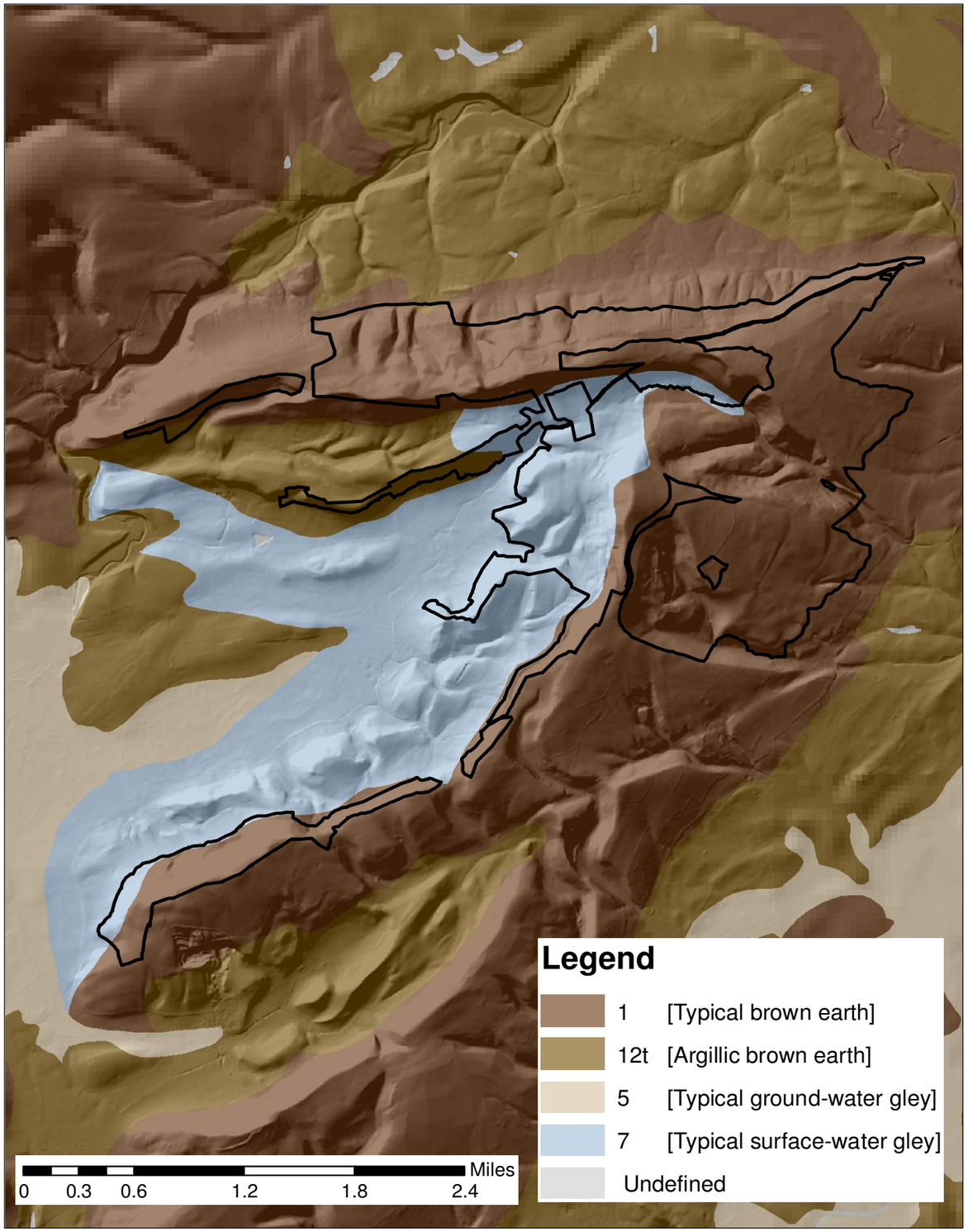
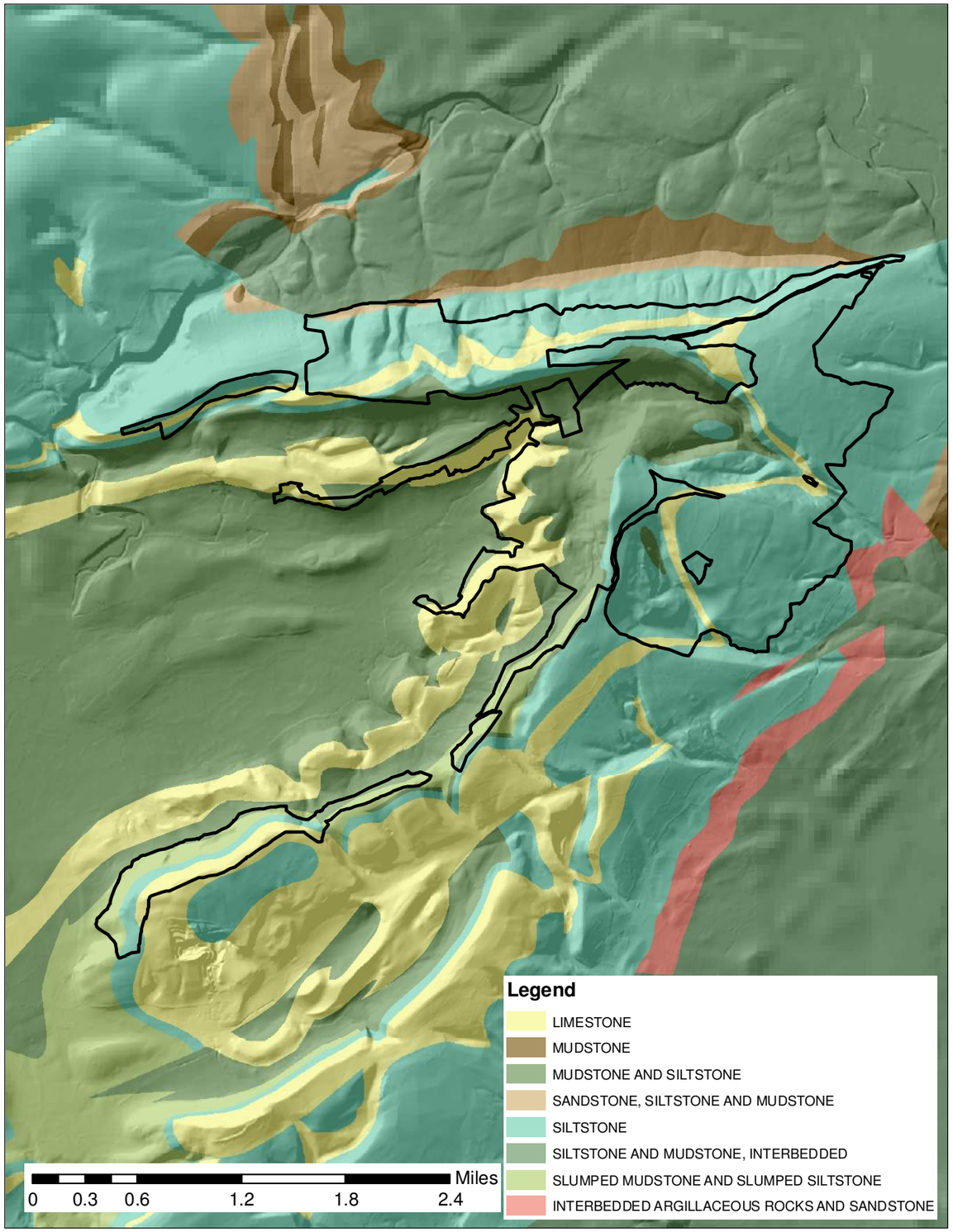
Soils



Geology



Landform Analysis

The Mortimer Forest Plan area sits raised in an lowland but hilly landscape at between 150 – 375 metres above sea level, with a predominantly north-westerly aspect.

The landscape analysis is used to assess the landform patterns and demonstrates how it is in keeping with the surrounding landscape character.

One's eye is naturally dawn up the valleys and down the ridges. These principles will be used to design the shape of future coupes. Ensuring that the shape and size of felling and restocking areas do not detract from the natural appearance of the forest and its contribution to the landscape character.

