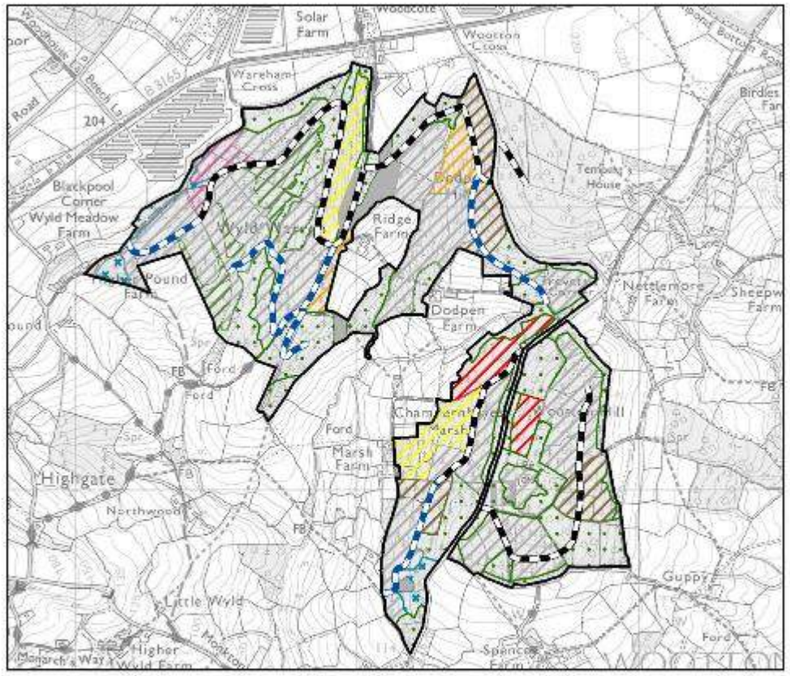
Declaration by FE as an Operator.

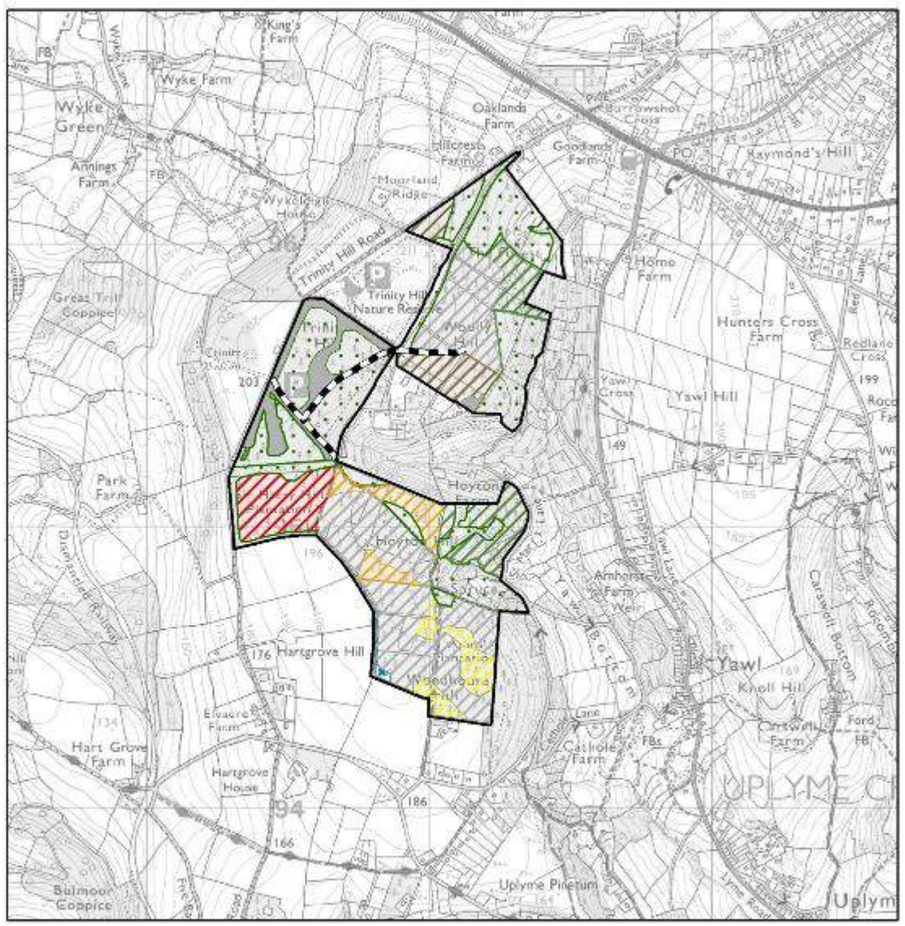
All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)

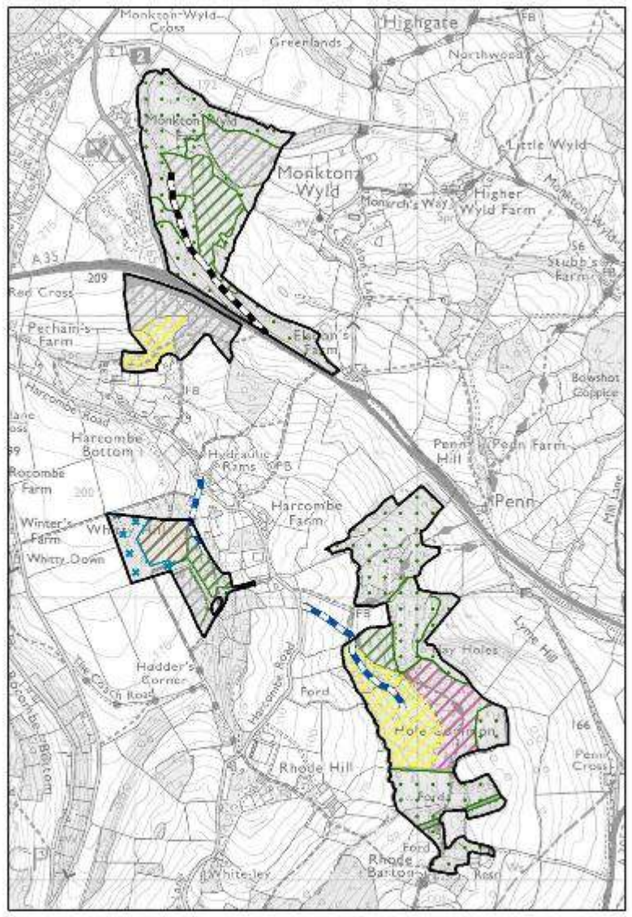
Management Prescriptions

2019 - 2049









Legend

- Alternatives to Clearfell
- Fell 2019 - 2021
- Fell 2022 - 2026
- Fell 2027 - 2031
- Fell 2032 - 2036
- Fell 2037 - 2041
- Fell 2042 - 2046
- Fell post 2046
- Coppice
- Wood Pasture
- Retentions
- Minimum Intervention
- Natural Reserve
- Open

0 0.125 0.25 0.5 0.75 1 Miles

Declaration by FE as an Operator.

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

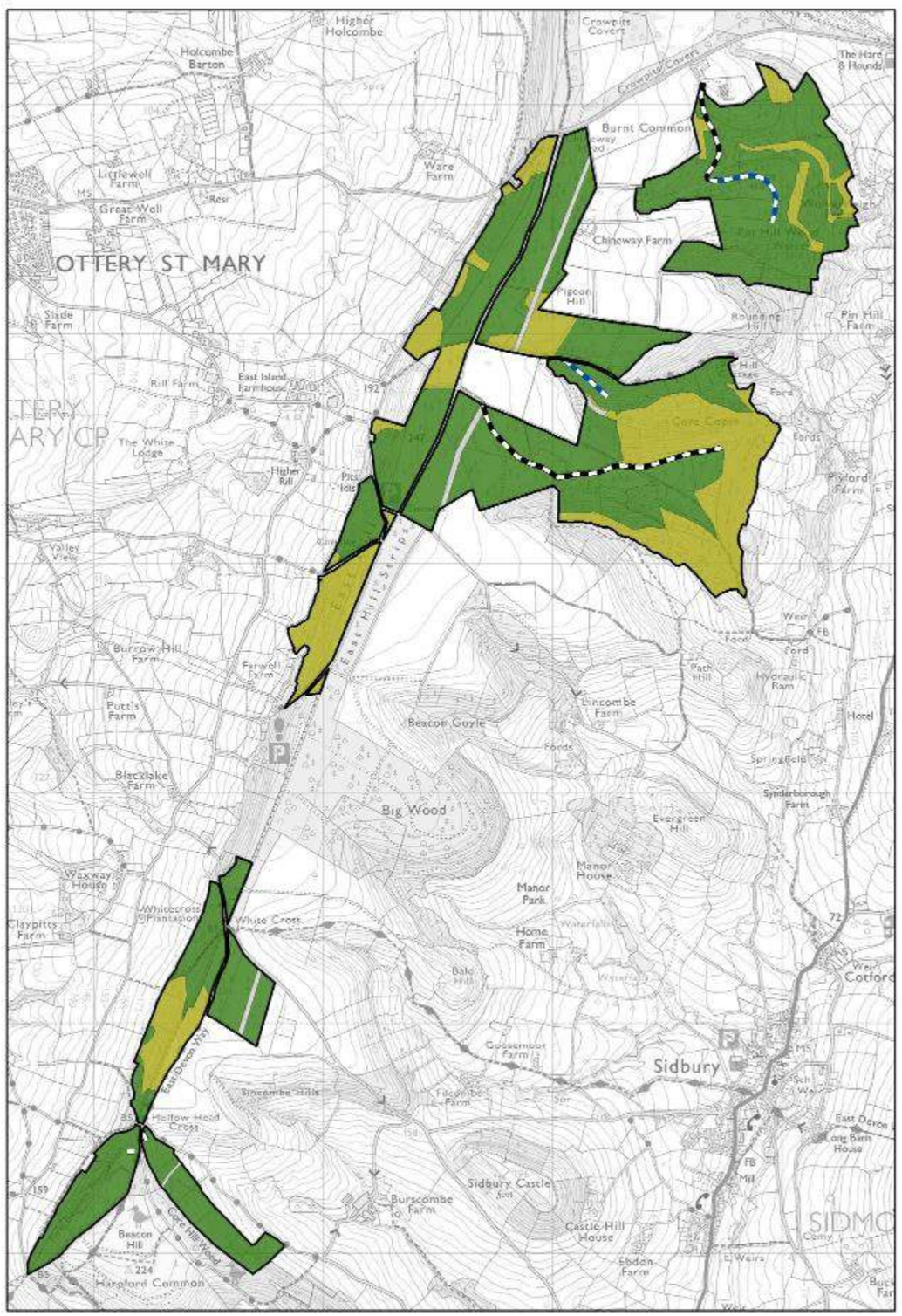
Restock Prescriptions

An outline of the intended restocking prescriptions through planting or natural regeneration for the next rotation, following the removal of the current stock.

Legend

- Conifer dominated forest
- Broadleaf dominated forest
- Open/other
- Class A/B Roads
- Class C Roads

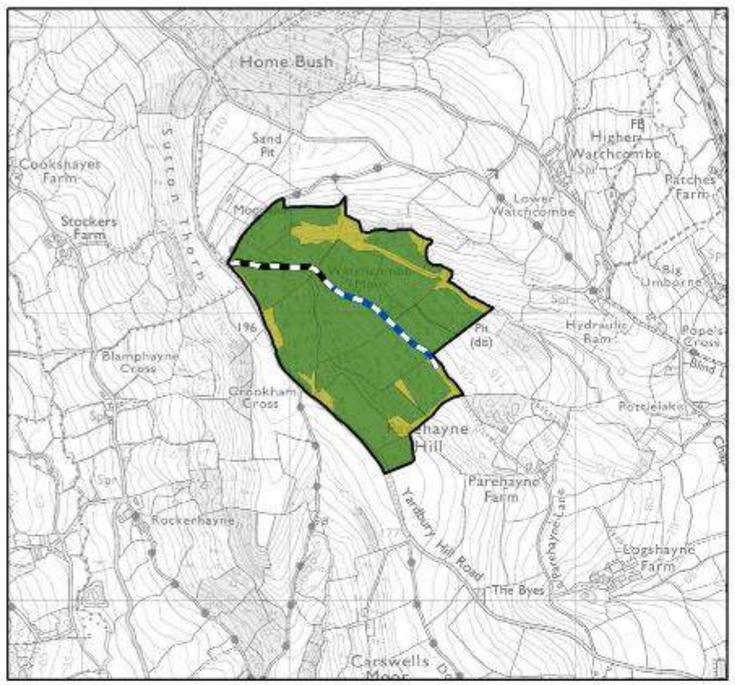
0 0.125 0.25 0.5 0.75 1 Miles

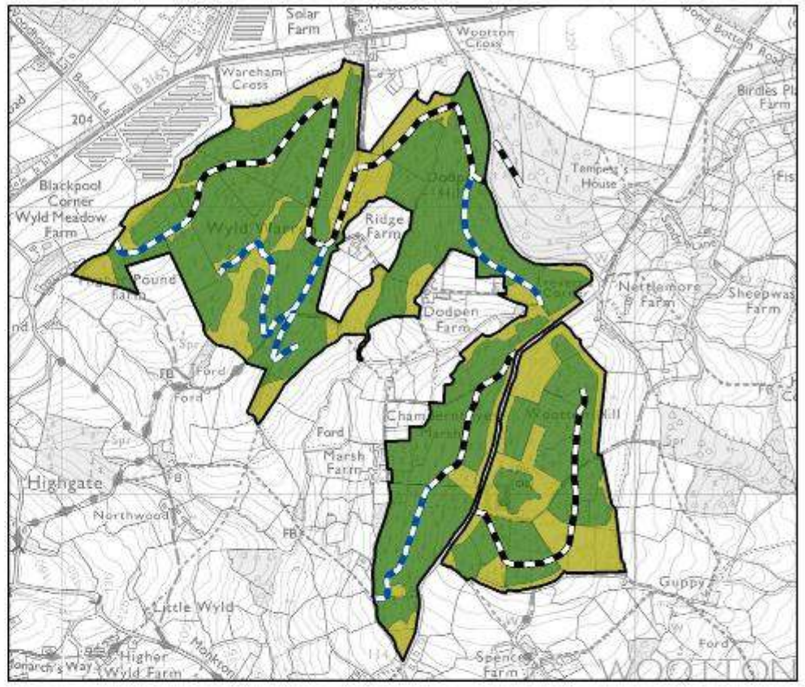


Declaration by FE as an Operator.

