

Matlock Forest Plan 2014 to 2024

Summary

Matlock Forest Plan (483ha) comprises of 7 named woodlands (Sitches, Whitesprings Plantation, Seventy Acre Plantation, Forty Acre Plantation, Upper Moor, Farley Moor and Bottom Moor) on Matlock Moor, Derbyshire. The plan area of 483ha comprises of 378ha of conifers (78%), 77ha of broadleaves (16%) and 27 ha of Open ground (6%). The plan comprises an aggregation of woodlands separated by fields and open moorland on a plateau rising to 300m above the valley of the River Derwent. The woodlands are in part visible from each other and are prominent in the surrounding landscape and form part of a single landscape unit. Principal views are from the public roads which cross the moors. The wider setting comprises open, managed heather moorland and acid, sheep-grazed grassland fragmented by minor roads. The centre of the plan area is 1.5 miles north of Matlock and 6 miles south-west of Chesterfield. The plan details management operations including felling and restocking for the next 10 years with outline proposals for the next 50 years.

The main objectives for the Forest Plan (FP) are the continued production of commercial conifers and broadleaves; the provision of informal recreation; manage the forest for the conservation of the wide range of species which are found there and to make the economic potential of the forest more resilient in the face of a changing climate, pests and diseases. The woodland structure is dominated by mature stands of conifer which covers 85% of the FP area.

The current threat to the primary conifer species in Matlock Forest Plan from pests and diseases will lead to a diversification in species currently grown. To achieve this some of the Lodgepole pine stands will be removed early before they reach the end of their rotation and healthy stands (Spruce & Scots pine) will be retained beyond their economic rotation to ensure the retention of some high forest. Management will have to become more reactive in the face of current and future pests, disease and climate change to ensure it can grow the economic, social and environmental value of the forest into the future.

The FP will incorporate any features of cultural significance, veteran trees and open woodland habitats into its design to ensure these can be maintained and conserved while forestry operations are carried out.

Forestry Operations 2014 to 2024

Woodland Name	Grid Reference	Total Area (ha)	Felling (ha)	Natural Regeneration (ha)	Restocking (ha)	Open Space (ha)
Bottom Moor	SK31976287	120	29	6	23	
Upper Moor	SK30856466	49	7		7	
Farley Moor	SK30186318	188	45	9	35	1
40 Acre	SK29796511	33	1	1		
70 Acre	SK29426488	47	3	1	2	
Whitespings Plantation	SK28806546	59	20	2	16	2
Stiches Wood	SK29826633	20	9		9	



Forestry Commission England - **Central Forest District**

- **Matlock Forest Plan (FP)**

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A Application for Forest Plan Approval

i Plan Area Identification:

Beat: Peak District
 Name: Matlock Forest Plan
 Nearest Town: Matlock
 OS Grid Reference: Matlock Moor Central Point SK 3028 6342
 Local Planning Authority: Derbyshire County Council

ii Designations:

- Lies within the Dark Peak Natural Area adjacent to the western edge of the Derbyshire Peak Fringe and Lower Derwent, Secondary Woodland.

iii Date of Commencement of Plan

As soon as possible once approved.

Area (ha)	Conifers	Broadleaves
Felling	129	
Restocking	110	
Open Space	4	
Natural Regeneration		15

Total felling area 129ha

- Forest Plan maps are attached

I apply for Forest Plan approval for the area described above and in the enclosed Forest Plan.
I undertake to obtain any permission necessary for the implementation of the approved plan.

Signed

Approved

FDM

District

Conservancy

Date

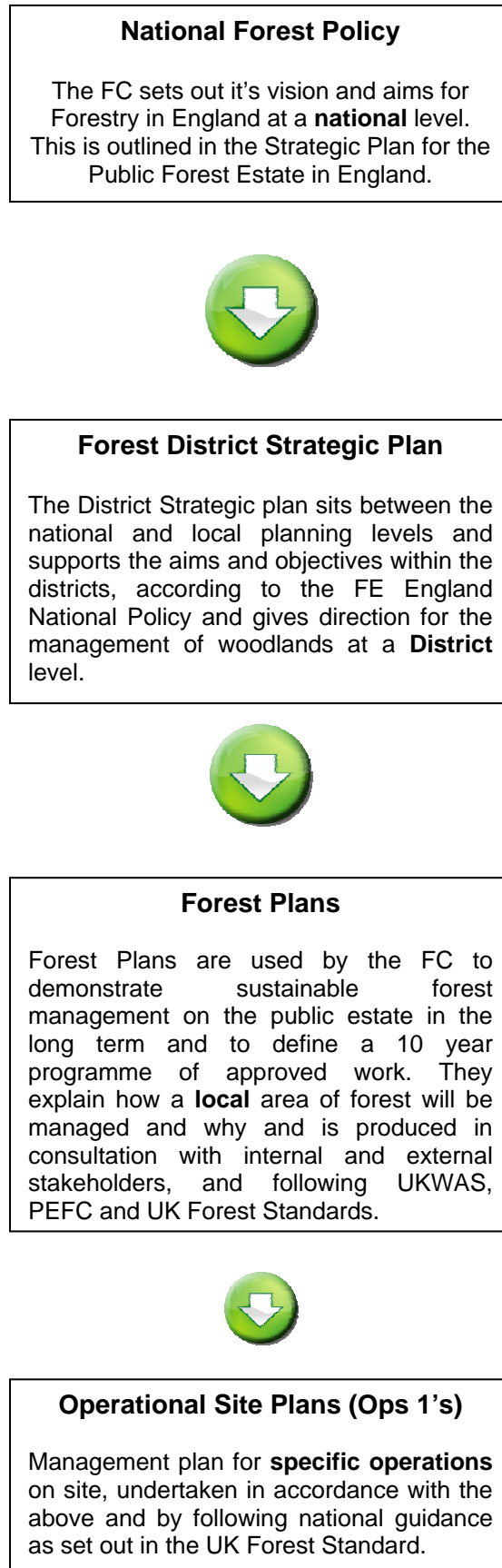
Date

1. Introduction

This Forest Plan (FP) is updating an older plan prepared in 2001 and provides approval for felling and restocking over the next 10 years and sets out our management proposals for the next fifty years. FP's are operational plans and although they do take into account the presence of social and environmental features, their management will be dealt with in separate documentation.