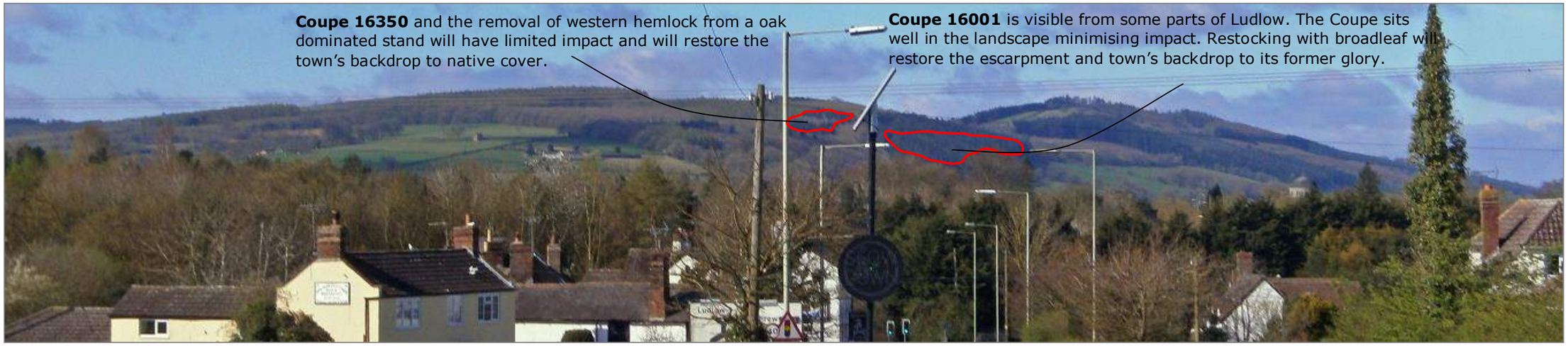
Lines of upward force

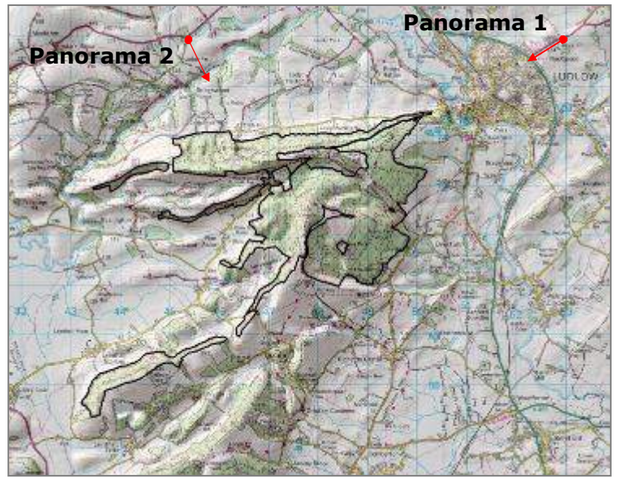
Lines of downward force

0 1 2 4 6 8 Miles

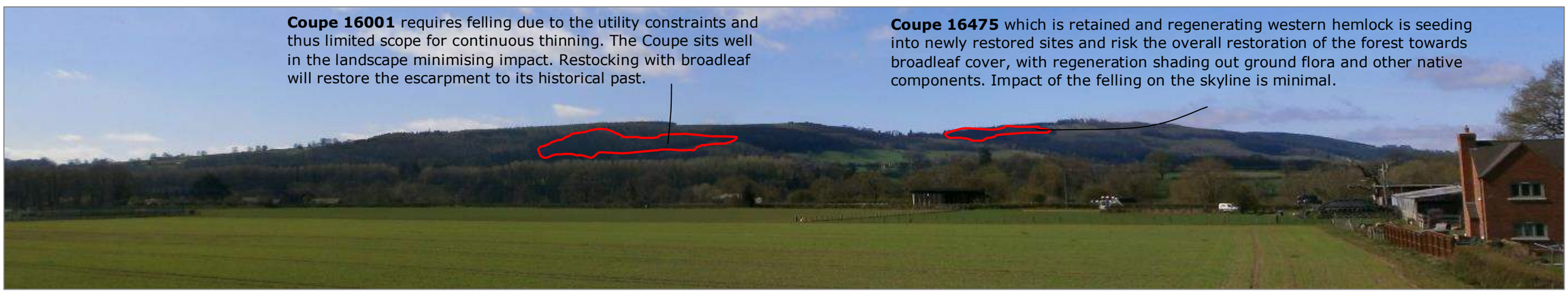
Landscape Analysis

Panorama 1



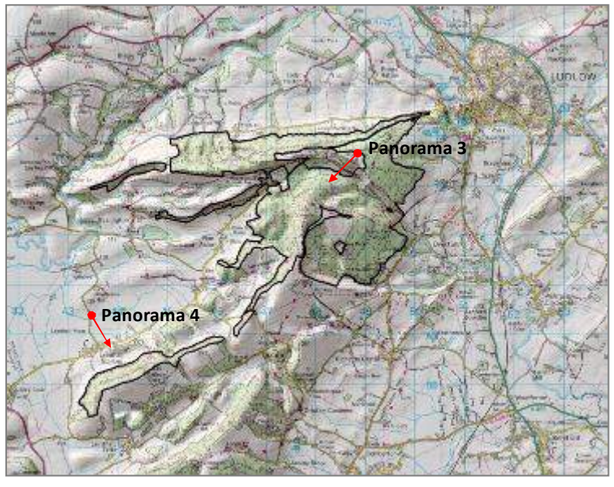


Panorama 2

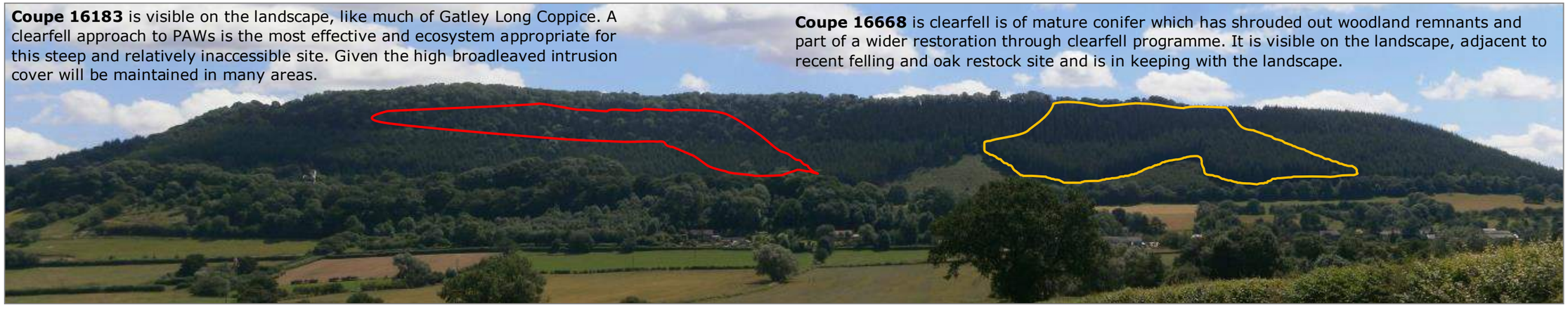


Landscape Analysis

Panorama 3



Panorama 4



Water & Riparian Management

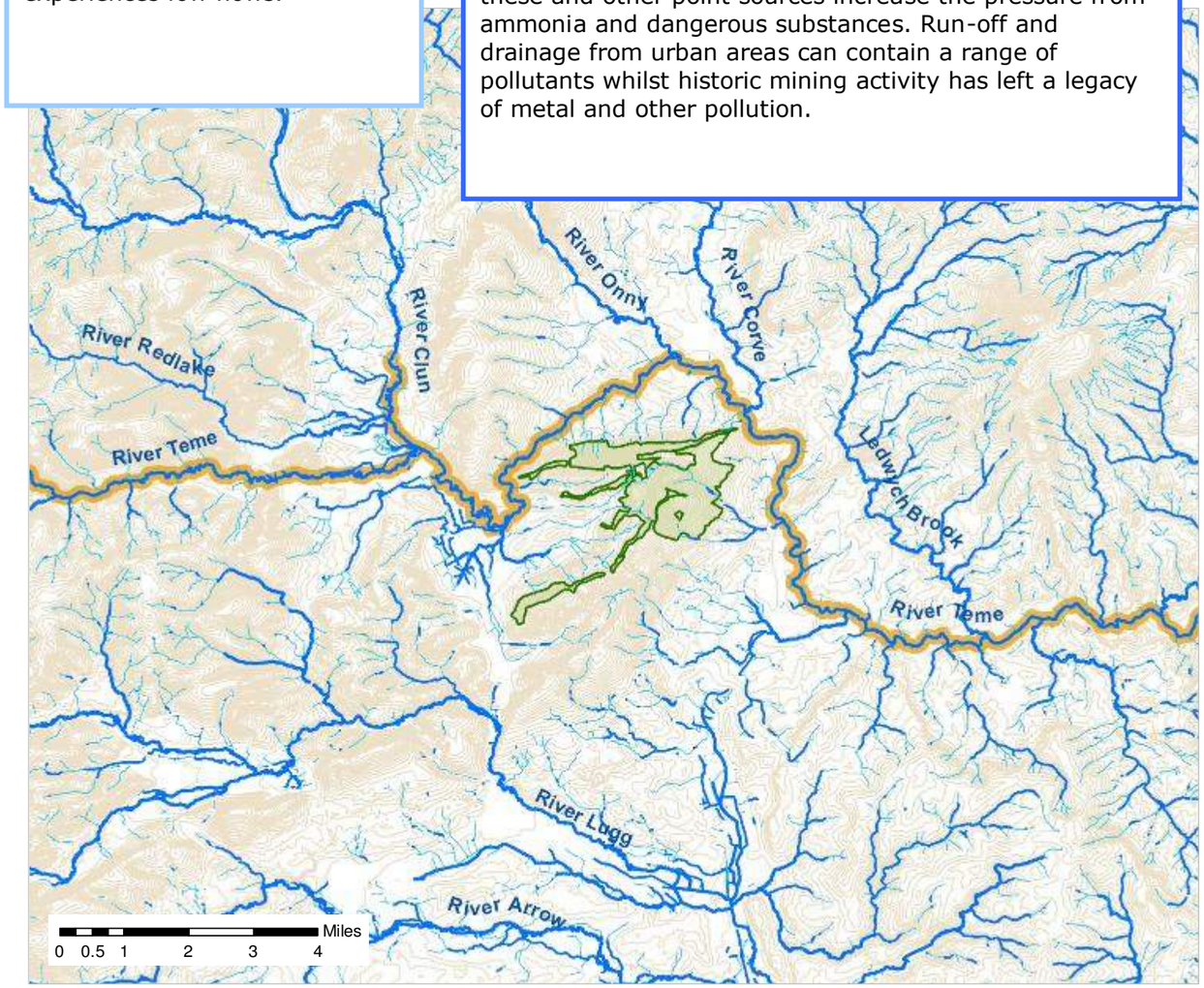
River Teme Catchment (River Basin Management Plan, Environment Agency, 2009)

Brown trout and migratory Atlantic salmon are found throughout the majority of the Teme catchment and its tributaries provide extensive spawning grounds for both species. The presence of obstacles such as weirs limits the distribution of salmon within the catchment. Water quality in the lower reaches of the catchment is affected by diffuse pollution, mainly by nutrients and sediment. Whilst there is adequate supply of surface water in the catchment during the winter months, in the summer the Teme often experiences low flows.

flow

River Severn Basin (River Basin Management Plan, Environment Agency, 2009)

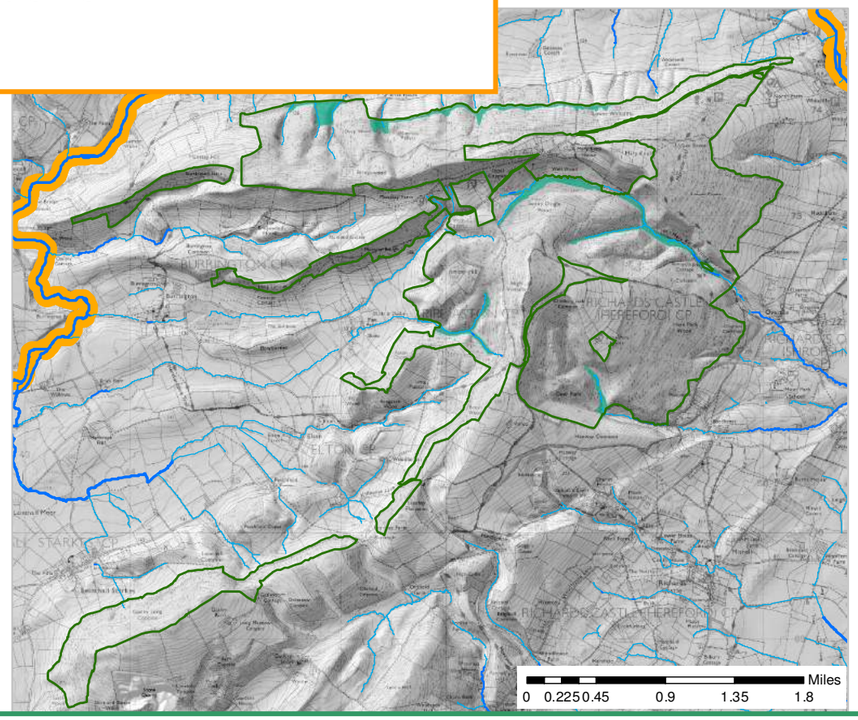
The Severn River Basin is home to over 5.3 million people and covers an area of 21,590km2, with about one third of the district in Wales. The river basin district contains important habitat and wildlife areas, including 28 Special Areas of Conservation and five Special Protection Areas. Rural land management is a source of diffuse pollution from nutrients, sediments and pesticides. Sewage treatment works and other intermittent discharges from the sewerage network also increase nutrient levels whilst these and other point sources increase the pressure from ammonia and dangerous substances. Run-off and drainage from urban areas can contain a range of pollutants whilst historic mining activity has left a legacy of metal and other pollution.



River Teme SSSI (SSSI Notification, Natural England, 1996)

The River Teme is of special interest as a representative, near-natural and biologically-rich river type associated with sandstone and mudstones. These attributes and the high water quality, support significant river plant, fish and invertebrate communities and otter populations.

The majority of the SSSI is currently in 'Unfavourable, no change' condition, due to poor water quality as a result of inappropriate hard structures, invasive freshwater species and water pollution. The maintenance of good water and sediment quality are essential to maintaining a healthy river system. River management should minimise pollution both from point and diffuse sources, and will include discharges of domestic and industrial effluent, run-off from agriculture, forestry and urban land, and accidental pollution from industry and agriculture. Riparian areas and the wider catchment need to be managed sensitively to avoid excessive run-off of soil particles and nutrients into the river.



Riparian Management

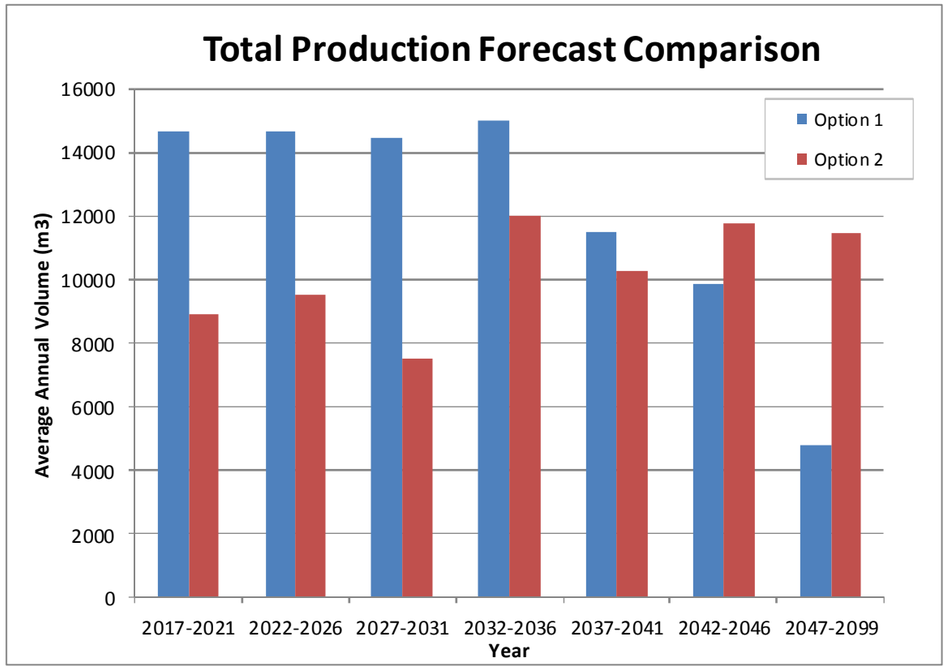
The riparian zones identified will be developed over time to create areas of 50% continuous forest cover through gradual conifer removal and enrichment with site appropriate native tree species, such as *Alnus, Salix* and *Ulmus* spp. A gradual change to this type of wetland habitat will create a environment of dappled shade with good light penetration and aeration as well as buffer the riverine systems from forestry operations.

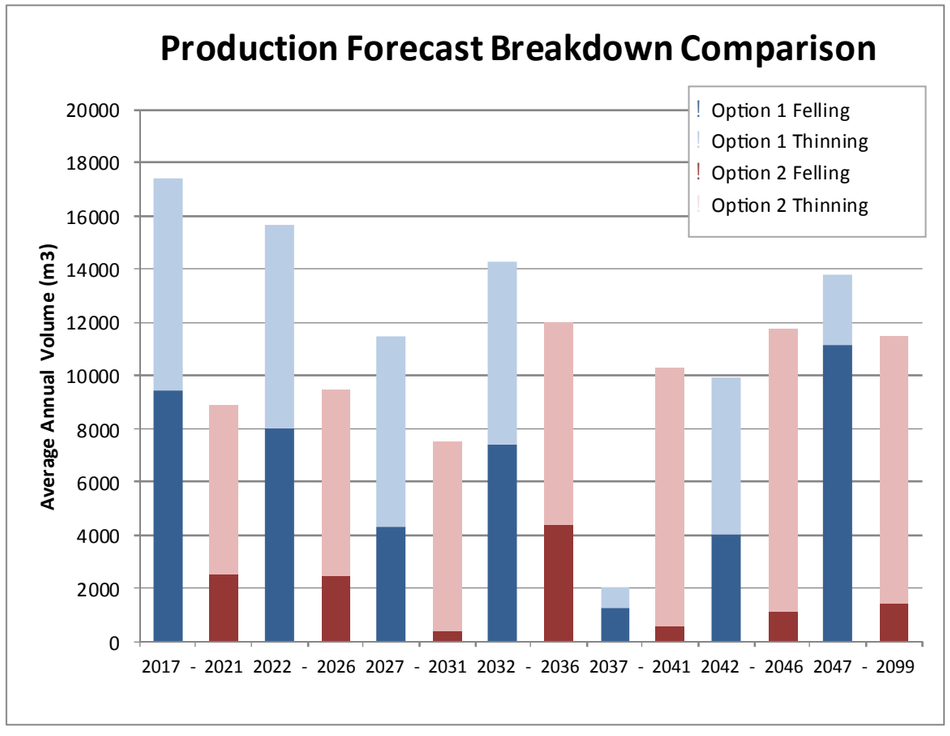
Clearfells within the Plan area have been designed and phased to minimise surface water runoff and soil erosion ensuring the riverine systems and SSSI are protected and improved into the future. All operations will look to work within the guidelines set out in UKFS, Forests and Water.

Mortimer Forest Plan area provides excellent flood alleviation for the River Teme and the wider Severn River Basin through 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.

Option Testing

Option 1 – Current Forest Plan	Option 2 – Proposed Forest Plan
The continued production of sustainable and marketable woodland products.	
The production of timber is somewhat reliant on volume resulting from clearfelling. This felling programme is experiences some periods significant of peaks and troughs. This combines together to make a less sustainable production model for woodland products.	The felling and thinning programme is balanced across the decades which stabilises the sustainability of timber production. This is achieved by resequencing coupes and increasing the amount of thinning volume by switching suitable coupes to CCF.
To conserve, maintain and enhance cultural and heritage assets	
The proposals make little acknowledgement of the heritage assets but in reality plans would have minimal impact on features.	The Plan acknowledges the cultural significance of the Forest and a clear and measurable set of proposals have ensured the perpetuity of these valuable features.
The provision and maintenance of recreation facilities.	
Management proposals see a steady flow of clear felling with coupes adjacent to recreational facilities.	Selection systems will replace some clear felling in key areas to ensure a higher quality of user experience.
To protect and restore areas of ancient woodland in line with 'Keepers of Time'.	
Minimal acknowledgement is made of the need or process to restore ancient woodland. Any significant restoration would be achieved through clear felling and restocking.	A clear strategy for PAWS restoration through a mixture of clear felling, group felling and thinning together with native species replanting will ensure a proactive restoration of ancient woodland will occur over time.
Protect and enhance woodland and open habitats and their associated species.	
Restructuring is mainly reliant on the use of clear felling with restocking consisting use of one or two species, thus retaining fairly monocultured single-aged stands.	The diversification of age and species structures through targeted felling and restocking together with a proactive programme of maintaining permanent and transient open space ensures an enhanced and diverse range of habitats is realised.
To deliver well-designed proposals that comply with landscape design principles in keeping with the local landscape character.	
A reliance on clearfell particularly on visible edges, such as Bringewood with little allowance for integrated management systems and retentions to minimise felling impact.	The Plan makes acknowledgement and provision for the forests contribution to the local landscape character. Coupes are designed in a way to enhance the local character both from a short and long-distance, Steps have been taken to reduce the amount of clearfelling as well as using corridors to improve internal landscape views.





