

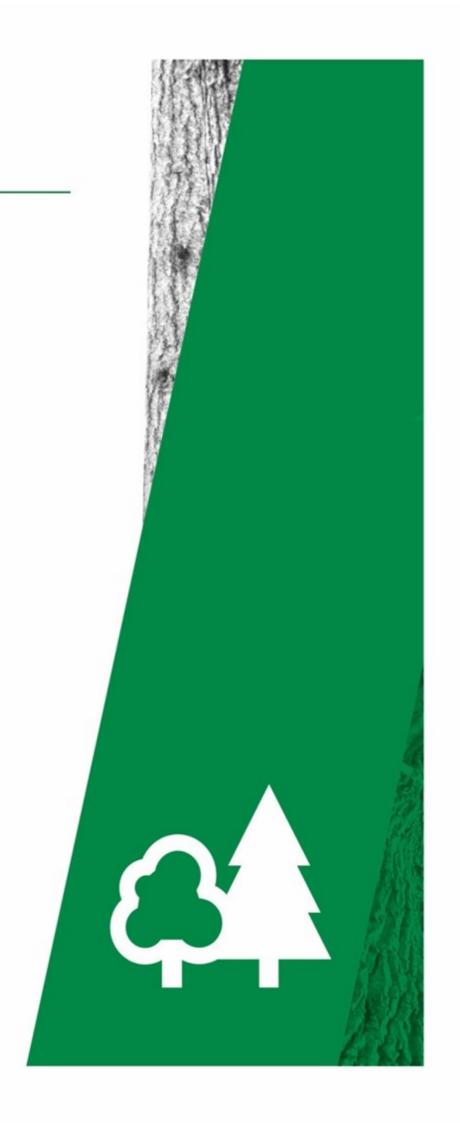
Fermyn Woods Forest Plan

2025 - 2035



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





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Summary

This Forest Plan (FP) summarises proposals by Forestry England for the management of the Fermyn Woods in North Northamptonshire. The Fermyn Woods FP area totals 918.9ha and comprises the woods of Harry's Park (232.3ha), Mounterley (23.9ha), Cherry Lap (99.4ha), Souther (202.1ha), Titchmarsh (181.7ha), Lilford (30.7ha), Wadenhoe Great (33.6ha), Wadenhoe Little (11.8ha), Bearshank (45.3ha) and Oundle (58.1ha). They lie to the east of Corby and area arranged in an approximate V-shaped formation (see Location, Tenure & Access Map, p.15). The tenure is mix of freehold (672.7ha) and leasehold (246.2ha), with associated public access permitted across the majority of the westerly woods.

The Fermyn Woods sit within the Rockingham Forest National Character Area* (NCA). The landscape is a patchwork of woodland and large- to medium-sized fields of mainly mixed use surrounding small nucleated villages. Although not forming continuous belts, the blocks of woodland often coalesce visually with hedgerow trees and smaller copses to increase the perception of extensive woodland cover across the landscape. Landform in the local landscape is fairly low-lying and undulating, with the elevation of the woods ranging from 38m in Oundle to 106m in Harry's Park. Locally the woods are visible from parts of Corby, local villages, public roads and footpaths (see Survey Map, p.18).

The soil types of the Fermyn Woods are mostly calcareous pelosol with some areas of pelostagnogley. Both soils are clayey and poorly draining, resulting in seasonal/intermittent waterlogging and deep cracking during dry seasons (see Soils Map, p.16). The woodlands themselves are predominantly Plantations on Ancient Woodland Sites (PAWS)* and Ancient* and Semi-Natural* Woodland (ASNW), plus a mix of broadleaved and coniferous secondary* woodland.

The primary management objectives for the Fermyn Woods FP are to:

- Continue the restoration of PAWS, and maintain and improve the ecological value of the lowland mixed deciduous woodland and lowland meadow priority habitats.
- Manage important open and woodland edge habitats to benefit flora and fauna, maintain botanically rich rides, and continue the partnership with Butterfly Conservation to enhance habitat conditions.
- Sustainably grow commercial timber using species and systems resilient to the impacts of pests, diseases and climate change to maximise yields and prioritise timber quality.
- Conserve the heritage features and maintain existing public access in freehold areas.

^{*} Technical words are identified throughout the plan with an asterisk and their meaning described in the glossary (see Appendix I, p.12-14).



Application for Forest Plan Approval

i Plan Area Identification:

Forest District: Central Forest District

Beat: South Northants Beat

Name: Fermyn Woods Forest Plan

Nearest Town: Corby

Grid References (access): Harry's Park SP 9473 8654

Mounterley SP 9600 8571 Cherry Lap SP 9644 8593 Southey / Titchmarsh SP 9733 8460 Lilford SP 9851 8496 SP 9939 8459 Wadenhoe Little Wadenhoe Great SP 9922 8445 SP 9975 8594 Bearshank Oundle TL 0098 8893

Local Planning Authority: North Northamptonshire

ii Designations:

NCA* Rockingham Forest (Profile 92)
Sudborough Green Lodge Meadows SSSI
Ancient Woodland* and PAWS*

iii Date of Commencement of Plan: On approval.

Fermyn Woods FP approved on

Proposed felling and restocking summary for 10 year FP period:

	Conifers	Broadleaves	Total
Clearfelling	69ha	53.9ha	122.9ha
Restocking	36.8ha	86.1ha	122.9ha
Regeneration Felling (LISS)	Up to 25.3ha	Up to 202.3ha	Up to 227.6ha

The above figures refer to the gross area and exclude routine thinning operations. Restocking includes both planting and natural regeneration.

Forest Plan maps are attached

In addition to proposed clearfelling, 568.9ha will be managed using Lower Impact Silvicultural Systems* (LISS). This will be done through the removal of small groups of trees, removing no more than 40% of the stems within any single management unit/compartment over the plan period. This operation will provide sufficient light to boost growth of the understorey and ground flora, allow adequate space for the development of crowns and stem form for quality timber and accelerate individual tree growth.

