

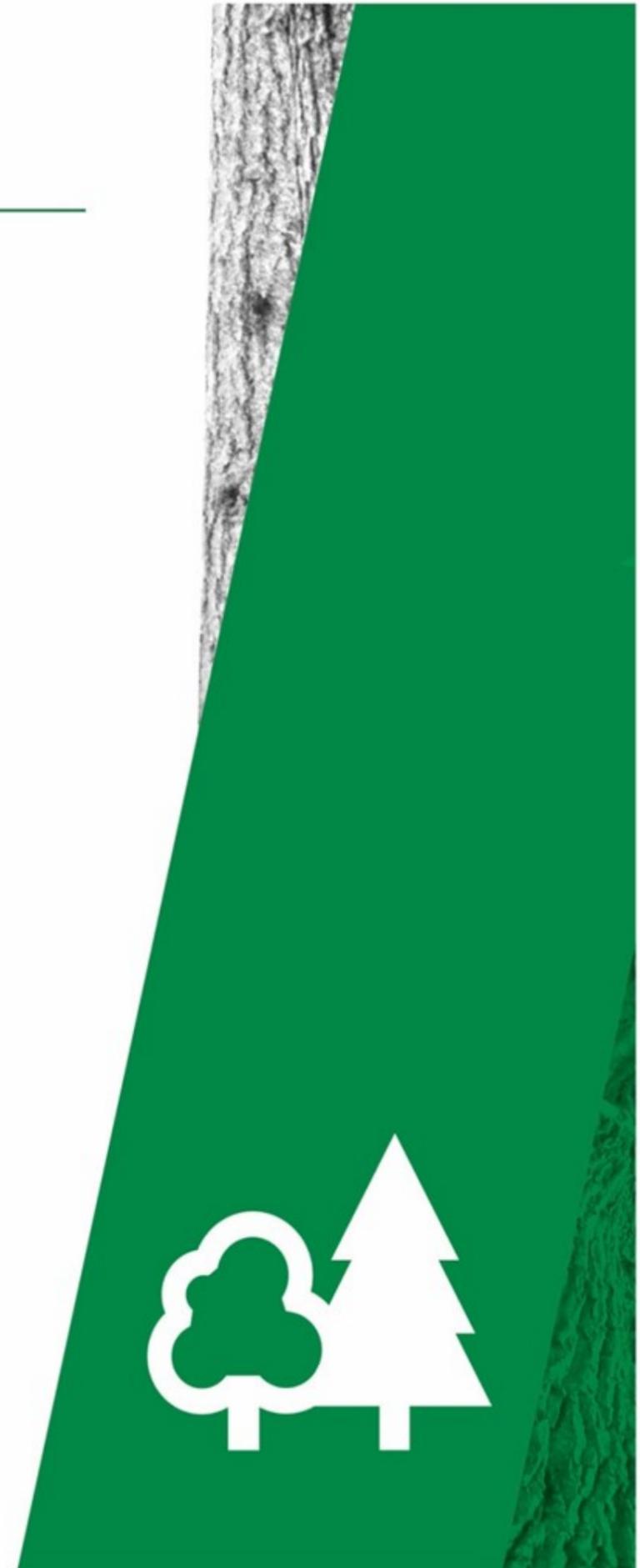
Bardney Limewoods Forest Plan

2025 – 2035



The mark of
responsible forestry

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



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Pic.1: Veteran oak TSI in Stixwould

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



Pic.2: Primrose (*Primula vulgaris*) on a ride in New Park

Summary

This Forest Plan (FP) summarises proposals by Forestry England for the management of the Bardney Limewoods in Lincolnshire. The Bardney Limewoods FP area is a cluster of fragmented woodlands totalling 1320.8ha. They straddle the East and West Lindsey Local Authorities about 12km east of Lincoln City, mostly lying between Wragby and Bardney with outliers of Wickenby to the north west and Horsington & Stixwold to the south east (see *Location Map p.16*). The tenure is freehold in all of the woodlands, the exception being Stainfield which is leasehold. Accordingly, public access is permitted throughout the Bardney Limewoods FP area except for Stainfield.

