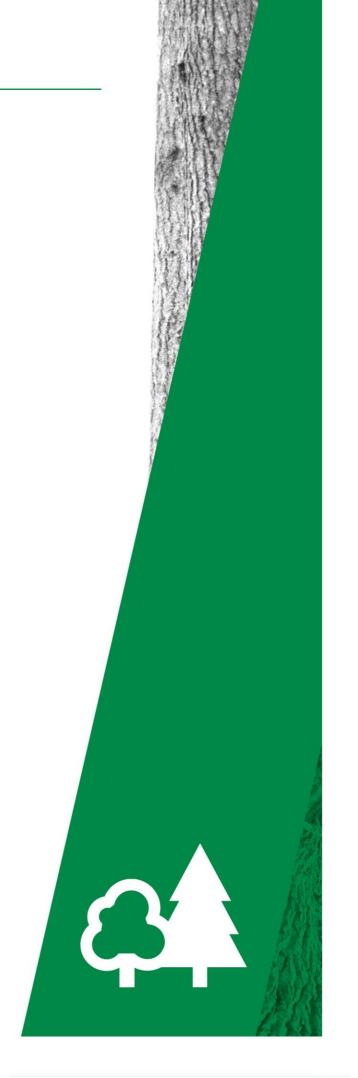


Long Mynd Forest Plan

2023-2033

Reference OP10/12

Rachel Giles March 2023



Application for Forest Plan approval - Long Mynd - March 2023

Forest district	West England Forest District
Woodland or property name	Long Mynd
Nearest town, village or locality	Church Stretton, Shropshire
OS grid reference	Centre of the plan area is at SO 4077 9008
Local authority	Shropshire Council Myndtown Parish Council; Lydbury North Parish Council

Plan area	226 hectares
Conifer felling	24.97 hectares
Broadleaf felling	0 hectares

- 1) I apply for Forest Plan approval for the property described above and in the enclosed forest plan.
- 2) I confirm that the scoping, carried out and documented in the consultation record attached, incorporated those stakeholders that the FC agreed must be included. Where it has not been possible to resolve specific issues associated with the plan to the satisfaction of consultees, this is highlighted in the consultation record.
- 3) I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
- 4) I undertake to obtain any permissions necessary for the implementation of the approved plan.

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	-

Signed.....

Forestry England Forest Management Director

Date...9th March 2023

Signed...... On behalf of Forestry Commission Area Director

 For estry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)



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Explanation of some of the terms used in the Forest Plan:

- Broadleaves are trees with broad, flat leaves e.g. oak, birch. Most are deciduous (lose their leaves in winter). **Conifers** are trees with cones and needles e.g. Scots pine, Sitka spruce. Most are evergreen, but not all e.g. larch is a deciduous conifer.
- The forest is divided into **coupes** groups of trees which will be managed in the same way. Management prescriptions (forest operations) include clearfell and low impact silvicultural systems such as shelterwood, and are described on page 21. Following clearfell, areas which have new trees planted on them are known as **restock areas**.
- Dynamic habitat is described on page 12.
- We measure the area of our land in **hectares** one hectare (ha) is equal to one hundred metres by one hundred metres, or the equivalent of about two and a half acres.
- Natural capital value from the soils to the trees, and all the species which live in them, the whole forest ecosystem is a resource known as 'natural capital'. We use a natural capital approach to help us understand the value to society of the various benefits that come from the nation's forests.
- Rides are tracks through the forest ridesides are often cleared of trees to make them light and welcoming for visitors, and to create open sunny spaces for flowering plants and insects.
- The linear areas alongside streams are known as **riparian** areas.
- A **stand** is a group, or area, of trees that are more or less homogeneous (the same) in terms of species composition, density and age. Stands of trees may be planted deliberately (plantation) or arise from natural regeneration, where trees grow from seeds which arrived on the site through natural means, usually from the previous crop, or overstorey.
- **Thinning** is where selected trees are removed, giving the remaining trees room to develop.
- The **understorey** is made up of the trees and shrubs that grow underneath the main crop (the **overstorey**), from seeds from above, or through deliberate **underplanting** (where new trees are planted under the main crop). The understorey provides habitats for wildlife. and will often become the next crop of trees, when the overstorey is felled.
- When an area of trees blows over, for example during a storm, it is known as windblow.
- Yield class is a measure of the annual growth of a stand of trees. If a tree or stand has reached **economic maturity**, it means that it has reached its maximum economic value. It can continue to grow, but its timber will not increase in value any further.

Section 1 - Forestry England vision

Forestry England - who we are and what we do

Forestry England is the country's largest land manager.

Our purpose is to secure and grow the social, economic and natural capital value of the nation's forests.

The foundation of our organisation is our world-class sustainable management of the nation's forests.

Our vision for wildlife...

The nation's forests provide the most valuable places for wildlife to thrive and expand in England.

Our vision for people...

The nation's forests are a living treasure for all, deeply connected to people's lives improving the health and wellbeing of the nation.

Our vision for climate...

The nation's forests are resilient to climate change, increasing their value for communities by producing high-quality, sustainable timber and absorbing carbon emissions.

The above is taken from our plan 'Growing the future: 2021-2026':

https://www.forestryengland.uk/growing-the-future

For more information about who we are and what we do, please visit:

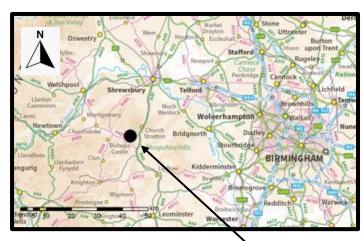
https://www.forestryengland.uk/we-are-for

Section 2 - About Long Mynd

Location

The Long Mynd is a heath and moorland plateau, approximately 7 miles long and 3 miles wide, that forms part of the Shropshire Hills.

Forestry England's land on the Long Mynd consists of a single block of 226 hectares of secondary woodland, located 5 miles northeast of Craven Arms, and 4 miles southwest of Church Stretton in Shropshire (Figures 1 and 2).



Long Mynd is in the Shropshire Landscape Assessment's 'high open moorland' landscape type (see box below). Forestry England's land is one of the "blocks of conifer plantations".