This FP is guided and directed by a number of policies and strategies - the main documents are summarised in Fig.1. Delivering this plan will require the Forestry Commission (FC) to be responsive to shifts in our operating environment and increasingly flexible in our approach, and to sustain this responsiveness over decades to come.

.Fig 1. Forestry Commission England's Planning Strategy



1.1. Matlock FP – Survey Data

Matlock Forest Plan (483ha) comprises predominantly conifer woodland (78%) with a small area of broadleaf woodland (16%) and limited open space (6%). The woodlands have no formal land designations but they lie in the Dark Peak Natural area and the northern boundary of Stiches and Whitensprings Plantation abut the southern edge of the Peak District National Park, Special Protection Area (SPA) and the South Pennine Moors Special Area of Conservation (SAC) which supports internationally important lowland heath.

Scots pine is the dominant species covering 29% of the woodland area with Lodgepole pine (20%), broadleaves (16%), Corsican pine (12%), larch (8%), evergreen conifers (9%) with open ground (6%) covering the remaining areas.

The threat to timber production from climate change and more directly from pest and disease is already having a major impact on Matlock FP woodlands. *Dothistroma* Band Needle Blight (DNB) is a fungus like pathogens that is now affecting the Lodgepole and Corsican pine in these woodlands and which will lead to reduced yields and in some cases tree mortality. *Phytophthora ramorum* is another pathogen killing larch and although not present in the woodlands in spring 2014 the Matlock woodlands lie in a high risk area adjacent to infected sites to the west. To ensure sustainable timber production long term the species used to restock the woodlands will be diversified selecting species that are more resistant to the current and future threats.

The demand for public access into the woodlands for recreation has increased over the last 10 years and the woods are now used regularly by individuals as well as organised groups. The number of visitors is still low. Leisure and tourism are a key factor in the local economy and the Forestry Commission will where possible work in partnership with local businesses and user groups to promote and facilitate access into these woodlands.

The new FP will ensure the continuation of sustainable timber production in balance with the nature conservation interests and the increased demand for access into the woodlands.

All planning and operations aim to satisfy our certification under the UKWAS, Programme for the Endorsement of Forest Certification (PEFC) and meet UK Forest Standard (UKFS).

2. Management Objectives

Economic - produce sustainable timber yields, encourage and support new and existing business activity associated to the public forest estate and to make the economic potential of our forests and woodlands more resilient in the face of a changing climate. Growing and diversifying our income from a wide range of sustainable activity on the estate, including non-forestry activities.



Environmental - To increase where possible the environmental contribution made by the Estate to the range of ecosystem services delivered and to protect and enhance its overall biodiversity and heritage value at both the landscape and local level.

Social - Enable everyone, everywhere to connect with the nations' trees and forests so that they understand their importance and act positively to safeguard forests for the future.



3.0 Forest Plan Objectives

3.1 Woodland

Planting commenced in 1943, with the majority of the plan area being established during the late 1950s and early 1960s on elevated land 300m above the Derwent Valley. The current stand structure comprises 78% conifers, 16% broadleaves and 6% open space. The conifers are grown on a 40 to 55 year rotation with Scots pine being the most dominant species with an average yield class of 8, see Fig 2, Table 1. The majority of the conifer stands are now reaching the end of their economic rotation and a harvesting programme began 15 years ago to utilise the timber resources, see Fig 3 Current Age Structure.