Forestry England has recently acquired land adjacent to our existing estate at Newball. This former arable area is for proposed woodland creation to expand the Nation's Forests and will create valuable habitat connectivity between existing Ancient Woodland sites at Rand, Newball and Hardy Gang. The planning and consultation processes for the proposed new woodland sit outside the scope of this FP. However, existing woodland within the acquired land is included in this plan.

The woodlands themselves are very important ecologically: encompassing the Bardney Limewoods National Nature Reserve (NNR)*; the Sites of Special Interest (SSSIs)* of Wickenby, the Bardney Limewoods, and Little Scrubbs Meadow; and Ancient* and Semi-Natural* Woodland (ASNW) and Plantations on Ancient Woodland Sites (PAWS)*. The undesignated areas are a mix of broadleaved and coniferous secondary* woodland.

The Limewoods sit within the Central Lincolnshire Vale National Character Area (NCA)* which is characterised by a tranquil, rural and sparsely settled landscape, largely used for the growing of arable crops. The Bardney Limewoods NNR represents England's biggest concentration of ancient small-leaved lime-dominated woodland and its associated high biodiversity value. Landform in the local landscape is low-lying and gently undulating, with the elevation of the FP woodlands ranging from 4m in the lowest points of Fiskerton, Scotgrove, Horsington & Stixwold up to 32m in the north-eastern corner of Chambers Farm. The woodlands are visible at distance in the wider landscape context when viewed from high points within the Lincolnshire Wolds National Landscape on a clear day. Locally the woods are visible from public roads and nearby villages (see *Survey Maps, p.21&22*).

The soil types of the Bardney Limewoods are mostly typical stagnogley in the north west woods and pelo-stagnogley in the south east woods. These soils are clayey and poorly draining, resulting in intermittent waterlogging in many areas (see *Soils Maps, p.17&18*).

The primary management objectives for the Bardney Limewoods FP are to:

- Manage the statutory NNR & SSSI areas in line with the current management plan.
- Continue the restoration of PAWS, maintain and improve the ecological value of priority habitats, and manage important open and woodland edge habitats to benefit flora and fauna.
- 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 retain public access in freehold areas.

Application for Forest Plan Approval

i Plan Area Identification:

Forest District: Central Forest District
 Beat: Sherwood East Beat
 Name: Bardney Limewoods Forest Plan
 Nearest Town: Wragby

Grid References (access):

Wickenby	TF 0829 8284
Rand	TF 0816 7792
Newball	TF 0833 7586
Great West / Cocklode	TF 1141 7634
College	TF 1193 7536
Hardy Gang	TF 0918 7515
Camshaw's Plantation	TF 1234 7414
Chambers Farm	TF 1455 7411
Fiskerton	TF 0805 7206
Stainfield	TF 1136 7187
Austacre	TF 1433 7168
New Park	TF 1650 7108
North Spring	TF 1508 7039
Scotgrove	TF 1296 6991
Southrey	TF 1323 6854
Birchwood	TF 1367 6781
Horsington	TF 1887 6755
Stixwould	TF 1841 6644

Local Planning Authorities: East Lindsey District
 West Lindsey District

ii Designations:

Central Lincolnshire Vale NCA* (Profile 44)
 Bardney Limewoods NNR*
 Bardney Limewoods SSSI*, Wickenby SSSI & Little Scrubbs SSSI
 Ancient Woodland* and PAWS*

iii Date of Commencement of Plan: On approval.

Bardney Limewoods FP approved on 07/11/2025

Proposed clearfelling and restocking summary for 10 year FP period:

	Conifers	Broadleaves	Total
Clearfell	40.3ha	25.7ha	66ha
Restocking	11.1ha	54.9ha	66ha
Regeneration Felling (LISS)	Up to 23.2ha	Up to 224.1ha	Up to 247.3ha
Coppice with Standards	0ha	70.1ha	70.1ha

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, 824.2ha gross area 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 30% 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.