Figure 1 Location of the Long Mynd, Shropshire

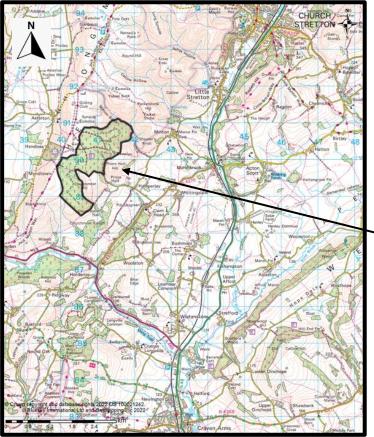


Figure 2 Location of Forestry England's land on the Long Mynd

High open moorland landscape type:

- exposed areas of upland plateau and slopes that provide panoramic views over the surrounding countryside
- contain large tracts of unenclosed moorland which remain unsettled, and are open largescale landscapes
- scattered prehistoric barrows
- narrow steep sided valleys (known locally as batches)
- typical species are heather, bilberry, red fescue and common bent grass
- localised bogs and wet flushes often form stream sources
- tree cover is limited to scrub on some slopes, and regular blocks of conifer plantations

Area of Outstanding Natural Beauty (AONB)

The Shropshire Hills AONB covers an area of around 80 000 hectares - almost a quarter of Shropshire. According to the AONB's management plan (2019-2024), the Long Mynd is a "core part of the AONB in terms of landscape, identity and biodiversity" and has the "biggest concentration of upland and semi-natural habitat within the AONB, including the largest areas of heathland". Figure 3 shows the location of Forestry England's Long Mynd site within the AONB. Although our land is predominantly conifer plantation, there are areas of heather with scattered trees on the western edges, which provide a valuable transition from high forest to open heath (Photo 1).

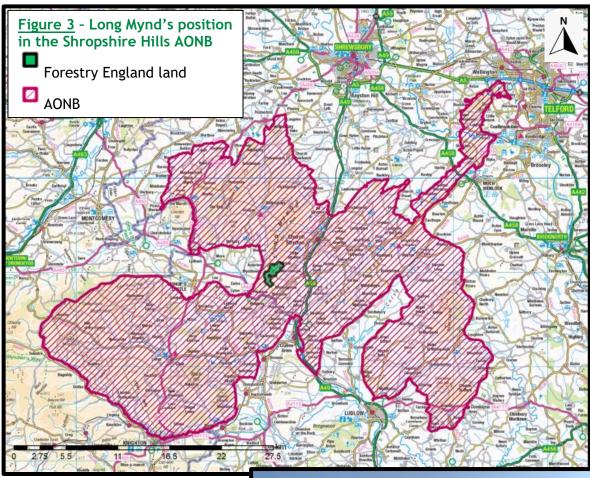
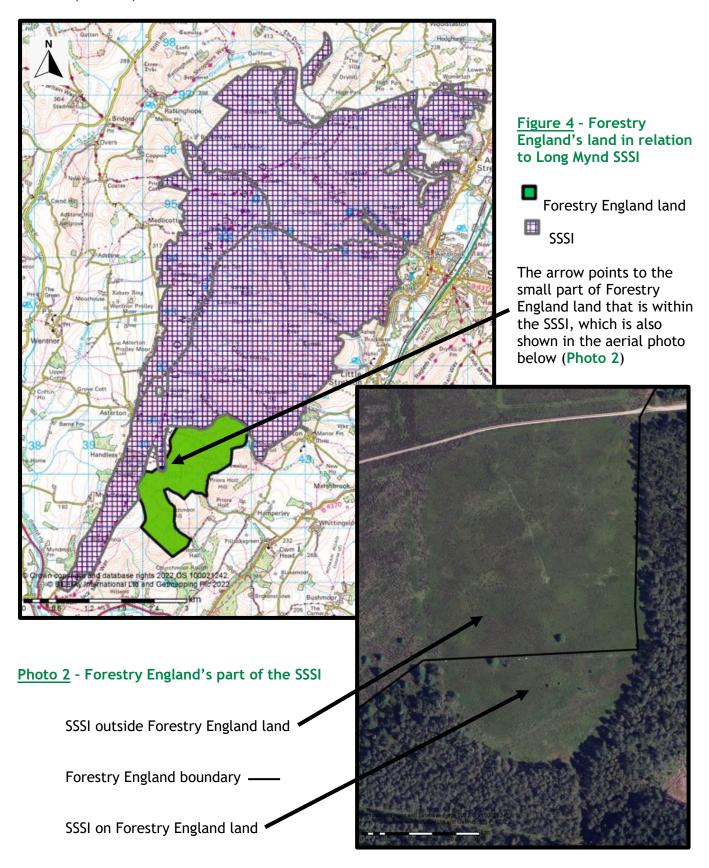


Photo 1 - looking east onto Forestry England land from neighbouring heathland



Site of Special Scientific Interest (SSSI)

Forestry England's land is adjacent to the Long Mynd SSSI, which is of botanical, ornithological and geological importance, with the main habitat of interest being upland dwarf shrub heath. One subcompartment of our land (0.76ha) falls within the SSSI (Figure 4) and is of a very similar habitat to that of the neighbouring part of the SSSI - open space with grass and heather (Photo 2).



Internal landscape

87% of the forest is planted with conifers - predominantly Sitka spruce - but this does not mean that it is a monotonous landscape. In fact, the conifers of various ages, together with the slope of the land create attractive views from the many forest roads and public rights of way (Photos 3, 4 and 5).

Photo 3 - top left - the forest track winds downhill through majestic conifers

Photo 4 - top right - on the eastern edges of the site, views stretch into the distance

Photo 5 - below - there are areas temporary open space within the forest





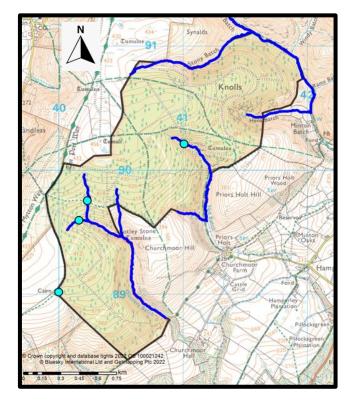


Streams and ponds

There are several small watercourses and four man-made ponds within the forest (see Figure 5). Most of the riparian areas (streamsides) have been cleared of vegetation in the past and are now lined with naturally regenerating broadleaves, mainly willows. The ponds are rather silted up.

> Figure 5 Streams and ponds In Long Mynd

> > Pond (Stream _____



Scheduled Monument

The bowl barrow (Scheduled Monument) on Prior's Holt Hill is one of many on the Long Mynd and is considered by Historic England to be a good example of a Bronze Age funerary monument

although it is currently covered with bracken (Figure 6 and Photo 6). A Scheduled Monument Management Plan for the site was approved by Historic England in 2022.



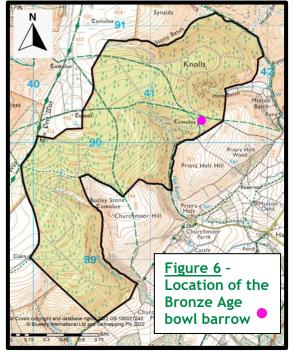


Photo 6 - Scheduled Monument from the forest track

People

Although Long Mynd is not a busy site (it is possible to spend several hours here without seeing anyone!), public use of the forest has increased in recent years. There are several public rights of way that cross the site and continue into the surrounding countryside, and the whole site is designated as open access. There are a few parking spaces (not on Forestry England land) near to the main entrance and this area is often busy with mountain bikers, who park and then ride through the forest to access the rest of the Long Mynd. The forest is also used and valued by local people for walking and horse riding.