All of our forests and woodlands are sustainably managed, ensuring they will continue to benefit future generations. Our management meets best practice standards summarised in the UK Woodland Assurance Standard* (UKWAS) and is independently certified under UKWAS to Forest Stewardship Council® (FSC®) and Programme for the Endorsement of Forest Certification (PEFC) standards. (Licence codes FSC-C123214 and SA-PEFC-FM-006972).



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





1. What are Forest Plans?

Forest Plans are produced by us, Forestry England, for each local forest area to set out how we aim to manage the woodlands in our care over the next 30 or more years and to communicate this to a range of stakeholders. They

- provide a description of the woods as they are now
- outline the main points considered when deciding what is best for the woods
- describe how the forest will develop over time
- give specific information about approved tree felling, replanting and regeneration over the next ten years
- help ensure our plans are economically, environmentally, and socially sustainable, supporting certification of our forest management and timber products

All tree felling in the UK is regulated and a licence is required before trees can be felled. The scale of tree felling in Central England Forest District, which this plan forms part of, means that the Forest Plan is the best way to apply for this licence. Responsibility for checking that the plan meets all relevant standards and statutes lies with the Forestry Commission. If all criteria are met, full approval is given for management operations in the next ten years from the approval date and outline approval is granted for our medium-term vision (ten to fifty years). Plans are reviewed every ten years to renew our felling licence and check we are on track to deliver this vision.

A Forest Plan is a 'felling and restocking' plan written at landscape scale and does not set out the detailed yearly management operations for each small piece of a wood, known as a coupe*. It is not possible to say in which year a particular operation will take place, but we can say in which five-year period it should happen. Forest Plans do not detail the management of recreation, ecological or heritage features. Planning for these elements is taken into account but follows a different management cycle and process. This includes Operational Plans* written by the Beat Forester before each operation takes place. These outline the site-specific features that need to be considered when we undertake felling and restocking.

Terms of Reference (p.11) are agreed at the start of the forest planning process to set out our management objectives for the plan area, how these relate to Forestry England's District and national priorities, and how these will be monitored.

2. Review of Previous Forest Plans

Previously Harry's Park and Fermyn Woods were distinct FPs. Both plans were originally approved in May 2006 and then extended until May 2021. Given the alignment of objectives across the woodlands it is appropriate to combine their management under a single FP.

The former plans were written against different criteria from recent FPs. Whilst they provide a valuable summary of the ecological and historical records, they are light on inventory data and detail regarding specific management objectives. This limits the reviewable elements of these plans.

PAWS* Restoration: The gradual reduction in conifers and reversion to broadleaf
species has been ongoing since 2006. This has been achieved primarily through heavy
restorative thinning (with an additional clearfell in Lilford Wood in 2016 following a
windblow event). To date, 38% of PAWS has now been restored to over 80% native
species cover. Fig.1 displays this progress since 2013.

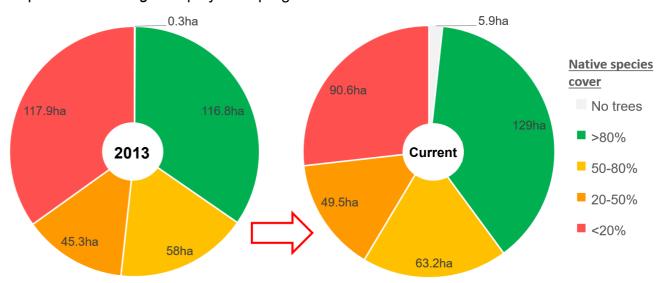


Fig.1: Fermyn Woodlands PAWS area classified by native species cover

- Reintroduction of traditional coppice with standards: This stated objective has not been progressed since the 2006 FP due to practical and economic factors, nor will it be carried forward. However, incorporating larger coupes of short rotation mechanised coppice will deliver many of the ecological benefits of this habitat in a more commerciallyviable way.
- **Ash Dieback*:** Although European ash only represents 8% of the overall component mix in the Fermyn Woods (see Fig.2, p.7), where it is present it is often the dominant species in a stand. In these areas ash dieback (*Hymenoscyphus fraxineus*) is already having a major adverse impact on woodland cover (see Pic.5, p.8). Previous FPs did not consider ash dieback since the disease was not confirmed in the UK until 2012.

3. Management Objectives

Forestry England's mandate is to protect and expand England's forests and woodlands and increase their value to society and the environment. Our mission is to connect everyone with the nation's forests by creating and caring for our forests for people to enjoy, wildlife to flourish and businesses to grow.

- We're Forestry England we live and breathe forests.
- We're using our scale and expertise to grow the nation's forests to make a positive difference to you and the environment.
- We're creating amazing places and experiences for you to enjoy, providing vital homes for wildlife and providing home-grown sustainable timber.
- We're able to share and care for amazing places and incredible wildlife because of the timber we produce.
- We sustainably manage forests to produce over a million tonnes of timber each year to support UK industry.

In the Fermyn Woods FP area we aim to achieve the following objectives:

Continue to grow commercial timber using a variety of species more resilient to the impacts of climate change, pests and diseases.

Engage with third party partners and businesses where compatible with wider FP and conservation objectives.

Consider emerging timber markets and evolving harvesting methods.

Ensure stands are more structurally- and species-diverse using a variety of silvicultural systems.

Maintain informal public access in freehold areas.

Continue the lease linking Forestry England woodland with Fermyn Woods Country Park.

Consider both internal and external landscapes.

Conserve heritage features in line with Forestry England's Historic Environment guidance.

Conserve Trees of Special Interest (TSI)*, recruit future veteran trees and increase deadwood volume and distribution.