A further 139ha will be managed as coppice with standards*, mostly through mechanized operations. During the FP period there are a total of 70.1ha coupes scheduled for working.

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 Plan

The former Bardney Limewoods FP was approved in October 2012 and expired in October 2022. The FP area has now changed slightly and excludes the woods of Eleanor and Lynwode (which now form part of the Market Rasen Woodlands FP).

The primary objectives of the previous Bardney Limewoods FP were:

- **To improve biodiversity and nature conservation interests.** PAWS restoration has continued, gradually reducing the conifer component in these areas through thinning and felling operations (see Fig.1 below, displaying this progress since 2013). Open space has increased, including an extension to Little Scrubbs Meadow and a conservation grazing area in Chambers Farm Wood. However, ride widening has not occurred to the planned extent due to reduced capacity and volunteering resources since Covid 19.

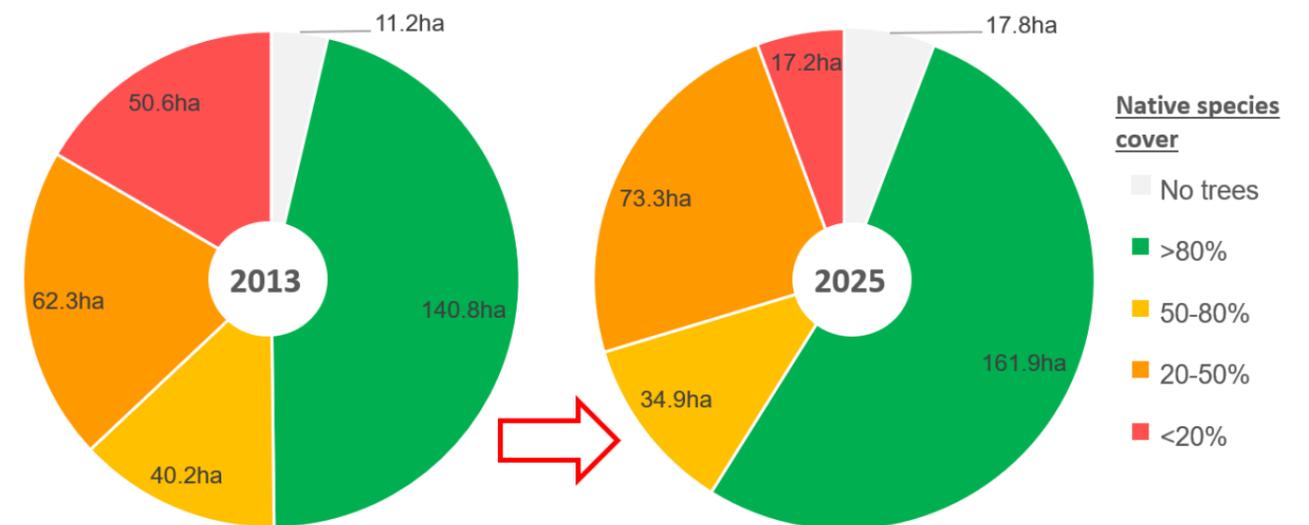