Biodiversity

The coniferous woodland provides habitat for birds such as crossbills and firecrest, and nightjar are found on the restock sites. Goshawks have been recorded on the site in recent years, and owls and other birds of prey use the deadwood perches which are deliberately left after clearfelling (Photo 7).



Photo 7 - above - deadwood perches (snags) on clearfell site

Photo 8 - right - one of the small streams

Other valuable habitats within the forest include the riparian areas (streams) (Photo 8), ponds, broadleaf woodland and temporary open space, which together offer opportunities for numerous species of insects, bats, reptiles and woodland birds.



Dynamic habitat

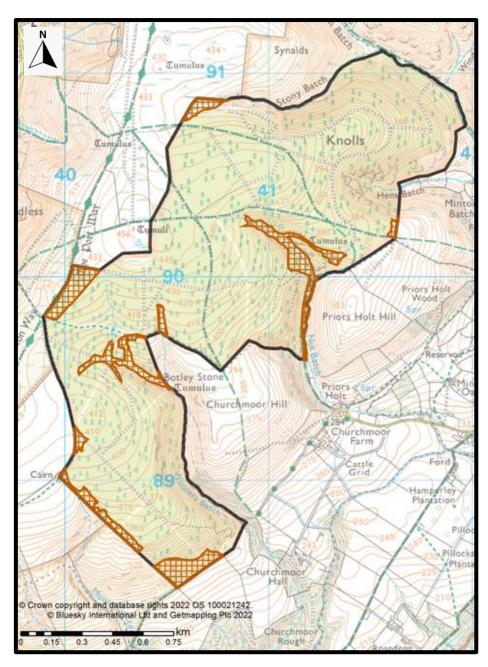
Forestry England recognises the value of transitional, dynamic habitats, for example where scattered trees grow irregularly in former open space, and where streamsides are partially cleared and then allowed to regenerate naturally.

Ecologically, these areas provide a wealth of microhabitats - in shade and in sunlight, and with different levels of vegetation at various stages of development - and are even more valuable where they are linked together to form networks, along which animals and birds can travel.

Figure 7 shows the mappable areas that have been recognised as dynamic habitat at Long Mynd, which currently include the riparian (streamside) zones (see page 10), the heathland with trees on the western side of the site (see page 7) and the few small temporarily open spaces (see page 9).

Areas where restocking (planting) does not come right to the edges of rides and roads are also important dynamic habitats, but these are not currently mapped, so are not shown in Figure 7.

Although clearfell sites provide valuable temporary open space, these are not classed as dynamic habitat because they will be deliberately restocked, whereas the dynamic habitats will be managed much more informally, allowing natural processes to take place.



Also not classed as dynamic habitat are the permanently open spaces. At Long Mynd, these consist of the Scheduled Monument and the SSSI, both of which we will proactively manage as open space in the long-term.

Current tree species

The forest currently comprises 87% conifers (predominantly Sitka spruce, with average yield class of 14) and 6% broadleaves, including areas of natural regeneration and subcompartments that have been planted with birch and other native species to increase the variety of habitats. About 7% of the site is currently open, including the archaeological site and SSSI. Figure 8 shows the main component (species or currently open space) in each part of the site, and Figure 9 shows the proportions of species.

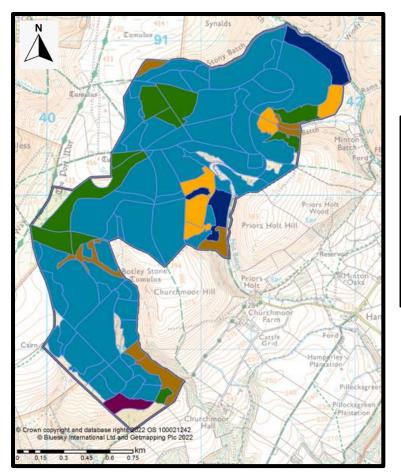
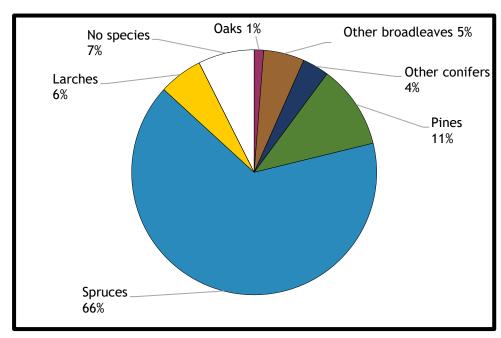


Figure 8 - Map to show the most common component in each subcompartment of Long Mynd

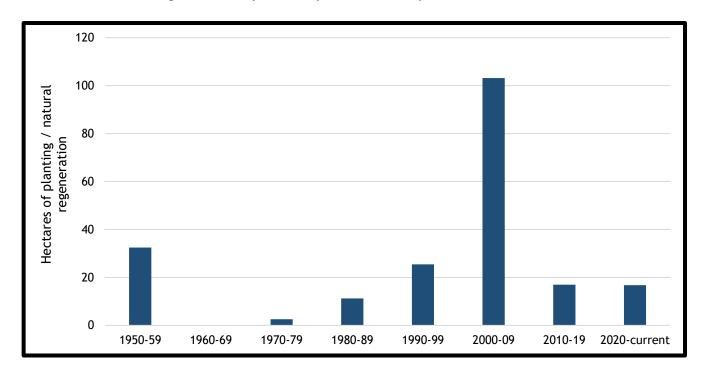


Figure 9 - Chart to show proportions of different species in Long Mynd



Current age structure

Figure 10 shows how many hectares of tree planting (or natural regeneration after felling) took place in Long Mynd in each decade. There are very few areas planted with older crops, partly due to the no-thin practice of recent decades meaning that crops are felled at a young age. There was clearly a significant peak of felling and restocking in 2000-2009, meaning that much of the forest is even-aged and will potentially reach maturity at the same time.



<u>Figure 10</u> - Chart to show area (in hectares) of Long Mynd that was established in each decade

Challenges to management at Long Mynd

Climate change

Anticipated changes in temperature and rainfall, together with an expected increase in extreme weather events will have an impact on forestry everywhere. Trees are long-lived and there is no guarantee that the ones that we plant now will be suited to the future climate.

Pests and diseases

It is difficult to predict how much impact pests and diseases may have on the trees planted at Long Mynd, but quite possible that the risk will increase if tree health is adversely affected by the changing climate.

Lack of species and structural (age) diversity

Landscape

Blocks of conifers on high ground can be rather noticeable in the landscape, especially when they have straight edges adjacent to low vegetation such as grassland or heathland.

Dynamic habitat management

Dynamic habitat requires regular intervention to ensure that tree cover remains appropriate for the management objectives.