Continue to manage Sudborough Green Lodge Meadows SSSI* as specified in the Management Plan to maintain Favourable status.

Identify key species and priority habitats, including dormouse, open space and woodland edges, and make appropriate provision for their requirements.

Continue restoration of Ancient Woodland through gradual reduction of non-native species.



3.1 Nature

1998.

Ancient* and native woodlands support high levels of biodiversity and host many priority species. They also deliver important ecosystem services including water and soil regulation, carbon storage, and support for people's wellbeing and cultural values. Nearly 75% of the Fermyn Woods FP area is classified as Ancient Woodland (See Fig.6 & Designations Map, p.17). Continuing to protect and gradually restore these woods to predominantly native tree species is a priority for this plan.

In recent years, the Fermyn Woods are known to have hosted a number of important and protected species such as bats (including barbastelle), great crested newts, hazel dormice and red kite. The woods were part of an early red kite re-introduction programme, with 70 young kites released in Harry's Park during 1995-



Pic.2: Wood white butterfly (*Leptidea sinapis*)



Pic.1: Red kite (Milvus milvus) landing for food

A further priority for Forestry England is the management of open land and associated woodland edge habitat for the benefit of wildlife. Currently 9.0% of the Fermyn Woods is open space (see Current Species Map, p. 19) and our continuing programme of ride widening will expand and enhance this excellent habitat for many species of Lepidoptera. We are grateful for the partnership with the Northants Butterfly Conservation Group for their continued involvement with habitat management and surveys. Remarkable butterfly and moth species within the Fermyn Woods include purple emperor, black hairstreak, dingy skipper, white admiral, grizzled skipper, white-letter hairstreak, concolorous, dark tufted scallop and dark aspen roller. The partnership has also carried out an assisted migration of wood white butterfly into the area during 2024.



Pic.3: Eyebright (*Nemorosa nigrum*)

The Sudborough Green Lodge Meadows SSSI sits wholly within the Fermyn Woods FP Area on the western edge of Souther Wood. The 13.6ha species-rich grassland site contains two adjacent hay meadows, the larger of which is agriculturally unimproved with extensive medieval ridge and furrow. This is now the largest and best, traditionally-managed example of its kind in Northamptonshire. Management here will continue in accordance with the most recent SSSI Management Plan to maintain the favourable condition of the site.

Within the Fermyn Woods there are records of many notable plant species including early purple, green winged and pyramidal orchid; adder's-tongue fern; broad-leaved helleborine; herb paris; common gromwell, stone parsley, tor grass, eyebright, wild liquorice and sulphur clover. Diverse flora is important in its own right, but the botanically-rich rides, glades and woodland edges in the Fermyn Woods also provide valuable nectar sources for invertebrate populations.



Pic.4: Flowering cowslip (*Primula veris*) in the Sudborough Green Lodge Meadows

There are 64 Trees of Special Interest* (TSI) currently recorded within the Fermyn Woods which are to be retained for generations to come. These include oak, ash, wild pear, crab apple, willow and aspen. We will continue to record TSI and future TSI as they are identified, so they can be conserved and protected during management operations. These ancient, veteran and notable trees are highly important for biodiversity and an invaluable part of our natural heritage, providing unique ecological conditions and supporting entire ecosystems. Similarly, where appropriate, dead and dying trees may be retained to increase ecologically-valuable deadwood habitat.

Ecological importance will continue to be prioritised in the 99.2ha Natural Reserve* area in Titchmarsh Wood. The 5.6ha mature conifer coupe within will be felled during this FP period and restocked through natural regeneration of mostly native species, expanding the natural habitat and improving connectivity.

Challenges for the woodlands include the high incidence of deer and grey squirrel, which will be proactively managed by Forestry England. The appetite of non-native grey squirrels for bark stripping increases the susceptibility of young broadleaved trees to secondary infections which often lead to tree death. Further adverse effects include stunted tree development and inhibited form, plus reduced carbon capture potential and yield. Very high browsing pressure from fallow and muntjac deer means most restock coupes will likely need fencing except for the least-palatable species. Expanding the ride infrastructure will help to improve pest management.

Wood small-reed (Calamagrostis epigejos) can pose an additional complication during establishment by rapidly covering felled areas (plus those badly affected by ash dieback canopy loss) and out-competing regenerating and newly-planted tree saplings.

Giant hogweed (Heracleum mantegazzianum) and Himalayan balsam (Impatiens glandulifera) are present in the woodlands. Work to remove and control the spread of these invasive non-native species will continue during the plan period when there are forest operations in the vicinity.

3.2 Economy

Timber production will be managed on a sustainable basis, improving future revenues by focussing on quality sawlogs and by maximising yield. Emerging markets, including biomass managed on shorter growing rotations, may provide opportunities to harvest and restructure areas where timber production is not currently financially viable. During restock, Forestry England will continue to introduce compatible and appropriate species and species mixes to improve resilience against future pests and diseases and ensure woodland habitats can be adapted to the rapid climate change we are now seeing. This will enable us to continue to provide sustainable timber resources needed by society while maintaining other woodland ecosystem services* including biodiversity, water and soil regulation, carbon storage, and support for people's wellbeing and cultural values.

78.7% of the wooded area is broadleaf (Fig.2); mostly oak, followed by birch and ash. The coniferous components are primarily Scots pine (8.6%), Corsican pine (5.5%) and Norway spruce (5.4%). Much of the coniferous area is designated PAWS*, so the phased felling and thinning schedule will support a gradual reduction in conifers as these coupes are restored to predominantly broadleaved woodland.