Fig.1: Bardney Limewoods PAWS area classified by native species cover

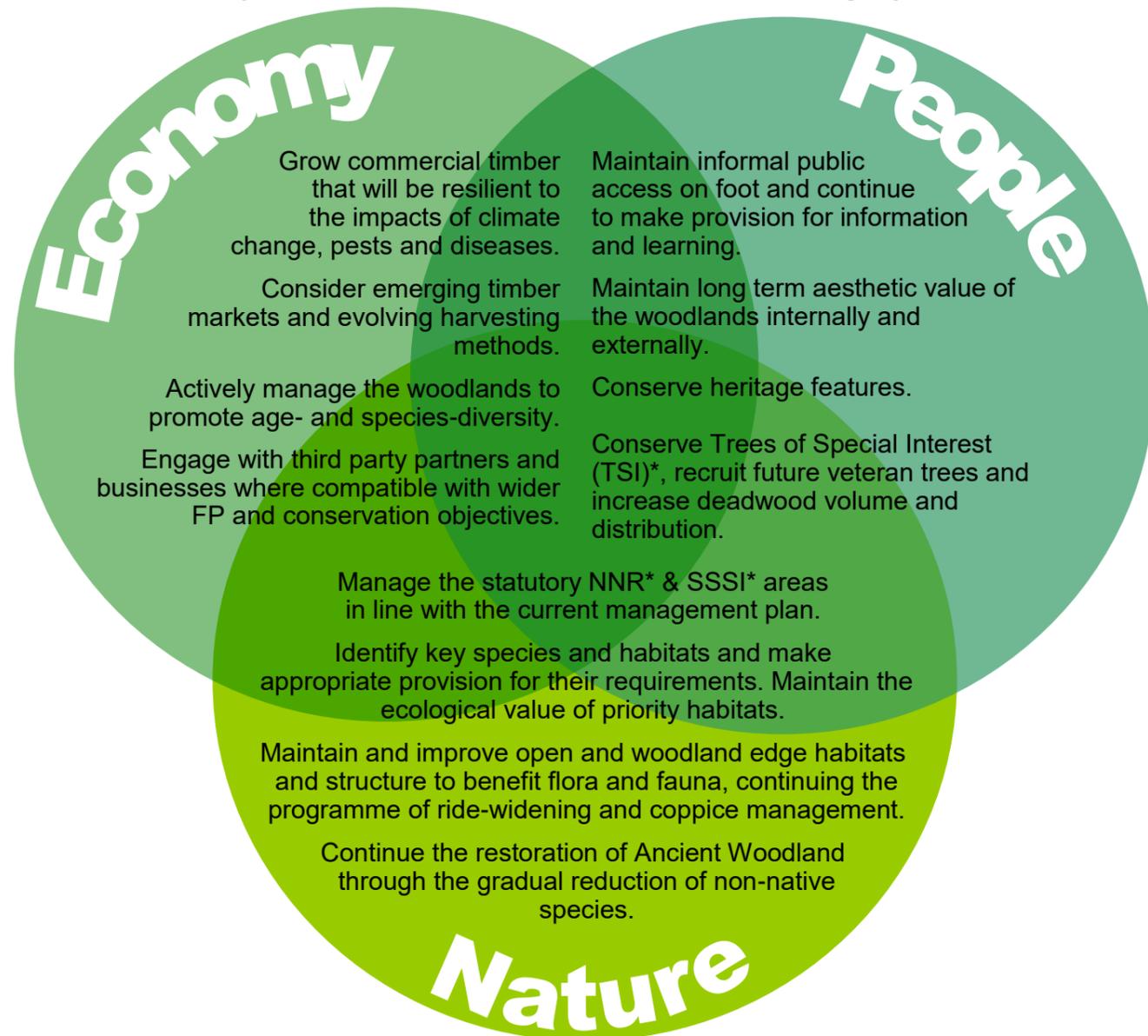
- **To encourage scientific studies, research and monitoring.** These have included: the Limewoods Bat Project (undertaken at Great West, Southrey and Chambers), the Dormouse Project (Chambers), the Lincolnshire Butterfly Conservation Group Project, and also the Seed Collection Project by the Greater Lincolnshire Nature Partnership.
- **To encourage public access and provide for education and learning.** Public access has been maintained in freehold areas. The additional facilities for educational and access (mainly at Chambers and initially funded through the Lincolnshire Limewoods Project) have recently been rationalised having reached the end of their safe working life. Camshaw’s Plantation hosts a learning provider who runs school visits relating to Bushcraft and Saxon Living.
- **To grow timber on a sustainable basis.** Forest operations were conducted during the previous Plan period, although some clearfell and coppice coupes were not worked due to limited capacity and unsuitable ground conditions.