Utilities

Legend

- Powerline Overhead
- Powerline Underground
- water_pipeline

Roads

- Class B
- Class C
- Unclassified
- n — Dams

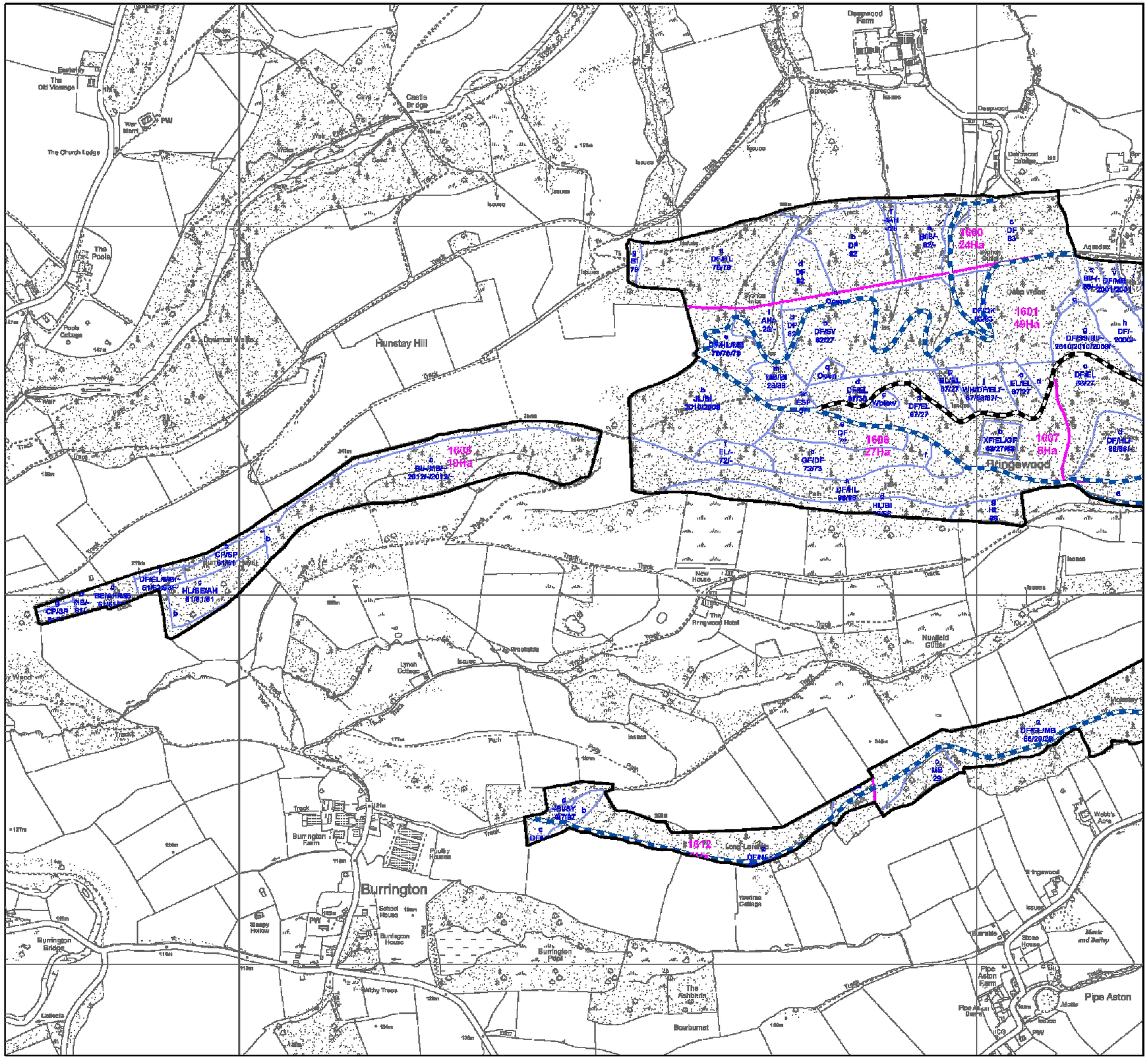
0 0.275 0.55 1.1 1.65 2.2 Miles

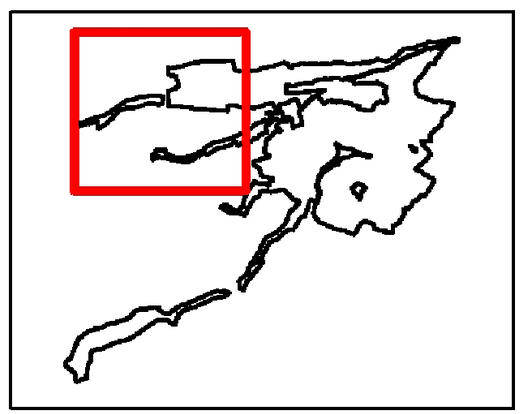
Fell 2019 - 2021
Fell 2022 - 2026
Fell 2027 - 2028
Group Selection

Coupe Prescriptions

Coupe	Area	Existing Crop	Rationale/Prescription	Restock	Area	Restock Proportion	Rationale/Prescription
16350	1.3 ha	p.56 WH	Mature western hemlock continues to pose a risk to the restoration of the forest towards broadleaf cover, with regeneration shading out ground flora and other native components, particularly mature oak within the stand which is to be retained. Operation should be similar to a heavy thinning.	**16350a**	1.3 ha	80% Native broadleaf 20% Open	Replanting should only be required to enrich the exiting mature oak component intrusion within the stand. This is most likely in towards the east of the stand which is more heavily coniferised. Consider enriching in with wych elm, cherry and wild service.
16475	2.8 ha	p.54 WH p.2001 WH	Retained and regenerating western hemlock is seeding into newly restored sites and risk the overall restoration of the forest towards broadleaf cover, with regeneration shading out ground flora and other native components.	**16475a**	2.8 ha	80% Native broadleaf 20% Open	Replanting on this exposed site will be required. Site is relatively poor and well drained, north facing and cool. Consider planting all of the site with Pedunculate oak, elm, cherry and/or wild service.
16183	9.3 ha	p. 64 NS	Clearfell approach to PAWs is the most effective and ecosystem appropriate for this steep and relatively inaccessible site. Clearfell is of mature conifer which has shrouded out woodland remnants and part of a wider restoration through clearfell. Option to heavily thin p.80s crop within coupe if felt appropriate.	**16183a**	9.3 ha	80% Native broadleaf 20% Open	Restocking should be achieved through a mixture of cluster planting and natural regeneration. Banks of seeding broadleaves to the south should provide good local source from which to build. Consider planting oak in clusters with hazel to replicate coppice with standards.
16001	8.4 ha	p.55 DF	Crop is mature and situated below major utility pipeline. Continued thinning for gradual restoration threatens the integrity of the pipeline and therefore crop will be removed in single operation.	**16001a**	8.4 ha	80% Native broadleaf 20% Open	Replanting should only be required to enrich the exiting mature oak component intrusion within the stand. This is most likely in towards the east of the stand which is more heavily coniferised. Consider enriching in with wych elm, cherry and wild service.
16083	9.3 ha	p.61 WH p.61 GF p.62 NS p.62 DF	Crop has now reach economic maturity and further thinning will yield little result. Mature seeding conifers pose a risk to the remnant features, with regeneration shading out ground flora and other native components and continued thinning to CCF too complex given the site conditions.	**16083a**	6.3 ha	90% Evergreen conifer 10% Open	Site yields good quality timber and should be restocked accordingly with this objective in mind. Flushed poor to rich soils mean consider planting Douglas fir, Omarika spruce or Noble fir
				16083b	3.0 ha	80% Native broadleaf 20% Open	Replanting on this exposed site will be required. Site is relatively poor and well drained and south facing. Consider planting all of the site with Pedunculate oak, elm, cherry and/or wild service.
16668	8.3 ha	p.64 NS	Clearfell approach to PAWs is the most effective and ecosystem appropriate for this steep and relatively inaccessible site. Clearfell is of mature conifer which has shrouded out woodland remnants and part of a wider restoration through clearfell programme. Option to heavily thin p.80s crop within coupe if felt appropriate.	**16668a**	8.3 ha	80% Native broadleaf 20% Open	Restocking should be achieved through a mixture of cluster planting and natural regeneration. Banks of seeding broadleaves to the south should provide good local source from which to build. Consider planting oak in clusters with hazel to replicate coppice with standards.
16836	4.9 ha	p.52 JL p.52 DF	Crop has now reach economic maturity and further thinning will yield little result. Given much is larch on secondary woodland, this is precautionary attempt to minimise the impact of *Phythophthora ramorum* infection. Coupe is part of wider ongoing clearfelling programme.	**16836a**	4.2ha	90% Evergreen conifer 10% Open	Site yields good quality timber and should be restocked accordingly with this objective in mind. Flushed poor to rich soils mean consider planting Douglas fir, Omarika spruce or Coast redwood
				16836b	0.7 ha	80% Native broadleaf 20% Open	Replanting on this exposed site will be required. Site is relatively poor and well drained. Consider planting all of the site with Pedunculate oak, elm, cherry and/or hazel.
16713	6.3 ha	p.50 JL	Group fellings totalling 1.5 ha within Plan period (up to 0.25ha per 2ha per 5 years) used to diversify stand structure and accelerate native woodland cover restoration. Group fells should start furthest from car park and trails to minimise impact.	**16713a**	6.3 ha	80% Native broadleaf 20% Open	Minimal replanting should be required given the sites propensity to naturally regenerate oak and hazel. Consider enriching in clusters with Pedunculate oak, elm, cherry and wild service.
16747	15.4 ha	p.59 JL p.49 JL p.49 LC	Group fellings totalling 3.5 ha within Plan period (up to 0.25ha per 2ha per 5 years) used to diversify stand structure and accelerate native woodland cover restoration. Group fells should start furthest from car park and trails to minimise impact.	**16747a**	15.4 ha	80% Native broadleaf 20% Open	Minimal replanting should be required given the sites propensity to naturally regenerate oak and hazel. Consider enriching in clusters with Pedunculate oak, elm, cherry and wild service.

Stock Data - 2018





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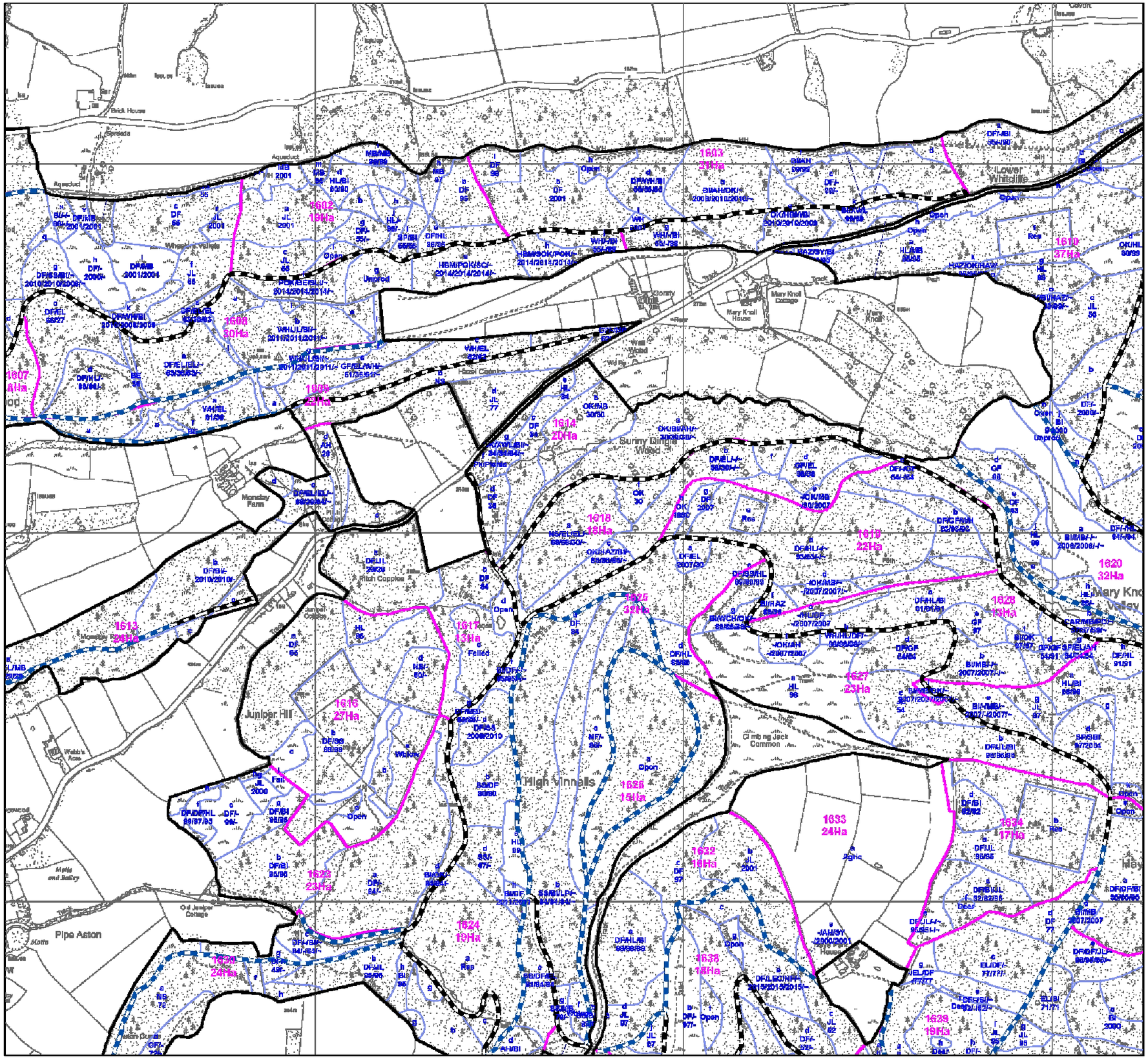

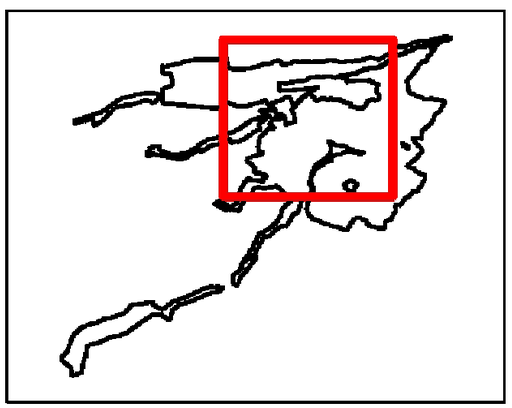

0 0.1 0.2 0.4 0.6 0.8 Miles

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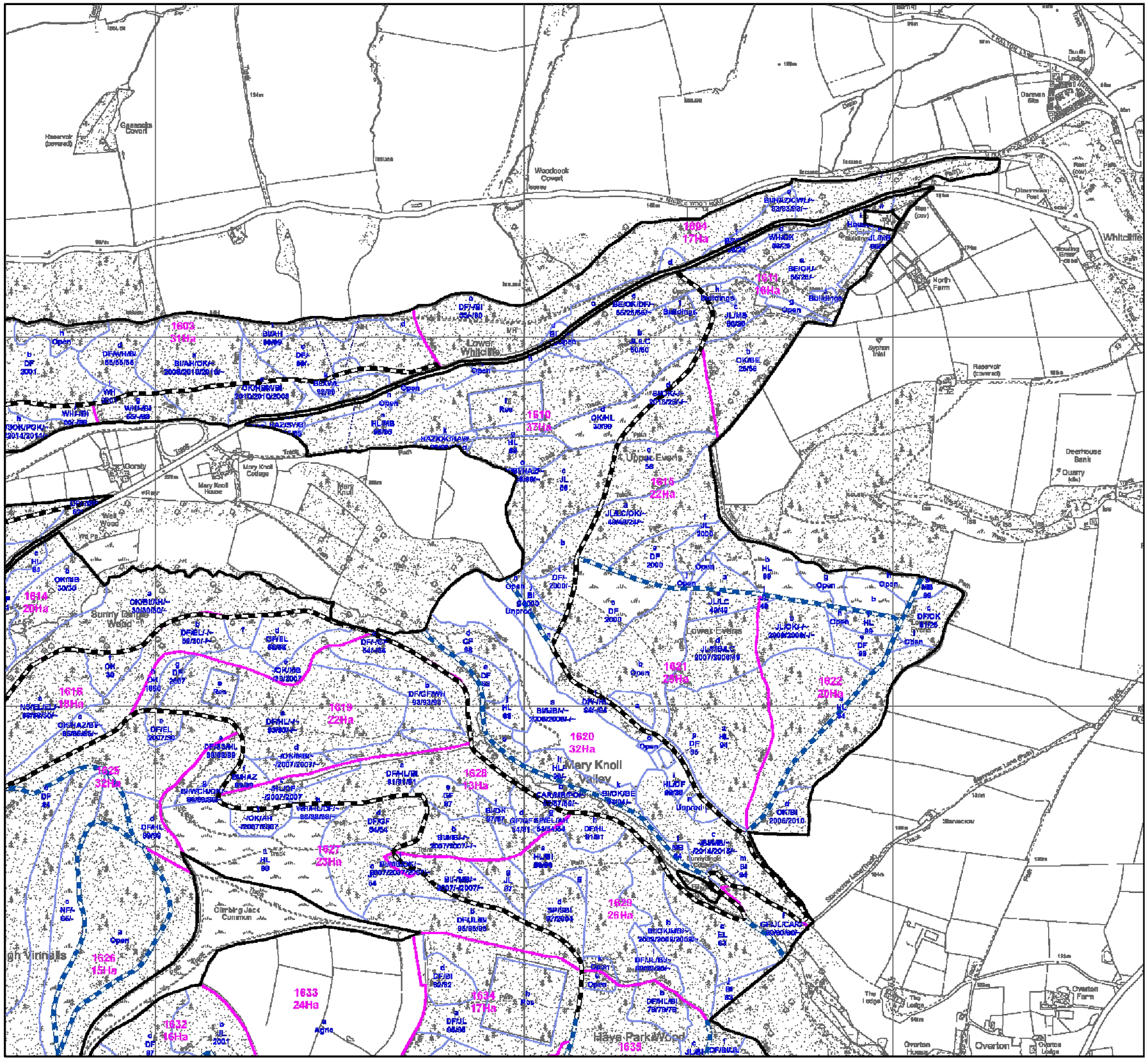