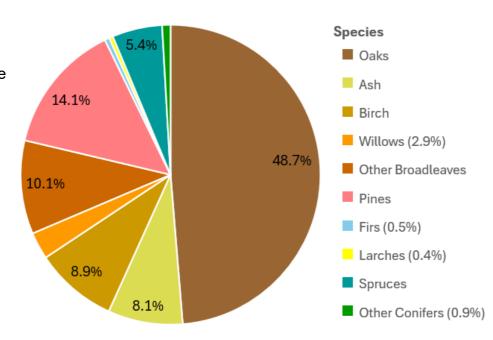


Fig.2: Current species composition of the Fermyn Woods

Fig. 3 below shows the current structural diversity. The first peak of broadleaves in the 21-30yrs age class reflects the 1994 new planting in Harry's Park. The two further broadleaf peaks in the oldest age classes highlight the need to restructure these stands. In addition to PAWS restoration, the planned programme of LISS* interventions such as small-coupe felling* will maintain timber production during the next 50+ years and increase the spread of younger broadleaves through restocking and regeneration, helping diversify woodland structure. Sustainable timber production using higher-yielding conifers will continue in secondary woodland areas which are already coniferous.

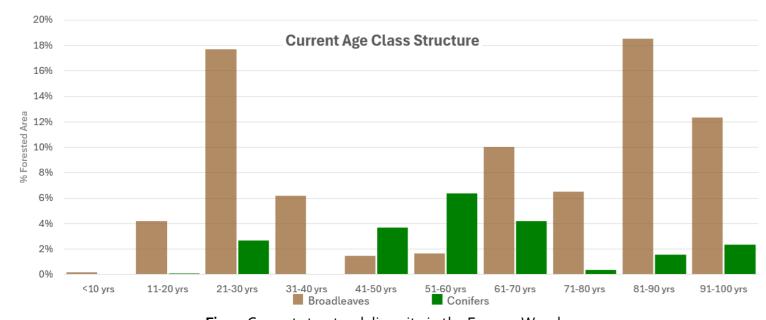


Fig.3: Current structural diversity in the Fermyn Woods

Any opportunities to engage with third party partners or businesses to generate secondary income sources will be considered where these align with wider FP objectives.

Table 1 displays the predicted average annual timber production (from clearfelling, LISS, and thinning operations combined) alongside the average annual clearfell area for the next six five-year periods. The annual combined timber volumes are split approximately 60% from conifer and 40% from broadleaf. As PAWS* restoration proceeds this ratio will switch, with future production being dominated by hardwood. The high average annual area during the first period reflects the large pine clearfell in Harry's Park as approved under a separate felling licence. At time of writing this operation has commenced and is expected to still be live during the approval timeframe of this FP.

clearfell areas			
Forecast Period	Average annual timber volume (m³)	Average annual clearfell area (ha)	
2025-2026	5518	21.2	
2027-2031	4146	8.4	
2032-2036	5289	6.2	
3037-2041	7744	9.3	
2042-2046	2479	4.4	

3423

2.2

2047-2051

Table 1: Forecast timber volumes and

3.3 People

Access to the Fermyn Woodlands is mixed and dependant on tenure (see Location, Tenure and Public Access Map, p.15). The freehold woodlands (Harry's Park, Mounterley, Cherry Lap plus much of Southey and Titchmarsh) are open access, mostly dedicated under CRoW (Countryside and Rights of Way Act, 2000). These have a fairly small user base of mainly local dog walkers and naturalists who enjoy the woods using the forest roads and network of informal paths. Access into Cherry Lap Wood is also promoted as part of Fermyn Country Park (see Designations Map, p.17) which is managed by North Northamptonshire Council. The wider Country Park facilities include a carpark, toilets, café and easy access trail. There is no public access permitted into the leasehold woodlands on the eastern side of the FP area beyond the public footpaths.

Although there are no scheduled heritage sites, there are a number of known heritage features within the FP area (see Survey Map, p.18). There is a moated site to the south of Titchmarsh Wood which is interpreted as Lowick Green pound; a likely medieval enclosure to collect trespassing animals from local villages or to control large numbers of animals for breeding or shearing. Other known historic elements include inconspicuous ancient coppice boundaries, Roman finds sites, woodbanks, enclosures and ditches. All known features of historic and cultural significance are mapped to ensure forest operations in their vicinity are managed appropriately. Similarly any new findings will also be recorded.

4. Harvesting Operations

A range of silvicultural systems* will be used in the Fermyn Woods (see Fig.4 & Silvicultural Systems Map, p.22). These are designed to effectively manage the existing stands, to create ideal conditions to establish the next rotation of trees and to further the biodiversity aims of the woodlands.

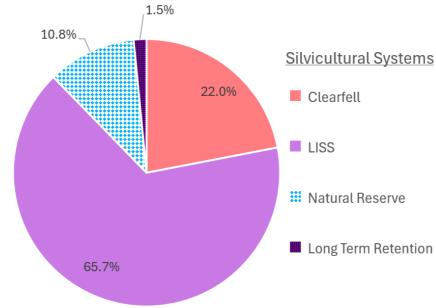


Fig.4: Silvicultural systems by forested area

22% of the total wooded area will still be managed under a clearfell and restocking programme, providing cost-effective timber production and transitional open space for wildlife. This clearfell proportion is expected to reduce over future rotations as PAWS* restoration will increase the opportunities for forest management using LISS* going forward.



Pic.5: The impact of ash dieback (Hymenoscyphus fraxineus) in Souther Wood

A total of 122.9ha of clearfell will be undertaken during the 10 year FP approval period comprising 19 coupes (see Felling Phases Maps, p.29-34). These clearfell coupes are mainly coniferous (69ha); involving the economic felling of mature conifer crops, the premature felling of DNB*-infected younger pine stands and PAWS* or natural habitat restoration. The clearfells planned in broadleaf areas during the next 10yrs total 53.9ha and involve management for ash dieback (Pic.5, below left) and short rotation mechanical coppice.