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

Restock Prescriptions





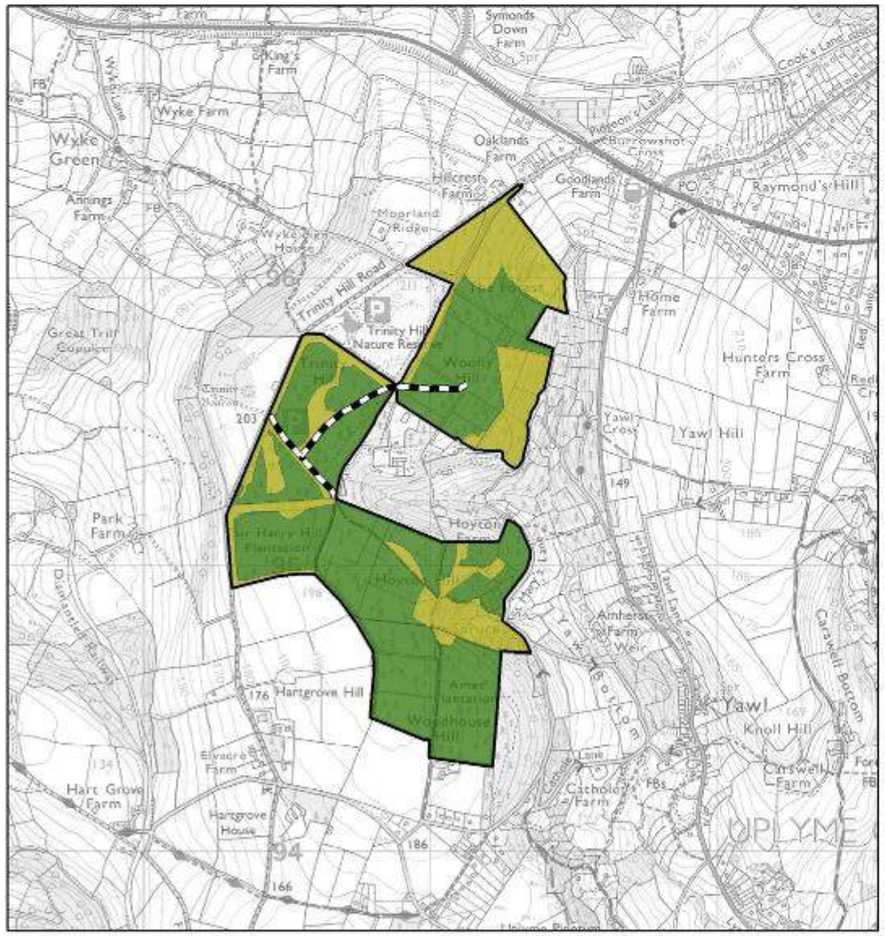
Legend

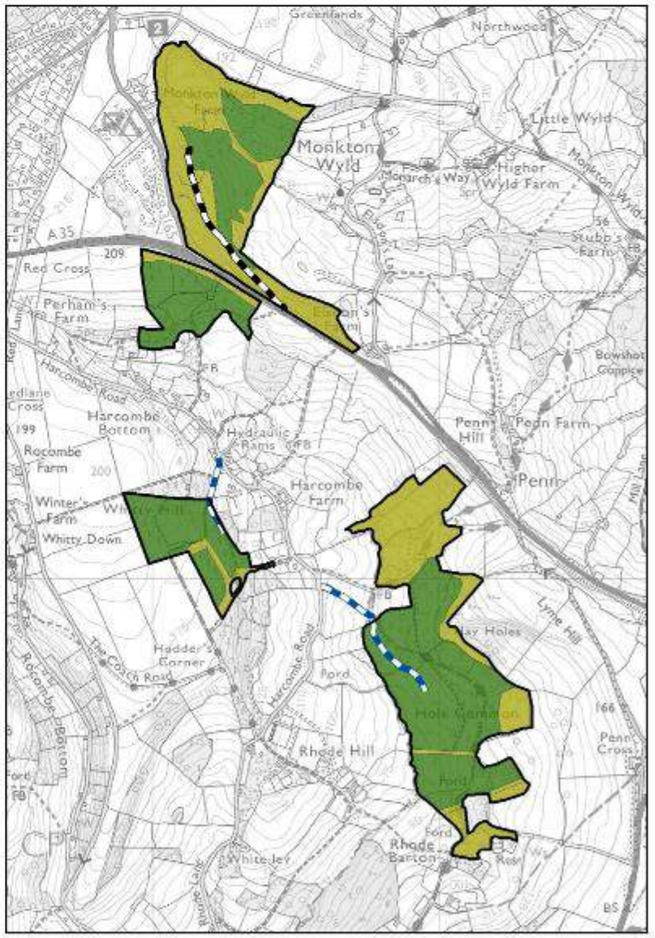
- Conifer dominated forest
- Broadleaf dominated forest
- Open/other
- Class A/B Roads
- Class C Roads

0 0.125 0.25 0.5 0.75 1 Miles

Declaration by FE as an Operator.

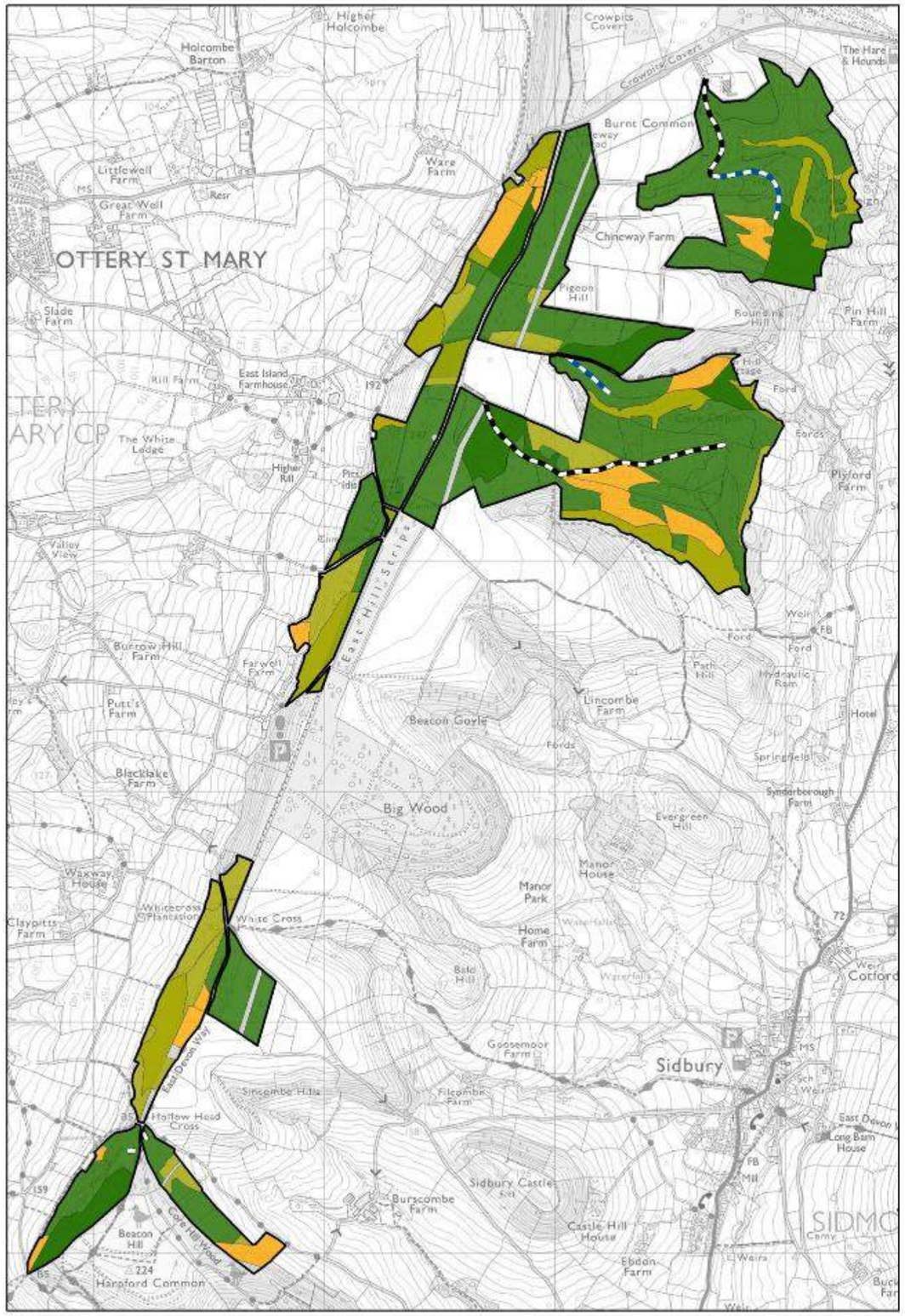
All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)

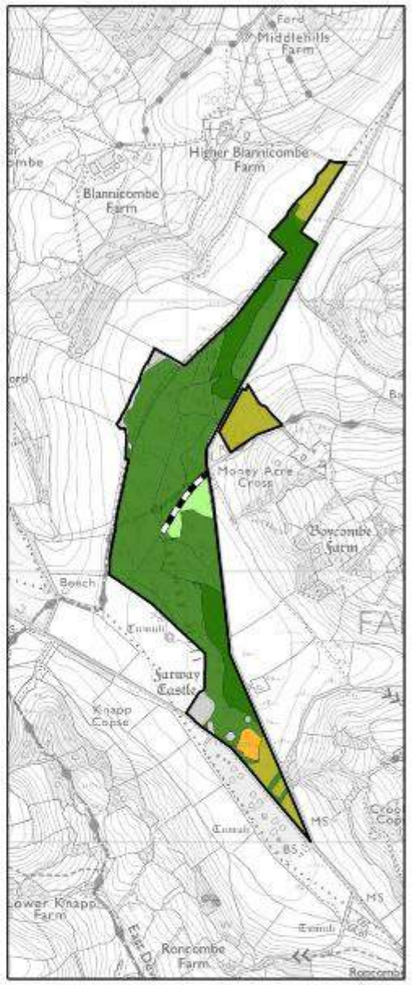


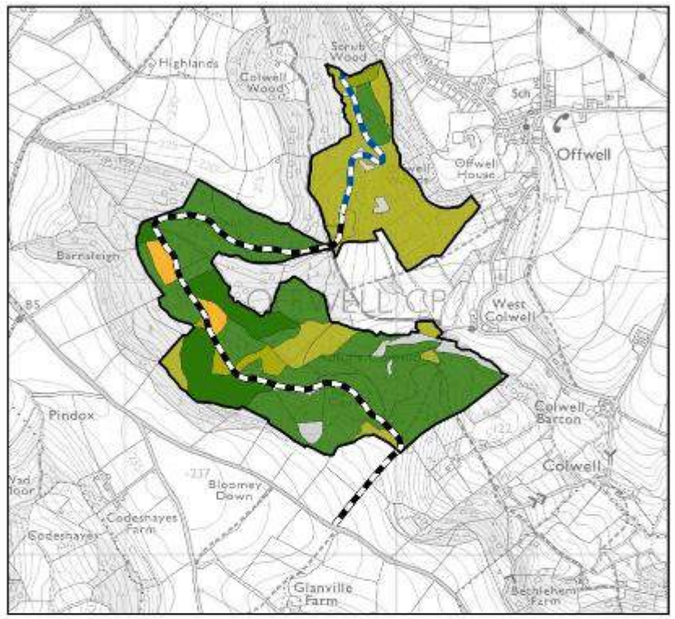


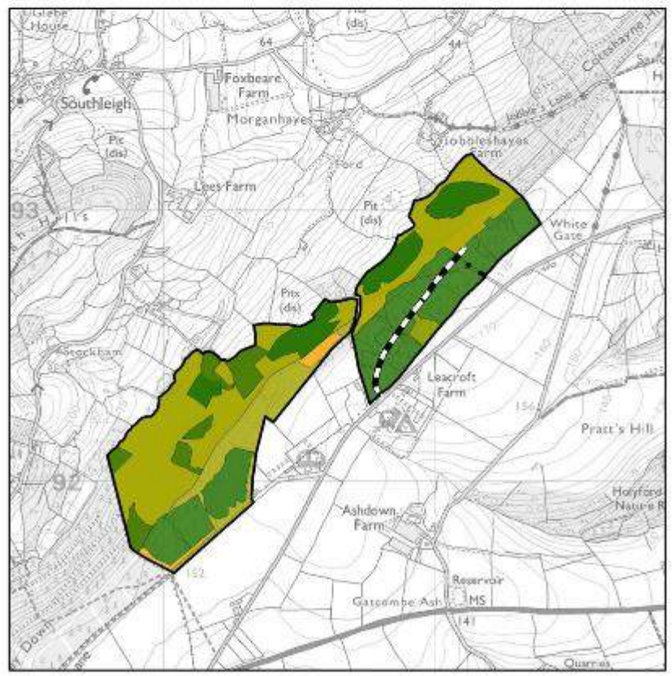
Indicative Future Species 2029

The projections made are indicative of species composition in ten years time. They do not constitute a guarantee and merely act as an indicator of how the vision for the Plan area will be delivered over time.









Legend

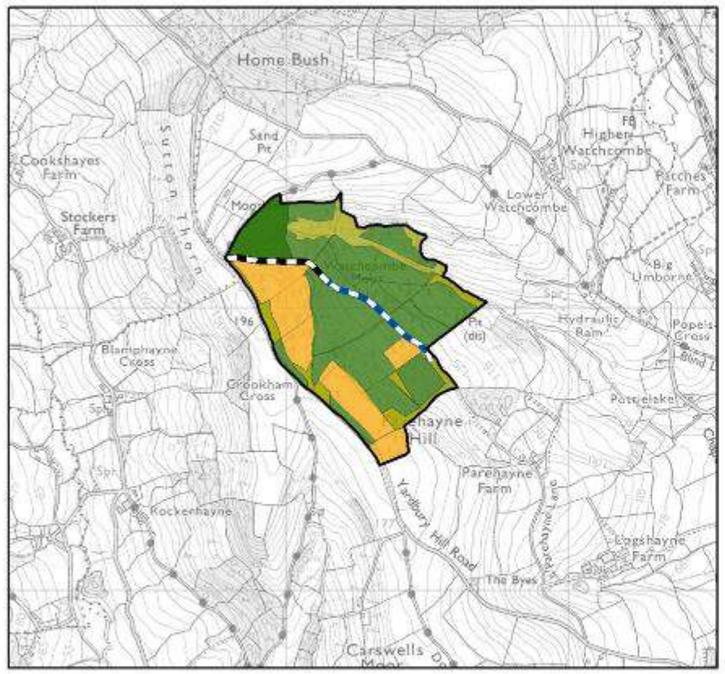
- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other

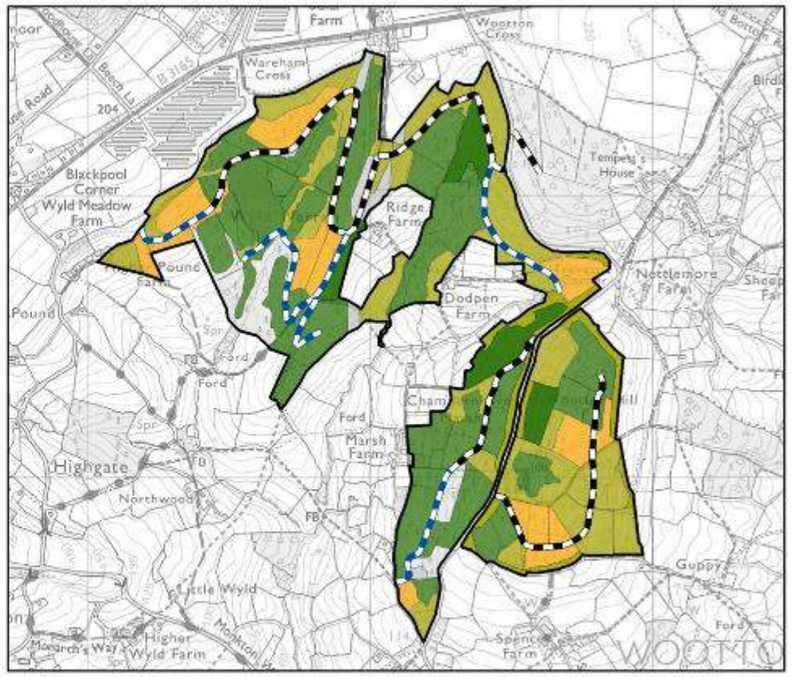
0 0.125 0.25 0.5 0.75 1 Miles

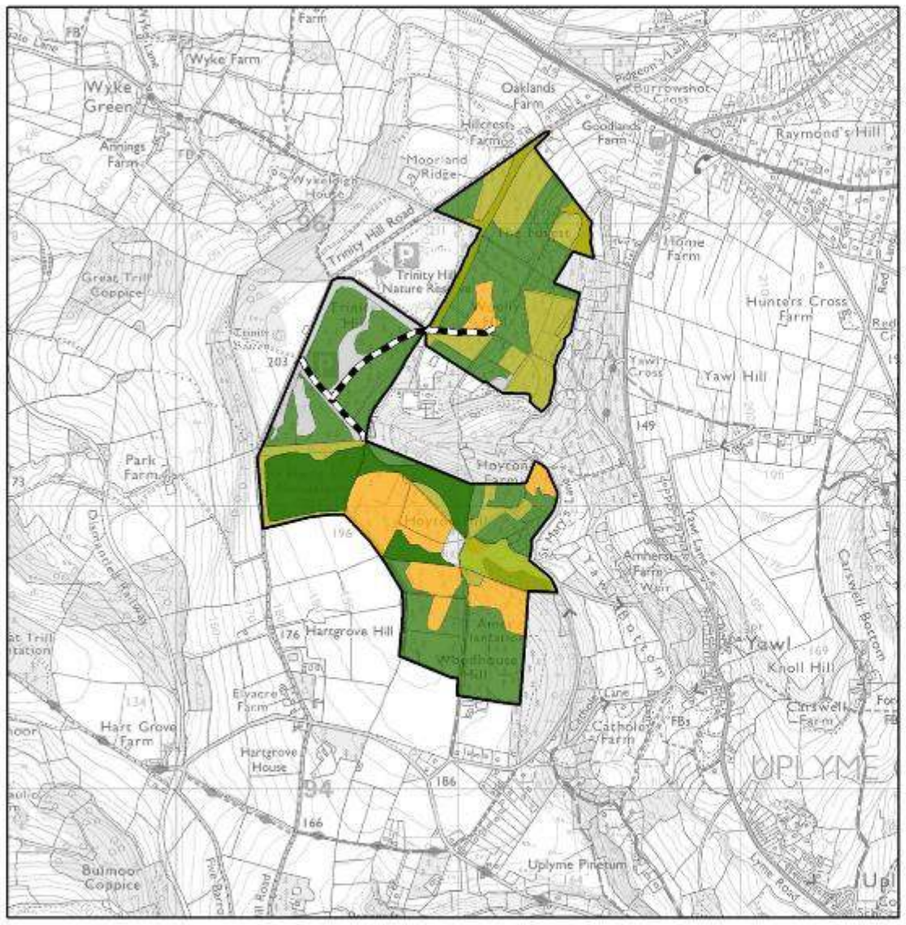
Declaration by FE as an Operator.