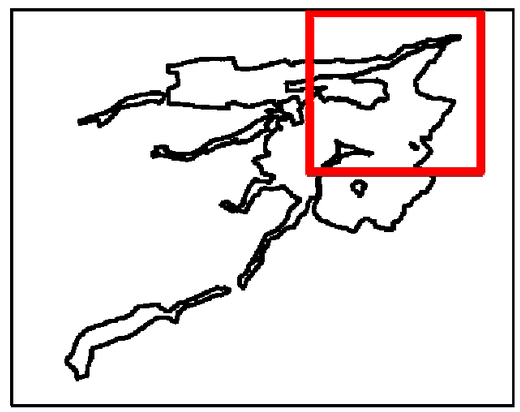

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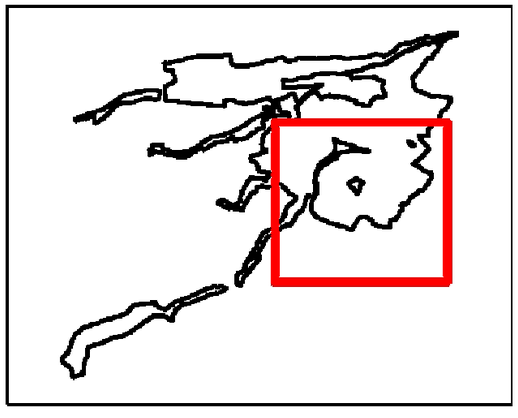

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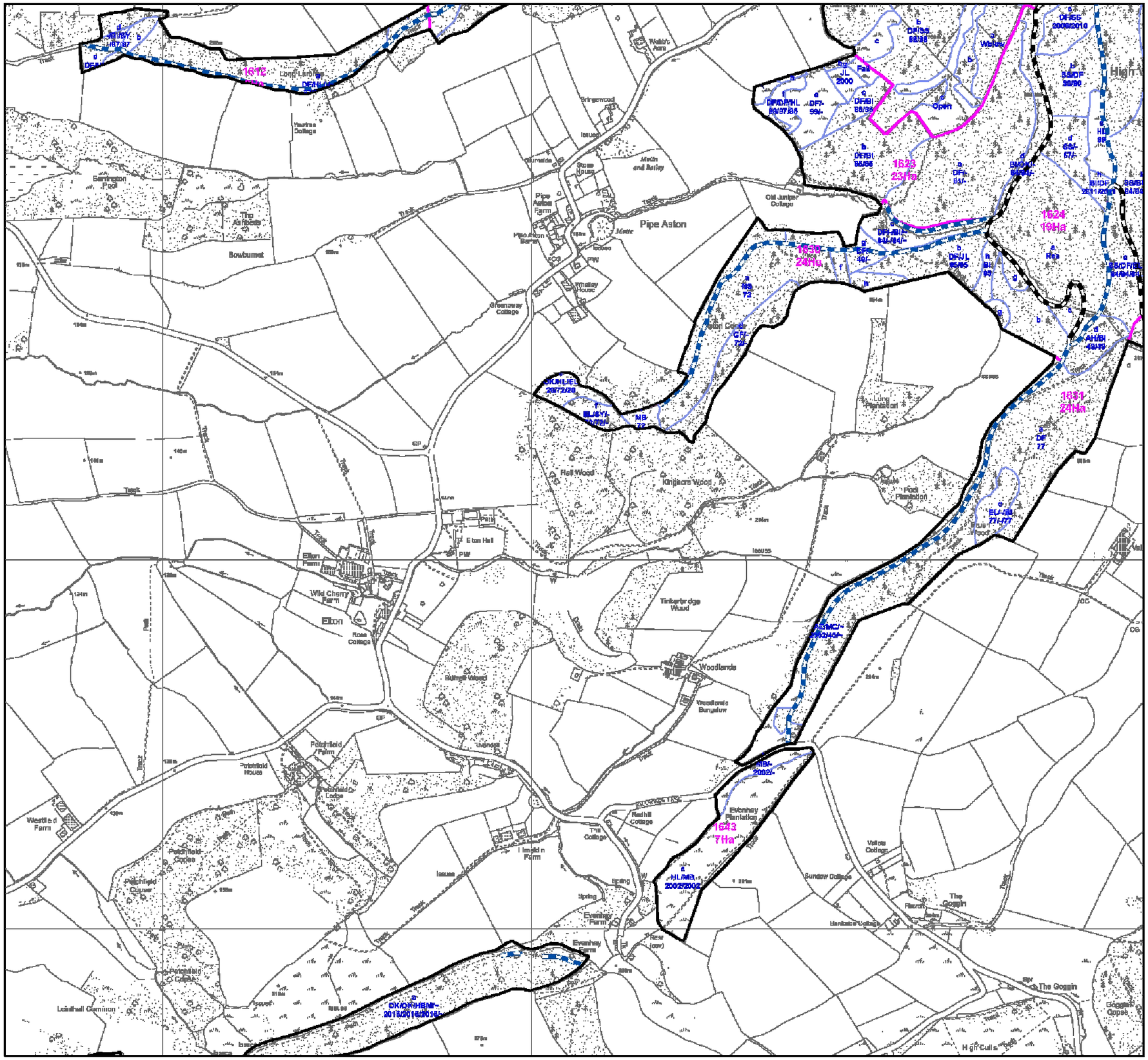

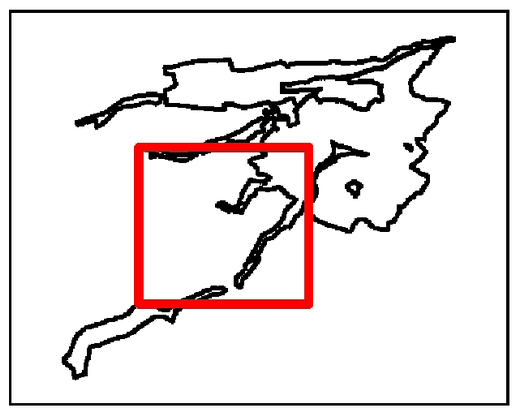

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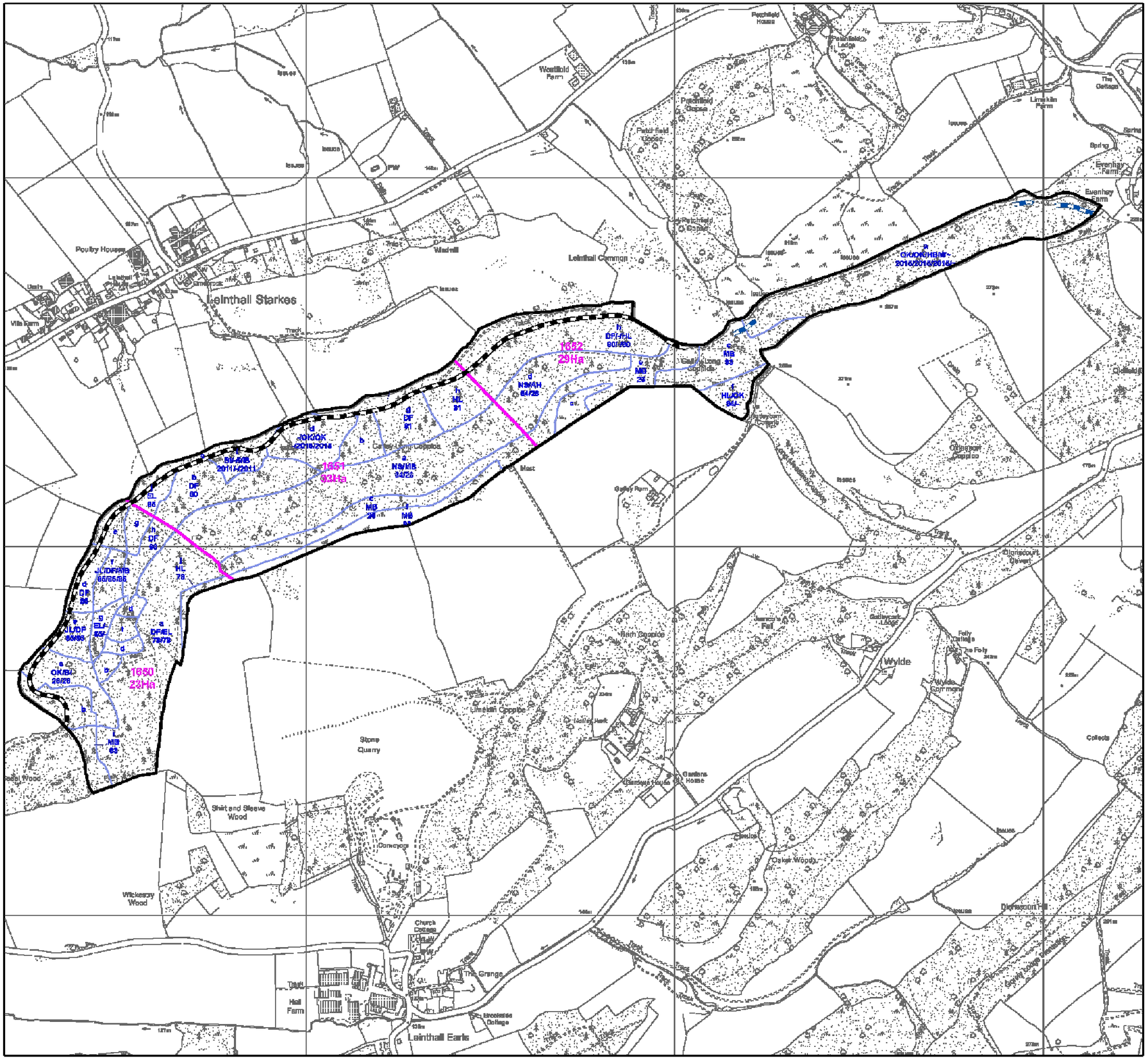
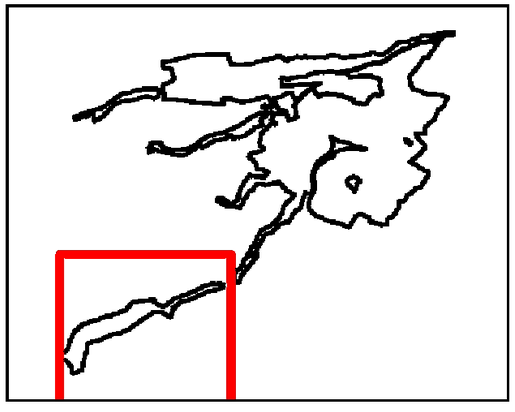
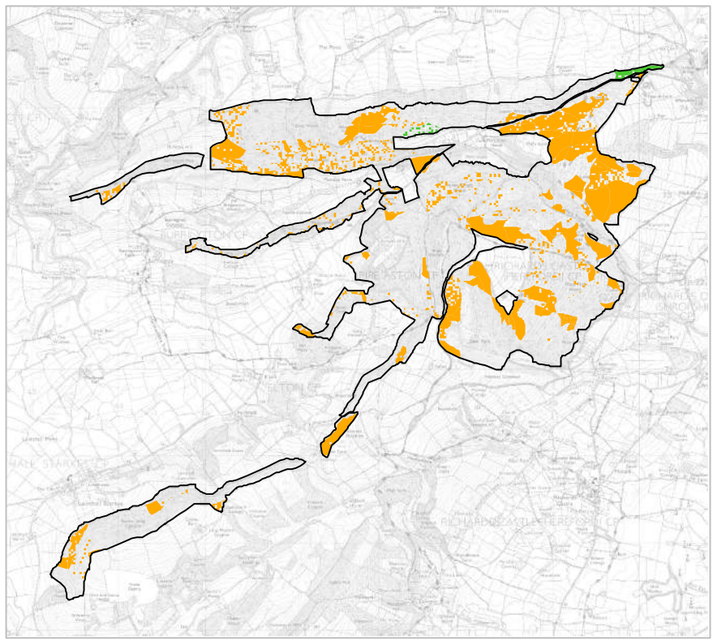
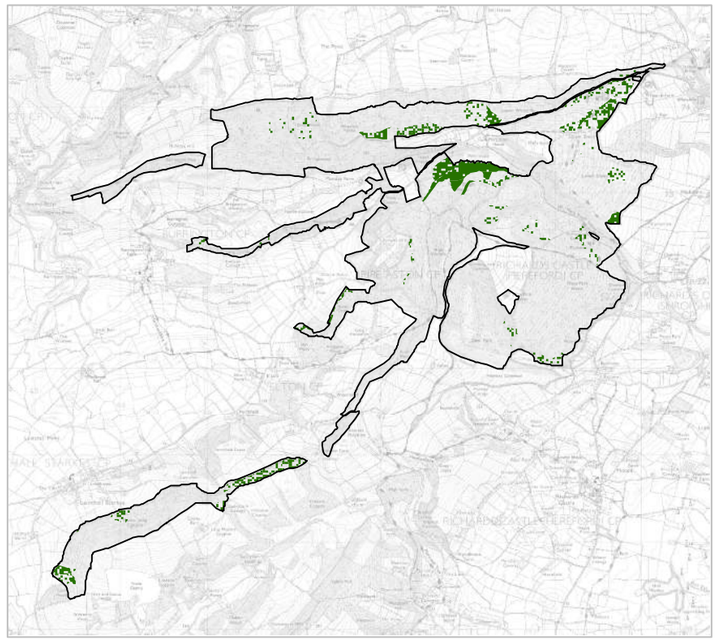




Pests & Diseases

Name: *Phytophthora ramorum* (PR)
First appearance: 2009
Attacks: Larches
P. ramorum was first found in the UK in 2002 and until 2009 in the woodland environment had largely been associated with rhododendron species acting as a host from which spores are produced. In August 2009 P. ramorum was found on a small number of dead and dying Japanese Larch in South West England, causing particular concern since some affected trees were not close to infected rhododendron and showing a significant change in the dynamics of the disease than experienced previously. Following this testing in Devon and west Somerset confirmed the presence of PR in mature Japanese larch as well as species in its under-storey, including sweet chestnut, beech, birch, oak, Douglas fir and Western hemlock. On some sites there is little or no rhododendron present. It is now known that Japanese larch can produce very high quantities of disease-carrying spores when actively growing in spring and summer, at much higher levels than those produced by rhododendron. These can be spread significant distances in moist air. PR is a notifiable disease dealt with by felling the infected area under a statutory plant health notice (SPHN) issued through FERA and the Forestry Commission.





Name: Oak 'dieback' or 'decline'
First appearance: unknown
Affects: Oak
Oak 'dieback' or 'decline' is the name used to describe poor health in oak trees and can be split into Chronic decline and Acute decline. Chronic decline is protracted taking effect on the Oak over a number of decades whilst Acute decline is much swifter acting over much shorter periods usually five years or so. Symptoms can be caused by a range of living agents e.g. insect and fungal attack, or non-living factors, e.g. poor soil and drought. Factors causing decline can vary between sites, as can the effects of the factors through time. Oak decline is not new; oak trees in Britain have been affected for the most part of the past century. Both native species of oak are affected, but Pedunculate oak (Quercus robur) more so than Sessile oak (Quercus petraea). Successive exposure to any of these agents on a yearly/ seasonal basis further reduces the health of the tree(s) and predisposes it to other living (Biotic) agents that can often spell the eventual death knell for the tree.

Name: *Chalara fraxinea*
First appearance: currently N/A
Attacks: Ash
Pretty rampant in Europe, showing up in 2012 mainly in East Anglia and along the East coast of England. To date no infection has been found within this part of the West England Forest District and let us hope it stays that way!

Name: Dothistroma Needle Blight (DBN)
First appearance: mid 1990s
Attacks: Pine species
Often referred to as Red Band Needle Blight (RBN) and can reduce growth rates by between 70 and 90%. Effects of RBN are managed through thinning the wood more heavily than you would normally to introduce higher levels of air flow through the remaining crop. However, the Mortimer Plan area contains a relatively small component and therefore its impact has been fairly limited.