Management of the remaining broadleaf component will be mostly through LISS* group felling systems (group selection and small coupe felling). This entails creating small clearings of between 0.25ha-2ha to restructure the crops and diversify their age and species composition, also improving the woodlands' resilience and adaptive capacity. The size and shape of the clearings will be designed around the light requirements of the trees to become established (considering aspect* and shade cast by adjacent stands), helping create optimum growing conditions. For the benefit of wildlife larger clearings will be elongated to maximise edge habitat. 63.2ha of conifer-dominated woodland will also be managed through LISS. The use of LISS should also offer greater protection to soils and ground flora by maintaining canopy cover; thus reducing the likely impacts of extreme weather events and variation in micro climates throughout the day and between seasons.

99.2ha of woodland is retained as Natural Reserve* and a further 13.4ha planned for Long Term Retention*. These management types prioritise conservation and environmental benefit over other objectives.

In addition to the aforementioned felling programme, thinning assessments will be made every 5 years and thinning operations planned accordingly. Managing stand density and light availability through thinning is essential for each tree's crown and root system to develop fully, helping ensure the trees remain stable in the wind as they mature. Thinning operations are also an important source of timber and timber revenue.

As part of our Operational Planning* process, all forest operations are carefully considered beforehand and their delivery takes the specific ecology, heritage, and constraints of the site into account. Operations will be carried out in line with all relevant regulations and best practice guidance as summarised in UKFS* and UKWAS*. Forestry operations may take place at any time of the year. This is necessary to strike a balance between the greatly increased risks of damage to flora and increased soil compaction associated with working during the wetter winter months and the need to minimise disturbance to designated habitats, species and breeding birds.

5. Intended Landuse

The species composition within the Fermyn Woods is currently split approximately 79% broadleaf to 21% conifer. PAWS* restoration and conversion from conifers to broadleaves elsewhere in other ecologically-important areas will result in broadleaf woodland increasing to an estimated 93% of the forested area during the next rotation. (See Fig.5 & Intended Landuse Map, p.27).

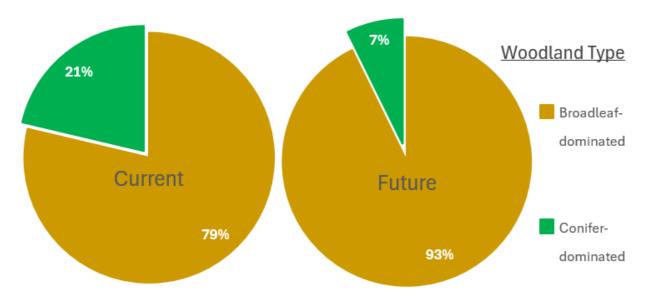
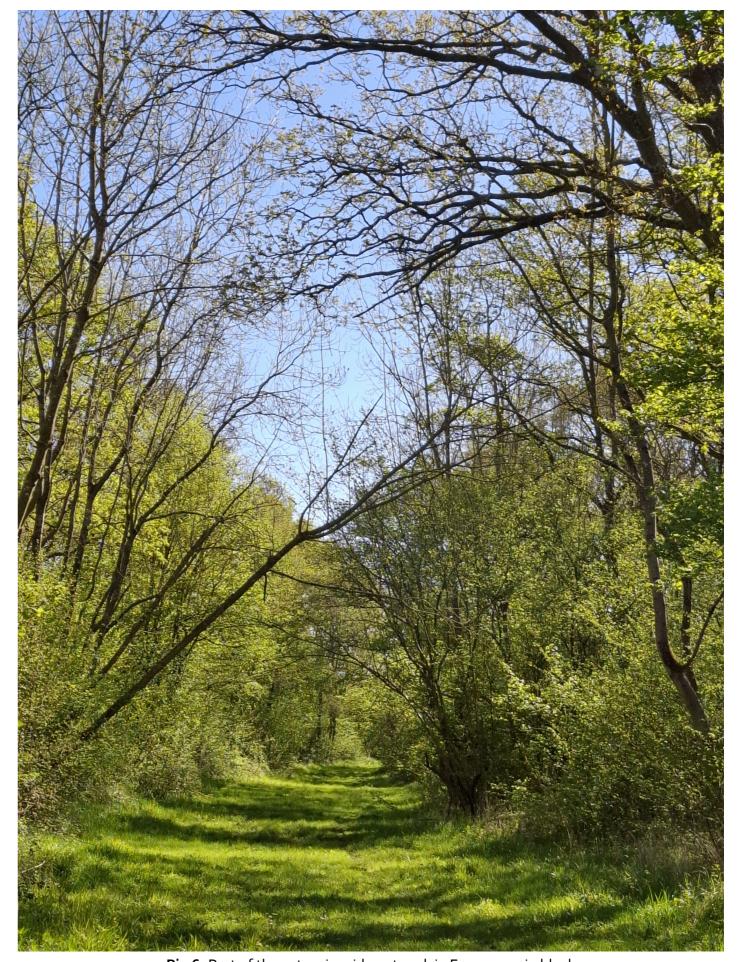


Fig.5: Woodland composition change over the next rotation

To increase forest-scale resilience to current and future pests, diseases and climatic changes we aim to introduce a wider range of tree species during restock where appropriate. This forms part of our portfolio approach to restocking, which also includes accepting natural regeneration and sourcing planting stock of local provenance and/or from 2 to 5 degrees south where possible.

Opportunities to increase the species diversity of oak-dominated areas will be taken following LISS interventions through natural regeneration and/or planting. The ash stands scheduled for felling will be restocked with alternative broadleaved species, enhancing the woodlands' resilience and adaptive capacity in the wake of ash dieback. The FP includes provision for some ash to remain in lower risk areas.