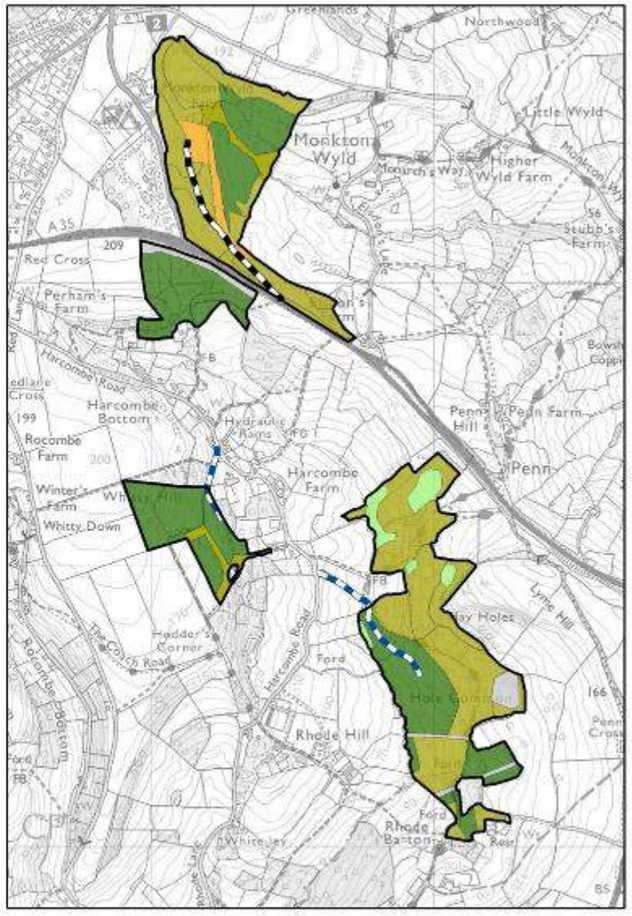
All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)

Indicative Future Species 2029





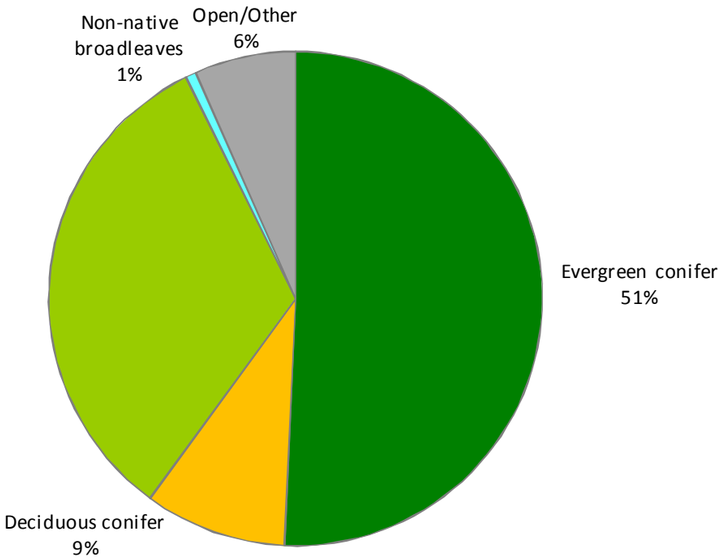




Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other

2029



Miles
0 0.125 0.25 0.5 0.75 1

Declaration by FE as an Operator.

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

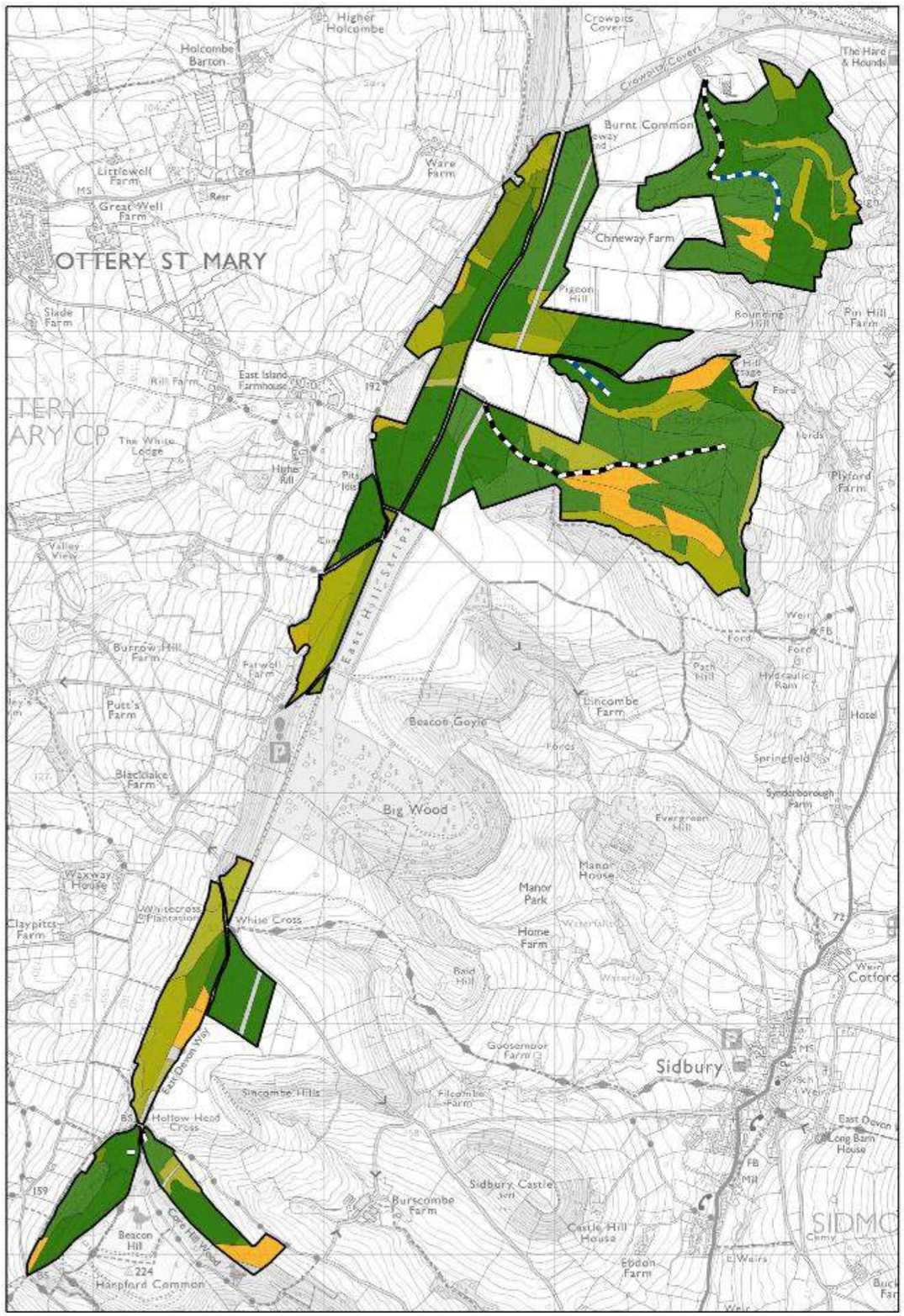
Indicative Future Species 2049

The projections made are indicative of species composition in ten years time. They do not constitute a guarantee and merely act as an indicator of how the vision for the Plan area will be delivered over time.

Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other

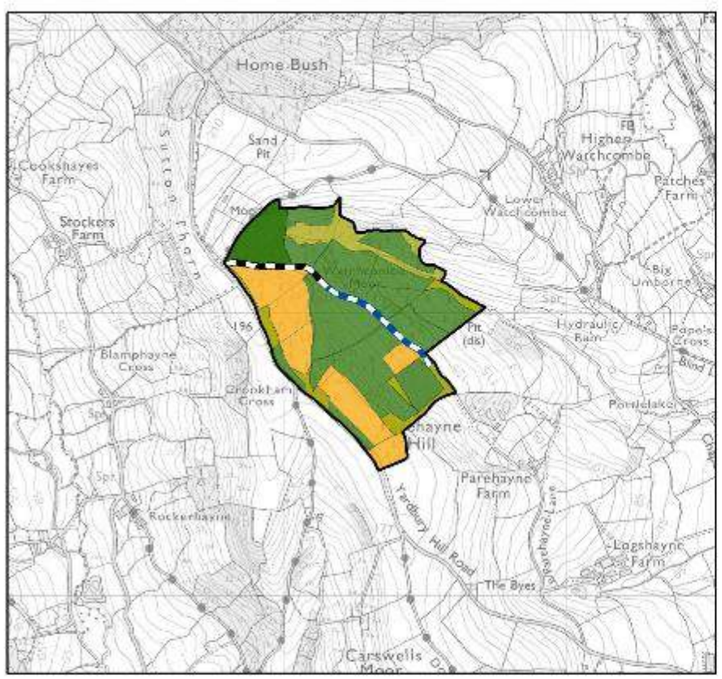
Miles
0 0.125 0.25 0.5 0.75 1

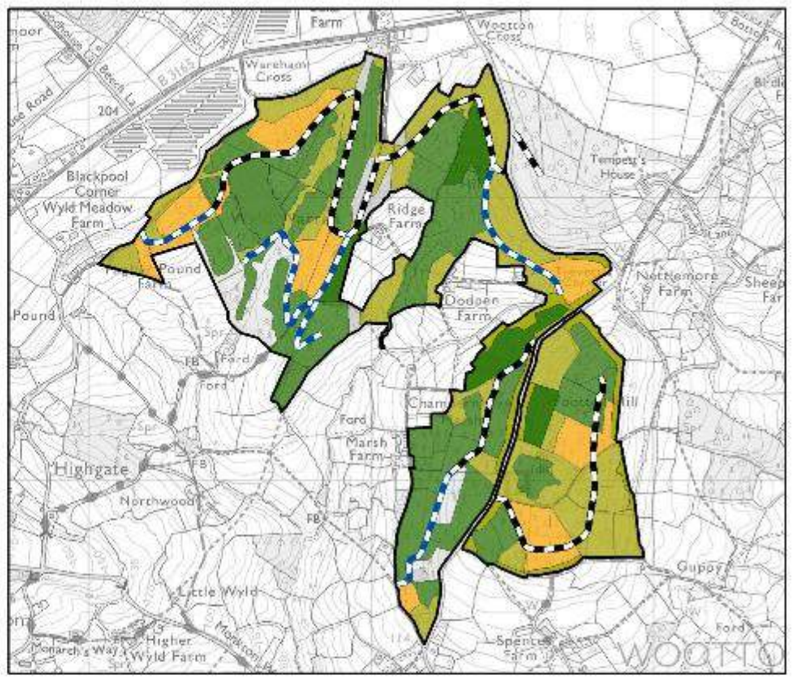


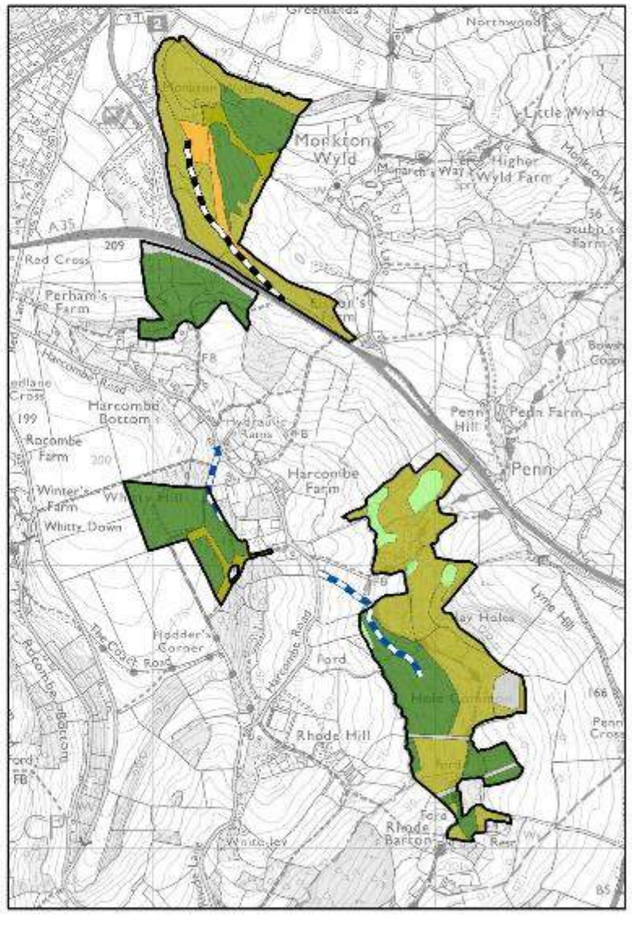
Declaration by FE as an Operator.

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

Indicative Future Species 2049



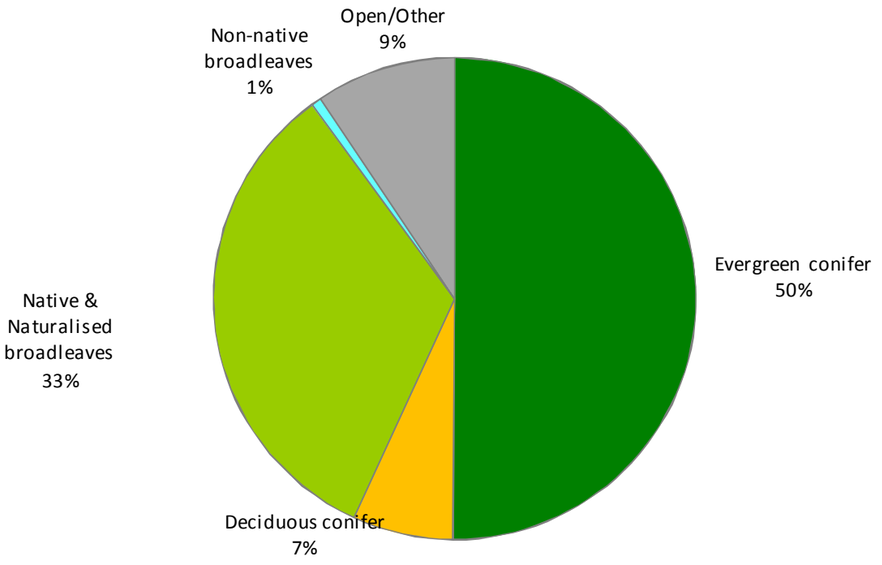




Legend

- Evergreen Conifer
- Deciduous Conifer
- Native & naturalized broadleaves
- Non-native broadleaves
- Open/other

2049



0 0.125 0.25 0.5 0.75 1 Miles

Declaration by FE as an Operator.