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 clear-fell 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 e.g.: 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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APPENDIX 4 - Consultation Record

Consultation conducted via Citizen Space between 30th November 2018 and 1st February 2019

Consultee Name	Consultee Comment	FC Response
Statutory		
Hereford CC	No Response	-
Shropshire CC	No Response	-
Hereford CC	No Response	-
Shropshire CC	No Response	-
Natural England	No Response	-
Historic England	No Response	-
Ludlow Town Council	Representational Committee would like to express their appreciation for the comprehensive Mortimer Forest Plan 2018-28. The consideration given to the diversity of flora and fauna within the plan, and particularly the increased broadleaf planting were very much appreciated	Comments acknowledged.
Aymestrey CP	Aymestrey Parish Council asks Forestry Commission England to implement its obligations under the Keepers of Time Policy by replanting the ancient woodland in Mortimer Forest, including Gatley Long Coppice which is within the parish boundary; that the woodland be enhanced by linked open spaces, thereby increasing biodiversity in accordance with the Government's commitment ; and that the Commission reviews the historic mapping and other archives to better understand the heritage value and biodiversity potential of the forest. Please refer to www.mortimerforest.net and the references therein. The restoration of Gatley Long Coppice would provide a corridor from Mortimer Forest out to the wider habitats, which is of importance and worth consideration.	The Forest Plan is written in line with Keepers of Time, and all heritage features are identified and protected at the time of operations and intervention through the Operational Planning process. Page 24 has been updated and outlines how habitats will be connected and enhanced using the ride and corridor network.
Leintwardine Group	Leintwardine Group Parish Council's comments on the Plan are as follows: 1. The Parish Council has no objection to the 10 year Plan insofar as it sets out proposals for forestry and land management. 2. The consultation meeting arrangements were unsatisfactory. Three representatives of Leintwardine GPC attended the consultation meeting on 16 January 2019. The room where the meeting had been arranged could not accommodate even a small proportion of the number of people attending. The meeting had to take place outdoors, on a cold day, without seating for participants who were elderly and infirm. 3. There was no proper engagement with local stakeholders. Leintwardine GPC covers an area which includes Burrington and Downton, and, therefore, closely adjoins Mortimer Forest, and yet the Parish Council had not been notified of the consultation until it was brought to their attention by a local resident. 4. Matters of significant concern to local people were outside the scope of the consultation and the meeting was informed that these were determined entirely by central government policy. One of the main concerns of residents within the Parish is whether there will be any further proposals to develop a holiday resort in the Forest, as in the Forest Holidays plans which currently stand withdrawn. Despite the fact that the 10 year Plan makes reference to leisure use, and the fact that the renewal of the 10 year Plan was delayed because of the Forest Holidays proposals, the meeting was informed that there are separate plans for Community Engagement/Recreational Use of the Forest which are not in the public domain and are only available on request. The Parish Council believes that there should be genuine engagement with the public about any future proposals for large-scale changes to the use of the Forest. 5. In addition, the Parish Council has become aware that there are proposals concerning Forestry Commission land at Bedstone, but Leintwardine Parish Council has not been consulted even though it serves an adjoining Parish.	Comments acknowledged, all Parish Councils which are within the Mortimer Forest Plan area were contacted at the commencement of the consultation either by post or email. This is standard for Forestry Commission Forest Plan consultations. The Plan seeks to find a balance between the economic, natural and social demands on the land management decisions for the Forest.

Consultee Name	Consultee Comment	FC Response
Richards Castle CP Shropshire	With reference to income and employment/ recreation and access, sustainable tourism is supported, which in the view of the parish council excludes development of camping or chalet facilities. The forest plan appears not to address the areas of grassland – there should be planned grassland management as well as for the forest. The plan needs to deal effectively with notifiable plants such as ragwort and fencing with neighbouring farms should be kept in good condition. It is suggested that the plan should consider taking a genuinely long-term view, up to 100 years.	Comment acknowledged Grassland areas are identified on page 24. These areas are managed under Tenancy and therefore the direct management of these areas is outside of the control of the FC. We feel that a 50 year vision is appropriate given the changing environments and complexities of forest management.
Richards Castle CP Herefordshire	Richards Castle (Herefordshire) Parish Council fully supports the proposals in the plan which if implemented will protect the forest as a natural habitat through active forestry care and maintenance. Activity in respect of forest products and services will need to be sensitively managed. Similarly for income and employment/ recreation and access, opportunities should support sustainable tourism, and exclude development of camping or chalet facilities. Trails need to be in keeping and exclude unsuitable materials like tarmac.	Comments acknowledged. The Plan seeks to find a balance between the economic, natural and social demands on the land management decisions for the Forest.
Wigmore Group	A number of Wigmore Group Parish Councillors attended the public meeting regarding the Forestry Plan for Mortimer Forest during which we were told of the main purposes of the document. It was stressed several times that it is primarily just a land (in this case woodland) management document and accordingly, the document is full of technical details compiled by experts. Most Councillors lack the technical knowledge to critically examine the details within this plan and so have no comment to make on that aspect of the plan. It was also stated that a Forest Plan does not relate to stakeholder engagement, nor to recreational use of the forest and that these areas have their own management plans, many of which are available either on the Forestry Commission website, or on request. It has not been possible to find on the internet or elsewhere the plans re stakeholder engagement, opportunities for volunteering and recreational use of Mortimer Forest which the Forestry Commission representatives referred to at the consultation meeting. Please could these be made available or, if they do not exist, could such plans be prepared and submitted for consultation? A large number of people demonstrated their interest in the Mortimer Forest by attending the consultation meeting and Wigmore Group Parish Council consider that efforts should be made to improve co-operation between the Forestry Commission and the local community	Comment acknowledged Comment acknowledged Comments acknowledged, passed to Communications Lead to action.
Ludford CP	No Response	-
NGO		
Butterfly Conservation	First of all I'd just like to thank you for the opportunity to comment on the revised FDP for Mortimer Forest and for mentioning the rare Wood White butterfly. I've been talking to Lorne about the design plan, he's suggested it might be better for me to email you my thoughts rather than commenting online, I hope that's ok. **Open space** Is the farm tenancy area part of the overall open space stated in the plan? If it is, are there any opportunities to increase the percentage of open space actually within the woodland? I was thinking something similar to the scallops at Bury Ditches and Wigmore Rolls. A number of scallops (or refugia) have been created adjacent to forest roads at both Wigmore Rolls and Bury Ditches, for the rare Wood White butterfly, to provide additional habitat beyond their preferred habitat i.e. ride-edge. This has been very successful, with a number of the scallops now supporting areas of suitable Wood White habitat. This open space has also considerably improved the condition of the verges adjacent to and opposite the scallops. These scallops have the potential to benefit a number of species. Woodcock have been recorded using a scallop at Bury Ditches. When re-planting is it possible to retain/create wide open verges, when appropriate?	The area of open within the FBT is accounted for in the Forest Plan, species composition. Page 24 has been updated and outlines how habitats will be connected and enhanced using the ride network which is implemented at an operational level. At the time of restock a margin of 5-10metres of unplanted ground is normally implemented to building scalloped transient open space,.

Consultee Name	Consultee Comment	FC Response
Butterfly Conservation continued	Bringewood Planting mix great, especially as White-letter Hairstreak have been recorded near coupe 16001. Pleased to see that 60% of coupes 16001, 16350, and 40% 16668 & 16183 (Gately) will be left to naturally regenerate, great. Generally planting with broadleaves, great. When re-planting will the wide verges be retained and managed as open space? Are there any opportunities to increase open space in Bringewood? A number of areas within Bringewood were found to support some good areas of Wood White habitat in 2018. Juniper Hill area Great to see open space retained in this area. Would be good to see felling/thinning works here prior to 2032, if possible. As Forest Holidays are no longer involved, Lorne and I are looking at opportunities to improve Juniper Hill area for key invertebrates, including Wood White. General comments Mary Knoll Valley – any opportunity to bring the work planned for this area forward? Hay Parke Wood – any opportunity to link permanent open space near SAM to ride-network instead of having an isolated patch of open space? The SAM is close to Mary Knoll Valley which is a significant area for Wood White. Gatley Wood – great to see work planned for this woodland, an important site in the wider landscape, as areas of Wood White habitat were found here during 2018. Any opportunity to retain more open space or widen verges? Wildlife corridors – any opportunities to link the hay meadows to open areas within the wider woodland i.e. Mary Knoll Valley or Haye Park Wood ? This could potentially be beneficial for a number of species. Lepidoptera bit on page 25. Your text below, my changes highlighted in red. Mortimer is a priority lepidoptera site manged in partnership with Butterfly Conservation (remove "Trust"). Silver-washed Fritillary, Wood White and White-letter Hairstreak (either remove "Dingy Skipper" or state that Butterfly Conservation has historical records for Dingy skipper, but they've not been seen for a while) all inhabit the transient open spaces of the woodland. A specific Herefordshire, (add Shropshire and Worcestershire) wide Wood White project is ongoing which includes Mortimer Forest Mapping inconsistencies When comparing maps on page 20 and 21 (in the main FDP), it looks like open space is being replanted in the following areas: Juniper Hill, Upper Evens, Haye Park Wood and Deer Park. Is this correct? Is this space going to be lost? Or is this a mapping error?	At the time of restock a margin of 5-10metres of unplanted ground is normally implemented to building scalloped transient open space. Juniper Hill area is be managed through alternative to clearfell through thinning and the next felling intervention will before 2032, more likely sometime within the next 5 years. Mary Knoll Valley will still be thinned heavily to favour broadleaves, but habitat and site conditions mean that priorities for accelerated transition are elsewhere. Page 24 has been updated and outlines how habitats will be connected and enhanced using the ride network. *A large ride side network of transient and partial open space already exists within the Plan area. This consists of ride edges and occasional cut scallops. These areas will be maintained and enhanced at the time of restocking and thinning and maintained through periodic cutting into the future, thus delivering constantly evolving habitats for wide array of species which benefit from varying amounts of light, exposure such as reptiles and invertebrates.* A greater provision of open space has now been afforded on all restock sites to create a more open wooded edge habitat in the future. Location of the transient open space will be determined by local team at the time of operation, but comments are noted and on file. There will be an increase in open space within the woodland by a minimum of 7ha in ten years, an equivalent to 17% of all areas being felled in Plan period. Changes made. This is a mapping area, smaller areas of open space were not included in general restock areas. Changes made. No open space will be lost, also even where tree species are prescribed this may not always be up to 100%, and could be as low as 20%.
Central Ecology	Timber (conifer) output is still too high. As a member of HART (Herefordshire Amphibian and Reptile Team) and as a trustee of ARG UK I would like to see greater emphasis on restoring, maintaining and increasing open heath, scrub habitats, wet areas, ponds and native wood pasture and definately within a 50 year plan. Looking at the graph projection of woodland and open area for 2018-2047 the graph illustrates approximately a decrease of only 10% of conifer, an increase of only 10% native broadleaf and no change (increase) in open habitats. Only a few years ago there was much talk that FC were looking to restore conifer areas back to native broadleaf. This plan shows little change. On the previously opened habitats in the Mortimer Forest there are naturally occurring heathland species; heather, gorse, broom and acid grassland, growing where conifer woodlands have been cleared. For less transient species such as reptiles and amphibians there must be robust long-term connected habitat, encouraging a healthy, viable metapopulation structures across the whole landscape. This area, in relation to the distribution of the adder (Vipera berus) and other herptile species in Herefordshire, is a significant site and must remain with large linked open heath areas. Haye Park, Vinnalls, High Vinnalls, Climbing Jack and networks of wide open woodland glades should enable effective dispersal and linkage of reptiles and amphibians. The long-term plan must take into account fast growing, maturing conifer which will rapidly shade out favourable herptile habitat. A long-term conservation management plan for these vulnerable species must be a priority.	The Plan seeks to find a balance between the economic, natural and social demands on the land management decisions for the Forest. Page 24 has been updated and outlines how habitats will be connected and enhanced using the ride network. *A large ride side network of transient and partial open space already exists within the Plan area. This consists of ride edges and occasional cut scallops. These areas will be maintained and enhanced at the time of restocking and thinning and maintained through periodic cutting into the future, thus delivering constantly evolving habitats for wide array of species which benefit from varying amounts of light, exposure such as reptiles and invertebrates.* Open space provision has been increased across the plan proposals, both along ride sides and within restocking areas to increase open space within the woodland.

Consultee Name	Consultee Comment	FC Response
Herefordshire Wildlife Trust	Herefordshire Wildlife Trust welcome the opportunity to comment on the Mortimer Forest Design Plan (FDP). In general, we welcome the ambition of the 50-year vision, particularly the drive to increase the area of Broadleaved woodland, restore Plantations on Ancient Woodland Sites, protect ancient and veteran trees as well as the aim to 'deliver a rich mosaic of robust habitats that support an abundance of both rare and common species'. The significance of the Mortimer Forest in a county context cannot be understated, such an extensive area of land containing numerous rare and protected species provides a unique opportunity with the potential to create huge biodiversity gains. The FDP is the basis by which these gains can be achieved. Whilst the Forest Design Plan has the potential to enhance biodiversity, we believe the opportunity is far greater and there will be challenges to delivering the Vision based on current proposals. We therefore have the following recommendations: 1 The Vision implies there will be a substantive shift towards increasing broad-leaved woodland cover and a reduction in PAWS and conifer plantations. However, this is not supported by the indicative future make up of species which proposes only modest changes by 2048 of a 2% reduction in evergreen Conifer and 6% reduction in Larch. Naturalised and broad-leaved woodland will increase by only 6% and open space will not increase at all. Whilst, it is acknowledged that additional Larch removal may lead to increased open space, presumably for disease control, it does not appear to be an objective in the plan. Similarly, the plan summarises that 'Implementation and maintenance of an environmental corridor system will continue to increase diversity of habitat and internal landscaping'. However, within the plan it doesn't say how this will be achieved above and beyond maintaining the existing system of rides and tracks. There does not appear to be any drive to increase open space in the woodland or expand on the system of rides and glades. A reduction in conifer cover with corresponding increases in broad-leaved woodland, greater areas of coppice management and an enhanced network of open space throughout the woodland is critical to the increase and expansion of many rare species that are found in Mortimer Forest (e.g. Wood White butterfly, Dormice, Pearl Bordered Fritillary, Adders and Bats). It is therefore, hard to see how significant progress will be made in the conservation of these species (and many other associated species) within the first 30 years of FDP implementation. 2 Much of the area outside the designated Ancient Woodland is earmarked for retention of conifers. There is a lot of evidence to suggest that many of these areas were once important habitats such as Wood Pasture. This is particularly true of Bringewood, Mary Knoll and the Vinnalls. Wood Pasture is a priority habitat within the Herefordshire Biodiversity Action Plan supporting important species including those identified within the FDP (e.g. adder). We would like to see actions within the FDP to restore areas of Wood Pasture in preference to continued conifer plantation. 3 Within the PAWS woodland there are ambitions to restore older crops of Larch at a rate of 0.25ha per 2ha per 5 years. This would mean that some areas of PAWS restoration could take up to 40 years to implement. We believe that this is too long. The success of PAWS restoration diminishes over time and we would like to see this activity accelerated, preferably within the first 20 years of the plan. The halo thinning and protection of ancient and veteran trees within PAWS should also be a priority to ensure their survival. 4 We would like to see objectives in the Plan for increased partnership working with local communities and NGOs. This would undoubtedly bring broader benefits and new opportunities such as help with ecological surveys, volunteering tasks and additional external funding through grants and donations. 5 The Mortimer Forest is a key site within one of Herefordshire Wildlife Trust's Living Landscape areas as well as a regional landscape conservation initiative focusing on the Marches. The Mortimer Forest could be an exemplar of sustainable woodland management, setting a high standard within the region and providing an exemplar site that could be emulated both locally and regionally	Page 24 has been updated and outlines how habitats will be connected and enhanced using the ride network. *A large ride side network of transient and partial open space already exists within the Plan area. This consists of ride edges and occasional cut scallops. These areas will be maintained and enhanced at the time of restocking and thinning and maintained through periodic cutting into the future, thus delivering constantly evolving habitats for wide array of species which benefit from varying amounts of light, exposure such as reptiles and invertebrates.* A greater provision of open space has now been afforded on broadleaf restock sites to create a more open wooded habitat in the future. Of the 41hectares of conifer clearfelling on 25% will be restocked again with conifers, with 31 hectares areas of native woodland restoration, which will include 7 hectares of integrated open space. The broadleaf restoration outlined in this Plan is in line with sound ecological science and national policy, whilst achieving the Forest Plan objectives. Comment acknowledged, passed to Local Team Lead to action.