Exposure and access

Long Mynd is quite exposed (Figure 11) with steep slopes, so conifer crops have not been thinned in the recent past due to risk of damage from wind and difficulty of access. This means that many of the stands are very dense and dark and have to be felled at a young age so there are very few old trees on the site.

Sheep

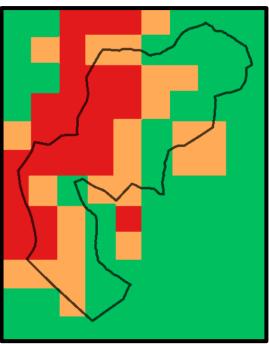
Sheep from neighbouring farms often stray into the forest and damage the young trees in our restock areas.

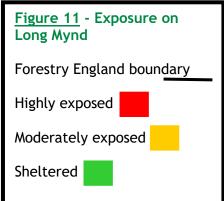
Mountain biking

There has been a recent increase in unauthorised mountain biking trails and jumps (Photo 9).

Photo 9 -Mountain bike trails at Long Mynd







Section 3 - What we'll do

Forestry England's land on the Long Mynd will continue to be a productive forest, planted mainly with conifers that grow quickly and efficiently, absorbing carbon and offering shelter for wildlife as they grow, and ultimately providing a sustainable long-term supply of timber. Although Sitka spruce will continue to be an important crop, we will plant it in mixtures with other species in each restock to increase diversity and resilience to future changes in climate and pests and diseases.

Taking into account wind risk and accessibility, we will identify suitable crops to thin, which will increase structural diversity, and allow some stands to grow to an older age. Some areas of conifers will be retained beyond economic maturity to provide the mature habitat favoured by goshawks and long-eared owls.

We are committed to the expansion and ongoing management of our dynamic habitats - we're excited about the potential of the western edge of the forest to provide a transition from high forest, through scattered trees, into heathland, and we will be looking for opportunities to open up riparian areas and ridesides in order to increase connectivity between areas of dynamic habitat. At the northern edge of the site, we will soften the edge where the forest meets the neighbouring SSSI by not replacing any failed trees in the recently planted crops - this will create gaps which can remain open or into which scrub and natural regeneration will develop.

Consideration will be given to the position of the site within the wider landscape - planting and felling will be planned to minimise visual impact, and planting of broadleaves will be increased around the edges of the forest, softening the interface with neighbouring heathland and farmland.

We will continue to communicate with local farmers, mountain bikers and other forest users, so that they understand how the forest is managed and how their activities may impact on productivity and biodiversity.

Our Forest Plan objectives, and how they link to the Forestry England vision, are listed in Table 1 below.

The analysis (what is there now) and concept (what we will do) are on pages 18 and 19.

Our action plan is on page 20.

 $\underline{\text{Table 1}} \text{ - Forestry England's objectives of management at Long Mynd}$

	Our vision for	Our vision for	Our vision for
Forestry England vision for the nation's	wildlife: The nation's	people: The nation's	the climate: The nation's forests
forests	forests provide	forests are a	are resilient to
Long Mynd Forest Plan objectives	the most valuable places for wildlife to thrive and expand in England.	living treasure for all, deeply connected to people's lives, improving the health and wellbeing of the nation.	climate change, increasing their value for communities by producing high-quality, sustainable timber and absorbing carbon emissions.
Generate timber to suit a variety of current / changing markets			✓
Increase resilience to future	_		_
changes in climate and pests and diseases	√	✓	√
Improve ecological condition	✓	✓	✓
Protect the historic environment		✓	
Provide opportunities for informal public use and enjoyment		✓	

Analysis is best viewed at A3 size

Long Mynd - Analysis - what is there now

DYNAMIC HABITAT Broadleaves and conifers are gradually regenerating in the wet area in the northwest corner.

New conifer planting in the northern end of the site includes Sitka, Norway and Serbian spruces with some European larch - a trial mixture planted to increase species diversity and future resilience.

A recently planted strip of birch, hawthorn, rowan and oak provides attractive wildlife habitat on the edge of the site.

Although the site produces excellent quality Sitka spruce most of the Scots and lodgepole pine crops are of much poorer form (vield class 6-8).

(yield class 14-18), not all conifer species grow well on Long Mynd -

> The subcompartment that lies within the SSSI is open space with heather and other heathland / grassland plants.

The bowl barrow Scheduled Monument is an Iron Age burial site.

Steep slopes, especially on the eastern side of the site, make access challenging. This, together with the exposed position and risk of wind damage, means that many of the crops have been managed as 'nothin', ie thinned only once in their lifetime or not at all.

The main entrance to the site leads onto a track that winds uphill through an attractive area of majestic conifers. There are not many old trees in the forest, but these (planted in 1951) are among the oldest crops.

DYNAMIC HABITAT

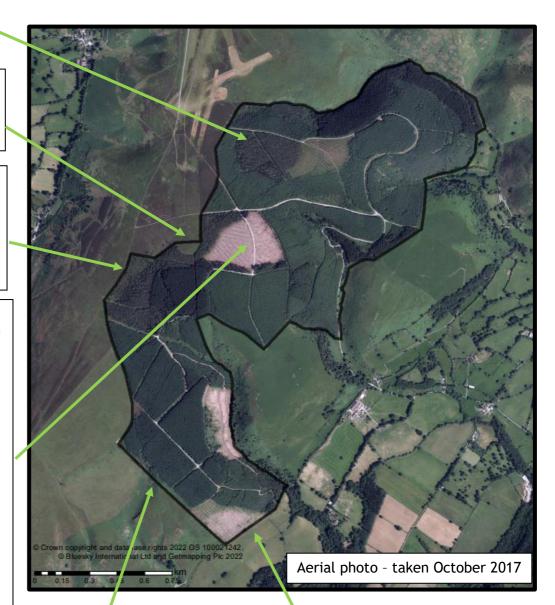
Patches of open space with scattered trees provide a valuable transitional habitat from high forest to open heath. In places, the tree cover has become too dense.

Prior to clearfelling this area, we experimented with a system where patches of trees would be felled at different times to try to diversify age / structure. Unfortunately, this led to instability and many of the remaining trees blew over in the wind - hence the decision to clearfell.

A few rows of mature Sitka were left and have successfully provided seed for natural regeneration, which was supplemented by planting the rest of the site with Sitka and oriental spruce in 2018. At the moment, the Sitka is thriving, but the oriental spruce is being damaged by grazing sheep. Some tall dead trees (snags) were also left to provide valuable deadwood habitat for invertebrates, and vantage points for owls and other birds.

Much of the Long Mynd is common land, where a group of farmers called commoners graze their sheep and ponies. Other neighbours to the west include the National Trust and the Midland Gliding Club.