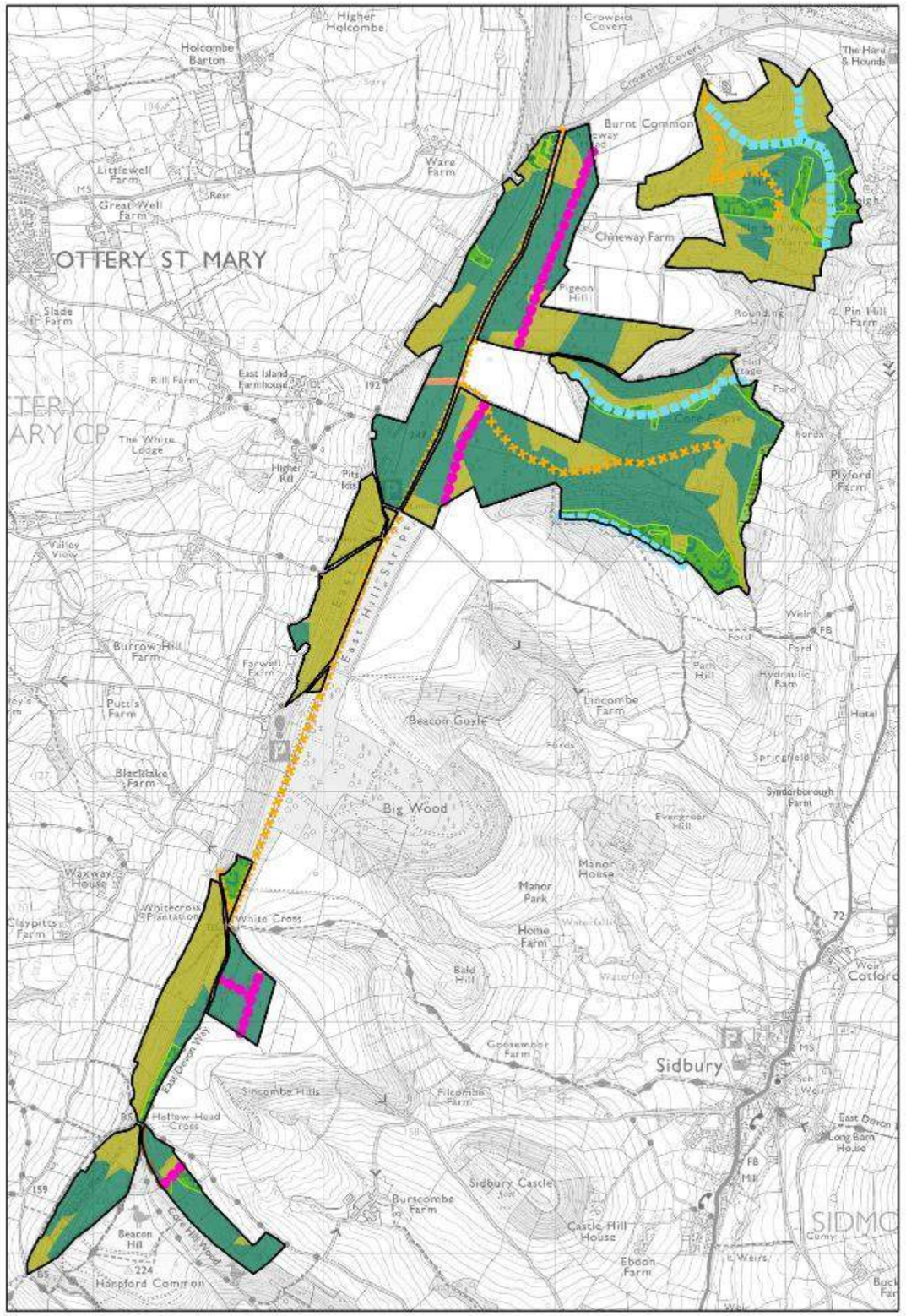
All timber arising from the Forest Enterprise estate represents a negligible risk under EUTR (No 995/210)

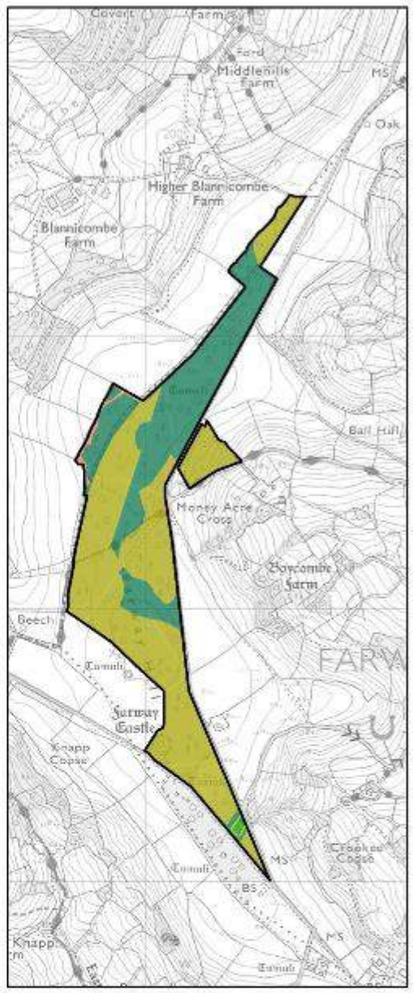
Conservation - Habitats

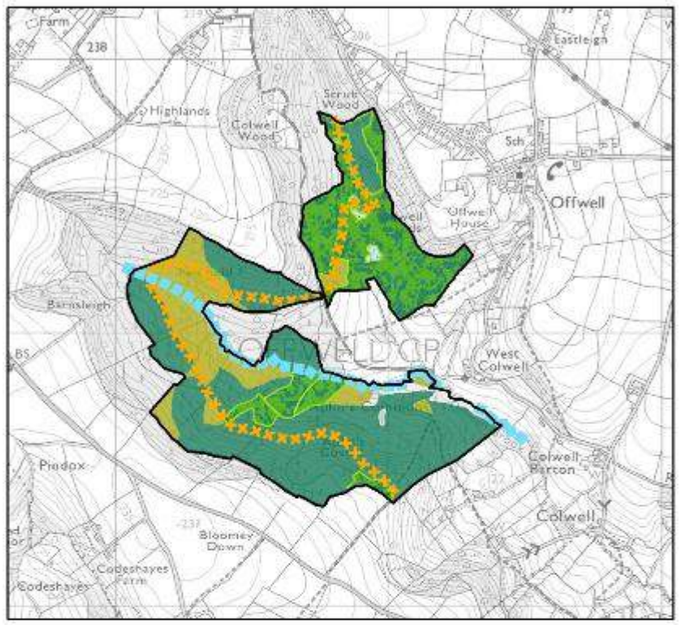
Miles
0 0.125 0.25 0.5 0.75 1

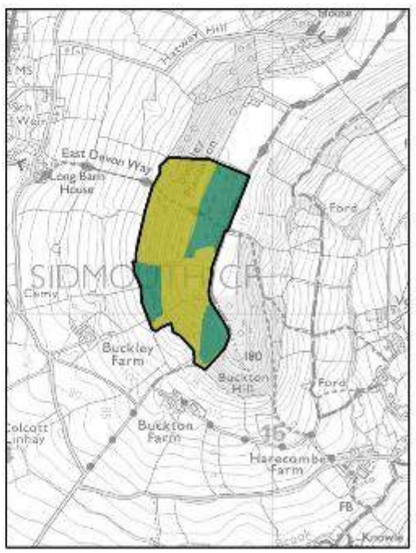
Legend

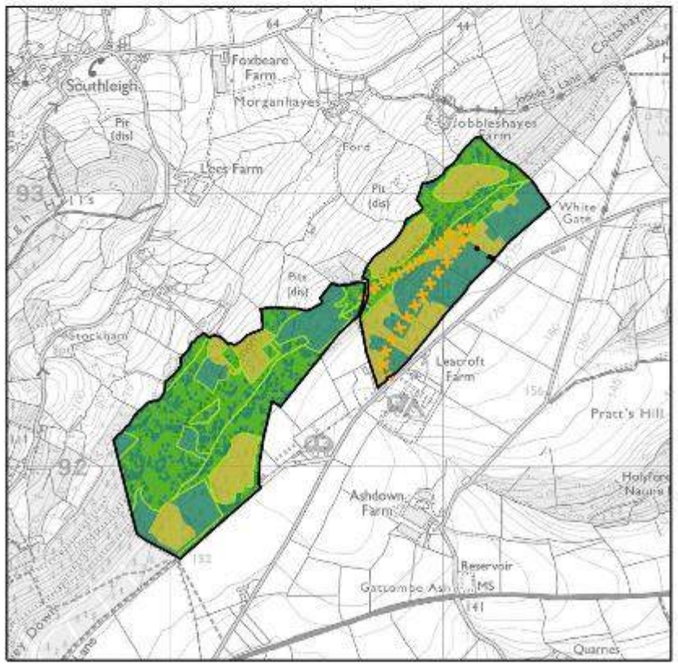
- BROADLEAVED; MIXED/YEW WOODLANDS
- CONIFEROUS WOODLANDS
- BOUNDARY & LINEAR FEATURES
- IMPROVED GRASSLAND
- NEUTRAL GRASSLAND
- Upland mixed ashwoods
- Wet woodland
- Lowland mixed deciduous woodland
- Moorland & Heathland
- Streamsides
- Tree hedges, belts & groups
- Forest & Public Roads & Utility Wayleaves
- Windfirm & Graded Edges





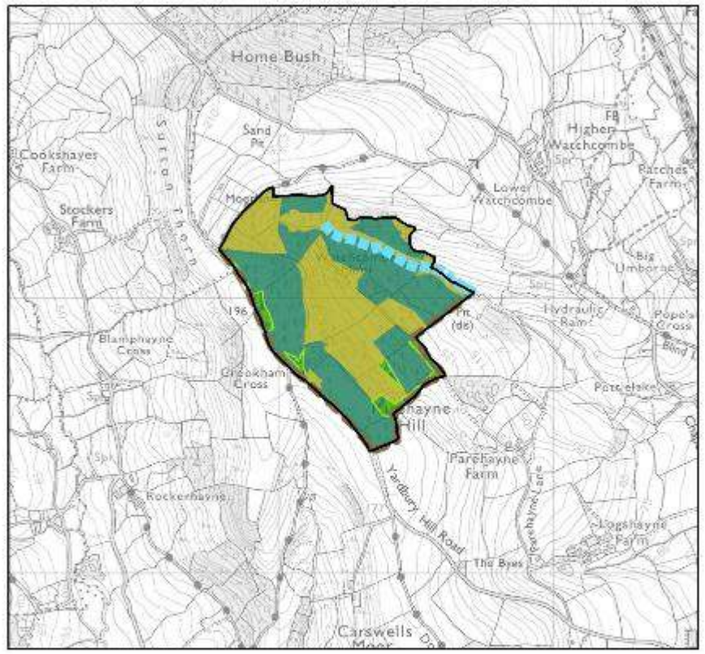


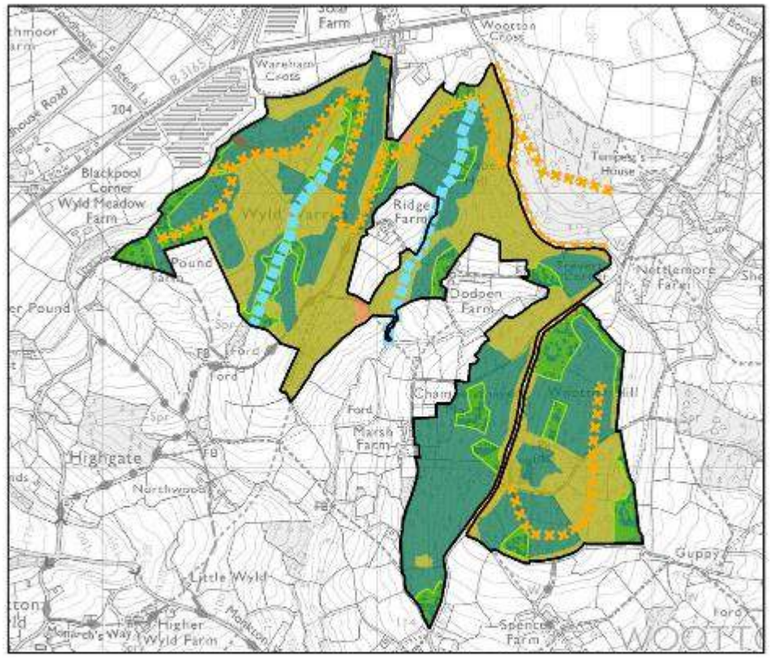


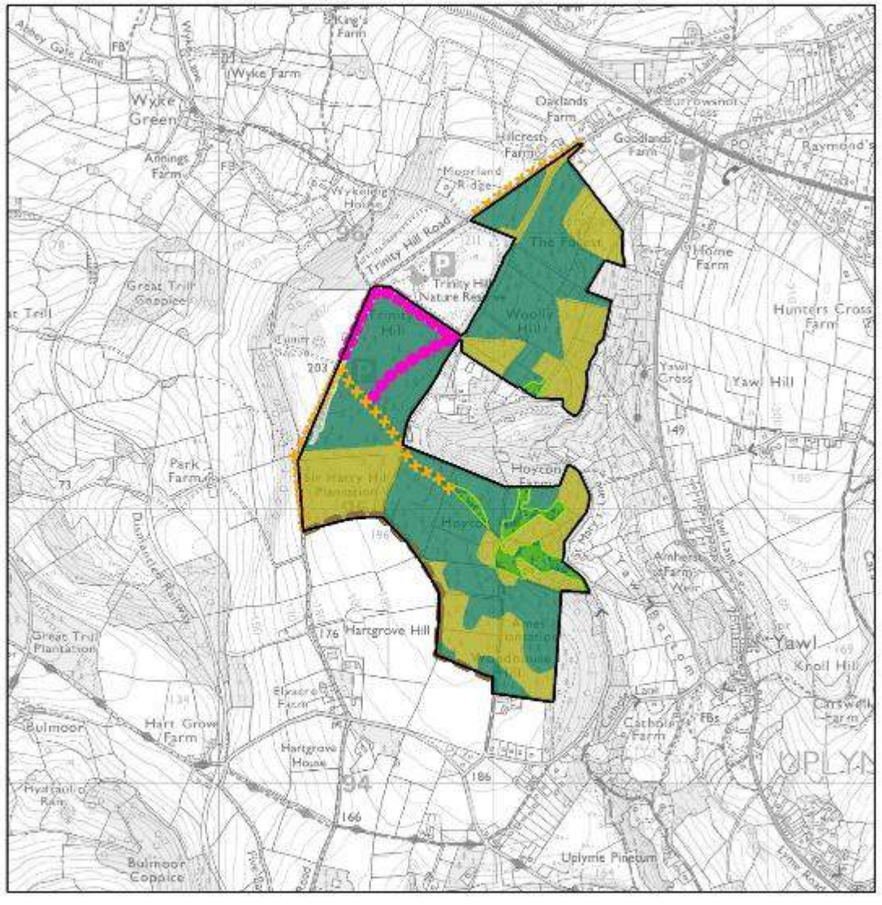


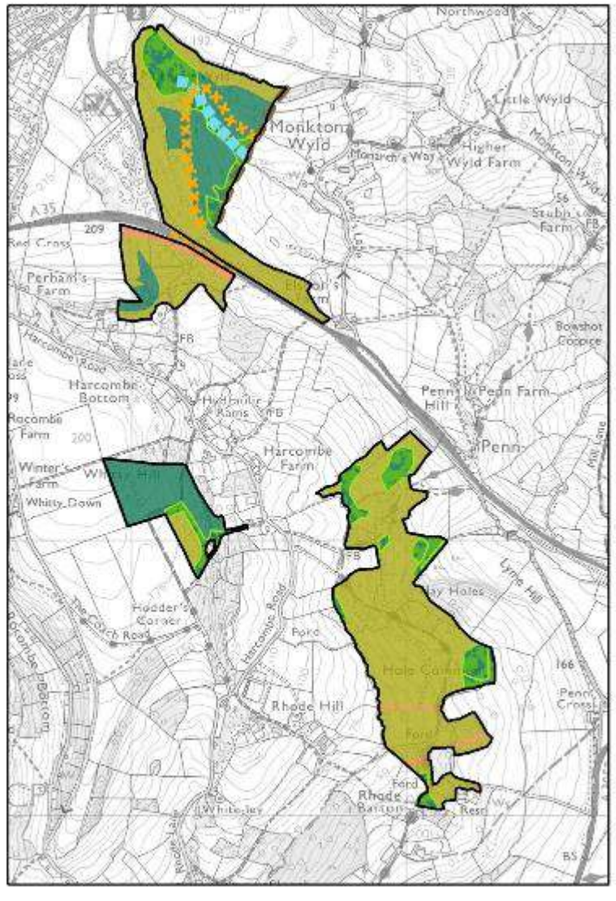
Conservation - Habitats

0 0.125 0.25 0.5 0.75 1 Miles









Legend

- BROADLEAVED; MIXED/YEW WOODLANDS
- CONIFEROUS WOODLANDS
- BOUNDARY & LINEAR FEATURES
- IMPROVED GRASSLAND
- NEUTRAL GRASSLAND
- Upland mixed ashwoods
- Wet woodland
- Lowland mixed deciduous woodland
- Moorland & Heathland
- Streamsides
- Tree hedges, belts & groups
- Forest & Public Roads & Utility Wayleaves
- Windfirm & Graded Edges

<u>Lowland Mixed Deciduous Woodland</u>

A number of areas of remnant lowland mixed deciduous woodland (as shown) are found across the Plan area. These are predominantly made up of Sessile and pedunculated oak, ash, birch and beech. Some evidence of coppicing of hazel exists and looks to reassert. Management of these areas will be sensitive to ensure the quality is maintained in perpetuity. Thinning will be reviewed on a ten yearly cycle with the aim of enhancing and improving the condition of the habitat. Removal of invasive or un-suitable species, such as laurel, rhododendron or conifer will ensure that this habitat is maintained and used as a building block for future native broadleaf restoration.