Consultee Name	Consultee Comment	FC Response
Shropshire Wildlife Trust	Shropshire Wildlife Trust is disappointed at the rate of conversion to restore PAWS areas – it falls short of the vision in the "Keepers of Time" published by the Forestry Commission. It is not as ambitious as it could be, with only some 4% of the overall forest area converted over this ten year period. While native broadleaf forms the majority of restocking on PAWS, conifers are still being included, and the maps on pages 22 and 23 of the plan show that these plantations will remain on much of the PAW area of the forest at least until 2048. The slow rate of conversion may well be supported by ecological reasoning, but this is not explained in the plan and the overall timescale for conversion to broadleaved woodland on the PAWS areas needs to be more explicit. It appears conifer plantations will continue to be the dominant species type for many years to come, indicating that the traditional commercial forestry approach still holds sway. The increased value of a more natural forest to include biodiversity, recreation, tourism, education, etc. has not been fully realised in this plan cycle. This is a missed opportunity as DEFRA's 25 year plan for the Environment, 'Our Green Future' states "Our commitment to increasing hardwood timber supplies, means we will focus particularly on increasing the proportion of broadleaf woodlands that are sustainably managed". While recognising the long term nature of forestry and the implications of climate change, plant health, etc. we would still like to see a much more ambitious approach taken towards reversion. The proposals do not appear to consider how the Forest can contribute in a positive way to changes in species distributions, assist with the expansion of species ranges (pine martin etc.) or capitalise on wider recreational links, for example Mortimer Way and Hereford Way long distance paths. The "Keepers of Time" document states "that rare, threatened or priority species should not just be protected but enhanced" This would lead to a more diverse forest with a greater reduction in conifers and more open spaces such as glades, open areas around water bodies, and terrestrial habitat for Great Crested Newts etc. We would also encourage the Commission to look at how the Forest links into the wider landscape and identify opportunities to create or strengthen links to existing woodlands or other habitats, and not to see the woodland estate in isolation. It is clear from the public debate and interest in the recent Forest Holidays planning application that there is an untapped interest in the area and a huge appetite from the local community to be involved in the woodlands. This asset could be harnessed by the Forestry Commission to support them in their future work in work, especially where resources are stretched and budgets are strictly limited.	The broadleaf restoration outlined in this Plan is in line with sound ecological science and national policy, whilst achieving the Forest Plan objectives. Threatened and priority species and habitats unique or particularly special to Mortimer Forest are identified on pages 24 and 25. Management and enhancement of these features is outlined, where not outlined, FC will follow best practise and involve internal and external field experts when considering operations. The plan is written in the context of the wider landscape, whilst not explained it is a common consideration referenced implicitly through out the plan. i.e. analysis and concept, landscape character assessment, habitats and species, and landscape analysis. Comments acknowledged, passed to Communications Lead to investigate further.
RSPB	No Response	-
Woodland Trust	No Response	-
People for Ludlow	1. Questions 2 & 3 are very important. However the consultation document (and FC have also stated in meetings) is limited to the tree management plan. It contains no substantive proposals that have a bearing on Q.2 and Q.3 above so must therefore be regarded as poor from that perspective. 2. We consider that the relationship of Mortimer's Forest to Ludlow in terms of economics, tourism and employment to be vital and requiring a separate consultation in its own right. Simply using the Forest to provide some jobs and a forestry crop is not a long-term vision, it merely repeats the rationale of the founding of the FC. 3. We would like to see proper thought given to: a) the creation of high-value employment (and research?), e.g. through the establishment of biodiversity/ forestry teaching on site and a possible school. Why not discuss with Harper Adams University how this might be done?	The Plan seeks to find a balance between the economic, natural and social demands on the land management decisions for the Forest. Comments acknowledged.

Consultee Name	Consultee Comment	FC Response
People for Ludlow continued	b) adding to local economic sustainability in the long term; after all, both communities and forests have long-term planning horizons and c) better use of the therapeutic properties of a peaceful natural environment to heal both bodies and minds. This could be part of both a new type of job creation model and a service to the community, especially with the current recognition of both mental health issues in the population and the development of 'social prescribing'. 4. We would like to see more than lip service paid to the riparian aspects of the forest development. While it is heartening to see that steps will be taken to 'minimise the impact of forestry operations (p.24)' this is no the same as actively improving the quality and biodiversity of the rivers. 5. We support the tree management aspects of the plan and the intention to move towards broadleaved hardwoods as a major crop; this is line with better long-term thinking about the Forest.	Comments acknowledged. See page 32 for specific riparian management proposals.
Friends of the Forest	Comments on Mortimer Forest Plan 2018-28 The opportunity to comment on the draft Plan is appreciated. The undersigned were privileged to be among those who met Sir Harry Studholme and Kevin Stannard on December 14th, 2018. These comments are therefore made in the light of what was said at that meeting, as well as at the public meeting held on January 16th, 2019, on which we comment below. A key objective for us is to help repair the damage to relations between the Forestry Commission and the local community in the Ludlow area which was caused by the advancement in 2018 of a proposal by Forest Holidays, energetically supported by the Commission, to build a holiday chalet complex on Juniper Hill. This caused widespread consternation among residents of the Ludlow area. Fortunately that project was abandoned by Forest Holidays, so there is no need to dwell on its demerits, though we were very surprised that representatives of the Commission (at the meeting on January 16th) persisted gratuitously in seeking to defend the Forest Holidays proposal—an action calculated to inflame relations with local residents and make them nervous that the Commission might be considering another development of similar kind, despite your Chairman's statement at the Dec 14th meeting that the Commission's plans for Mortimer Forest do not include anything of this nature. Our fervent hope is that the Commission and local residents can build on the constructive foundation laid at the Dec 14th meeting and develop a collaborative approach to the management of Mortimer Forest in the interests of the environment, wildlife, sustainable silviculture and attracting more members of the public to enjoy and pursue recreational activities in the forest. Against the above background, our comments on the Plan are as follows: 1. The Plan as drafted is thoroughly confused and confusing as to what its purpose is. Its objectives are set out on page 5 and are said to include conservation, protection of habitats and the preservation of landscape character. A 50 Year Vision is set out on page 8 in high-sounding aspirational language, embracing social and environmental objectives which include the preservation of landscape character, conservation of habitats for rare species, contributing to carbon sequestration, water regulation and public enjoyment of the forest. The objectives of the Plan are stated again on page 10, with equal weight being given to "Nature", "People" and "Economy", thus covering the full range of the Commission's mandate. Any reader of the document reasonably concludes from all this that the Plan will go on to specify actions designed to deliver on these social and environmental objectives of the stated objectives. However, the draft Plan fails completely to do this. The objectives of the Plan remain just pious statements which are not followed up. In terms of action, the Plan focuses only on the felling and planting of timber and a few related activities. No awareness is shown of DEFRA's 25-year Environment Plan and the importance of natural capital. It is noteworthy that, at the public meeting on Jan 16th, Commission representatives stated that the Plan is indeed meant to be solely about timber production. But that is not what is stated in the draft Plan itself. It is not surprising, then, that local residents have a confused impression about the purpose of the Plan.	Comments acknowledged, passed to Communications Lead to action. The Plan seeks to find a balance between the economic, natural and social demands on the land management decisions for the Forest. The competing demands on the forest need to be acknowledged and accounted for when making a contextual decision on the management of the woodland and other habitats. It outlines ten years of land management interventions against a backdrop on the competing demands on the forest, its features and processes.

Consultee Name	Consultee Comment	FC Response
Friends of the Forest continued	2. If, as appears to be the case, this Plan is only about timber production, then this should be stated clearly at the start and a separate parallel plan for Mortimer Forest should be prepared which addresses the environmental and social objectives. This should state what the Commission intends to do in these fields, what resources will be committed and what the timeframes are for undertaking the proposed actions. That would permit the Commission to be held accountable for delivering what is in the Plan. The overall impression given by the Commission through its handling of the whole consultation process is that accountability is something the Commission is seeking to avoid--particularly towards its owners, the public.	The Plan is not merely concentrating on timber production, it considers other non-timber related land management issues and makes proposals accordingly on topics such as habitat restoration, silviculture, water and riparian management.
	3. Despite the Commission's oft-stated duty to take account of the wishes of local communities, the Plan does not contain a single word about how the Commission proposes to consider the interests of this community or to work with local people and organisations—for example to manage habitat for rare or protected species, to control pests, to eradicate invasive plants and trees, to enhance the visitor experience, to create educational facilities or programmes, or to undertake other socially beneficial activities which help the Commission to deliver on its public benefit objectives. There are many potential volunteers with varied skills and knowledge in the local community who would be willing to devote time to working with the Commission on programmes such as these. But little attempt has been made so far to harness this resource and the draft Plan ignores the opportunity completely. We therefore suggest that the Commission should develop a separate plan, in consultation with relevant bodies such as the Wildlife Trust, CPRE, RSPB, Friends of the Forest and local landowners and residents, directed at specific targets (e.g. habitat enhancement for particular species, grey squirrel eradication, assistance with planting broadleaf trees, reversing invasive plant and tree encroachment, environmental education, teaching of woodland crafts). We are aware of the resource constraints under which the Commission operates; this gives all the more reason to enlist volunteer help. Some commitment of resources by the Commission would be required (e.g. training and supervision of volunteers) but this would be a highly cost-effective use of resources.	Comment and suggestion acknowledged. Passed to Communications lead to investigate further.
	4. Specific comments on the timber production aspects of the Plan are as follows: a) We strongly support the effort to return the area to native woodland similar to what existed before the Commission acquired the use of the land in the first half of the 20th century and cut down large areas of native broadleaf woodland (including Ancient Woodland) in order to grow conifers. The target of increasing broadleaf woodland by 7% (from 18% to 25% of the total area) over the next ten years is a step in the right direction but, in our view, insufficient. The plan to add only another 4% by 2047 is woefully inadequate. This would leave large areas which used to be ancient woodland still unrestored. As the Plan states, Mortimer Forest is of significant value in the cultural heritage of this area. Conifers such as spruce, hemlock and Douglas fir do not belong in that heritage.	The broadleaf restoration outlined in this Plan is in line with sound ecological science and national policy, whilst achieving the Forest Plan objectives.
	b) Planting native broadleaf trees (with the sole exception of wild cherry) is a waste of time and money if the grey squirrel population is not drastically reduced. A large proportion of all other native species will inevitably be bark-stripped by grey squirrels and die or be deformed after about 10-15 years of growth if no action is taken to reduce grey squirrel numbers very sharply. Neighbouring landowners are willing and ready to participate in a joint effort. The controlled introduction of Pine Martens should also be considered.	Comment acknowledged.
	c) The Plan should contain a clear statement that the Commission will not fell during the breeding season for birds and bats (approximately March to September), in conformity with the Wildlife and Countryside Act. Also, we trust that bird and bat surveys will be undertaken before felling.	FC follows best practice guidance with regard both European and nationally protected species. Best practice does permit felling operations in bird nesting season provided comprehensive surveys have been carried beforehand and avoidance and mitigation is in place.
	d) Zero increase in the area devoted to open space is (which is planned to remain at 10%) is insufficient for wildlife conservation purposes. Where soils indicate there has been open habitat in the past (e.g. on Juniper Hill) these areas should be returned to such habitat. The 50-year Vision refers to increasing the areas of meadow and neutral grassland, but this is not reflected in the actions described in the Plan.	Open space provision has been increased across the plan proposals, both along ride sides and within restocking areas to increase open space within the woodland by a minimum of 7ha in ten years, an equivalent to 17% of all areas being felled in Plan period.
	5. Specific comments on wildlife- and environment-related aspects of the Plan are: a) In the 50-year Vision, there are various statements of intent about preservation of landscape character and conservation of habitat for rare species (e.g. goshawk, hobby and nightjar). No actions are identified in the Plan to achieve these objectives. For example, if ground-nesting birds such a nightjar are to be protected, it will be necessary to fence off certain areas to prevent access by dogs and other predators. This is an example of a project on which the Commission could work with local volunteers.	FC follows best practice guidance with regard species identified as special and unique to Mortimer Forest.

Consultee Name	Consultee Comment	FC Response
Friends of the Forest	b) Areas with conservational potential should be identified in either this Plan or a separate parallel plan, accompanied by detailed statements of what will be done and by when. A framework for monitoring progress also needs to be established. c) No reference is made in the Plan to the long-haired deer, a unique sub-species found (we believe) only in Mortimer Forest. Are any conservation measures intended for these? d) Other forms of wildlife mentioned in this Plan are dormice, great-crested newts and butterflies (presumably including the wood white, though that is not specified). Each of these needs habitat improvement. In the case of dormice, for example, the areas of hazel coppice will need to be managed and extended to make corridors linking up with other coppiced areas. 6. No reference is made in the Plan to any proposals to undertake revenue-generating projects other than timber production. While that is welcome in that it precludes developments involving large-scale permanent overnight tourist accommodation and related facilities (like the proposed Forest Holidays project), it appears to be a missed opportunity in other respects. There are activities which could attract the public into the forest, and would not change its character or be destructive of wildlife habitat, which could be sources of revenue for the Commission. Maybe a review of these could be undertaken, in cooperation with the local community, and made part of the separate plan suggested above. 7. No explanation is given of why this Plan is 5 years late in being prepared (the previous Plan covered the years 2003-2013). We know (and it has been admitted by Commission representatives) that the reason for the delay is that in 2014 or earlier the Commission were already in secret discussions with Forest Holidays about the planned chalet development and wanted to avoid any action which might require disclosure of their intentions. Deceitful practice of this nature destroys public trust in the Commission. A statement of regret by the Commission for this lack of straightforwardness would go a long way towards persuading the local community that the Commission is ready to adopt a new approach. It is noteworthy that Commission staff prepared a draft of the Plan in mid-2018 (before Forest Holidays withdrew) which simply referred to the chalet development as if it already existed, thus seeking to present the public with a fait accompli. 8. A further general comment is that the Plan lacks imagination and genuine Vision. It smacks of being an exercise in fulfilling a standard bureaucratic requirement, accompanied by lip-service to environmental and social objectives, rather than an effort to think seriously about the opportunities presented by Mortimer Forest to do something that would improve the landscape, enhance the environment, encourage more involvement by the public in the management and use of the forest and improve public perception of the Commission. 9. Finally, comment is called for on the public consultation process itself. The draft Plan was first published on the internet near the end of November. Little or no effort was made to draw attention to it among local residents. Various bodies with an obvious interest in the Plan (including the Councils of several parishes containing parts of the forest) were not notified of the consultation. A deadline of Dec 24 was set for the submission of comments. This (especially in the period leading up to Christmas) was unreasonably short (the standard period for public consultations is 12 weeks). When various Parish Councils requested an extension, this was granted but only to Feb 1st 2019. The Commission also agreed (with apparent reluctance) to hold a public meeting in its Whitcliffe offices on Jan 16th (a working day afternoon). Commission staff were evidently totally unprepared for the 120 or so people who turned up. These were initially told that everyone was now going to go for a walk. Many refused, because they had been invited for a meeting, not a walk, and anyway were not in walking clothes. The result was that everyone ended up standing outside in drizzle on a very cold day while Commission staff attempted rather ineptly to answer questions. The outside location made it difficult for many attendees to participate or hear what was being said. Commission representatives rubbed the crowd up the wrong way by quite unnecessarily expressing their disappointment that Forest Holidays had abandoned the chalets project. The net effect of the meeting was to alienate the local community from the Commission, instead of building bridges. Our overall point is that the Commission have given the clear impression from the start of the consultation process that they do not welcome public interest or involvement in the planning or management of Mortimer Forest. Such an attitude is not consistent with the Commission's stated duties and objectives. We earnestly request that the Commission adjusts its approach. Members of the local community are working on proposals for joint initiatives with the Commission which would help it to meet its public benefit objectives. We sincerely hope that the Commission will respond in a genuinely cooperative manner. We also hope and expect that the Commission will respond to these and other comments on the draft Plan and say publicly what action, if any, is being taken in response to them.	Comment acknowledged. Long haired deer acknowledged on page 25. And management of specific species is outlined and Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for recreation in the Forest. Comment acknowledged. Comment acknowledged. All Parish Councils and Statutory Authorities within the Plan area were notified at the outset of the plan process. Notable additional stakeholders, including Friends of the Forest were contacted. Notices were erected on all major access points to the forest to ensure as many stakeholders as possible were notified. Extensions and meetings were granted in light of the congested period, and stakeholder request. Comments acknowledged. Letter written to respondent outlining steps following consultation closure. Consultation response will be published on Citizen Space.