Damaged fences are an ongoing issue, allowing sheep from the neighbouring farmland to come into the wood - there seems to be a resident population of at least 20 sheep and lambs which graze and cause damage to our restock areas and ground flora.



DYNAMIC HABITAT There is an open strip along the fenceline, where the conifers were not restocked to the edge of our land.

Most of the southeast section is broadleaf woodland - some very recently planted, and some older, with other areas left to natural regeneration.

The site is freehold (open access) and is crossed by several public rights of way. Public use is generally low, although there has been a sharp increase in the number of mountain bikers recently, and unauthorised trail and jump construction is becoming an issue.

© Bluesky International Life and Germannia

DYNAMIC HABITAT

There are a number of minor streams, and four small manmade ponds. Most of the riparian areas (streamsides) have been cleared of trees in the past and have regenerated with willows and other broadleaves, but some are still flanked by conifers. They are quite inaccessible so the mapping is not perfect. The ponds are mostly quite silted up.

DYNAMIC HABITAT

Ride and roadsides have been widened in places, creating open sunny edges with a variety of plants.

Analysis

Long Mynd - Concept - what we'll do

DYNAMIC HABITAT MANAGEMENT When we are working in the adjacent crop, we will clear the conifers and some of the broadleaves from the wet area in the northwest corner.

We will monitor growth rate, health and productivity of trial species mixtures and use our experiences to inform future planting plans.

When beating up, we will not replace failed trees in a strip 20m wide alongside Minton Batch in order to create patchy open space and natural regeneration alongside the SSSI.

Due to the risk of on a trial basis.

We will manage the Iron Age bowl barrow according to the Scheduled Monument Plan which was England in 2022.

majestic spruces just inside the entrance for aesthetic reasons and to provide potential habitat for also identify other areas for future long term retention to ensure continuity of this habitat.

exposure and difficulty of access on the steep slopes, we will continue to manage many of the conifer crops as 'no thin'. Some sheltered stands will be thinned

approved by Historic We will retain the

goshawk, which prefer older conifers. We will

communicate / work with the neighbouring farmers and commoners to try to keep this number to a minimum.

We will gradually remove the unhealthy stands of pine, replacing them with conifers that we know are better suited to the site, and trialling species mixtures to increase resilience and diversity.

We will look out for, and retain, a number of individual interesting pines for aesthetic reasons and to provide habitat for crossbill, long-eared owl and other wildlife.

We will ensure that the subcompartment that is within the SSSI remains open.

DYNAMIC HABITAT MANAGEMENT

We will remove some of the trees from the area that has become too densely populated aiming for 25-30% tree cover (broadleaf species and occasional pines) with heather and bilberry underneath.

An exciting goal for the coming decades is to expand this dynamic habitat on the western side of the site. We will do this by leaving areas unplanted when we restock after clearfelling, to provide new habitat for various species of reptiles, insects and small mammals, and complement the neighbouring National Trust land and SSSI.

We will continue to monitor the condition of the fences and the number of sheep on our land, and will

The broadleaves in the southeastern section of the forest will be managed with a very light touch, thinning if appropriate when neighbouring conifer crops are worked. This means that the recently planted birch and oak, and the areas that are naturally regenerating, will be more-or-less left alone to develop eventually into broadleaf woodland, providing a habitat that is quite different from the majority of the site, and an attractive soft edge when viewed from outside the wood.

We will attempt to de-silt the ponds to re-create small areas of open water. When we are planning operations nearby, we will carry out eDNA testing for great crested newts (a European Protected Species).

DYNAMIC HABITAT MANAGEMENT

When we are planning forest operations in areas near to the streams, our wildlife ranger will advise as to how we can improve the riparian habitat by removing trees (especially conifers) to create temporary open space followed by regeneration of native broadleaves.

While the areas are clear of trees, the streams can be mapped more accurately.

We will continue to use a clearfell / restock system, as we know that it is the best silvicultural system for this exposed, windy site, and it provides a mosaic of temporary open space which benefits species such as nightjar. When we clearfell, we will ask contractors to leave some standing trees as raptor perches.

DYNAMIC HABITAT MANAGEMENT When we restock after clearfelling, sections of ride and roadsides will be left unplanted where appropriate in order to increase open sunny spaces throughout the forest and to connect areas of dynamic habitat.

Concept

Aerial photo - taken October 2017

	Objectives - what we hope to achieve						
Long Mynd Action Plan Actions - what we will do (2023-33)	Generate timber to suit a variety of current / changing markets	Increase resilience to future changes in climate and pests and diseases	Improve ecological condition	Protect the historic environment	Provide opportunities for informal public use and enjoyment	Monitoring - how we will measure success **note that some of these are long-term goals - possibly not evidenced in this Forest Plan period	
 Conifers Manage conifers under clearfell / restock systems - fell 24.97ha in this Forest Plan period (see felling map - page 22) Restock using Sitka spruce in mixtures with other site-appropriate conifer species Trial thinning of selected conifer crops - see map on page 23 Retain 7.92ha of conifers beyond maturity (see map on page 21); begin to identify stands for future long-term retention When beating up at the northern end of the site, do not replace failed trees in a 20m wide strip alongside Minton Batch - to create a mosaic of mixed regeneration and gaps to buffer the SSSI 	✓	✓	✓			 Has clearfell / restock been carried out as in the actions list? **Have any stands been thinned? Has it improved structural diversity? Has there been any wind damage as a result?** Identify stands for future long-term retention Was beating up carried out as per the action plan 	
 Broadleaves Manage broadleaves with light touch - thin if needed when working in conifer crops nearby When felling stands on the periphery of forest, take opportunities to plant broadleaves on the outer edges, and to create views out into the surrounding landscape 		✓	✓		√	 Have any of the broadleaves been thinned? **Have there been opportunities to plant broadleaves on forest edges or to open up views?** 	
 Pynamic habitat Remove trees from existing dynamic habitat on western edge (see map on page 21) aiming for 25-30% canopy cover Create 2 to 3ha of new dynamic habitat - see Figure 14 on page 22 - remember to retain gnarly, interesting pines from current crop Remove trees from time to time along watercourses; allow natural regeneration, providing patchy 20-50% cover Widen ridesides by not planting to the edges when restocking (up to 10% of restock areas can be 'open') - prioritise this by considering connectivity between areas of dynamic habitat 		✓	✓		√	 Have trees been removed from existing dynamic habitat? Has dynamic habitat on western edge been expanded? Have opportunities been taken to develop dynamic habitat on stream and ridesides? Assess connectivity of dynamic habitat and use to advise next stages of habitat creation 	
 Other habitats and species Ensure that the small area of SSSI remains open When time and resource allows, de-silt ponds and remove overhanging trees; trial eDNA testing for great crested newt when working nearby Look for opportunities to increase / create other habitats such as deadwood eg leaving standing dead trees when clearfelling Monitor species such as goshawk, nightjar and long-eared owl to see how our management is affecting them 		✓	✓		✓	 Is SSSI still open? Have any of the ponds been improved - de-silted and trees removed? Presence / absence of other habitats and species of interest? 	
 Heritage Manage the bowl barrow as described in the Scheduled Monument Plan - remove trees and control bracken as efficiently as possible; consult HE before forest operations close to the SM Protect the non-scheduled heritage features that are marked on our maps 				✓		 Have trees been removed from the barrow? Is bracken control being carried out / feasible? 	
 Community engagement Inform forest users, neighbours and other interested parties about the Forest Plan / forest operations Monitor the number of sheep on site and the condition of fences; communicate with neighbouring farmers / commoners 					✓	 Has public engagement has taken place? Are the sheep still causing problems with restock? Has any solution been found? 	