Fig.2 Current Species within Matlock Forest Plan

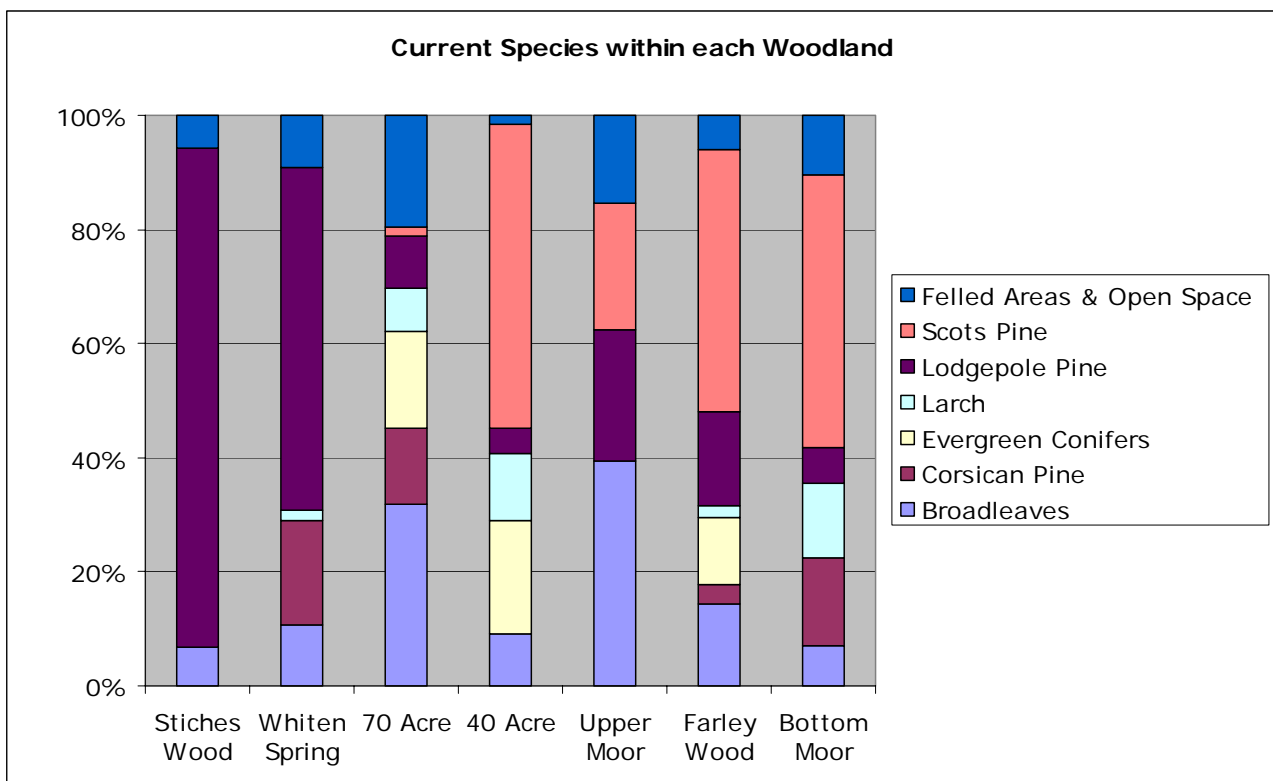
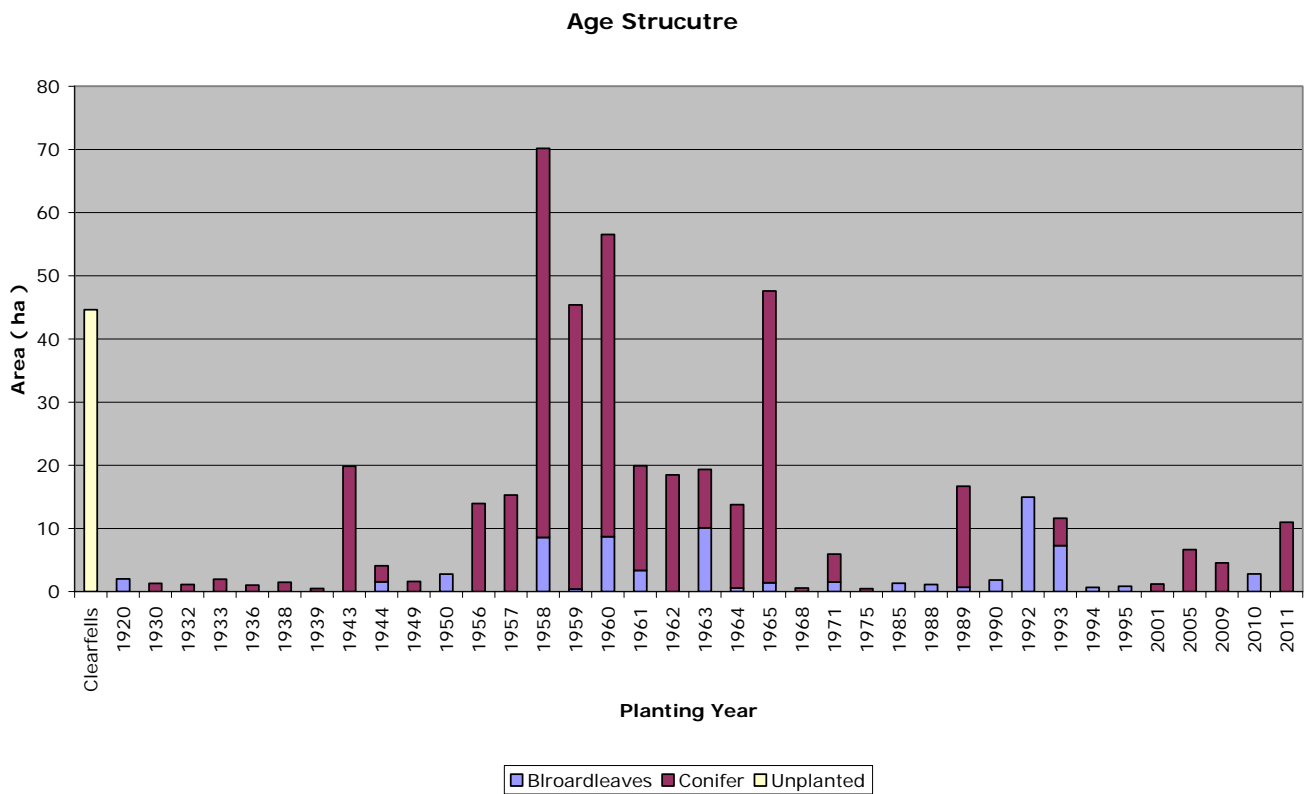


Table 1. Current Species

Species	Area (ha)	Percentage
Broadleaves	77	15.9
Scots Pine	140	29.0
Lodgepole Pine	95	19.7
Corsican Pine	58	12.0
Larch	42	8.7
Evergreen Conifers	43.6	9.0
Open Space	15	3.1
Roads (6m wide)	2.6	0.5
Rides (3m wide)	9.8	2.0
Total	483	100

Fig.3 Current Age Structure



The Lodgepole and Corsican pine is now becoming badly affected by a fungal disease *Dothistroma* Needle Blight (DNB) which causes a serious loss in production and in some cases can cause tree mortality. DNB is likely to have a major effect on the woodlands within the next 15 years, judging by the current speed and demise of the infected Lodgepole and Corsican pine which occupies 32.9% of the plan area. Future felling proposals will focus on the gradual removal of the Lodgepole and Corsican pine, although the timing of planned operations may change as the forest management team will have to be reactive to any sudden rise in infection within specific stands. The average yield class of 11 for Corsican and 7 for Lodgepole pine is likely to drop due to the impact of (DNB).