Consultee Name	Consultee Comment	FC Response
Member of the public	Much of the technical detail is beyond me, but I am glad to see that the proposal for an over-decadent commercial cabin development appears to have evaporated. My family has lived on the edge of the forest since 1970 and we (with countless local residents and visitors) value its peace and beauty very dearly. We also recognise the need of the Forest Commission to maintain its commercial viability.	Comments acknowledged
Member of the public	I feel strongly that the forest is an extremely valuable resource that needs careful management, protection and preservation.	Comments acknowledged
Member of the public	While I understand the need for income, too much emphasis on timber products	The Plan seeks to find a balance between the economic, natural and social demands on the Forest.
Member of the public	Well there's very little about recreation - there are no suggestions about future improvements to recreation in the forest - just a very passive status quo - other than a rather alarming mention of increased rural employment on page 13. There are odd mentions of AONB and NP authorities on page 10 which are irrelevant and a sentence on recreation is truncated on page 10. I think this plan needs a proper consultation on recreation and opportunities for low key improvements - there are many trails which remain impassable for much of the year when they are muddy (OK not 2018 summer but most previous years). I see no proposed improvements at all. What about extending access from the Forest Office car park which is only open 5days a week until 3pm. What about installing a new easy access trail at one of the other two car parks - or both. And what about cutting back vegetation from some overgrown trails to improve butterfly habitat and allow the paths to dry out more rapidly. I'd also like to see a couple of further stretches 'hardened' over the next 5-10 years at least. In fact there are mentions of 'proposals' but no details. Given the hooha about the Forest Holiday proposals I think the least you could do is have a consultation with local users and recreation groups to discuss what would improve things for current users and include a modest increase in usage and facilities over the next 20 years - I suggest contacting the the P3 groups, Walkers are Welcome Ludlow (and Chamber of Trade) Ramblers, and local cycling and riding groups - plus engaging with the loyal local dog walkers and regular users such as Park Run. I realise this is not the main focus of this document - but as far as I'm aware there isn't a separate recreation strategy document for the forest - perhaps there should be??? There you could spell out what the 'proposals' might be. There are many local people who care passionately about the forest and this measly recognition within this document is in no way sufficient to integrate their views and proposals for improving the contribution the forest makes to everyone's lives over the next several decades.	Comments acknowledged
Member of the public	My answers to No's 2 & 3 are very dependent upon the detail behind references to "Provision and maintenance of recreation facilities" (slide 9) and "Encourage and support business activity on the estate" and "High quality woodland-based recreation opportunities" (slide 10). I appreciate the plans to transition to 80% broad leaved woodland which, in itself provides the high quality recreation facilities in that the clean air, calm atmosphere and peaceful environment could not be improved upon to enhance feelings of physical and mental wellbeing - provided that the woodlands can feel, largely, distilled of people and recreational 'props'. I would like to think, albeit bravely, that this could involve dog-free areas. There appears to be a gap between the objectives for 'business' and 'recreation' in that no mention has been made to the support of important 'social services' on the estate - whether purely educational or for the support, repair and restoration of broken bodies and minds through structured activities (not strictly 'businesses'). In applauding the plans to move towards 'natural' woodland there is an explicit recognition that the traditional role of forestry has changed and so, in my view, should its funding. We, as taxpayers, are currently subsidising farmers to care more for the environment and we should, through government policies, be prepared to support the existence and expansion of our nation's broadleaved woodlands.	Comments acknowledged

Consultee Name	Consultee Comment	FC Response
Member of the public	It is important that no building work is undertaken in this area. It is a rare example of an ancient area which has been forgotten and is only now being investigated in detail. The surrounding area affords considerable scope for holiday and visitor accommodation.	Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for recreation in the Forest.
Member of the public	Last year I attempted to walk the 32 mile trail of the Mortimer Forest and it was so overgrown, which although great for wildlife, meant much of it was impassible and I ended up using more roads than paths. I did report this to the tourist office in Ludlow and complained to Balfor Beatty, who I belief, at that time, managed the forest. Neither parties were interested and I received no feedback. Having talked to other people regarding the new Mortimer Forest plan, there is a need for a mixture of deciduous and old-growth tree and not just conifers for a short term cash-crop. I personally do not agree with the forests being managed by an estate, using the area for profit. The very two words: "Biodiversity and Conservation" needs to mean the protection of the natural forest, wildlife and only then, allowing human access.	Comment acknowledged with regard path, passed to Local Team Lead to investigate. The Plan seeks to find a balance between the economic, natural and social demands on the Forest.
Member of the public	Haven't see your 10 year plan so unable to comment on the above.	Comment acknowledged
Member of the public	Woodland development should move towards an increasing number of native species in lieu of conifers. Leisure development should only take place in limited areas but an increase in off road biking facilities would not be inappropriate. Any leisure development in terms of holiday accommodation should only be allowed if does not adversely impact the natural environment and has the agreement of local communities.	Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for recreation in the Forest.
Member of the public	It's almost as if these local communities don't want year round income with a constant stream of tourists! They'll moan whether they've got customers/tourists or not. Lots of people seem to be against Forest Holidays as I've read up on the 'controversial' opening of Beddgelert - yet, from Friends who've visited, it seems they're happier than ever due to having constant customers and visitors. Yet here I was thinking FHolidays were bad?!? The amount of money that local cafes, pubs and restaurants could potentially receive is crazy, especially compared to what they get now. 68 Cabins with a minimum of 2 guests in each = £££. Yes we get it, treehuggers love trees but there has to be some give and take. LOCAL people will finally have suitable vacancies close to home rather than having to travel to Shrewsbury or Birmingham! Everyone, as a whole, would benefit from this but I guess a few trees is more important, eh? Please bare that in mind the next time you're writing a letter complaining about Forest Holidays!!!!!!!!!!!!!!!	Comments acknowledged
Member of the public	Given the recent experience over the Forest Holidays I would like to see more explicit commitments NOT to do certain things within the forest - or at least certain parts of it. These would include large scale luxury commercial developments. I do believe their is scope for increasing facilities to encourage desirable activities and visitors with benefits for the local community and economy on the fringes of the forest eg mountain biking and hiking centre with bikes for hire and a well planned network of mountain bike trails and facilities to meet the needs of all abilities.	Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for recreation in the Forest.
Member of the public	Overall the Plan is very good but I would like to see a different emphasis eg above question 3. needs to be turned round "environmental objectives ..... etc." The needs of the forest environment and its wildlife habitat should be the priority. Human accessibility needs to be managed in accordance with the needs of flora and fauna whose lives are dependent on the forest. I would expect to be excluded from parts of the forest at certain times of the year if that was beneficial to certain species.	Comment acknowledged
Member of the public	At a recent Forest Plan consultation meeting (held at the request of individuals and local parish councils) the Forestry Commission stated at the outset that the plan is solely about timber production, although they acknowledged that the very high level of attendance undoubtedly resulted from recent plans by the FC to develop part of the forest as a luxury holiday complex. Issues of importance to the 100+ people who turned out on a very cold day to attend the outdoor meeting, were completely disregarded. It was stated that there are other plans in place which address public recreation, opportunities for volunteering, community engagement but no information was made available as to where these may be viewed and none of this is common knowledge to local people. A summary of the 2018-2028 plan obtained in July included references to a Forest holidays site in the forest. Now that has been dropped why is there no reference in the plan to how it is envisaged people may enjoy the forest, which is recognised as playing a massive part in supporting social wellbeing. It was perturbing to hear that the plan was put on hold for 5 years because of the F C's engagement with Forest Holidays, a scheme that the FC staff member repeatedly stated he supported. Having no plan in place for such a long period hardly sets a good example to other guardians of woodlands and forests. A very disappointing experience.	Comments acknowledged

Consultee Name	Consultee Comment	FC Response
Member of the public	My main concern is the effect of climate change on the biodiversity of the forest. As a short lived species, in relation to trees, humans must look beyond their immediate personal needs. Our focus must be on the future of the forest. As a grandparent I am vey conscious of the legacy I leave for my grandchildren [and to their grandchildren as well].	Comment acknowledged
Member of the public	Mortimer Forest should be kept as a tranquil conservation area and used for the growing and harvesting of trees. Pedestrians should continue to have access. Carriage driving should be reinstated and access kept for horses and ponies. All motor vehicles including quad bikes should be banned except those for forestry use and for emergencies. Mountain bikes should also be banned as they can be fast, silent and dangerous. No development whatsoever should be allowed in this unique place.	Comments acknowledged
Member of the public	Thanks for inviting me to comment on this Forest Design Plan, please find my observations and recommendations below. I should also say that the above form is too simplistic to give any meaningful assessment on such a complex management plan covering over 1,000 hectares of biodiversity potential and heritage landscape : 1. Most of Mortimer Forest is either ancient woodland, the medieval Hay park or medieval Bringewood chase, the latter two are at least as important to be restored for biodiversity and heritage reasons as the former (Hay Park was completely intact until the 1950s). There should be no restocking with conifers on these areas including in cpts 16836 and 16083. 2. It is very disappointing that FC envisages retaining such a high proportion (47%) of conifers to 2048 especially as most conifer stands were established on ancient woodland inventory sites after the 1985 Broadleaves Policy. 3. Shelterwood silvicultural systems will tend to retain shaded acidifying conditions in conifer stands and delay restoration by many years to the long term detriment of biodiversity. 4. Most of the Mortimer Forest ecosystem component species are light demanders. For these reasons Shelterwood should not therefore be the preferred silvicultural system (it is also more expensive). 5. Young conifer compartments at thicket stage should be subject to accelerated thinning regimes to avoid canopy closure, encourage intruded broadleaves and shorten the time to restoration. 6. Artificial restocking should include a more significant component of site native underwood species such as hazel and field maple. 7. 'Keepers of Time' policy relates ecosystems restoration to historical land use which, knowing the history of Mortimer Forest, requires there to be significant areas of open conditions, a commitment to which is lacking in the plan. 8. Mapping biodiversity potential, establishing adequate baseline data and monitoring for the restoration objectives of Mortimer Forest requires resources that only a partnership between FC and local organisations can supply. Such a partnership approach will also provide opportunities for local volunteer activities, training, citizen science and well-being objectives. This will engender a greater sense of stakeholder involvement and care for this public land managed for public benefit and thus make it more likely that Mortimer Forest will be retained as a wonderful area of delight for future generations (which will also have positive indirect economic benefits). 9. Lastly, current land use climate models infer that conifer plantations have a zero or negative impact on climate warming due to canopy albedo, loss of soil carbon stocks and the relatively low carbon retention time of softwood products (references available).	There is no restocking with conifers proposed on sites identified as ancient woodland, as per 'Keepers of Time'. The coupes identified are both being planted in two sections, Coupe 16836 (4.9ha in total) 0.7ha is being with broadleaves, Coupe 16083 (9.3ha in total), 3.0ha is being planted with broadleaves to achieve a diverse and balanced woodland structure. The broadleaf restoration outlined in this Plan is in line with sound ecological science and national policy, whilst achieving the Forest Plan objectives. PAWS restoration is addressed on page 16 and both gradual thinning, and small scale clearfelling of groups is proposed to ensure a variety of light and nutrient conditions are provided from which a number of native species can flourish. Proposals for restocking on ancient woodland are based on NVC type and include 'sub-species' such as cherry, wych elm and hazel. Open space provision has been increased across the plan proposals, both along ride sides and within restocking areas to increase open space within the woodland by a minimum of 7ha in ten years, an equivalent to 17% of all areas being felled in Plan period. Comments acknowledged, passed to Communications Lead to investigate further. Wood products from sustainably managed forests (as practiced in the UK) both play a role in carbon storage and reducing fossil fuel emissions by substituting for materials with high fossil fuel emissions associated with their production (see section 3 of the Read report). It is true that Albedo of conifer forests is generally higher than that of deciduous broadleaf forests. However, this impact is limited in regions with low snow cover duration and the overall contribution of conifer forests in climate change
Member of the public	I'm glad to see there is no mention of constructing lodges or any other inappropriate development. I trust this plan is not misleading and that no such developments are being planned through some other route.	Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for recreation in the Forest.
Member of the public	There is no mention of schools or the forest as an educational resource. Engaging young people should be an objective.	Comment acknowledged, the Plan covers the land management proposals for the coming 10 years and does not define strategy for engagement in the Forest.

Appendix 5 — Mortimer Forest SSSI Management Plan

1. Agreement and Consent

District West England Forest District

Name of SSSI Mortimer Forest

National Grid Reference
1. SO 459735
2. SO 472731
3. SO 473730
4a. SO 477735
4b. SO 483738
4c. SO 487738
4d. SO 489739
4e. SO 491740
4f. SO 493741
5. SO 488730
6. SO 495724
7. SO 485712
8. SO 473719

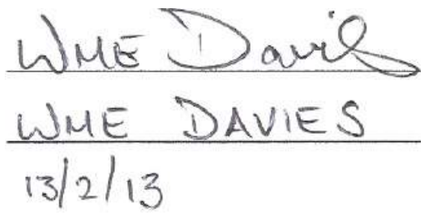
Period of Plan 2012 - 2022

Agreed on behalf of
Forestry Commission England

Forest Management Director
Forestry Commission England

Agreed on behalf of
Natural England

Herefordshire
Land Management Team



The signing of this plan by Natural England gives the necessary consent under Section 28 (6) of the Wildlife and Countryside Act (1981), as amended, for the management prescriptions detailed in this plan and to be undertaken without necessity to consult prior to each operation during the plan.

FC England will keep a written record of work carried out during the period of this plan.