<u>Lowland heathland</u>

A number of remnant and restored fragments of lowland heathland are found at the higher elevations of the Plan area. These are typically made up of an assemblage dwarf shrubs such as heather and gorse as well as grasses. Managed as permanent open habitat with no more than 20% tree cover through mechanical cutting of regenerating tree species, the plan will aim to connect these areas through a well managed ride network.

<u>Wet Woodland Habitats</u>

The streamsides and wet woodland found at the bottom of hollows and small valleys will be managed at the time of intervention to aid the recruitment of suitable wet woodland species such as alder, willow and birch encouraged as well as patchy open space to create dappled shade and light penetration.

<u>Corridor Habitats</u>

Road and rides sides will conform to the prescriptions outlined in the District document, *Design and Management of Environmental Corridors* (Lucas, 2006). The road and ride network within the Plan area will be utilised to extend and connect ride side habitats and transient open spaces, this will be achieved through targeted widening and unstocking of edges to some coupes following felling operations to create a mixed transient open and scrubby habitat for a multitude of species. In practice this means that regenerating vegetation on road sides will be regularly cut where access is easiest to create a dynamic edge habitat which the likes of Lepidoptera, insects and small birds choose to inhabit. Whilst wetter and less well used rides which are not used for deer control will be allowed to regenerate to provide habitat and linkage for a variety of species.

<u>Deadwood</u>

Mature established broadleaved trees with their moss and fauna will be retained as much as possible, and allowed to developed in senescent habitats. A variety of deadwood will be retained according to the level of ecological value and in line with Guidance (Humphrey & Bailey, 2012). Retaining decaying snags and logs as well senescent trees throughout the forest will create suitable deadwood habitat for numerous associated species including raptor, smaller birds and an array of insects.

Conservation — Natural and Cultural Heritage Features

The Forest Plan area is used by an array of common and rare flora and fauna some of which are highlighted below. On the other hand some non-native flora and grazing fauna species can have a detrimental impact on the forest and its features if their numbers are too high. Species such as rhododendron, wild deer and squirrel will all be managed in line with District Strategy to ensure that their pressure does not have a negative impact on the condition of habitats.

The introduction of new tree species, in the bid to diversify the forest structure means that deer and small mammal populations will need to be managed. Protection and control will need to be increased and strategically targeted. This will include fencing, planting design and new deer glades which will be created following felling.

Raptor - such as buzzard, kestrel and goshawk are known to roost and hunt within the forest areas. Many of the species choose to rest in high well branched conifer trees and then feed over open ground, making the forests ideal raptor habitat in an otherwise minimally treed landscape. The management of appropriate large or potentially large trees for long retentions will ensure that habitat provision is maintained.

Otter - are known to use the full length of the Rivers Sid and Axe and its tributaries and is widespread across most rivers in Devon and Cornwall This protected species experienced a decline in previous decades but has recovered well in the south west of England. They inhabit streamside and wetland areas and the riparian woodland habitats found within the Plan area are ideal for nesting otter. The management of riparian wet woodland where a light touch intervention will be employed will ensure that a rich diversity of open space, scrub and high forest will ensure otter habitat is preserved to support this species.


Source: Forestry England

Trees of significance are found throughout the Plan area and will be retained for perpetuity. The majority of these trees are beech boundary trees. When crops are thinned crowns will be released slowly to minimise the impact of sudden exposure to desiccating winds and sun scorch. Management will be in line with FE Guidance (Ops No. 31).

Heritage features - are found across the Plan area, demonstrating its rich cultural significance. East Devon contains a significant collection of hillforts and barrows. The Farway Hill Barrow, of which the Scheduled Farway Castle is part, complex comprises the most extensive and densest concentrations of barrows in east Devon. At least 57 barrows are located within a 3 miles stretch covering parts of Gittisham Hill, Farway Hill and Broad Down.

These features and the internal surrounding landscape needs to be preserved, and enhanced where possible, to retain and develop the Plan Area's cultural heritage. All unscheduled monuments will be identified and treated sympathetically at the time of operation in consultation with the County Archaeology team.


Farway & Gittisham Hill Cemetery
Source: East Devon AONB

Nightjar - is a nationally rare bird and the East Devon forests support a contingent of the south west England population. The bird nests in freshly cleared areas, most notably clearfell sites. The provision of both permanent and transient open space through rotation clearfelling and scrubby open space creation and management of existing areas will continue to support this important species into the future.


Source: Forestry England

Dormouse favourable habitat is found fragmented throughout the Plan area. This European Protected Species requires pinch points across corridors to allow habitat connectivity between broadleaved woodland, particularly in stands with a high hazel and/or sweet chestnut components. The increase in coppicing in hazel dominated stands will significantly enhance habitat quality with prescriptions outlined in the Environmental Corridors document also ensuring appropriate habitat provision and management will be in line with Best Practice Guidance (FC & NE, 2007).


Source: Forestry England

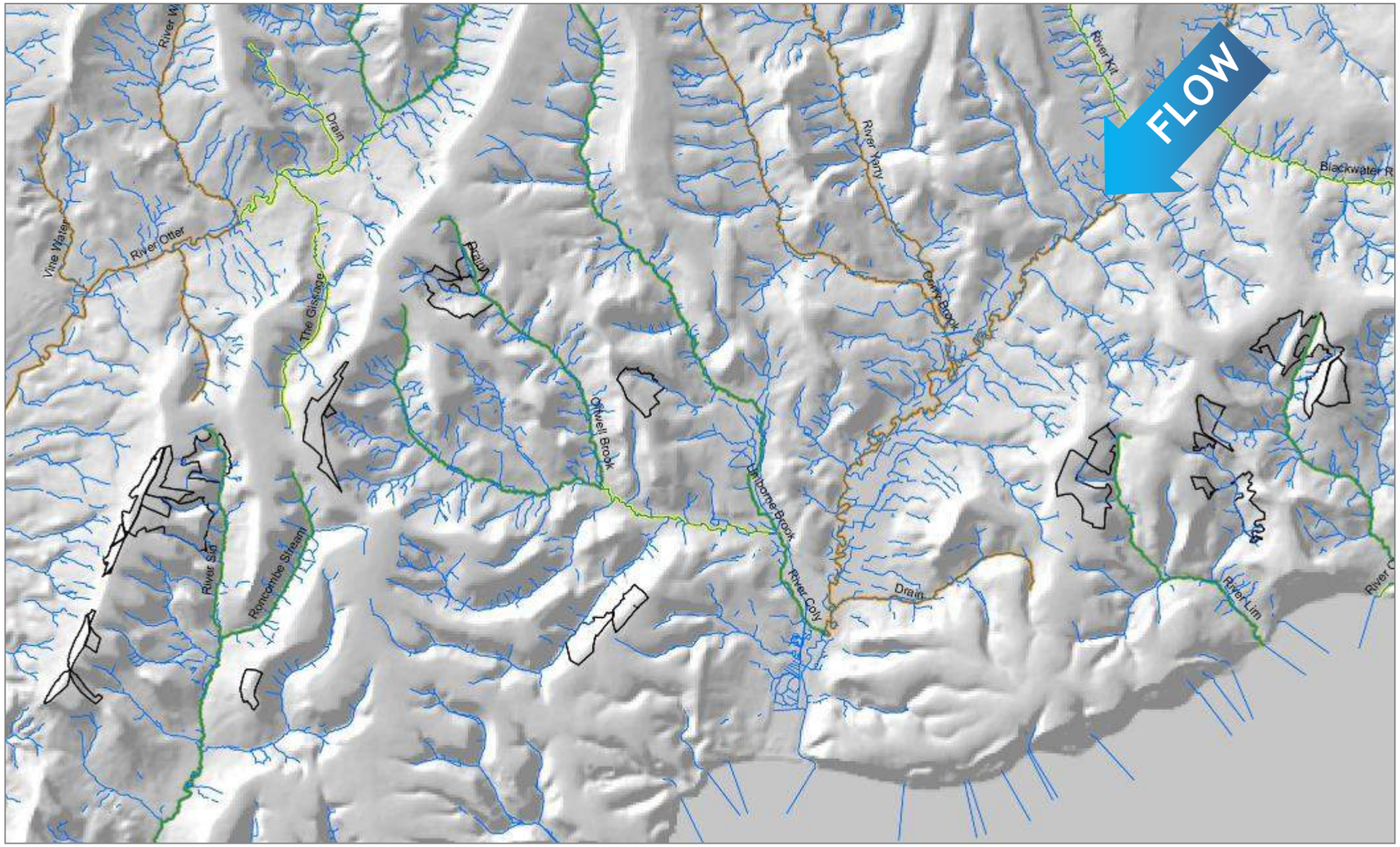
Water & Riparian Management

Riparian Management

All watercourses and riverine areas will be management sensitively to protect and enhance water and soil quality in line with best practice. Riparian zones will be developed to create and maintain areas of up to 50% continuous forest cover through gradual regeneration or enrichment with site appropriate tree species, such as *Alnus, Salix* and *Ulmus* spp. A gradual change to this type of wet woodland habitat through heavy thinning at the time of intervention (usually clearfell), will create a environment of dappled shade with good light penetration and aeration as well as buffer the riverine systems from forestry operations.

Clearfells within the area have been designed and phased to minimise surface water runoff and soil erosion ensuring the riverine systems are protected and improved into the future. All felling and restocking operations will work within the guidelines set out in UKFS, Forests and Water with the aim of developing further riparian areas at the time of intervention to stimulate native species regeneration.

The East Devon Plan area is a component of for the Otter, Axe and Sid catchments all close to their output into the sea. Therefore soil stabilisation and surface runoff, retaining forest cover and a move towards continuous cover systems together with maintained drains and water storage will ensure this continues to slow down peak flows into the future.



South West Catchment District

Just over 3 million people live in the South West River Basin District. The economy is dominated by the service sector, and each year millions of visitors to the district make a vital contribution to the economy. However, the resulting seasonal fluctuations in population bring challenges for protecting the water environment, especially in coastal areas.

The district has a huge network of internationally, nationally and locally recognised wildlife sites, from the uplands of Dartmoor and Exmoor and outstanding rivers such as the Camel and Hampshire Avon, to the fantastic estuaries and coastline. There are two national parks, and the Jurassic Coast in Devon and Dorset is the only natural world heritage site in England.

The farming and land management sector has a big role in looking after and improving the quality of the rural environment. Agriculture accounts for approximately three quarters of the land area in the South West River Basin District.

East Devon Catchment

The East Devon catchment has a varied landscape and stretches from Exmoor and the Blackdown Hills in the north to Exmouth and the Jurassic coast and west Dorset. At approximately 750 sq.km, the East Devon catchment drains the rivers Exe, Otter, Sid, Axe and Lim. Only 7% of the catchment is developed compared to the national average of 16%. The catchment contains one National Park and three Areas of Outstanding Natural Beauty (AONBs) covering 66% of the catchment.

There are 103 river water bodies in the catchment as well as 4 lakes, 4 estuaries, 10 groundwater bodies and coastal waters to the south. Rivers, groundwater and coastal waters in East Devon are used for drinking water, recreation and should support healthy fisheries and wildlife. There are a number of water problems affecting the Rivers Axe, Otter and Clyst mainly related to manures, slurry and soil entering the river. There are also water quality problems related to sewage and runoff from urban areas. However, the pressure from manure and slurry from farming is greater.

In 2009 30% of water bodies in the East Devon catchment where classified at good ecological status or better under the Water Framework Directive. The Environment Agency has investigated the possible reasons for failure and found that diffuse pollution from agricultural sources account for 54% of the water bodies not achieving good status and barriers to migratory fish account for 23%.

Fell 2019 - 2021
Fell 2022 - 2026
Fell 2027 - 2029

Coupe Prescriptions

Detailed coupe prescriptions as a result of felling and restocking 2019-29 as outlined on pages 21-24.