Pic.6: Part of the extensive ride network in Fermyn main block



6. Contribution towards Forestry England Central District's commitments to UKWAS and UKFS from the Fermyn Woods FP

	Forest Plan Area (ha)	Forest Plan Percentage	Forest District Area (ha)	Forest District Percentage
Total Area	918.9	100%	28101.3	100%
Total Wooded Area	836.6	91%	23572.8	83.9%
Open Habitat (>10%)	82.3	9%	4528.5	16.1%
Natural Reserves* (1%)	99.2	10.8%	591.8	2.1%
Long-term Retentions*, LISS* & Minimum Intervention* (>1%)	681.5	74.2%	14,624	52%
Area of Conservation Value (>15%) including underlying land designations, Ancient Woodland*, PAWS*, Open Habitat, Minimum Intervention*, Natural Reserves, Long Term Retentions & LISS	828.9	90.2%	17,651	62.8%



7. Terms of Reference

National Strategy	District Strategy	Forest Plan Objective	Monitoring
Economy: 1) Maintain the land within our stewardship under UKWAS certification, 2) Improve the economic resilience of our woods and forests, 3) Encourage and support business activity on and around the Estate.	 Adapting our management practices to suit the character and requirements of local woodlands whilst satisfying national standards and business requirements. We will use the opportunity presented by additional, unscheduled clear felling as a result of disease control to accelerate the diversification of both conifer and broadleaf species appropriate to each local area and site type, and in some areas trialling species which may not have been previously planted in forest conditions, using a range of silvicultural systems. 	Continue to grow commercial timber using a variety of species that will be more resilient to the impacts of climate change, pests and diseases to maximise yields. Consider emerging timber markets and evolving harvesting methods. Ensure stands are more structurally diverse, actively managing the woodland to promote age- and species -diversity. Consider further possibilities for business activity as opportunities arise.	Forestry operations and restocking will be recorded in the Forestry England subcompartment database and monitored at 5 year mid-term review and 10 year renewal. As above. Monitor as part of the 10 year forest plan renewal. No monitoring required.
Nature: 1) Improve the resilience of the natural environment of the Estate under our Stewardship, 2) Realise the potential of the Public Forest Estate for nature and wildlife, 3) Maintain and improve the cultural and heritage value of the Estate.	 Adapting more sensitive timber harvesting arrangements and adopting recent FC guidance on forest operations to reduce the impact of forest operations on soils and ground vegetation on sensitive sites. Contributing to and undertaking control programmes to limit the impact of deer and other species on woodland habitats in order to reduce the adverse impacts of grazing and disturbance to native habitats and their flora and Fauna Where possible, work with interested parties to explore ways to maintain or improve features of cultural or heritage value to the local community. 	Continue the restoration of Ancient Woodland through gradual reduction of non-native species. Continue to manage Sudborough Green Lodge Meadows SSSI as specified in the most recent SSSI Management Plan to maintain favourable status. Identify key species and habitats and make appropriate provision for their requirements. Maintain the ecological value of the priority habitats present. Manage open and woodland edge habitats on rotation to benefit flora and fauna, maintaining botanically rich rides and continuing partnership with Butterfly Conservation to enhance habitat conditions. Identify existing Trees of Special Interest and manage appropriately to retain these, recruit future veteran trees and increase the volume and distribution of deadwood.	Ancient Woodland restoration monitored as part of the 10 year forest plan renewal. Monitoring as specified in the most recent SSSI Management Plan. Monitored as part of the operational planning process. As above Existing and future TSI to be recorded on the conservation database, reviewed as part of operational planning process, at the 5 year midterm review and as part of the 10 year forest plan renewal.
People: 1) Encourage communities to become involved in the Estate, its management and direction, 2) Provide high quality woodland-based recreational opportunities for people and business, 3) 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.	 Provide safe and accessible woodlands. Offering opportunities for quiet recreation and adventurous activities, to enable people to experience the potential health and wellbeing benefits. Developing partnership with private businesses and public bodies to expand and improve recreational opportunities across the estate. Creating a wide variety of opportunities for schools, groups, families and individuals to engage with and learn about trees and forests in accordance with the National and District Strategies. Encouraging third party environmental educators and other partners to offer learning opportunities on the public forest estate 	Consider both internal and external landscapes through the diversification of woodland structure and through interventions which are sympathetically designed and appropriately scaled. Conserve heritage features in line with Forestry England's Historic Environment guidance. Maintain informal public access in freehold areas, including established footpaths and bridleways. Continue lease with North Northamptonshire Council, linking Forestry England woodland with Fermyn Woods Country Park. Engage with third party partners and businesses where compatible with wider Forest Plan objectives.	Species composition, age structure and coupe design reviewed at 5 year mid-term review and as part of the 10 year forest plan renewal. Monitored as part of the operational planning process. No monitoring required. Monitor via Forestry England's lease system Monitor via Forestry England's lease & permit systems



Appendix I

Glossary

Acute Oak Decline

Acute oak decline is a complex syndrome in which several damaging agents interact and cause a serious decline in tree condition, and can kill oak trees within four to six years of the onset of symptoms. The agents can be abiotic or biotic; the latter often include insects and fungi which are not capable of invading healthy trees but which can be very destructive to stressed oaks. Symptoms include characteristic weeping cankers/lesions in the bark

Ancient Woodland

Areas of semi-natural native woodland that have had continuous woodland cover since at least 1600. They are particularly rich in biodiversity and this is often notable in their characteristic ground flora.

Ash Dieback (Hymenoscyphus fraxineus)

Ash dieback (also known as Chalara ash dieback) is a highly destructive fungus killing native ash trees across the UK. Young and coppiced trees will die quickly once infected, more mature ash may survive for a number of years once infected. Causes the timber to lose strength, become brittle and trees to start dropping limbs.

Aspect

The direction a slope faces. This can have a strong influence on the microclimate, ground vegetation, soils and hydrology.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees. The shade it casts has a strong influence on the plants, trees and shrubs beneath it.

Carr Woodland

A wet woodland area, usually dominated by willow, birch and alder species.