Clearfells will remain the primary silvicultural system used on the plateau – these areas are more susceptible to windthrow due to the wetter soils and greater exposure. Continuous cover systems and small scale clear fells (> 1ha) will be used on the steeper slopes and valley side which are visible from the roads to soften the woodlands appearance in the landscape.

3.2 Environmental

Matlock FP has a wide variety of habitats including wet woodland, water features, heathland, trees of special significance and 77ha of fragmented broadleaf woodland, see Survey Details Map. The plan lies within the Dark Peak Natural Area and contains some naturally regenerating native woodland characteristic of the area: The Eastern Peak District Moors were notified for their special interest for breeding birds, upland vegetation, lower plants, invertebrates and geological features, representing a full range of habitats characteristic of the south Pennines. Some habitat persists on ride-sides and regeneration of acidophilous dwarf shrub heath and acid grassland is likely given the appropriate conditions (felling operations). The Peak District National Park lies along the north boundary of the forest plan and this area has been designated as a Special Area for Conservation (SAC) and contains an area designated as a Site of Special Scientific Interest (SSSI).

A number of the above habitats and species found in Matlock FP's woodlands have been identified in Derbyshire County Council Biodiversity Action Plan (BAP) and Habitat Action Plan (HAP). The presence of HAP and BAP species (Appendix II) will be taken into account when Operational Site Plans (Ops1) are written up to conserve and enhance these key features wherever possible when forestry operations are undertaken.

Trees of special interest and deadwood habitats will be retained wherever possible in each of the woodlands to create long-term retentions. Individual and small groups of character trees if identified during management operations will be retained in perpetuity to create future trees of special interest, increase deadwood habitat and diversify the available woodland ecosystems. 6.4ha of natural reserve in Bottom Moor and 1.4ha in Sitches Wood will have the Lodgepole pine removed over the next 10 years after which the natural reserves will be managed under a minimum intervention policy.

3.3 Social

There are no recreational facilities provided at present but the woodland is developing regular local use by Matlock residents (notably Bottom and Farley Moor). There is also potential for mountain bike activity both in the main blocks, and in the disused quarry areas. There is only one promoted trail and this lies in 40 Acre Wood. Its construction and maintenance has been led by the Darwin Forest Country Park. Their current level of use by the public is low but regular in most of the woodlands despite there being no recreation facilities on site.

The principal historical interests are the built artefacts from previous land use – dry stone walling along roadsides and building remains on the moor edges. None are scheduled sites. Roadside walls will be protected from accidental damage and conserved wherever possible as characteristic features of the upland landscape.

3.4 Restocking and Future Management

Sites due to be felled will be assessed to select the most appropriate species that will be best adapted to each site and the impacts of any future climate change whilst maintaining species diversity. No one species will dominate the future forest structure but due to the elevated and exposed position of these woodlands the choice of species may be limited. Broadleaf stands will use a combination of restocking as well as utilizing natural regeneration where site conditions allow Table 2 and Fig.4. Management operation will look to develop stands of high quality timber in both the broadleaf and conifer stands.

Matlock FP area produces an annual yield of 2,900 cubic metres (m³) of timber each year which can be harvested sustainably. The bulk of this volume is conifer timber which goes