Our management prescriptions for Long Mynd (Figure 12)

- Most of the forest will be managed under a clearfell system, with conifer crops being clearfelled at around 30-45 years old if they have not been thinned, and around 55-60 years old if they have been thinned.
- The SSSI and Scheduled Monument will be kept **open**.
- The broadleaf areas will be managed as low impact shelterwood systems - over many decades, the overstorey trees will be removed through thinning, leaving the understorey to develop to become the next crop.
- Riparian areas (streamsides) will be managed as group selection - where groups of trees of all ages will be removed at intervals to create temporary open space and dynamic habitat.
- The existing dynamic habitat on the western edge and small areas of temporary open space will be managed by single tree selection - individual trees of all ages will be removed to retain canopy cover at 25-30%. Over time, the dynamic habitat on the western edge will be extended following clearfells.
- A very inaccessible area in the northeast of the forest will be managed under **minimum intervention** for species that do well under low levels of disturbance.
- Some conifer crops have been identified as suitable for long-term retention - this will contribute to the age structure and aesthetic appeal of the forest and create areas of older trees which are beneficial for goshawks and owls.

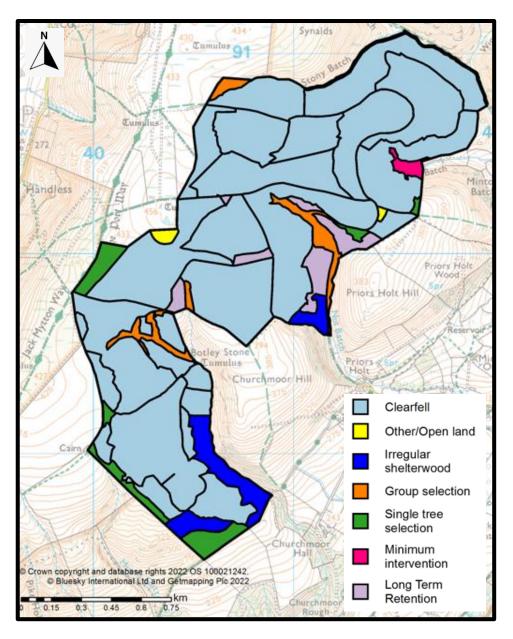


Figure 12 - Management prescriptions for Long Mynd

Long Mynd - felling plan 2023-2033 (Figure 13)

Clearfell coupe 12012 (7.62ha) Fell 2023-24

Clearfell poor quality Scots pine and lodgepole pine as soon as plan is approved

Restock with:

70% Sitka spruce

20% mixed conifers

10% open space - probably along ridesides - taking opportunities to connect areas of current and future dynamic habitat

Clearfell coupe 12028 (1.71ha) Fell 2023-24

Clearfell mature Sitka spruce on woodland edge and younger Sitka spruce adjacent to Scheduled Monument (consult with HE at site planning stage to ensure protection of the SM)

Restock with:

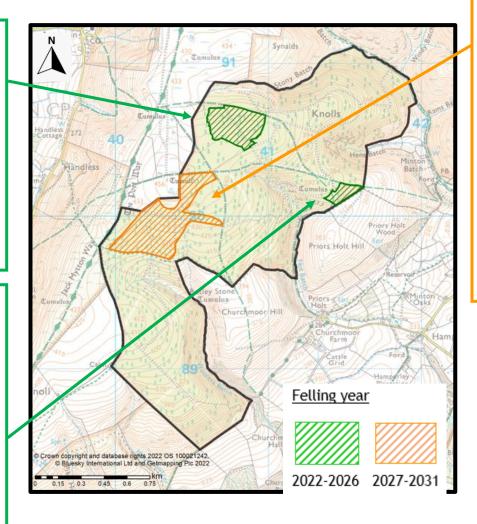
60% Sitka spruce

20% mixed conifers

10% mixed broadleaves along

forest edge

10% open space - probably along ridesides and forest edge



<u>Figure 13</u> Felling operations to be carried out at Long Mynd 2023-2033

Clearfell coupe 12030 (15.64ha) Fell 2030-31

Fell Sitka spruce, then Scots and lodgepole pine a year later; retain any interesting individual pine trees for biodiversity

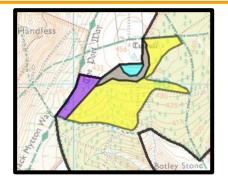
Restock 13.8ha with:

70% Sitka spruce

20% mixed conifers

10% open space

Leave a strip of 2 to 3ha along western edge to naturally regenerate as new dynamic habitat - aiming for 20-30% canopy cover (Figure 14)



<u>Figure 14</u> - Restock / dynamic habitat plan

Conifer restock Existing dynamic habitat New dynamic habitat



Thinning at Long Mynd

Note that most crops at Long Mynd have not been thinned in recent years. We have now identified some relatively sheltered stands which could be partly or completely thinned (see Figure 15 below).

The longer term clearfell dates shown in the felling map on page 24 are based on the assumption that this thinning will take place. If the thinning does not happen for some reason, then clearfell dates will be changed.

Crops which have been thinned are usually felled after around 55-60 years, whereas those which have not been thinned are felled earlier - after about 30-45 years

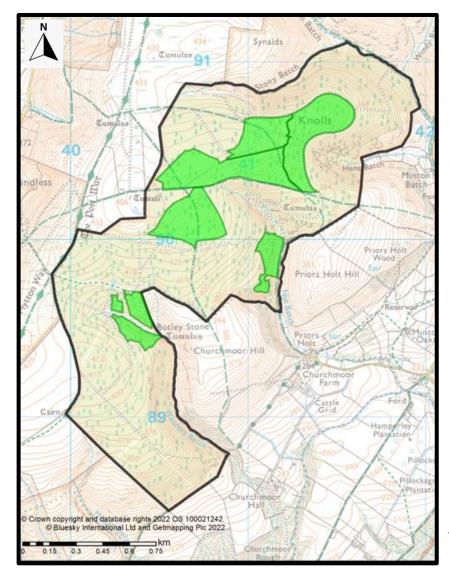


Figure 15 - crops which may be suitable for thinning

Long Mynd - longer term felling plan 2023-2053 (Figure 16)