Chronic Oak Decline

Chronic oak decline is a complex disorder of oak trees which several damaging agents interact either simultaneously or sequentially to bring about a serious, <u>long term</u> decline in tree health and condition. It differs from acute oak decline (above), which causes a much faster, and usually fatal, decline in tree health.

Clearfell System

Cutting down of an area of woodland (if it is within a larger area of woodland it is typically a felling greater than 0.25 ha). Sometimes scattered or small clumps of trees may be left standing within the felled area.

Climax Species

Tree species that will eventually dominate the forest canopy, maximising their exposure to sunlight and outcompeting other species.

Coppice

Coppicing is a Lower Impact Silvicultural System (LISS) based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and regrowth. Coppice can also refer to an area of woodland in which the trees or shrubs are periodically cut back to ground level to stimulate growth and provide wood products. 'Coppice with standards' refers to coppice with a scatter of trees grown on a long rotation to produce larger-sized timber and to regenerate new seedlings to replace worn out stools.

Coupes

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

Dothistroma Needle Blight (DNB)

DNB is a fungal disease affecting mainly pine species. The fungus affects the needles of the infected tree, which are eventually shed. This can continue year on year and gradually weaken the tree, significantly reducing timber yields. It can also eventually lead to mortality.

Ecological Site Classification (ESC)

ESC is an online tool developed by Forest Research to help a forester choose tree species that are suited to a specific site. It models how well each species is likely to grow using information on climate and soil properties. It can also be used to forecast how climate change may impact suitability.

Ecosystem

An ecosystem is an interconnected network formed of all the living things in a given area (plants, animals and organisms) and their interactions with each other and their non-living environments (eg: weather, earth, sun, soil & climate).

Ecosystem Services

Ecosystem services are the goods and services that people depend on that arise from ecosystems. They are usually categorised into Provisioning (eg: timber, water, food production), Regulating (eg: regulation of climate and diseases), Cultural (eg: recreational opportunities, aesthetic value) and Supporting services that underpin these (eg: crop pollination).

Forestry England

Forestry England is the executive agency of the Forestry Commission that is responsible for managing the Nation's Forests in England.

Forests and Water Guidelines

One of seven sets of guidelines that support the United Kingdom Forestry Standard (UKFS). The UKFS and guidelines outline the context for forestry in the UK; set out the UK Government's approach to sustainable forest management; define standards and requirements; and provide a basis for regulation and monitoring, including national and international reporting.

Forest Plan (FP)

An FP is primarily a landscape-scale felling and restocking plan. It provides a holistic, long-term approach to planning and forest design, detailing felling operations over a 10 year period for the purposes of licencing felling and outlining proposals over the next 50 years. FPs 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.

Group Selection

A method of managing irregular stands in which regeneration is achieved by felling trees in small groups. Group selection involves felling groups of trees (generally <0.25 ha per group)

Historic Environment

The physical remains of every period of human development starting from 450,000 years ago and including earthworks, buried remains, structures and buildings.

Ips typographus (larger eight-toothed European spruce bark beetle)

Although the beetle prefers stressed or weakened trees, under the right environmental conditions its numbers can increase enough to result in attacks on healthy trees. If left uncontrolled, the beetle could cause significant damage to the United Kingdom's spruce-based forestry and timber industries.

Landscape Character

England is renowned for its rich, diverse and beautiful landscapes which have their own distinct local characters. These have been shaped over many thousands of years by natural influences such as soil and landform and by generations of human activity.

Long Term Retention

Individual, stable stands and clumps of trees retained for environmental benefit significantly beyond their normal economic age or size.



Glossary (continued...)

Lower Impact Silvicultural Systems (LISS)

Silvicultural systems including group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, minimum intervention and single tree selection systems which are suitable for windfirm conifer woodlands and most broadleaved woodlands.

Minimum Intervention

Management with no systematic felling or planting of trees. Operations normally permitted are fencing, control of invasive non-native plant species and vertebrate pests, maintenance of paths and rides and safety work. Management only involves the basic inputs required to protect the woodland from external forces or ensure succession of key habitats and species.

the Nation's Forests

The woodlands managed by Forestry England. These include both freehold and leasehold land. (Previously referred to as the Public Forest Estate.)

National Character Area (NCA)

Broad divisions of landscape form the basic units of cohesive countryside character, on which strategies for both ecological and landscape issues can be based. There are 159 Character Areas, each of which is distinctive with a unique 'sense of place'.

National Nature Reserve (NNR)

NNRs were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research. Most NNRs offer opportunities to the public to experience wildlife first hand and learn more about nature conservation.

Native

Native tree species colonised Britain without human assistance at the end of the last ice age, before the English Channel cut Britain off from mainland Europe.

Naturalised

Naturalised trees have colonised Britain since the land divide with mainland Europe and are growing and reproducing successfully within their natural climatic range without human intervention.

Natural Regeneration

The growth of new trees from seed found in the soil or cast from adjacent trees. Regeneration only occurs where suitable seed sources and conditions are present.

Natural Reserve

Natural Reserves are predominantly wooded, usually mature and intended to reach biological maturity. They are permanently identified and in locations which are of particularly high wild-life interest or potential. They are managed by minimum intervention unless alternative interventions have higher conservation or biodiversity value.

Nest Planting

Trees planted in small groups which are distributed across the restock site with remaining unplanted areas left to naturally regenerate. A useful way to introduce new species or provenances to a site.

Notifiable Disease

Some tree pests and diseases are notifiable, which means that, in England, they must be reported to the Forestry Commission or Animal & Plant Health Agency. Notifiable tree pests and diseases are typically those with the potential to cause greatest damage to our trees, woods and forests.

Open Grown Trees

Trees that have been given space to develop a large crown and natural shape. In comparison trees planted closely in a plantation managed for timber or biomass tend to have a more uniform shape.