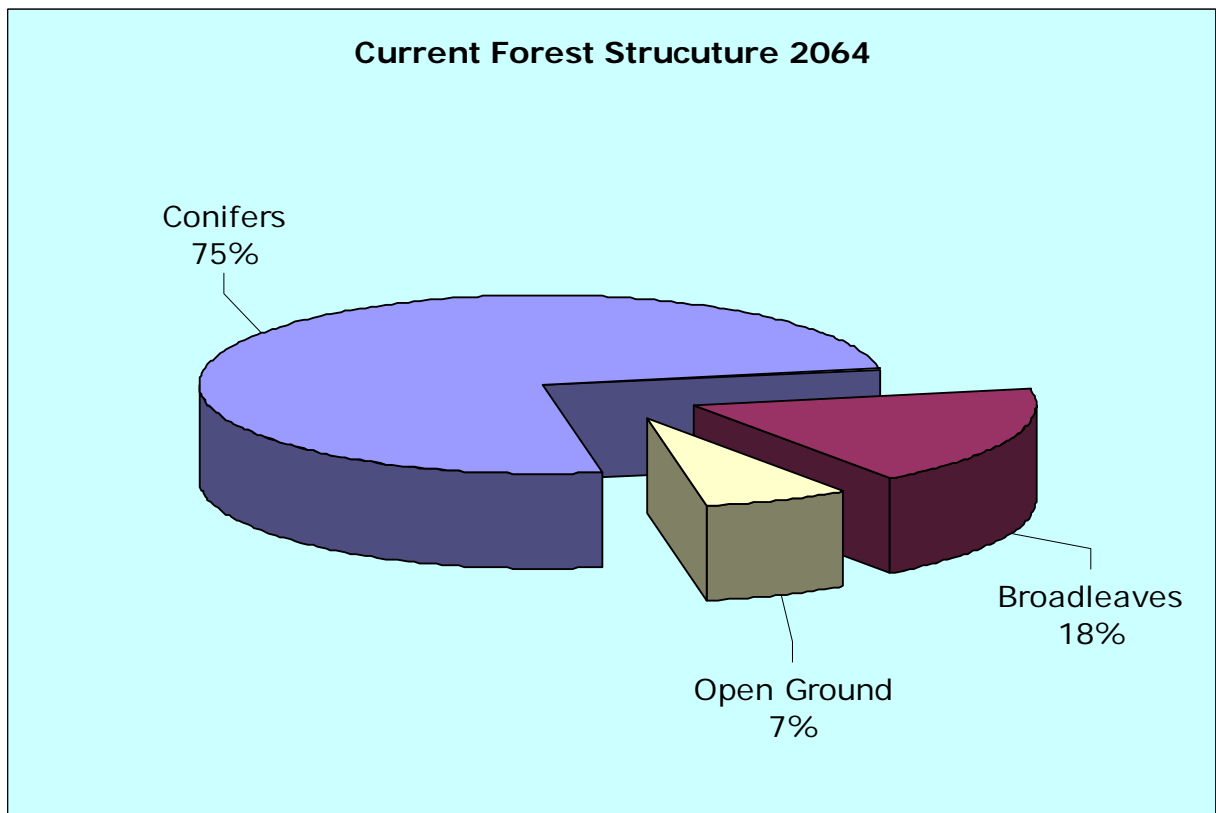
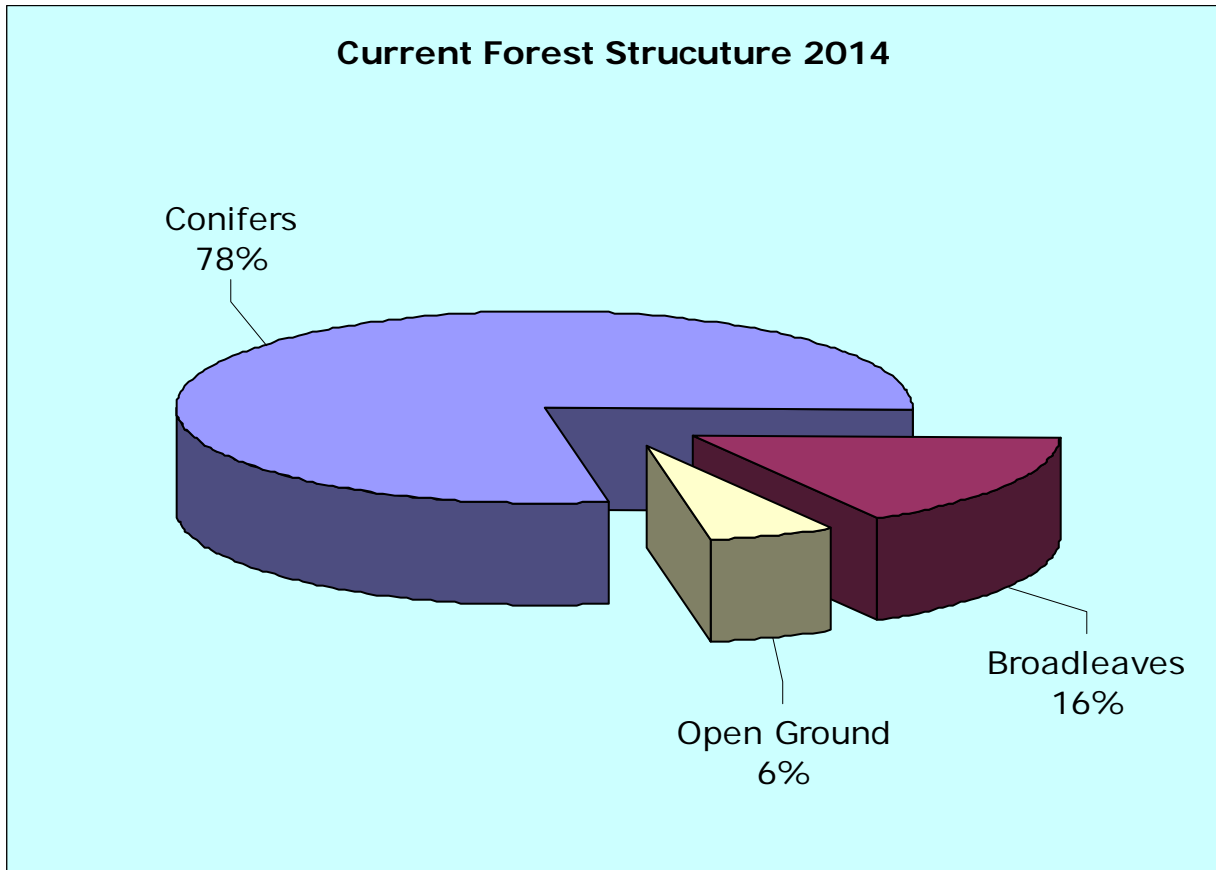
into fencing and building markets as well as chipwood for wood-based panels. Hardwoods are used to supply UK markets for construction and wood fuel.

Clearfell and restocking will remain an important system in regeneration the forest covering an area of 349ha with 120ha being managed using low impact felling systems. These silvicultural systems will be refined over time to provide the most suitable conditions to diversify and establish future stands, see Silvicultural Systems maps.