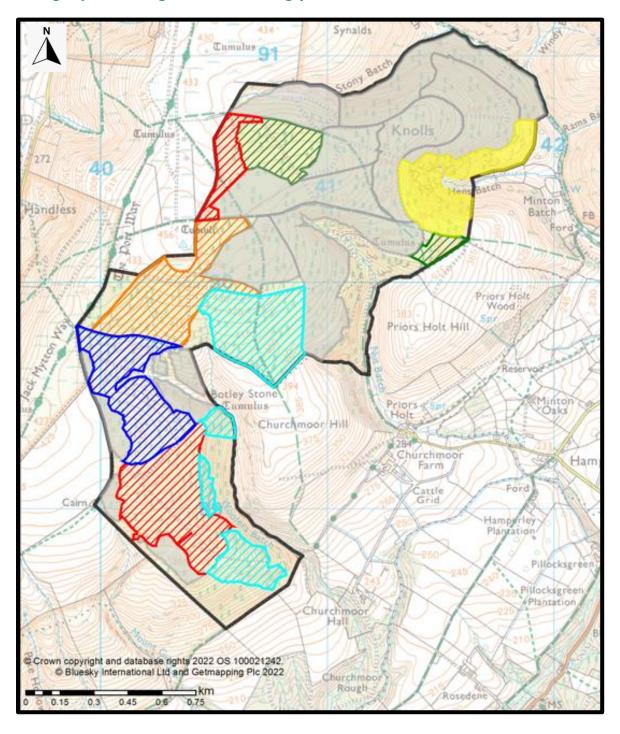


Figure 16 - Long term felling plan for Long Mynd 2023-2053

Felling year



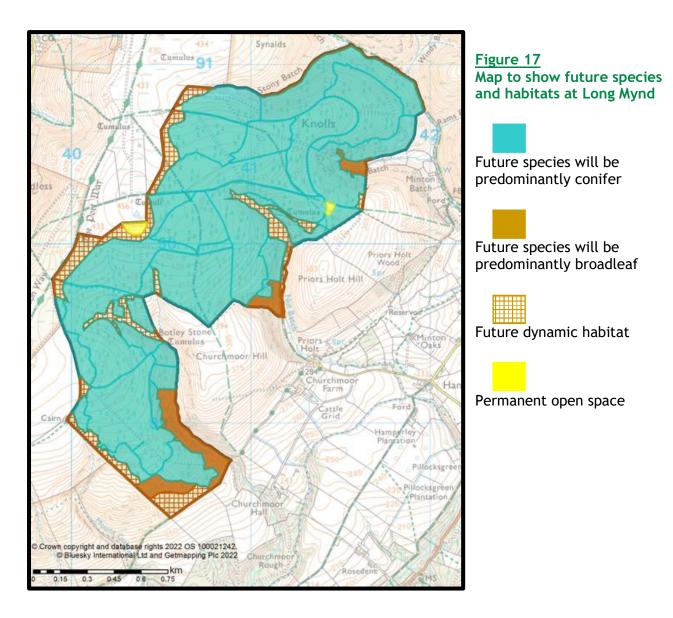
2022-2026 2027-2031 2032-2036 2037-2041 2042-2046 2047-2051 Fell after 2052

Future habitats and species

Forestry England's land on the Long Mynd will continue to be predominantly conifer plantation. However, a broader range of conifer species will be planted to reduce the dominance of Sitka spruce.

Broadleaves will be planted and encouraged along the eastern sides of the forest, and the dynamic habitat will be expanded on the western and southern edges and along stream and ride sides.

Figure 17 below gives a broad overview of the expected future composition of the forest. Note that only the mappable areas of dynamic habitat are shown on the map. Opportunities will be identified to create further (unmapped) areas of dynamic habitat during restocking following clearfells. Each restock coupe has 10% of its area recorded as 'open' to cover this (see restock proposals on page 22).



Appendix 1 - Bowl Barrow Scheduled Monument Plan

Bowl barrow on Prior's Holt Hill, Myndtown Scheduled Monument Management Plan 2022-2032

(may also be referred to by Forestry England as 'Long Mynd barrow')

Bowl barrows, the most numerous form of round barrow, are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC.

List Number: 1007334

NOTE - signed version with notes about management during the plan period is kept on the West England Forest District Sharepoint site

Name	*Name*
Forestry England	Historic England
Date	*Date*

Forestry England Monument Management Plan West District	Date of visit: Forest planner with beat team 25 th April 2022 and with advisor from HE - 23 rd May 2022
<u>List entry:</u> 1007334 <u>OS grid reference:</u> SO 41438 90189	Scheduled Monument name: Bowl barrow on Prior's Holt Hill, Myndtown
Local numbers: N/A	Other statutory designations: N/A
Beat: Marches North	West Forest District compartment: 1204

Modern Ordnance Survey mapping: © Crown Copyright and dalabase right 2018. All rights reserved. Ordnance Survey Licence number 100024900—Marine mapping: © British Crown and SeaZone Solutions Ltd 2018. All rights reserved. Product licence number 100024901.

This is an As sized map and should be printed full size at A4 with no page scaling set.

Heritage Category:
Scheduling
List Entry No: 1007334

County:
District: Shropshire
Parish: Myndtown

Each official record of a scheduled monument contains map. New entries on the schedule from 1986 norshards include a digitally created map which forms part of the official record. For entries created in the years up to an excluding 1987 a hand-drawn map forms part of the official record. The official records are not of the official record can be official record can be official record can be official record can be obtained from 1statot England.

This map was delivered electronically and when printer may not be to scale and may be subject to distortions All maps and grid references are for identification purposes only and must be read in conjunction with other information in the record.

 List Entry NGR:
 SO 41438 90189

 Map Scale:
 1:10000

 Print Date:
 14 July 2022

Historic England
HistoricEngland.org.uk

<u>Forest plan:</u> Long Mynd forest plan currently being rewritten - will be 2023-33

Site Descriptions and Importance:

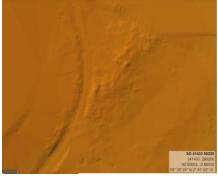
There are over 10,000 surviving bowl barrows recorded nationally. This is a good example: it appears to be intact and will retain archaeological deposits and evidence from the old land surface sealed beneath the mound and in the ditch fill; as one of several such monuments in the area, it contributes information relating to the intensity of settlement and land use during the Bronze Age.

It is a well-defined mound of stone and earth construction 14m diameter, up to 0.8m high; profile is flattened and slightly spread; although no longer visible at ground level, a ditch surrounds the mound.