Open Space

Areas within a forest without trees, such as glades, stream sides, grass or heathland, water bodies, rocky areas, roads and rides.

Operational Plans

Detailed site plans prepared in advance of all major forest operations providing guidance to Forestry England staff and contractors. They identify site constraints, opportunities and areas requiring special treatment or protection.

Phytophthora ramorum and P.pluvialis

P.ramorum is a very destructive pathogen affecting over 150 plant species, particularly larch trees. Some broadleaved plants (such as sweet chestnut and rhododendron) can also host *P.ramorum*. *P.pluvialis* was first recorded in the UK in 2021 and affects a range of species including Douglas fir and western hemlock.

Plantation on Ancient Woodland Site (PAWS)

Ancient Woodland areas where semi-natural woodland has been cleared and replaced by plantation, often including non-native species. PAWS sites can include both broadleaved and conifer woods and often retain remnant ancient woodland features like species-rich ground flora or undisturbed soils. Also known as Ancient Replanted Woodland.

Pollarding

A form of pruning where the upper branches of a tree are removed, promoting a dense head of foliage and branches. Cutting is usually around 2.4 metres above ground – the height that wild animals or domesticated stock could reach. Traditionally, trees were pollarded for fodder or for wood. Fodder pollards are generally pruned every two to six years, wood pollards at longer intervals, usually of eight to 15 years, to produce upright poles for eg: fence rails and posts.

Production Forecast

The projected volume of biomass that the forest will produce each year. Calculations are based on species, age, net area and yield class.

Public Rights of Way (PROW)

Access routes open to the public through legal designation. These include footpaths, by-ways and bridleways.

Respacing

Thinning of dense natural regeneration at a young age (generally when trees are 2-5m tall) to produce a more consistent crop, focus available resources on the remaining trees and promote good development.

Restocking

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

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland which provide access for management and other activities.

Scheduled Ancient Monument (SAM)

A scheduled monument is a site that is legally protected because of its historical importance.

Secondary Woodland

Woodland that has been established on land formerly used for another purpose (eg: as pasture, arable fields, quarries, etc.). Unlike ancient woodland it has not been continuously wooded in the past.

Seed Trees

Trees with good shape and growth rates chosen to produce seed for restocking. Seed trees need to be of an age and size where they produce fertile seeds in large quantities.



Glossary (continued...)

Selective Felling (Regeneration Felling)

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

Semi-natural woodland

Those woodlands which are comprised mainly of locally native trees and shrubs, and have some structural characteristics of natural woodland.

Shade Tolerant Species

Trees that have adapted to lower light levels and will regenerate and establish freely under the shade of the surrounding tree canopy, as opposed to light demanding species which require full sun/high light levels to establish and grow.

Silvicultural Systems

Silviculture is the process of tending, harvesting and regenerating a forest. Different patterns of felling and regeneration form distinct 'silvicultural systems'. Different systems may be suitable for different management objectives (eg: conservation in an ancient woodland vs timber production in a conifer plantation).

Site of Special Scientific Interest (SSSI)

A SSSI is a formal conservation designation. Usually, it describes an area that is of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiographical features that may lie in its boundaries.

Small Coupe Felling

A small-scale clearfelling system. The system is imprecisely defined but coupes are typically up to 2 ha in extent, with the larger coupes elongated in shape so the edge effect is still high.

Special Area of Conservation (SAC)

SACs are protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. These areas form an internationally important network of high-quality conservation sites that make a significant contribution to conserving Annex I and Annex II habitats and species.

Special Protection Area (SPA)

SPAs are protected areas selected to protect one or more rare, threatened or vulnerable bird species listed in Annex I of the Birds Directive, or specific regularly occurring migratory species. They form an internationally important network of high-quality conservation sites that make a significant contribution to conserving important habitats and species.

Strategic Plan

Forestry England's guide to the management of woodland in Central England Forest District. It divides the district into zones for the purpose of management and ensures forestry activities reflect the local ecological, social and cultural individuality of each woodland.

Strip Felling

Strip felling involves removal of some trees in rows, leaving strips of mature trees in place rather than clearfelling a crop in one operation. This creates space between remaining trees suitable for planting new trees (especially species that require sheltered growing conditions) and maintains woodland cover while new trees are established. The width of strips may vary and multiple strips are removed from one stand at a time.

Sub-compartments

Areas of forest that form a homogeneous crop in terms of age, species composition and condition. They may be split across several locations and their boundaries may change as the forest develops after felling and restocking.

Thinning

The removal of a proportion of trees in a forest after canopy closure, usually to promote growth and greater value in the remaining trees.

Trees of Special Interest (TSI)

Trees that are of interest biologically, aesthetically or culturally because of their age, or trees that are in the ancient stage of their life, or trees that are old relative to others of the same species. Also referred to as Veteran or Ancient trees.

UK Forestry Standard (UKFS)

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

UK Woodland Assurance Standard (UKWAS)

A voluntary scheme for the independent assessment of sustainable forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to growing consumer demand for timber products from sustainably managed forests.

Understorey Woodland Species

Minor tree species that live under top canopy trees or are 'pioneer' species that arrive in clearings before climax species become established. Once the overstorey is established understorey species are more common on woodland edges and clearings where light levels are higher.

Wood Pasture

Wood pasture is derived from the traditional practice of managing trees in tandem with grazing, characteristically combining at least some open grown or pollarded veteran trees or shrubs and diverse and dynamic open and open-woodland habitats.

Yield Class

Yield class is a measure of the growth rate of a tree crop on a given site. It describes the maximum average volume increase that a particular crop can achieve on 1 ha of land each year. For example, a crop capable of a maximum annual growth of 14 m3 per hectare has a yield class of 14. Yield Class varies depending on factors including the species, how it is managed and local site conditions.