Table 2 Future Species Composition – 2064

Restock	Area (ha)	Percentage
Conifers	365	75
Broadleaves	86	18
Open Ground	15	3
Roads (9m wide)	4	1
Rides (5m wide)	13	3
Total	483	100

Fig.4 Current / Future Forest Structure



4. Meeting and Monitoring Management Objectives

- Meeting Objectives

Objective	Description	Proposals	Methods of Monitoring
Woodland	The woodlands will be managed to produce commercial conifer and broadleaf timber using a variety of silvicultural systems which will be chosen to meet the other management objectives.	<p>Conifer stands will in most cases be managed to their economic rotation to maximise production using a clearfell and restock programme. Some continuous cover management systems will be introduced to sustainable yields from the conifers stands. The planned fell years may have to be reviewed to respond and be reactive to the worsening effects of pests and diseases.</p> <p>Broadleaf stands will generally be managed as high forest using CCF systems to produce quality timber.</p>	<p>Monitored through Sub-compartment database.</p> <p>Monitored through Sub-compartment database.</p>

Objective	Description	Proposals	Methods of Monitoring
Woodland	<i>Dothistroma</i> Needle Blight (DNB) is now affecting the Lodgepole and Corsican pine stands. <i>Phytophthora ramorum</i> is now present in Goyt Valley and Cheshire.	Any stands badly effected by pests and diseases will be felled early and replanted with alternative tree species that will be more resilient. If <i>Phytophthora ramorum</i> is identified this is a notifyable disease and infected stands will have to be clearfelled within a 6 month timescale.	Monitor annually by beat team and at FP review.
Biodiversity	A number of Habitat Action Plans (HAP) (Heather moorland, wet woodlands and ponds) are found within the FP area and 2 Biodiversity Action Plan (BAP) species have been recorded within the woodlands (nightjar, veteran trees)	<p>Future management operations and planned recreation activities will take into account the habitat requirements of these key species and the associated legislation will be used to help guide forestry operations.</p> <p>Clearfell operations will create the continuity of open space for ground nesting birds. The management of riparian areas will help conserve and improve water quality and wetland habitats. Cutting will be used to maintain heathland and rides.</p>	<p>Monitor annually by beat team and at FP review.</p> <p>Monitored by wildlife ranger and at FP review.</p>

Objective	Description	Proposals	Methods of Monitoring
Biodiversity	There are numerous veteran trees in the FP area but limited deadwood.	The veteran trees will be retained in perpetuity wherever possible. Character trees will be identified and conserved to provide future veteran trees and increase the available deadwood habitat. The current and future veteran trees will be surveyed and tagged.	Monitored by wildlife ranger and at FP review.
	Limited areas of deadwood	Standing snags will be left and individual and small groups of trees will be retained beyond their economic rotation, to become veteran trees and provide additional deadwood habitats.	No monitoring required
	Area of Natural Reserves has been identified to provide undisturbed areas for wildlife.	Following the removal of infected LP from the Wirestone Lane section of Bottom Moor no further forestry operations will take place. From then on, low levels of change within the designated areas will allow the ecological development of a more natural woodland ecosystem and will be beneficial for biodiversity	Monitoring at FP review

		(high nesting birds, deadwood, indigenous flora and fauna).	
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Objective	Description	Proposals	Methods of Monitoring
Biodiversity	The demand for access into the Matlock woodlands has increased over recent years with regular daily visits into each woodland. The level of use is still low.	The Forestry Commission will continue to manage its woodlands as open access land and wherever possible facilitate new access opportunities. The Forestry Commission remains open to any future opportunities to work with local businesses and stakeholders to facilitate the future demand for recreation and tourism.	No monitoring required
Heritage	There are no scheduled ancient monuments (SAM) within the FP.	Any archaeological features found will be avoided wherever possible during forest operations.	No monitoring required

5. 2014 Forest Plan comparison against the 2002 Forest Plan

The new FP is largely based on the old plan's management areas which were carefully designed to create a diverse forest structure as felling took place using irregular shapes that fitted into the local landscape. The main variations in the new FP will be the timing of felling operations and the species that will be used to restock the forest. The new FP has been designed in keeping with the Dark Peak Natural Area and adjacent National Park, SAC and SSSI and will maintain the diverse forest structure that maintains an important fringe habitat between the moorland and Derwent valley. The proposed felling will have little impact on the landscape due to the level plateau the woodlands are situated on and the shift to increase broadleaves which will break up the conifers edges and soften the woodlands outward appearance.

The expected yields from the forest has dropped due to the impact of *Dothistroma* Needle Blight on the Lodgepole and Corsican pine stands but through the early removal of poor stands and the diversification of species used to restock the woodlands the long term sustainability of the Matlock FP area will be maintained.

The future forest management will incorporate management patterns that are sympathetic to the recreation and leisure interests of our partner and local businesses. Through the active forestry management the Forestry Commission has practiced in Matlock woodlands the woodland ecosystem now supports a diverse range of wildlife and the new FP will continue to diversify the forest structure and available woodland habitat.

6. Consultees

The consultation undertaken in the preparation of this plan has been wide ranging and extensive. Full documentation including letters, notes of conversations etc. are held at our District Offices.