	Coupe	Area (ha)	Existing Crop	Rationale/Prescription	Restock	Area (ha)	Restock Proportion	Rationale/Prescription
East Hill	63051	4.43	p.57 CP p.73 SP	Pine has now reached maturity and maximum yield. A phased clearfell approach is appropriate on in area of limited access where an injection of productive pace is required. Intruded broadleaves should be retained where possible.	63051a	4.43	90% Ev. conifer 10% Open	Site is relatively acidic and wet with soils thin and gleyed somewhat limiting conifer species choice. Consider Scots pine, Sitka spruce and western hemlock.
	63054	2.03	p.59 SS p.59 DF	Stand is well thinned and at economic maturity. With poor access , continued thinning to CCF is not feasible with clearfell is the most appropriate form of felling to aid thinning of the wider forest.	63054a	2.03	90% Ev. conifer 10% Open	Site is rich, fresh and sheltered. Soils are deep and free draining brown earth. Consider western red cedar, western hemlock, Leyland cypress and Sitka spruce.
	63029	2.62	p.57 CP	Pine has now reached maturity and maximum yield. A phased clearfell approach is appropriate on increasingly steeper slopes to remove ‘checker board’ effect .	63029a	2.62	90% Ev. conifer 10% Open	Site is reasonably acidic and wet with thin surface water gley soils somewhat limiting conifer species choice. Consider Scots pine, Sitka spruce, Maritime pine and Douglas fir with aspen to soften edges of geometric shapes.
	63012	4.96	p.58 DF p.58 CP	Stand is at economic maturity. With the high wind exposure, limited access and very high landscape impact clearfell is the most appropriate form of felling with coupe design integral to success.	63012a	4.96	70% Open 30% Ev. conifer	Soils are relatively thin, acidic and wet on top, increasing in fertility and depth on the lower slopes. Restocking and heathland restoration to complement the adjacent Fire Beacon heathland site. Consider Scots pine, Douglas fir and Oriental spruce .
	63007	5.45	p.58 BE p.58 SP	Stand is well thinned and nearing economic maturity. With the high wind exposure, steep slopes and very high landscape impact mean continued thinning is not feasible with clearfell the most appropriate form of felling with coupe design integral to success.	63007a	5.45	70% Broadleaf 30% Ev. conifer 10% Open	Ground is mildly richer and better drained when compared with surrounding areas. However soils remain thin and wet so an intimate mixture of pine and broadleaf species should be used. Consider Maritime pine, Scots pine, Sitka spruce, aspen or beech.
	63015	6.05	p.65 DF p.67 SS	Crop has now reach economic maturity and is not suitable for transformation to CCF due to limited access and exposed edges. Clearfell is the most appropriate form of felling to aid thinning of the wider forest	63015a	6.05	90% Ev. conifer 10% Open	Site is fairly rich, wet and sheltered. Restock design should be robust enough to enable efficient access and substantial production but in keeping with broadleaved intrusion. Consider Sitka spruce, Oriental spruce Noble fir and broadleaf regeneration.
	63032	6.70	p.57 Fir p.72 Pine	Stand is mature and is showing signs of windthrow, unsuitable for further thinning and felling will ensure greatest economic value is achieved.	63032a	6.70	90% Ev. conifer 10% Open	Site is flat acidic and wet in places with thin gleyed soils. Build on existing CCF transformation and novel species trials. Consider Scots pine, Sitka spruce, Oriental spruce and Grand fir.
	63037	4.46	p.58 SP p.58 BE	Stand is well thinned and nearing economic maturity. With the high wind exposure, poor access and very high landscape impact mean continued thinning is not feasible with clearfell the most appropriate form of felling with coupe design integral to success to remove ‘checker board’ effect .	63037a	4.46	45% Ev. conifer 45% N. broadleaf 10 Open	Soils are relatively thin, acidic and wet on top, increasing in fertility and depth on the lower slopes. Consider Maritime pine, Scots pine, Oriental spruce with aspen and beech to soften edges of geometric shapes.
Farway	63087	3.22	p.53 SP p.53 CP	Pine has now reached maturity and maximum yield. A phased clearfell approach is appropriate with high road frontage and narrow forest shape with high landscape impact.	63087a	3.22	70% Ev. conifer 20% N. broadleaf 10% Open	Site is relatively acidic and wet with soils thin surface water gleys somewhat limiting conifer species choice. Consider Scots pine, Sitka spruce and Monterey pine.
	63096	5.83	p.52 CP p.52 RC	Pine has now reached maturity and maximum yield. A phased clearfell approach is appropriate with high road frontage and narrow forest shape with high landscape impact.	63096a	5.83	90% Ev. conifer 10% Open	Site is relatively acidic and wet with soils thin surface water gleys somewhat limiting conifer species choice. Consider Scots pine, Sitka spruce with aspen to soften edges of geometric shapes.
Buckley	63024	3.53	p.73 DF	Stand is well thinned and nearing economic maturity. With the high wind exposure, poor access and very high landscape impact mean continued thinning to CCF is not feasible with clearfell the most appropriate form of felling with coupe design integral to success.	63024a	3.53	90% Ev. conifer 10% Open	Site is rich fresh and exposed on deep typical brown earth. Continued conifer production should be pursued with design robust to enable efficient access but sympathetic to the high landscape profile. Consider Douglas fir, Sitka spruce and Coast redwood.
Offwell	63088	0.52	p.50 WH	Western hemlock is seeding into ancient woodland threatening restoration potential into the future.	63088a	0.52	90% N. broadleaf 10% Open	Site is relatively rich and well drained loamy brown earths. Site is ancient woodland and must be restocked with native species using NVC type as defining palette. Consider Pedunculate oak in clusters, with hornbeam and Wild service.
	63070	5.25	p.60 SS	Stand is mature and is showing signs of windthrow, unsuitable for further thinning and felling will ensure greatest economic value is achieved.	63070a	5.25	90% Ev. conifer 10% Open	Site is rich and fresh, on deep loamy brown earth. Productive forestry should be pursued. sympathetic to the sites complexities . Consider Douglas fir, Sitka spruce and Coast redwood.
	63071	3.36	p.60 DF	Site is wet and underthinned causing windthow risk and lack of light in riparian area. Removal of mature crop will ensure economic value is achieved. Intruded broadleaves should be retained where possible to protect watercourse.	63071a	3.36	60% Ev. conifer 30% N. broadleaf 10% Open	Site is rich and moist to wet, continued conifer production should be pursued with stocking robust to enable efficient access and production. Consider Oriental spruce, Sitka spruce and alder.
	63094	4.83	p.59 DF	Stand is well thinned and at economic maturity. A prime crop on a south facing slope.	63094a	4.83	90% Ev. conifer 10% Open	Site is rich and fresh, on deep loamy brown earth. Productive forestry should be pursued. Consider Douglas fir, Sitka spruce and Coast redwood.

Fell 2019 - 2021
Fell 2022 - 2026
Fell 2027 - 2029

Coupe Prescriptions

Detailed coupe prescriptions as a result of felling and restocking 2019-29 as outlined on pages 21-24.

	Coupe	Area (ha)	Existing Crop	Rationale/Prescription	Restock	Area (ha)	Restock Proportion	Rationale/Prescription
Parehayne	63090	3.92	p.61 DF	Stand is well thinned and at economic maturity. With poor access and exposed edge continued thinning is not feasible. Clearfell will aid thinning of the wider forest.	63090a	3.92	90% Ev. conifer 10% Open	Site is rich and fresh with deep brown earth soil, continued conifer production should be pursued. Restock design will need to be robust but sympathetic to the high landscape profile. Consider Douglas fir, western red cedar and Coast redwood.
	63044	4.71	p.64 SS p.70 DF	Stand is well thinned and at economic maturity. Given the wetness of the site, clearfell will enable intervention and the thinning of the wider forest.	63044a	4.71	90% Ev. conifer 10% Open	Site is rich and moist to wet, continued conifer production should be pursued with stocking robust to enable efficient access and production. Consider Oriental spruce, Sitka spruce and alder.
Morganhayes	63048	4.04	p.68 DF p.68 DF	Stand is well thinned and at economic maturity. With poor ground condition, exposed edge and road frontage continued thinning is not feasible. Adjacent crops must be established before proceeding..	63048a	4.04	90% Ev. conifer 10% Open	Site is mildly acidic and wet with thin surface water gleys soils limiting conifer species choice. Consider Oriental spruce, western hemlock and Sitka spruce
	63046	4.54	p.73 RC p.73 WH	Stand is well thinned and at economic maturity. With poor ground condition, exposed edge and road frontage continued thinning is not feasible. Adjacent crops must be established before proceeding..	63046a	4.54	90% Ev. conifer 10% Open	Ground is richer and better drained when compared with northern reaches. Consider Douglas fir, Serbian spruce, western red cedar and broadleaf regeneration to integrate into wooded agricultural landscape.
Trinity Hill	63049	6.76	p.55 WH p.55 CP	Mature conifer crop is on the windward edge and seeding freely into the surrounding area. Continued thinning will only perpetuate further colonisation with hemlock. Retain broadleaves along edge to mitigate visual and ecological impact of felling.	63049a	6.76	90% Ev. conifer 10% Open	Site is mildly acidic and dry with soils thin limiting conifer species choice. Consider Scots pine, Sitka spruce with aspen to soften edges of geometric shapes.
	63066	4.53	p.69 WH	Crop is somewhat disjointed and prone to windthrow following previous interventions. Now at economic maturity and terminal height clearfell is appropriate	63066a	4.53	90% Ev. conifer 10% Open	Ground is richer and better drained when compared with surrounding areas. However soils remain thin and to create convergence between heath and wooded agricultural areas a mixture of pine and broadleaf species should be used. Consider Scots pine, aspen, oak or beech.
Wyld Warren	63068	1.72	p.47 SS P.47 SP	Site is mature and exposed, and therefore at risk to windthrow. Coupe is overdue, unsuitable for further thinning and felling is robust and fits will into the landscape.	63068a	1.72	90% Ev. conifer 10% Open	Site is rich and moist to wet, continued conifer production should be pursued with stocking robust to enable efficient access and production. Consider Douglas fir, Serbian spruce and Sitka spruce.
	63072	3.37	p.48 SS p.65 NS	Site is wet and underthinned causing windthow risk and lack of light in riparian area. Removal of mature crop will ensure economic value is achieved. Intruded broadleaves should be retained where possible to protect watercourse.	63072a	3.37	90% Ev. conifer 10% Open	Site is rich and moist to wet ground water gley, continued conifer production should be pursued with stocking robust to enable efficient access and production. Consider Douglas fir, Serbian spruce and Sitka spruce.
	63081	1.41	p.61 NS	Stand is well thinned and at economic maturity. With poor access and unsuitable species on site for the future, continued thinning to CCF is not feasible with clearfell is the most appropriate form of felling to aid thinning of the wider forest.	63081a	1.41	90% Ev. conifer 10% Open	Site is rich and moist to wet, continued conifer production should be pursued with stocking robust to enable efficient access and production. Consider Serbian spruce, Oriental spruce and Noble fir.
	63074	2.69	p.53 NS p.70 NS	Crop has reached economic maturity and is over due for felling. Retain and protect broadleaf features within the Dodpen SNCI.	63074a	2.69	90% Ev. conifer 10% Open	Site is fairly rich, wet and sheltered. Restock design should be robust enough to enable efficient access and substantial production but in keeping with broadleaved intrusion and protecting and enhancing SNCI features. Consider western hemlock, Oriental spruce and Scots pine.
	63076	4.21	p.49 CP	Pine has now reached maturity and maximum yield. A phased clearfell approach is appropriate on in area of limited access where an injection of productive pace is required. Intruded broadleaves should be retained where possible.	63076a	4.21	90% Ev. conifer 10% Open	Site is fairly rich, moist and well drained. Soils are reasonably thin brown earth. Consider Sitka spruce, Scots pine, Oriental spruce and Noble fir
Hole Common	63067	7.61	p.63 NS	Site is very wet to boggy in places. Removal of mature crop will ensure economic value is achieved. As much of crop as possible should be retrieved as is safe to do so and leaving areas of considerable windblow/breakdown. Work will aid thinning of the wider forest.	63067a	7.61	60% Ev. conifer 30% N. broadleaf 10% Open	Site is rich and moist to wet, continued conifer production should be pursued with stocking robust to enable efficient access and production whilst affording space and regeneration of broadleaves. Consider Oriental spruce, Sitka spruce and alder.

Stock Data 2019

East Hill

Compartments

Sub-Compartments

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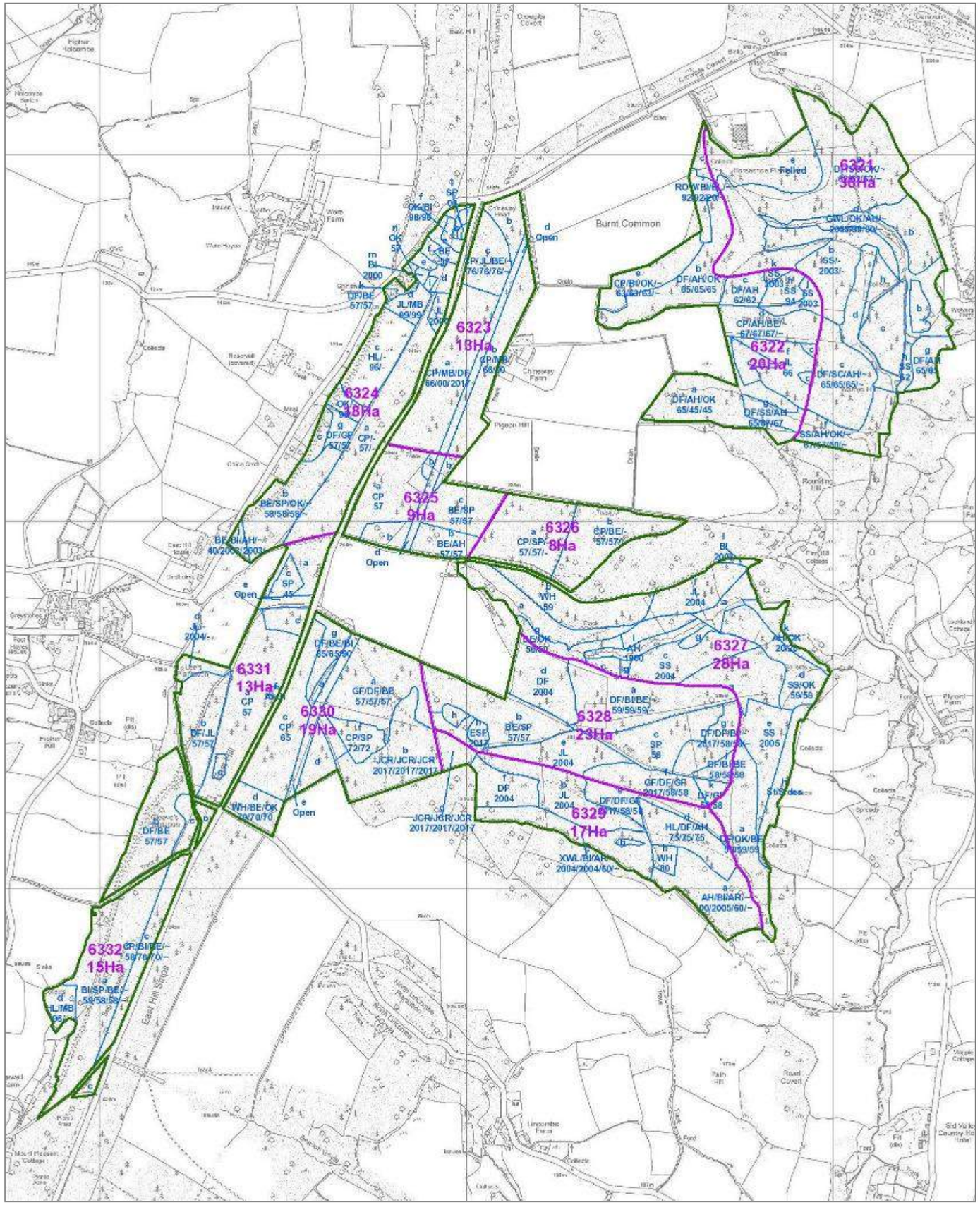
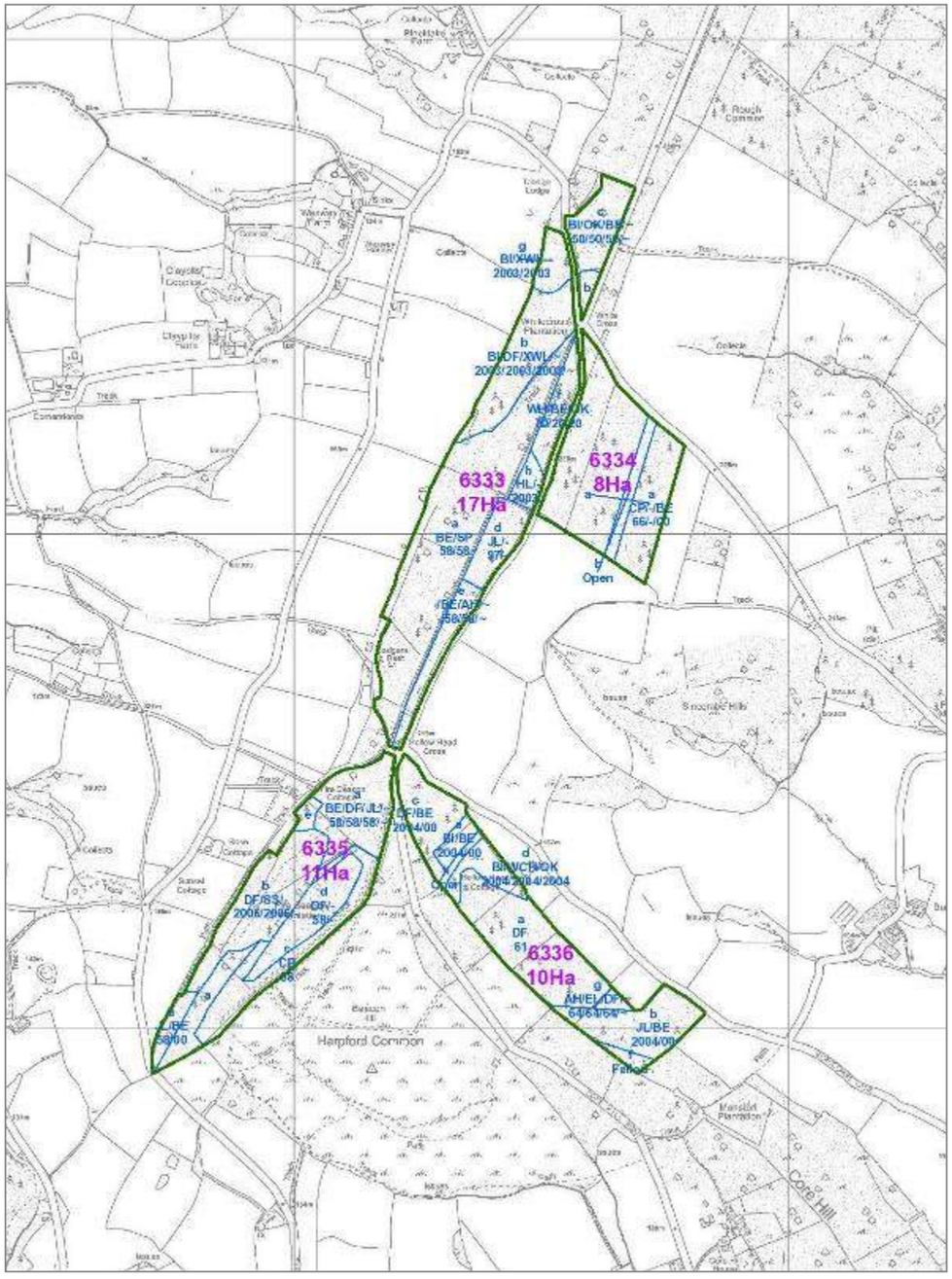