More info at: https://historicengland.org.uk/listing/the-list/list-entry/1007334?section=official-list-entry



Photo taken from NW corner of the scheduled area, looking SE -March 2022



Alison MacDonald - HE - May 2022 - "the barrow is only very faintly showing on the <u>LiDAR</u> and not at all on aerial photographs"

Condition

- Despite being spread by past ploughing, the bowl barrow on Prior's Holt Hill survives well.
- It is currently covered with bracken with a few scattered trees (conifer and broadleaf).
- It is very difficult to see the actual barrow because of the bracken and because the land is undulating with rocky outcrops, one of which was mistaken for a second barrow in a previous plan. HE has now confirmed that there is only one barrow (May 2022).

Management Objectives:

 To reduce risk of damage to the monument from bracken and trees, and to expose it so that its form can be seen more clearly

Note - we have discussed at length the options for removal of bracken and options are: bruising it by hand, use of machines or chemical treatments. However, we are trying to reduce the use of chemicals, and machines may damage the SM.

HE advice 31.10.22:

Removal of bracken from the monument would still be my objective, as the bracken is actively destroying the barrow. If you feel that bracken cutting is not viable then discrete area chemical spraying would be the next best option.

The machinery needed to roll bracken is likely to cause damage to the barrow.

Disposal of material can be through burning on the track or just outside the Scheduled Area.

Decline and Vulnerability

Potential threats include:

- Tree roots damage the monument
- Bracken rhizomes change the soil chemistry and damage what's underneath
- If bracken is removed successfully, there is more likely to be encroachment of grass and trees / scrub

Work Proposed in the Plan Period:

Achieved



- 1. Remove regenerating trees from the burial mound (no need to remove trees from elsewhere within the scheduled area).
 - Alison (HE) confirmed the exact location of the barrow (map above), so we can use this to guide which trees need to be removed.
- 2. Continue to experiment with bracken removal try bruising it with hand tools for the next few years, and then consider use of chemicals if it persists. Burn any removed bracken on the track outside the SM.

Proposed Works which Require Scheduled Monument Consent: Individual trees can be felled without SM consent as long as it is not likely to damage the SM in the felling or removal. If in doubt, ask (midlands@historicengland.org.uk). Email from Harriet Halliday of HE during Forest Plan consultation - 2023: "Whilst felling is not in itself a work within the scope of the 1979 Ancient Monuments and Archaeological Areas Act any associated ground disturbance or wilful or reckless damage may constitute offences under Sections 2 and 28 of the Act. As such we strongly advise that for the Estate's comfort the contractor/estate staff's method statement is submitted to us for comment prior to felling being undertaken."	Arrangements for monitoring: Forestry England will carry out a monitoring visit at least once per year to assess whether work is needed to remove trees or bracken. FE will inform HE of any issues on the site, and will meet again to discuss management in ten years at the end of this plan period, or sooner if deemed necessary.
Opportunities:	Record of management and/or observations during plan period To be completed by Forestry England after each monitoring visit

Appendix 2 - Consultation record

The external consultation for the Long Mynd Forest Plan was open for six weeks in January / February 2023. Posters were put up at six points where public rights of way enter the forest, directing people to an online survey. In addition, emails were sent specifically to organisations and groups who we felt have an interest in how the site is managed eg parish councils, the Commoners Association and the local mountain biking shop.

Six of the 19 respondents to the survey describe themselves as neighbours / forest users - their feedback was generally positive:

"Looks well thought through to me - good balance of objectives"

"Thank you for this amazing forest"

although there was disappointment that the plan does not say much about mountain biking.

Forestry England comment:

 Our Forest Plans don't directly address recreation - they are about land management for long-term forest protection and resilience. We will make sure that the scope of Forest Plans is explained more clearly within the plan itself in future.

One respondent was concerned about litter and asked what we can do to prevent it.

Forestry England comment:

• We don't see too much litter at Long Mynd and are reluctant to put up posters which can detract from the sense of remoteness that makes this forest so special. Unfortunately, we just have to rely on forest users being respectful and taking their litter home.

And someone else asked us to "stop cutting down trees".

Forestry England comment:

Outting down trees is part of the cycle of sustainable forest management at Long Mynd. We plant them, look after them, and then cut them down to provide timber. It can look quite dramatic when an area has been cleared of trees, but the next stage is to restock and begin to grow the next generation of trees. For more information, visit www.forestryengland.uk.

Seven responses were received from members of the Long Mynd and District Bridleways Association, expressing concerns that they hadn't been consulted directly and therefore had not had time to formulate a response.

Forestry England comment:

 We thought that we had contacted all the relevant local groups and apologise for omitting the Bridleways Association. If you would like to discuss the plan, please feel free to email us.

Historic England and the Shropshire Council Historic Environment Team were pleased to see the inclusion of a scheduled monument plan for the bronze age bowl barrow, but pointed out that unscheduled historic features should be protected too.

Forestry England comment:

 We mark all historic features that we are aware of on our maps so that they are protected during forest operations. This should've been stated in the plan and has now been added to the final version. We also received feedback from Natural England, the National Trust and the Shropshire Hills AONB, who recognise the challenge of balancing competing land uses - timber production, recreation, biodiversity - and appreciate that our Forest Plan places the creation of dynamic habitat high up on our agenda.

However, they would have liked us to create a greater amount of dynamic habitat to act as a buffer between the forest and the neighbouring heathland SSSI, and would like us to move away from a forest dominated by conifers managed by clearfelling, towards greater habitat diversity and variety of management systems, in order to protect soils and watercourses.

Forestry England comments:

- We need to write a plan that is realistic and achievable. In addition to the creation of 1.89ha of new dynamic habitat, we will (in the next few years) be restoring an area (2.49ha) on the western side of the site which was open and has become dominated by trees - this will add to the dynamic habitat, as will the 10% of 'unstocked' space that is recommended in all of our planting areas.
- We are, of course, aware of the importance of the neighbouring SSSI, which is why we
 have committed to further extending the buffer on the western edges of the forest over
 the coming decades.
- We have recently restocked the area in the northern part of the site with conifers, but with a broadleaf strip along the edge of the streams / SSSI.
- Sustainable forest management is a long-term business we cannot transform conifer forest to broadleaf / open / heathland overnight, but as trees reach economic maturity, we will fell them and look at each area individually to ensure that what replaces them delivers for timber production, jobs, carbon sequestration, biodiversity and people.
- With regard to how forests impact on streams and soils, Forestry England is UKWAS
 certified and we manage all operations to UKWAS and UKFS best practice. Each operation
 goes through a site planning process before it is approved, meaning that the constraints
 and opportunities for each individual location are considered carefully.
- In the past, Long Mynd has been managed predominantly as no-thin conifer plantation. In future, we are moving towards thinning many more of the stands on the site, which will create a more open forest structure, possibly generating opportunities for alternatives to clearfell in the future, once we see how the thinned stands respond to wind and storms.

Forestry England - westenglandplanning@forestryengland.uk