2. SSSI Notification

County Herefordshire, Worcestershire and Shropshire

Site Name Mortimer Forest

District Leominster, South Shropshire

Site Ref 15 WG8

Status Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authority Hereford and Worcester County Council

National Grid Reference
1. SO 459735
2. SO 472731
3. SO 473730
4a. SO 477735
4b. SO 483738
4c. SO 487738
4d. SO 489739
4e. SO 491740
4f. SO 493741
5. SO 488730
6. SO 495724
7. SO 485712
8. SO 473719

Area 6.46 hectares

Ordnance Survey Sheet 1:50,000: 148 1:10,000: SO 47 SE

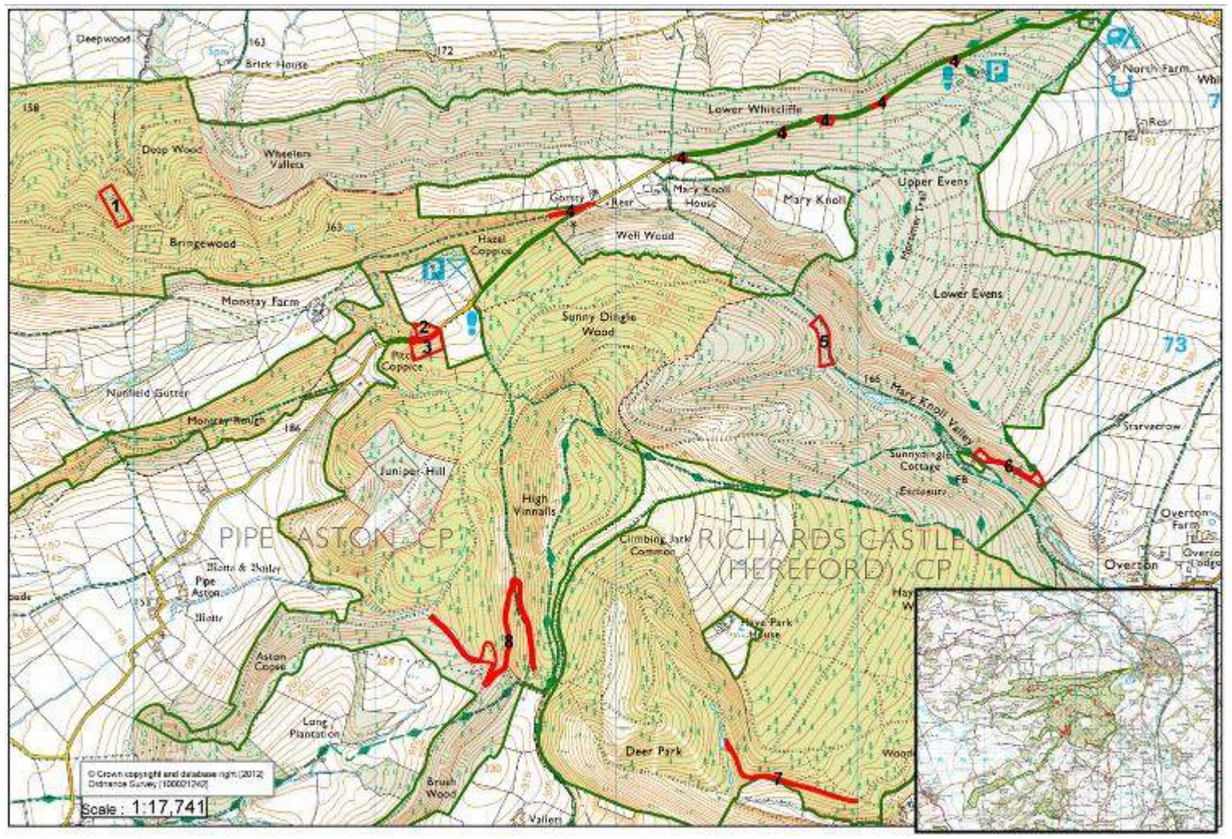
Date Notified (Under 1949 Act) 1969

Date Notified (Under 1981 Act) 1992

The SSSI is currently in Favourable condition.

3. List of Potentially Damaging Operations

Ref. No.	Type of Operation
7	Dumping, spreading or discharge of any materials.
12	Changes in tree and/or woodland management including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management.
13 b	Modification of the structure of watercourses (eg. rivers, streams, springs, ditches, drains), including their banks and beds, as by re-alignment, re-grading and dredging.
14	The changing of water levels and tables and water utilisation, including irrigation, storage and abstraction through boreholes.
20	Extraction of minerals, including topsoil and subsoil.
21	Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
22	Storage of materials.
23	Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
24	Modification of natural or man-made features, clearance of boulders, large stones, loose rock, scree or spoil and battering, buttressing, grading or seeding rock-faces, outcrops or cuttings.



4. Location

Mortimer Forest SSSI lies within the Mortimer Forest woodland. It comprises 8 units (one unit is made up of four sub-units) as detailed on the map below.

Map 1: Location of Mortimer Forest SSSI

5. Summary Description

Mortimer Forest SSSI is made up of eight sections, consisting of a number of road cuttings, disused quarries and a stream section all of which provide exposures of Silurian aged rocks. These rocks include Wenlock Limestone, Elton Beds, Bringewood Beds, Leintwardine Beds, Whitcliffe Beds and Downton Red Marls.

They cross a succession of layers of rock which slope gently in the direction of Ludlow, exposing progression through time, with the highest and therefore youngest beds nearest Ludlow. They are sedimentary rocks which were deposited in the sea during Silurian Times, about 400 million years ago, and the exposures cover approximately 10 million years of geological time.

Fossils, the remains of once living organisms, are abundant and include many types now extinct. Brachiopods are dominant, but trilobites, corals, crinoids, bryozoa, bivalves, cephlapods, graptolites, worms, fishes and plants are not difficult to find.

The site is of International significance, displaying many type sections and including the standard section for the base of the Ludlow series of the Silurian System.

6. Geological Information

Geologists believe that the rocks of the Ludlow area were first laid down as sediments on the floor of a shallow sea about 420 million years ago. The sea was many thousands of miles away in the southern tropics.

The sea would have been a warm shallow sea covering the continental shelf between the edge of a land mass (now represented by the Charnwood Forest area of the Midlands to the East) and a deep ocean basin (now the thick folded sedimentary rocks of central Wales to the West).

The sediments were originally deposited in more or less horizontal layers on the sea floor. The layers are now dipping at a small but noticeable angle. This is the result of earth movements, as the continental plates have drifted over the earth's crust, buckling the strata into an arched fold or anticline.

The site is exceptionally important for displaying sections through Wenlock and Ludlow Series rocks. The site includes many type sections and has yielded a rich and diverse fossil fauna.

Unit 1- Deep Wood Stream Section (SO459735)

Unit 1 shows key sections in the Ludlow Series Elton Beds, in particular the Middle Elton Beds (Gorstian Stage) with a fauna of graptolites and trilobites. The outcrop here is restricted to the stream bed and a few slabs in the stream bank. This is the type section for the base of the Middle Elton Beds in the Ludlow Series.

Unit 2 Pitch Coppice (SO472731)

The western end of Unit 2 shows Much Wenlock limestone formation, Wenlock Series - alternating bands of hard limestone and softer mudstone and siltstone. The mudstone and siltstone suggest regular influxes of sediment which clog up the filter feeding mechanism of the corals, leading to a lack of fossils at this unit.

The eastern end of Unit 2 shows Topmost Much Wenlock limestone Formation - hard nodular limestone with a few soft partings. The back wall shows "slickensides" - the grooves and ridges found a long a fault like, caused by the two sides of the fault moving past each other.

Unit 3 - Monstay Quarry (SO473730)

Unit 3 lies on the opposite side of the road to unit 2 and shows Much Wenlock Limestone Formation, Wenlock Series and Lower Elton Formation, Ludlow Series. Two quite distinct types are visible here. The Wenlock Limestone of the lower portion was probably dug to feed the limekiln. Within the hard nodular limestone is a conspicuous slot where a soft band of shale has been eroded. About two metres above the slot there is an abrupt change from the nodular Wenlock Liestone to the well bedded fine siltstone of the lower Elton beds. A thin layer of bentonite (Fuller's earth) results from the fall-out of dust from a volcanic explosion

The site is important as it exposes the boundary between the Ludlow Series and the Wenlock Series. Being an international standard section Pitch Coppice is one of Britain's most important geological sites.

Unit 4 – Ludford Lane Quarries (4a SO477735, 4b SO483738, 4c SO487738, 4d SO489739, 4e SO491740, 4f SO493741)

Unit 4 comprises 6 sub-units (a-f) situated along the road. It shows the Upper Elton Formation (with evenly bedded flaggy siltstones, with hard calcareous bands and graptolite fauna), the Lower Bringewood Formations (with olive-coloured calcareous siltstones, limestones concentrated into nodules and shelly macrofauna), Upper Bringewood Formation (noticeably more large limestone nodules giving an irregularly bedded appearance to the rockface and large brachiopods), the Lower Leintwardine formation (regularly bedded calcareous siltstones, with lines of nodules often weathered out to give a honeycombed appearance) and the Lower Whitcliffe Formation (thickly bedded olive siltstones). Extensive paleontological collections were made at these localities by earlier workers.

Unit 5 – Mary Knoll Valley (SO488730)

Mary Knoll Valley is an exposure within a streambed and trackside. It forms a classic stratotype section for the Lower Bringewood Formation and Upper Bringewood Formation boundary. It is the type section for the lower part of the Upper Bringewood Formation, and it contains a diverse well preserved shelly macrofauna.

Unit 6 - Sunnyhill Quarry (SO495724)

Sunnyhill, Mary Knoll Valley is the international stratotype locality for the base of the Ludfordian Stage of the Ludlow Series. The type section of the Lower Leintwardine Formation lies in Sunnyhill Quarry and exposures up to the Lower Whitcliffe Formation along the track to the east-south-east. The boundary between the Upper Bringewood Formation and Lower Leintwardine Formation is exposed in the quarry section. Both formations have a diverse, well preserved shelly macrofauna and a diverse marine microflora.

Unit 7 – Deer Park (SO485712)

Deer Park Road contains the parastratotype sections for the upper part of the Lower Bringewood Formation, Upper Bringewood Formation, Lower Leintwardine Formation and lower part of the Lower Whitcliffe Formation. It has yielded a well preserved, shelly macrofauna and marine microflora.

Unit 8 – Goggin Road (SO473719)

Goggin Road exposes the parastratotypes of the Lower Elton Formation, Middle Elton Formation, Upper Elton Formation and lower part of Lower Bringewood Formation. These are the best exposures in the type area for the Gorstian Stage. A diverse macrofauna occurs in the Lower Elton Formation and the Much Wenlock Limestone Formation, and a graptolite fauna in the Middle and Upper Elton Formations. Marine microfloral elements are well preserved throughout the section.

7. Ownership, Site History and Access

Mortimer Forest SSSI is managed by the Forestry Commission on a part freehold, part leasehold basis.

Mortimer Forest SSSI comprises 8 individual units (unit 4 comprises six sub-units) that are situated throughout the Mortimer Forest block.

Mortimer Forest SSSI is a popular place for recreation with car parks and trails. There is open public pedestrian access to all parts of the SSSI.

8. Important Evaluation Criteria

8.1 Rarity

The rocks and fossils at Mortimer Forest SSSI are of great significance, both to the modern geologist and in the history of geological science. The sites illustrate one of the few places where one can view the gradual evolution of some of the marine animals which have been used to define time divisions of the Silurian period as well as demonstrating the relationship between different animals and the environment in which they lived.

8.2 Intrinsic appeal

Many people visit the Ludlow area to enjoy Mortimer Forest and to study the geology of the area. The geological sites should remain easily accessible by members of the general public and the surrounding woodland should be maintained and enhanced wherever possible.

9. Conservation Objectives and Management Aims

9.1 Conservation Objective

To carry out management agreed with Natural England to maintain the SSSI in favourable condition and to ensure easy access to the sites by the general public.

9.2 Management Aims

To ensure that the geological exposures remain relatively free of regenerating vegetation so that vegetation does not physically damage or erode the exposures and so people can enjoy unhindered access to the sites

To maintain existing fences and danger signs and to prevent access by vehicles and fly-tipping

To encourage open access and study of the geological sites.

10. Factors Influencing Management

10.1 Working Forest

Mortimer Forest SSSI is situated in the Mortimer Forest - a productive forest of mixed broadleaves, larch and Douglas Fir. Many of the geological exposures are surrounded by forestry and some were originally exposed by the creation of forest roads in the past. Care should be taken when working the forest to ensure that no damage is done to the exposures.

10.2 Access and Boundaries

Much of the geological interest is on the periphery of the Ludford Lane and could be at potential risk from fly tipping. Efforts should be made to not make the sites to obvious to passing traffic whilst at the same time encouraging access to those interested in the geology. The "Mortimer Forest Geology Trail" booklet outlines the geological sequence displayed at various exposures within and outwith the SSSI and encourages access for all.

11. Agreed Habitat Management

Regenerating trees and scrub

Wherever possible, small diameter regeneration of broadleaf and coniferous trees should be cut and the stumps treated on a **three-year** rolling programme of management throughout each unit of Mortimer Forest. Those growing on the exposures or affecting access to the exposures should be targeted. Trees should be removed before they become too large and difficult to manage and potentially pose increased likelihood of damage to the geological exposures.

Large, well-established trees

Large trees, when not posing an issue for the geology should remain in-situ, as removing them could cause more damage than leaving them. Small amounts of tree cover can provide shelter and lead to reduced levels of regeneration on the exposures. However, too much shading can lead to damper conditions and the growth of mosses, which although not damaging, can limit the ability to view the exposures. If large trees are thought to be causing damage or are at potential risk of windthrow they should be removed. Felled trees should be cut into lengths and retained nearby to provide habitat piles.

Bramble, bracken and gorse

Bramble, bracken, gorse and other shrubs obscuring the geological exposures or preventing access to the exposures should be managed on a **three-yearly** basis to prevent damage to the underlying geology and ease access.

Infrastructure

All wooden posts marking and preventing vehicular access to the roadside SSSI units should be maintained to reduce the incidences of fly-tipping. Signage indicating the Mortimer Geological Trail should be maintained so that sites are easily identified and visitors can access them easily.

12. Management Prescriptions by SSSI Unit

12.1 Unit 1

The exposures are restricted to the streambed with a few slabs in the stream bank. The unit is fairly difficult to access and is surrounded by European larch planted in 1927 and 1967 shading the site and leading to extensive moss coverage of the exposures.

Management Prescriptions for the period 2019 - 2029		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Ensure the SSSI is accounted for when planning nearby forestry operations and fell European larch from SSSI area and wider riparian zone to reduce shading, create important habitat and ease access to the SSSI unit.	◆			◆			◆			◆
2	Remove small woody conifer and broadleaf regeneration by cutting and treating the stumps	◆			◆			◆			◆
3	Remove encroaching bracken and bramble when it is obscuring the geological exposures or preventing access	◆			◆			◆			◆

12.2 Unit 2, 3 and 4

Units 2, 3 and 4 lie alongside the busy Ludlford Lane and a few have, in the past, been subject to small amounts of fly-tipping. Efforts must be made to ensure that the exposures remain easy to access but that fly-tipping is kept to a minimum by maintaining wooden posts and not making the units too obvious from the roadside. There are small amounts of regenerating trees on some of the exposures as well as bracken and bramble which should be removed. Larger trees are present at the top of unit 4 e which should also be felled.

Management Prescriptions for the period 2019 - 2029		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Remove small woody conifer and broadleaf regeneration by cutting and treating the stumps										
2	Fell larger trees growing at the top of the exposure at 4e and treat stumps										
3	Remove encroaching bracken and bramble when it is obscuring the geological exposures or preventing access	◆			◆			◆			◆
	Maintain geological trail posts and good pedestrian access	◆			◆			◆			◆

12.3 Unit 5

The features of interest at this unit are difficult to identify and advice needs to be sought from a geologist before works go ahead. Unit 5 lies in an interesting area of wet woodland and efforts to conserve the geology should not be at the expense of surrounding habitat. Correspondence with Dr Dave Evans in 2001 indicated that the exposures in the streambed and banks and cuttings are overgrown and degraded and would benefit from being cleared and re-exposed.

Management Prescriptions for the period 2019 - 2029		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2	Remove small woody conifer and broadleaf regeneration by cutting and treating the stumps										
3	Remove encroaching bracken and bramble when it is obscuring the geological exposures or preventing access	◆			◆			◆			◆
		◆			◆			◆			◆

Unit 6

Sunnyhill Quarry is generally well exposed however there is a small amount of regeneration of small woody growth and bramble on the face of the quarry wall and some larger trees that will need to be checked regularly to ensure that they are not having an adverse impact on the geology of the site.

Management Prescriptions for the period 2019 - 2029		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Remove small woody conifer and broadleaf regeneration by cutting and treating the stumps	◆			◆			◆			◆
2	Remove encroaching bracken and bramble when it is obscuring the geological exposures or preventing access	◆			◆			◆			◆
3	Regularly check trees at top of exposure to ensure they are not having an adverse impact on exposures. If necessary specialist tree surgeons will be required to carry out felling operations				◆			◆			◆

Unit 7 and 8

Deer Park and Goggin Road units are both linear trackside exposures and are subject to some encroachment of gorse.

Management Prescriptions for the period 2019 - 2029		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Remove small woody conifer and broadleaf regeneration by cutting and treating the stumps	◆			◆			◆			◆
2	Remove encroaching gorse when it is obscuring the geological exposures or preventing access				◆			◆			◆
3	Flag roadside SSSI units during planning phase of re-grading or forestry operations in the immediate area	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

13. Record of Management

Operation	Unit number	Signed	Date

14. Bibliography and Further Reading

Jenkinson., Andrew, 2000. The Mortimer Forest Geology Trail

http://www.naturalengland.org.uk/information_for/sssi_owners_and_occupiers/default.aspx