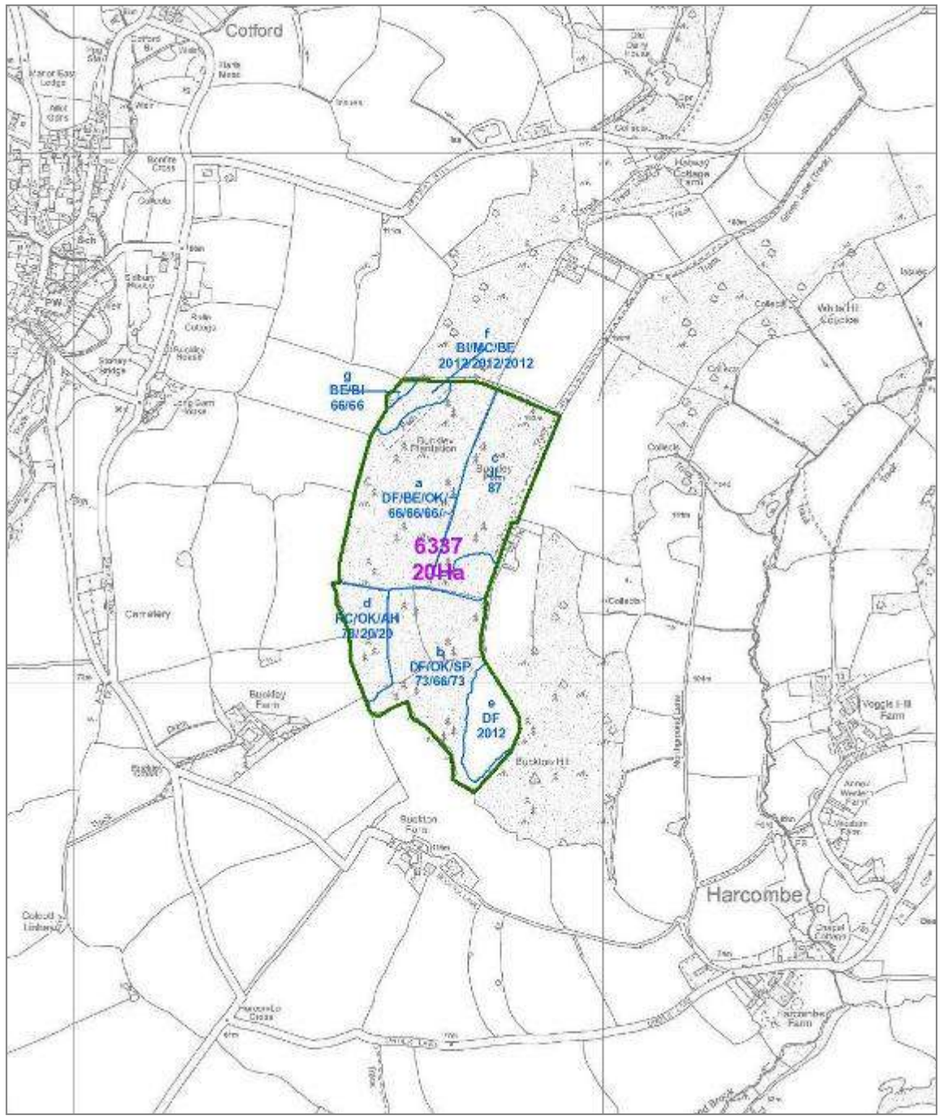


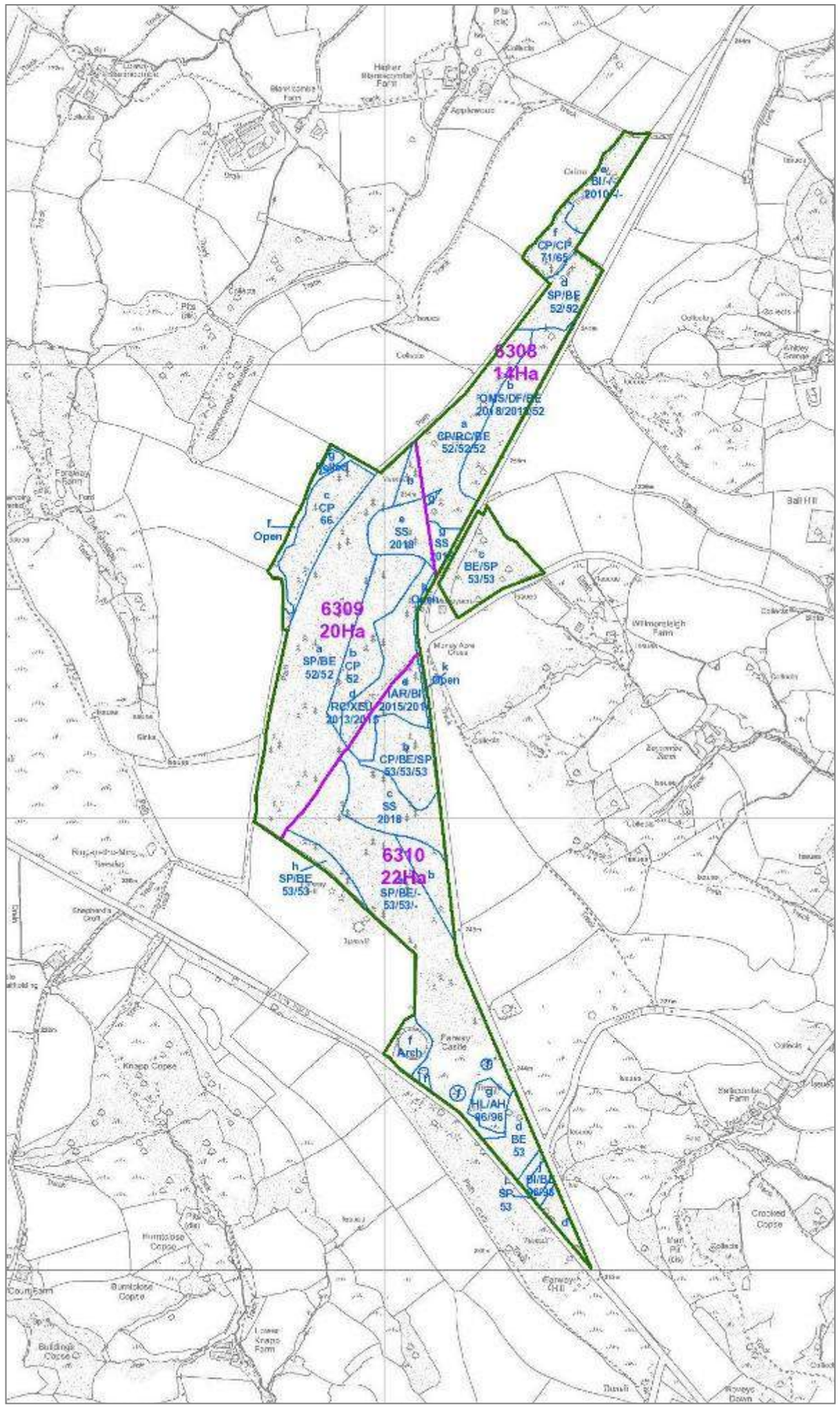
Stock Data 2019

Farway and Buckley

Compartments

Sub-Compartments





Miles
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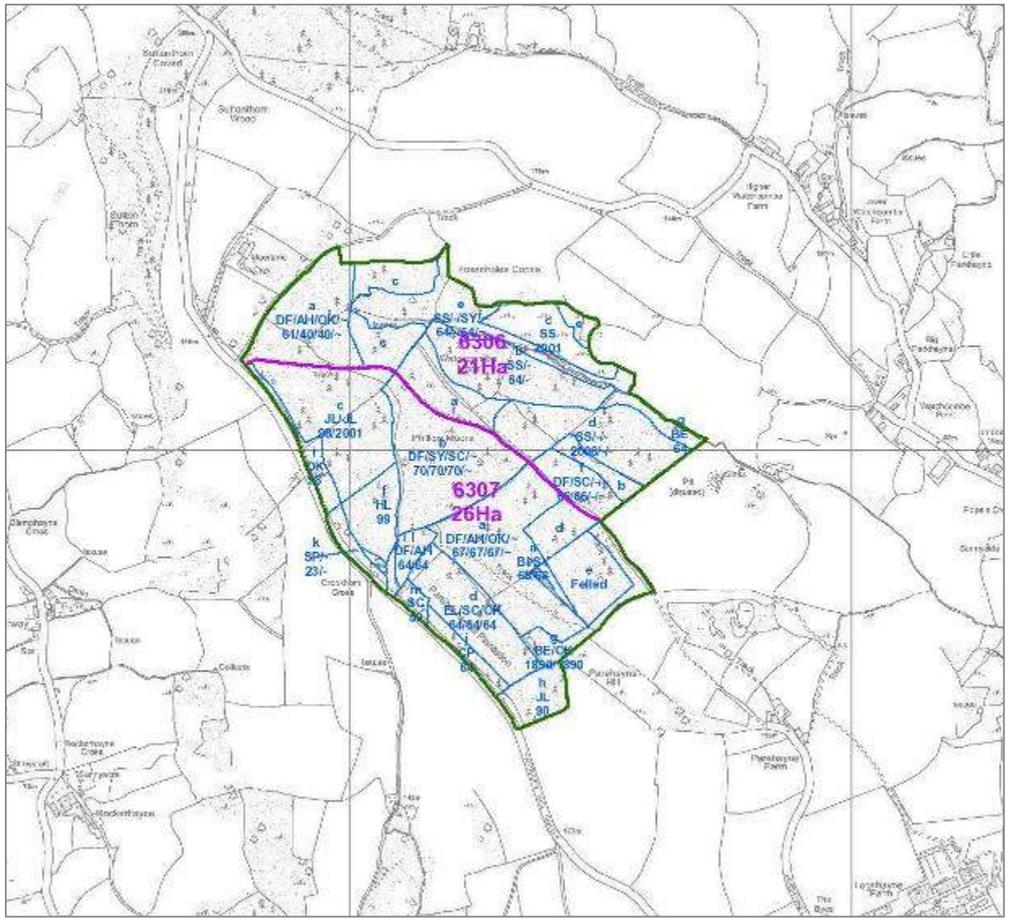
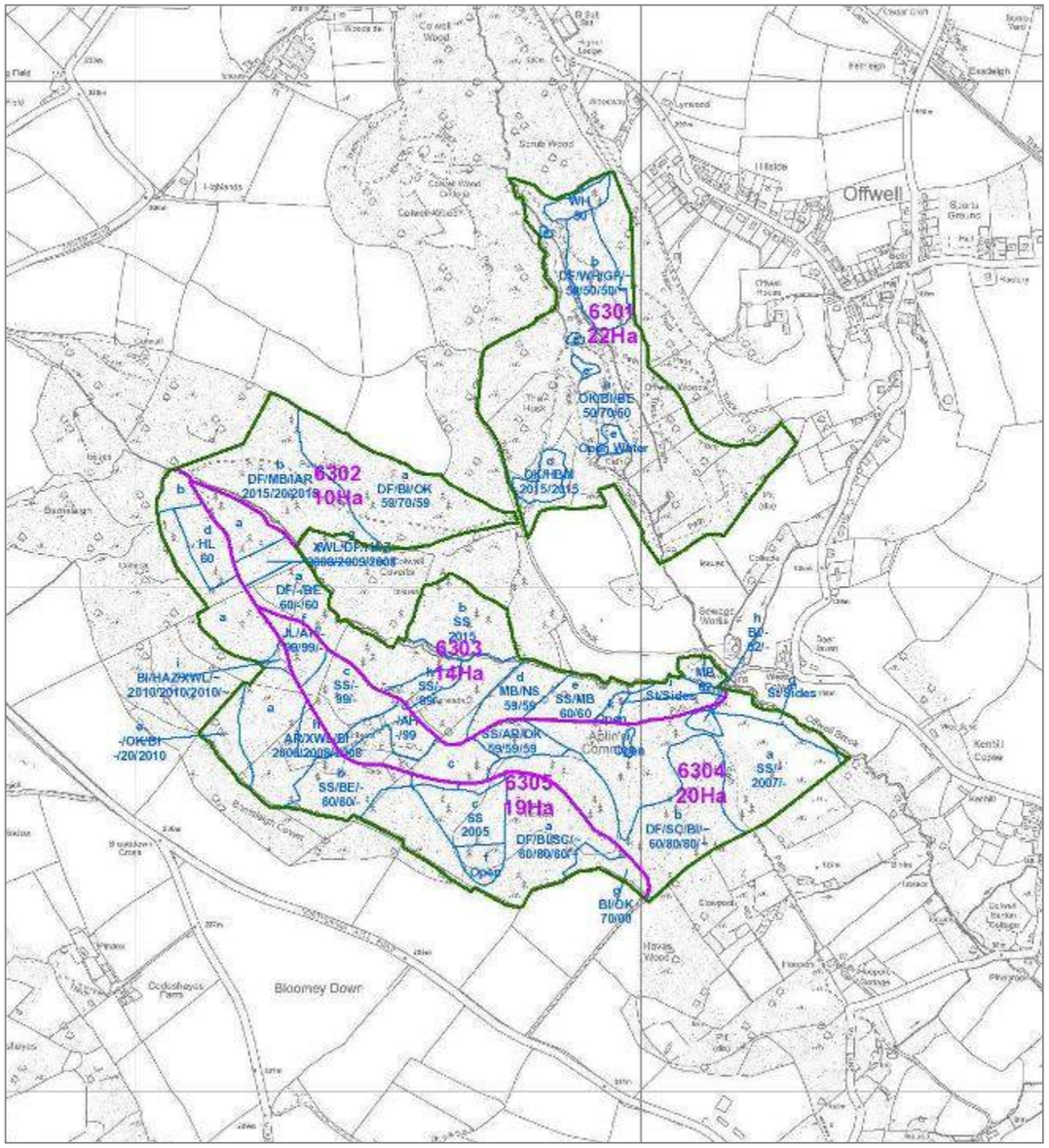
Stock Data 2019