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 Bardney Limewoods FP area we aim to achieve the following objectives:



3.1 Nature

The Bardney woodlands provide nationally important habitats supporting many characteristic and rare species, which is reflected by 40% of the area designated as SSSI (see *Designations Summary Table, p15 & Designations Maps p.19&20*). These notified areas comprise:

- **Bardney Limewoods SSSI.** Britain’s greatest concentration of woodlands dominated by small-leaved lime, exhibiting a species composition prevalent in lowland Britain between 5,000 and 8,000 years ago, and managed as coppice or high forest since at least the 11th century. The diverse association of ground flora supports very rich invertebrate populations including a number of scarce moth and butterfly species and notable breeding birds.
- **Wickenby Wood SSSI.** Similar to above, notable for its uniform wetness and alkaline soil, and therefore representing the range of variation of this scarce woodland type.
- **Little Scrubbs Meadow SSSI.** An outstanding example of an unimproved neutral grassland, supporting plant communities (now rare in the East Midlands) typical of calcareous clay and loam soils. These communities include a wide range of grasses, herbaceous species and sedges.

Management of the SSSI areas will follow the agreed Management Plans already in place. Where any adjustment to these plans is required, we will liaise with Natural England as appropriate.

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. 76% of the Bardney Limewoods FP area is classified as Ancient Woodland, including both ASNW & PAWS. Continuing to protect and gradually restore these woods to predominantly native tree species is a priority for this plan.

There are 190 Trees of Special Interest* (TSI) currently recorded within the Bardney Limewoods which are to be retained for generations to come. These include lime, oak (*Pic. 1, p.2*), ash, crab apple, willow, wild service tree and horse chestnut. 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, notable and future important trees are highly important for biodiversity and an invaluable part of our natural heritage, providing unique ecological conditions and in some cases supporting entire ecosystems. Similarly, where appropriate, dead and dying trees may be retained to increase ecologically-valuable deadwood habitat.

Surveys in recent years have confirmed the Bardney Limewoods host a number of important and protected species: types of mammals including badgers, hazel dormice and bats (barbastelle, common and soprano pipistrelles, noctule, brown long-eared, whiskered, Daubenton's, Natterer's and Brandt's); breeding birds such as woodcock and treecreeper; plus a range of other species including great crested newt, glow worm, and the rare Araneae (*Clubiona caerulescens*) spider.

The Limewoods are well known for their moth and butterfly populations which include: purple emperor; silver-washed fritillary; white admiral; white letter, purple, black and brown hairstreaks; marsh fritillary (*pictured right*); dingy skipper; bee hawk moths and other scarce moth species. Accordingly, a priority for Forestry England is the management of open land and associated woodland edge habitat for the benefit of wildlife. Currently 80.9ha (6.1%) of the Bardney Limewoods is permanent open space (*see Current Species Maps, p.23&24*) and our continuing programme of ride widening will expand this area. Creation of an estimated additional 136.1ha (10.5%) of transitional open space from coppicing and clearfells is anticipated during the FP period.



Pic.3: Marsh fritillary (*Euphydryas aurinia*)

Wildlife 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. Deer browsing pressure can impact natural regeneration so fencing of restock coupes will be a consideration in some areas. Expanding the ride infrastructure will help to improve pest management.

3.2 Economy

Timber production will be managed on a sustainable basis, improving future revenues by focussing on quality hardwood and softwood 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 regenerate and introduce compatible and appropriate species and species mixes; improving resilience against future pests and diseases and helping woodland habitats adapt 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.

87.7% of the wooded area is broadleaf (*Fig.2*); mostly oak, followed by birch, lime and ash. The coniferous components are primarily Scots pine (6%), Corsican pine (2.9%), grand fir (1.1%) and Norway spruce (0.9%). Much of the coniferous area is PAWS*, so the phased felling and thinning schedule will support a gradual reduction in conifers as these coupes are restored to predominantly native broadleaved woodland.