Consultee	Date Contacted	Date Response Received	Issues Raised	Forest District Response to Issues
Mr J Holmes Derby CC	10/06/14			
Mr R Frost Derby Ornithological Society	10/06/14			
Mr R Carrington – resident	10/06/14			
Mr G Foster Derby CC	10/06/14			
Mr Derbyshire – resident	10/06/14			
Cllr Brockscopp Ashover CP	10/06/14			
Mr K Hobson Natural England	10/06/14			
Mrs S Smith Matlock Town Council	10/06/14			
Ms C Lavell Darley Dale CP	10/06/14			
Derbyshire Bat Group	10/06/14			
Mr T Galletly – Forest Services	10/06/14			
34 letters sent to local residents and notices placed in the entrance of each woodland				

7. Glossary

Biological Diversity

The richness and variety of wildlife and habitats.

Biodiversity Action Plan (BAP)

Describes the UK's biological resources and details the protection of these resources, including 391 Species Action Plans, 45 Habitat Action Plans and 162 Local Biodiversity Action Plans.

Biological Retention

A habitat or woodland ecosystem that will be conserved and actively managed i.e. deadwood, coppice, wet woodland, grassland.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees.

Clearfell System

The removal of all trees in one operation > 0.5ha.

Continuous Cover Forestry (CCF)

Silvicultural systems where the forest canopy is maintained at one or more level, e.g. Shelterwood, Group Regeneration, Selective Felling, Regeneration Thinnings.

Compartments

Permanent management units of land within a forest, further divided into subcompartments.

Coupes

Areas of forest that have been or will be managed together.

Cubic metres (m³)

A standard forestry unit of volume. A cubic metre is roughly equivalent to a tonne of wood.

England Forestry Strategy (now England's Trees Woodlands and Forests)

Describes how the Government will deliver its forestry policies in England and sets out the Government's priorities for the next five to ten years.

Forestry Commission Guidelines

Outline the principles and standards of good management practices in forests and woodlands to enable landowners, land managers and their advisors to satisfy

Group regeneration system

A management system that allows young crops to become established under the side shelter of existing crops. Several areas of 0.1 to 0.5 ha are felled across an area to bring about natural regeneration on the ground beneath the existing tree crop. Once adequate regeneration has been achieved in these gaps, further groups of trees are removed and the cycle is repeated until the desired area is completely regenerated.

Forest Plan (FP)

An approved plan that outlines felling operation over a 10 year period, outlining proposals over the next 50 years. The FDP's are reviewed every 5 years and redrawn and approved every 10 years.

Forest Stewardship Council (FSC)

An internationally recognised body made up of non-government organisations promoting sustainable forest management to the forest industry and consumers.

Habitat Action Plans (HAP)

Habitat recognised as internationally important, for example those designated under the EU Habitats Directive; nationally or locally important.

Historic Environment

These are the physical remains of every period of human development from 450,000 years ago and include earthworks, buried remains, structures and buildings.

Limited Intervention

An area of stable clumps or stands of trees where forestry operations are limited to those necessary to meet biodiversity objectives, on health and safety grounds and the need to protect the surrounding forest >1% of the woodland area.

Long Term Retention

Trees that are being retained beyond their economic rotation.

Natural regeneration

The growth of trees from seed found in the soil or cast from adjacent trees and shrubs.

Natural Reserve Predominantly wooded areas, they are managed under minimum intervention unless alternative management systems have high conservation or biodiversity value.

Operational Plans (Ops1)

Detailed site plans that are prepared in advance of all major forest operations and identify site constraints, opportunities and areas requiring special treatment or protection.

Public Rights of Way (PROW)

Access routes open to the public through legal designation.

Restocking

The re-establishment of trees where felling has taken place. Restocking may be achieved through natural regeneration but as a term, it is more usually associated with replanting.

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland.

Road

Forestry term for a surfaced road that has been constructed to carry heavy forestry machinery.

Special Areas of Conservation (SACs)

Strictly protected sites designated under the European Habitats Directive

Scheduled Monuments

Nationally important archaeological sites which are protected under the Ancient Monuments and Archaeological Areas Act, 1979.

Secondary Woodland

Woodlands that have been established on land that was formally used as pasture, meadows, arable, quarries etc and has not continually been wooded.

Selective Felling

Where individual trees of varying sizes are selected and removed from a stand. The whole stand is worked and its aim is to maintain full stocking of all tree sizes and ages, from seedlings to mature trees, in any one area.

Silvicultural Systems

Techniques of managing a forest through a variety of cutting / felling patterns and time scale.

Species Action Plan

A conservation plan under the UK Biodiversity Action Plan for species based upon knowledge of its ecological and other requirements, which identifies the action needed to stabilise and improve its status.

Site of Special Scientific Interest (SSSI)

A Site of Special Scientific Interest is one of the country's very best wildlife and/or geological sites

Sub-compartments

Areas of forest comprising a more or less homogeneous crop in terms of age, species composition and condition. Their boundaries may change as the forest develops after felling and restocking.

Stand

An area of trees which can incorporate one or more coupes or sub-compartment.

Strategic Plan

Serves as a guide to the management of woodlands within South East England Forest District. It divides the district into zones for the purpose of management and ensures that forestry activities reflect the local ecological, social and cultural individuality of woodland. Strategic objectives for each zone are presented within the context of the Government's strategic priorities for forestry in England (e.g. forestry for rural development; forestry for economic regeneration; forestry for recreation, access and tourism and forestry for the environment and conservation).

Succession

Applied to the natural sequence of species change on a site over time, or more simply, the following on of one thing after another. So successional open space is the open space and the plants associated with it, that persist for a short time after felling of trees.

Thinning

The removal of a proportion of the trees in a sub-compartment to improve the quality of the remaining trees, accelerate individual tree growth and provide income.

UK Biodiversity Action Plan

The UK government response to the Convention on Biological Diversity at Rio de Janeiro: includes actions to safeguard key habitats and species.