Parehayne and Offwell

Compartments

Sub-Compartments





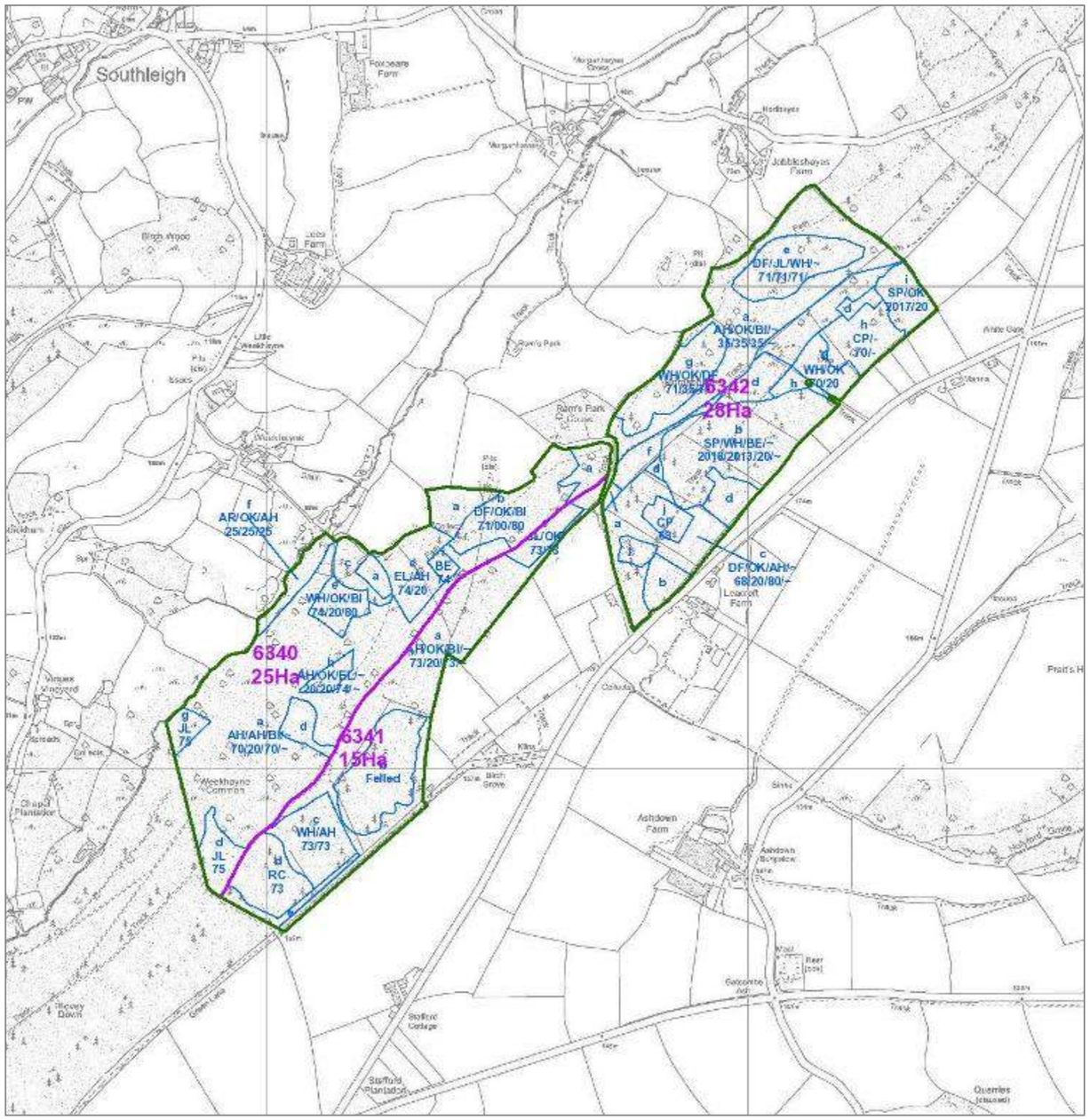
0 0.075 0.15 0.3 0.45 0.6 Miles

Stock Data 2019

Morganhayes and Trinity Hill

Compartments

Sub-Compartments



0 0.075 0.15 0.3 0.45 0.6 Miles

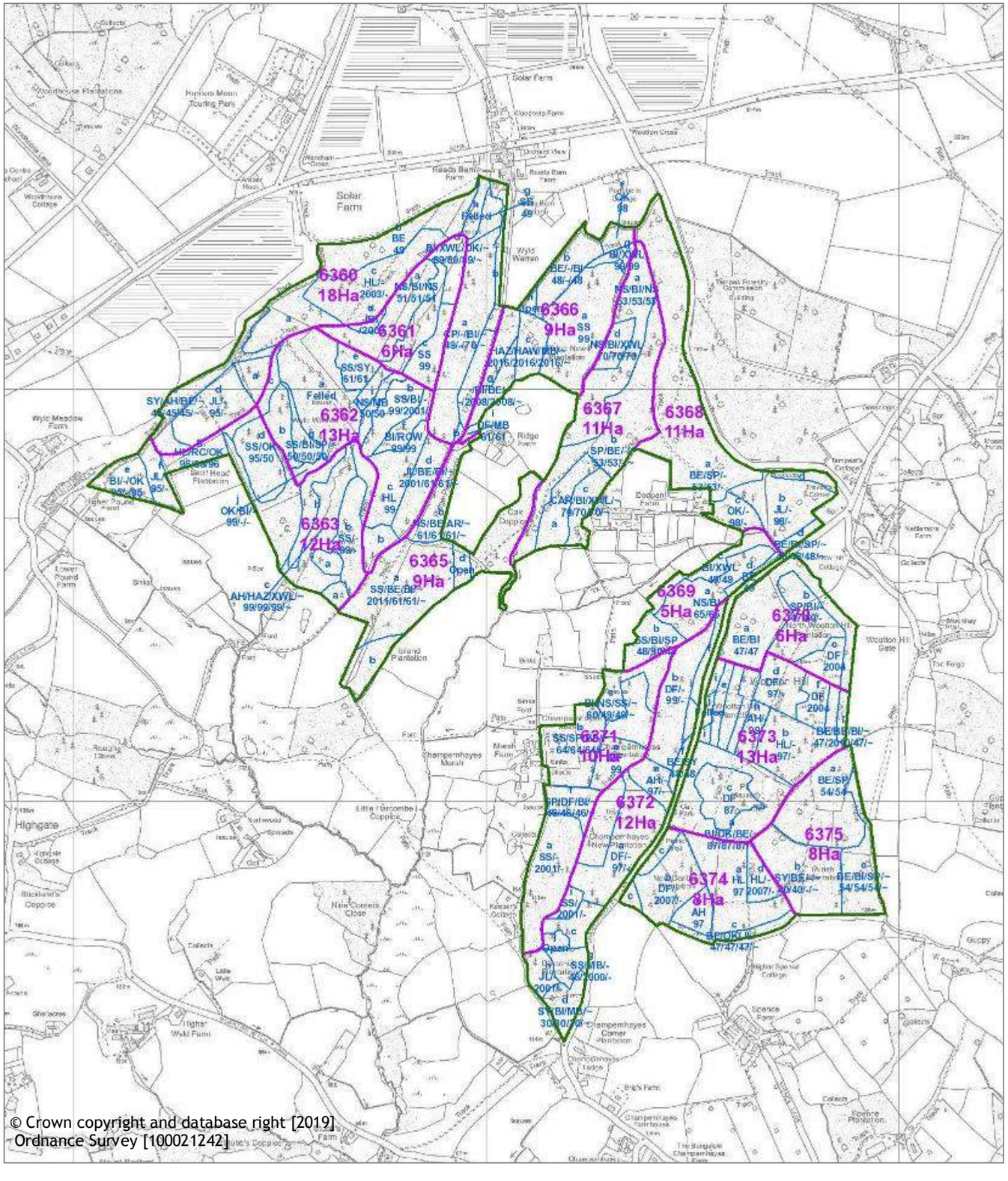
Stock Data 2019

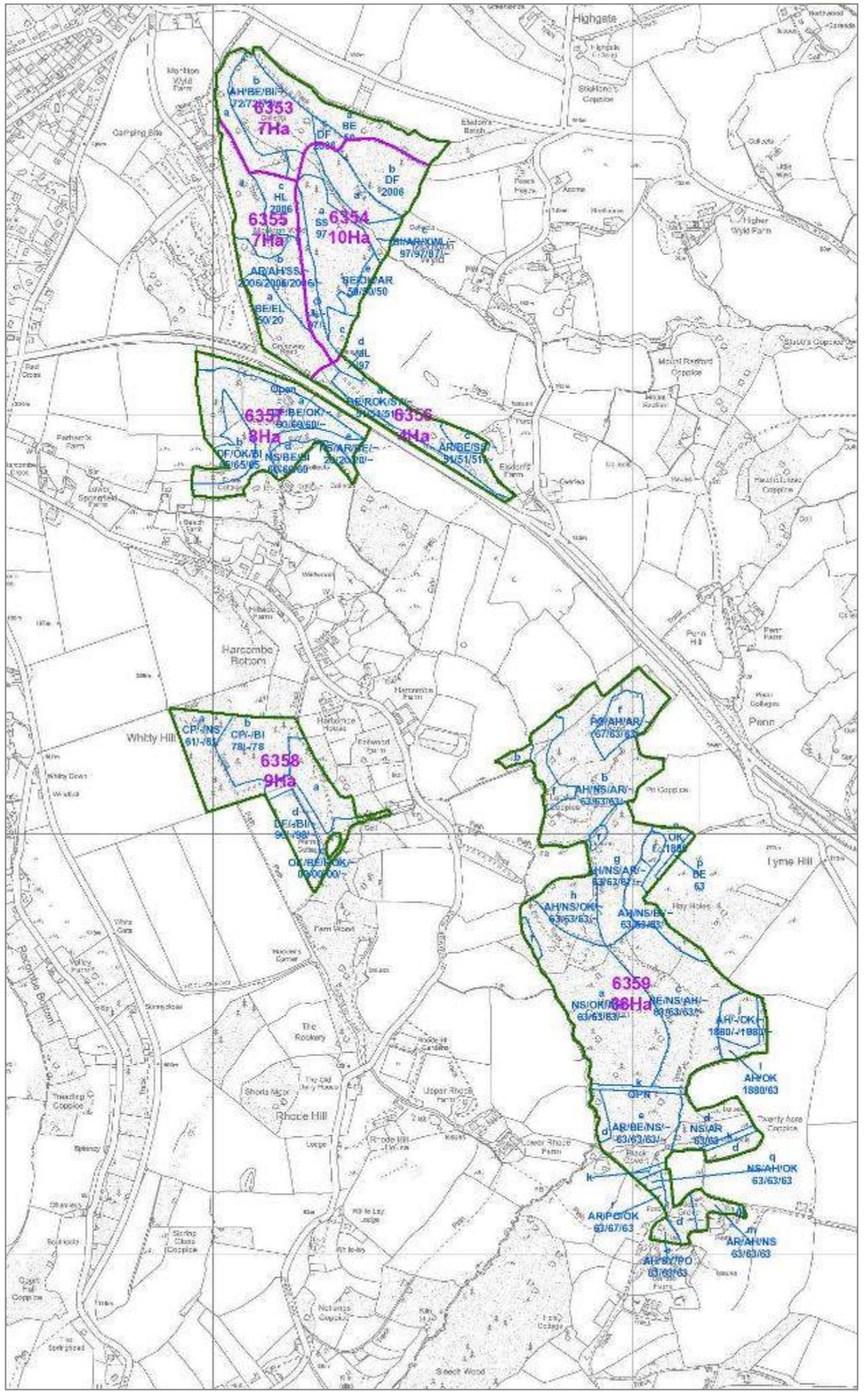
Wyld Warren, Monkton Wyld & Hole Common

Compartments

Sub-Compartments

0 0.075 0.15 0.3 0.45 0.6 Miles





APPENDIX 2
Glossary

Term	Abbreviation	Description
Ancient Semi-Natural Woodland	ASNW	An ancient woodland site, where trees and other plant species appear to of established naturally rather than having been planted. Predominantly these sites will contain 80% or over of site native species or species native to the surrounding area.
Alternatives to Clearfell	ATC	Alternative to Clearfell is similar to CCF and refers to management systems where stands are regenerated without clearfelling.
Ancient Woodland Site	AWS	A site that has technically been wooded since 1600AD and is unlikely to have been converted to farmland in the last few centuries.
Continuous Cover Forestry	CCF	Continuous Cover Forestry is an approach to forest management that enables an owner of woodland to manage the woodland without the need for clearfelling. This enables tree cover to be maintained, usually with one or more levels and can be applied to both conifer or broadleaf stands. With Conifer it is possible to regenerate the crop a lot faster than in broadleaf crops, where the canopy is generally removed a lot slower and over a much longer time span. A decision to use CCF must be driven by management objectives and will have long-term vision often aimed at creating a more diverse forest, both structurally and in terms of species composition. There are no standard prescriptions meaning CCF is very flexible in ensuring opportunities can be taken advantage of as they arise. This development of a more diverse forest is a sensible way to reduce the risks posed by future changes in the climate and biotic threats.
Clearfell	C/F or CF	To cut and remove all trees from a certain area of woodland.
Crop		A stand of trees. Often associated with stands completely or partially managed for its timber. Just as farmers manage crops so does forestry the only difference is a farmers' rotation is shorter and often realised in 1 year. Trees are a much longer term crop with rotations varying from 6 years to 400 years. (also see definition for rotation)
Enrichment planting		Planting different species within areas of regen that helps diversify the range of species in a wood and in doing so can make it more resilient to future climate change and future threats from disease. Enrichment may be desirable in areas where success of regeneration is uneven, patchy or where a regen crop is limited by the number of species present.
Group felling / group planting		This is where small areas of woodland are felled hence the name "group felling" and then either allowed to develop through the use of nat-regen or in this case planted hence "group planting". These techniques can help to develop structure* within a wood over a given length of time and is often used in conjunction with continuous cover. *Either in terms of age or number of tree species present, since shelter and shade are provided by the remaining upper storey one can consider a larger number of tree species when deciding what to plant.
Hectare	Ha	Unit of area equating to 2.47 acres.
Native (and honorary native)		The trees making up the woodland are part of England's natural, or naturalised flora. Determined by whether the trees colonised Britain without assistance from humans since the last ice age (or in the case of 'honorary natives' were brought here by people but have naturalised in historic times); and whether they would naturally be found in this part of England.
Natural Regeneration	Regen or nat-regen	Trees growing on a site as a result of natural seed fall, and can be used as a management process and can allow cleared areas of woodland to germinate, grow and develop naturally. This process can happen anywhere and woods can be managed to encourage nat-regen although there is no guarantee of success. In these instances, or if nat-regen is unlikely for a variety of reasons, one can use enrichment planting or group planting to achieve the same affect. The process usually relies on an overstorey of "parent trees" being present or on parent trees being close by to provide the seed. These parent trees will usually of been thinned and managed with natural regeneration in mind. Existing areas of nat-regen are then usually developed through carefully thinning the surrounding woodland over a number of years, to give more light and space to ensure the young trees can establish themselves into larger trees eventually allowing them to be incorporated ('recruited') into the main crop for the next rotation at some point in the future. Usually done in small groups or in strips this system can allow a varied woodland structure to develop over time. Protection from competing plant species and mammal browsing might be required in the early stages by fencing or using tree shelters.

Rotation		Generally a commercial term used to describe the length of time an area of trees is growing for, from the time of planting to the time of felling. For broadleaves a rotation is generally a lot longer than that of conifer species* and can broadly speaking be anywhere between 80 years to 3-400 years, as opposed to conifer crops whose rotation is generally shorter but can vary from 20-25 years to 120 years plus. *The exception being that of coppice where rotation length can vary from 5 or 6 years up to 30 years plus depending on management objectives. "First rotation" would refer to an area of wood planted on open ground not previously wooded. And so "second rotation" is one where woodland has been cleared and replanted.
Shelterwood		A management system that is applicable to conifer or broadleaf, where tree canopy is maintained at one or more levels without the need to clearfell the whole site. Felling can occur, but generally in small "groups" whose size shape and spatial distribution will vary depending on site conditions. The "groups" are then either: allowed to develop and establish by the use of natural regeneration, are planted or are established using a mixture of both techniques. This known as a "group shelterwood system" A variation on this is "Single tree selection". This variation removes individual trees of all size classes more or less uniformly throughout the stand to maintain an uneven-aged stand and achieve other stand structural objectives. While it is easier to apply such a system to a stand that is naturally close to the uneven-aged condition, single tree selection systems can be prescribed for even-aged stands, although numerous preparatory thinning interventions must be made to create a stand structure where the system can truly be applied.
Silviculture		A term coined during late 19th century from the Latin *silva meaning* 'wood' and the French *culture* meaning 'cultivation' and so Silviculture is the art and science of controlling the establishment, growth, composition, and quality of forest vegetation to achieve a full range of forest resource objectives.
Stand		A group or area of trees that are more or less homogeneous with regard to species composition, density, size, and sometimes habitat.
Thin	TH	Selective removal of trees from a wooded area, giving remaining trees more space to grow into larger trees. Thinning is done to: Improve the quality and vigour of remaining trees. Remove trees interfering with mature or veteran broadleaf trees. Give space for tops (or "crowns") of broadleaf trees to develop and potentially act as a future seed source. Give space for natural regeneration to grow and develop with the intention of recruiting these younger naturally grown trees as a part of the future woodland structure. Create gaps for group planting or enrichment. Remove species of tree that may compromise the intended management objective of the woodland eg: non-native or invasive species such as Sycamore, Western Hemlock or birch. Improve the economic value of a wood. Help realise opportunities to enhance ecological value. **NOTE:** This list is not in any order of priority and will vary depending on management objectives.
Yield Class	YC	A method of measuring the growth rate or "increment" of a crop of trees by age and height; measured in m3 per Ha per annum. E.g. A crop with a YC of 16 is one that has an annual increment of more than 16m3 but less than 17m3, although generally only even numbers are used when stating YC.

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