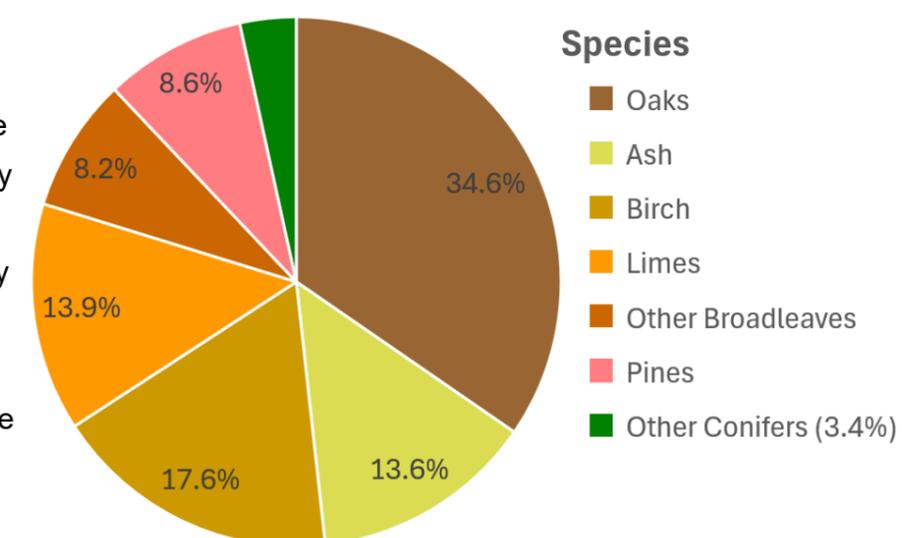


Fig.2: Current species composition of the Bardney Limewoods



Pic.4: Wood anemone (*Anemonoides nemorosa*)

There are records of many notable plant species within the Limewoods including lily-of-the-valley, greater butterfly and bird's nest orchids, marsh valerian and pale glaucous threadmoss; plus many ancient woodland indicator species such as wood anemone (*pictured left*), hairy woodrush, woodruff, yellow archangel and herb paris. Diverse flora is important in its own right, and the botanically-rich rides, glades and woodland edges in the Bardney Limewoods also provide valuable nectar sources for invertebrate populations (*Pic.2, p.3*).

We are grateful for the partnership with the Lincolnshire Dormouse, Bat and Butterfly Conservation Groups for their continued involvement with conservation, habitat management and surveys.

Fig.3 below shows the current structural diversity. The broadleaf peaks in the 71-80yrs and 81-90yrs age classes highlight the need to gradually restructure these stands. 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 undesignated secondary woodland areas which are already coniferous.