UK Forestry Standard (UKFS)

Outlines the Government's criteria and standards for the sustainable management of forests in the UK.

UK Woodland Assurance Scheme (UKWAS)

A voluntary scheme for the independent assessment of forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to the growing consumer demand for timber products from sustainably managed forests. It has been designed to ensure that it reflects the requirements of both the Government's UK Forestry Standard - and through this the guidelines adopted by European Forestry Ministers at Helsinki in 1993 - and the Forest Stewardship Council's (FSC's) GB Standard.

Uniform Shelterwood System

A management system that allows young crops to become established under the overhead shelter of existing crops. The existing tree crop is evenly and gradually removed over time in successive regeneration fellings to bring about natural regeneration on the ground beneath.

Trees of special interest

A tree that is of interest biologically, aesthetically or culturally because of its age, or a tree that is in the ancient stage of its life, or a tree that is old relative to others of the same species.

Windthrow (or sometimes windblow)

Uprooting or breakage of trees caused by strong winds.

Yield Class

Yield class is a measure of the growth rate of a tree crop and is the maximum average rate of volume increment (increase) that a particular crop can achieve. For example, a crop capable of a maximum annual increment of 14 m³ per hectare has a yield class of 14.

Appendix I

The Matlock Forest Plan Brief

Introduction

This Forest Plan summarises proposals by the Forestry Commission for the management of woodlands on Matlock Moors which comprises 7 named woodlands (Sitches, Whitesprings Plantation, Seventy Acre Plantation, Forty Acre Plantation, Upper Moor, Farley Moor and Bottom Moor). The plan area of 483ha comprises woodlands contained by a triangle of public roads: the A6 to the south-west, the A632 to the south-east and the B5057 and un-classified Rowsley road to the north. The FP area woodlands are bisected by the B5057. The centre of the plan area is 1.5 miles north of Matlock and 6 miles south-west of Chesterfield.

Landscape setting

The FP comprises an aggregation of woodlands separated by fields and open moorland on a plateau rising to 300m above the valley of the River Derwent. The woodlands are in part visible from each other and are prominent in the surrounding landscape and form part of a single landscape unit. Principal views are from the public roads which cross the moors. All the component woodlands are predominantly coniferous but contain or are associated with some broadleaved elements. The wider setting comprises open, managed heather moorland and acid, sheep-grazed grassland fragmented by minor roads. The moorland edge is more diverse with fringing woodland and watercourses. The large scale of the plantation which is now visually coherent on the upland plateau has a character which is distinct from the enclosed moorland landscape.

- Ensure that the visual coherence of the woodland is maintained.
- Evaluate the appearance of component woodland in extensive views and unity with the enclosed moorland and heath Landscape Character Type.
- Evaluate the appearance of woodland associated with wooded scarp slopes.
- Evaluate the design of edges seen from public roads.

Silviculture

Planting commenced in 1943, with the majority of the plan area being established during the late 1950s and early 1960s. Commercial species are mainly Lodgepole and Scots pine, with minor components of Corsican pine, Japanese larch and Sitka spruce. Yield classes are typically 8-10. Second rotation establishment has recently begun with the

early stages of restructuring. Both Lodgepole and Corsican pine are being affected by *Dothistroma* Needle Blight, a fungal disease that defoliates the trees, leading to a significant loss in production and in some cases mortality. Age structure is relatively even, with a high proportion of plantation trees in the 40-50 year class (approaching economic maturity).

Ecological issues

The plan lies within the Dark Peak Natural Area and contains some naturally regenerating native woodland characteristic of the area: The Eastern Peak District Moors were notified for their special interest for breeding birds, upland vegetation, lower plants, invertebrates and geological features, representing a full range of habitats characteristic of the south Pennines.

The woodlands are situated on what was moorland. Some habitat persists on ride-sides and regeneration of acidophilous dwarf shrub heath and acid grassland is likely given the appropriate conditions (felling operations).

Transitional open space that is created when clearfell operations take place have created important habitats that has enabled a number of breeding pairs of nightjar, a National Biodiversity Action Plan Species, to breed successfully over the last 10 years. The size and frequency of future clearfell patterns will be sympathetic to their habitat requirements.

A small population of Red deer have moved into these woodlands within the past 5 years. A thriving population of Fallow is also resident nearby.

- Incorporate measures to accommodate the conservation of key BAP habitats and species.
- Develop more diverse habitats within woodland
- Develop an appropriate interface with county wildlife sites and the SSSI.
- Incorporate opportunities to retain native trees to biological maturity.

Access and recreational issues

There are no recreational facilities provided at present but the woodland is developing regular local use by Matlock residents (notably Bottom and Farley Moor). There is also potential for mountain bike activity both in the main blocks, and in the disused quarry

areas. There is only one promoted trail and this lies in 40 Acre Wood. Its construction and maintenance has been lead by the Darwin Forest Country Park.

- Make allowance for public rights of way and informal access points in design proposals.

Cultural and Historical interest

The principal historical interests are the built artefacts from previous land use – dry stone walling along roadsides and building remains on the moor edges. None are scheduled sites. Roadside walls will be protected from accidental damage wherever possible and conserved as characteristic features of the upland landscape.

Consultation

The consultation period will run from June 10th 2014 through to 10 July 2014 after which time the Forest Pan will be finalised and submitted onto the public register for approval.

Appendix II

Key Features, Habitats and Wildlife

The table below identifies a number of the key features found in Matlock FP woodlands and their status.

Key Feature	Status
Nightjar	BAP
Wet woodland	HAP
Heathland	HAP
Trees of special interest	HAP