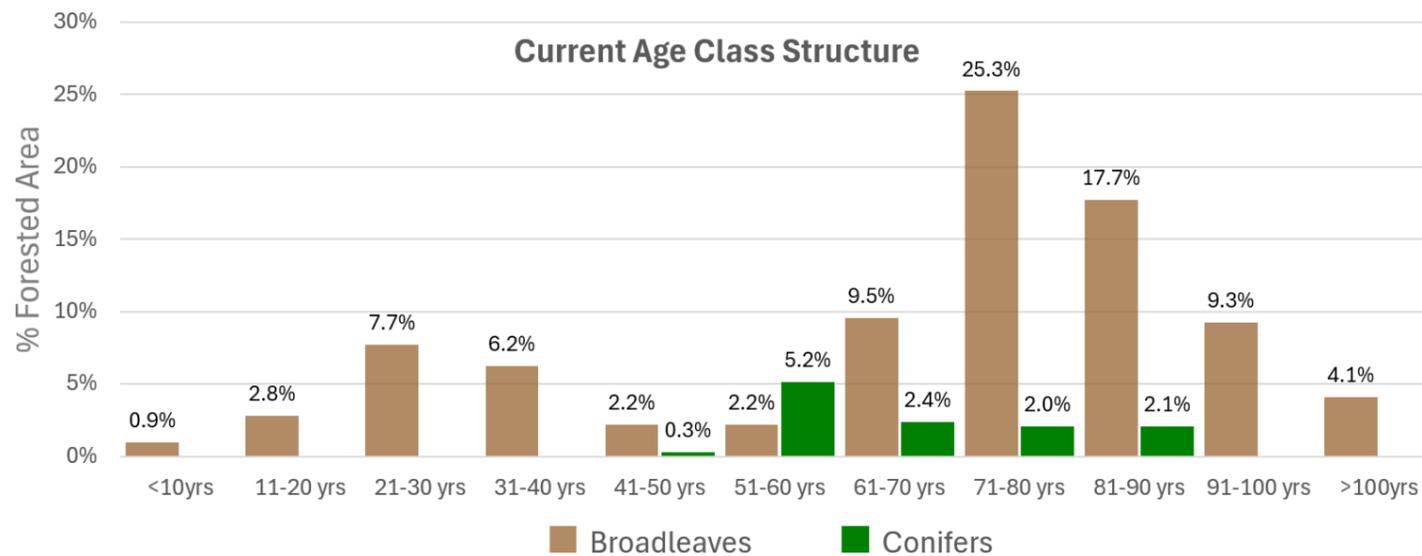


Fig.3: Current structural diversity in the Bardney Limewoods

Table 1 displays the predicted average annual timber production (from all forest operations combined) alongside the average annual clearfell areas for the next six five-year periods. The overall timber volumes are split approximately 74% from broadleaf and 26% from conifer, with the conifer element gradually reducing as PAWS* areas are restored.

Table 1: Forecast timber volumes and clearfell areas

Forecast Period	Average annual timber volume (m ³)	Average annual clearfell area (ha)
2025-2026	6586	5.7
2027-2031	11457	5.5
2032-2036	8264	7.0
3037-2041	8190	4.9
2042-2046	3934	5.1
2047-2051	3735	4.3

3.3 People

The Bardney Limewoods predominantly offer open access on foot under CRoW (Countryside and Rights of Way Act, 2000). Stainfield is the only woodland where public access is not permitted. There is car park provision at Chambers Farm and informal parking on public roads near to the forest gates in the other woods.

The Lincolnshire Limewoods Project ran from 2005 to 2011 and was a Heritage Lottery Funded partnership including Natural England, Lincolnshire County Council, Lincolnshire Wildlife Trust and Forestry England among others. This project provided funding for additional staff and facilities such as the Chambers Farm Wood Centre refurbishment and toilet block, managed walking trails, bespoke signage and interpretation boards. Now at the end of their safe working life and as we lack the resources to maintain them, most of these legacy facilities have been recently rationalised or closed. Driven by rising pressures on financial and staff resources, Forestry England is currently conducting an internal review of all recreation and access provision which exceeds our statutory obligations across the District. This review is yet to conclude but could potentially involve further reductions in provision or the introduction of self-funding measures such as parking charges. Within the Bardney Limewoods we will continue to meet the provision standards required for the NNR*, maintain pedestrian access on public rights of way, and retain CRoW open access in existing areas.

Although there are no scheduled monuments with the FP area, Cocklode Wood abuts the former site of Bullington Priory, a house of the Gilbertine Order and dedicated to Saint Mary. There are a number of unscheduled heritage features within the FP area, notably the moated site in Cocklode Wood (potentially a hunting or keeper’s lodge in an early medieval deer park); Castle Hill moated site with Civil War earthworks in Newball; and the possible deserted settlement in Minting Park, said to represent the lost village of Thorley. Other historic elements within the Bardney Limewoods include Mesolithic, Neolithic and Bronze Age finds sites, WWII features, 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.

We value the involvement of existing third party partners and volunteers, and will consider any opportunities to engage with organisations or businesses to further educational, conservation or economic interests where these align with our wider FP objectives.

4. Harvesting Operations

A range of silvicultural systems* will be used in the Bardney Limewoods (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.

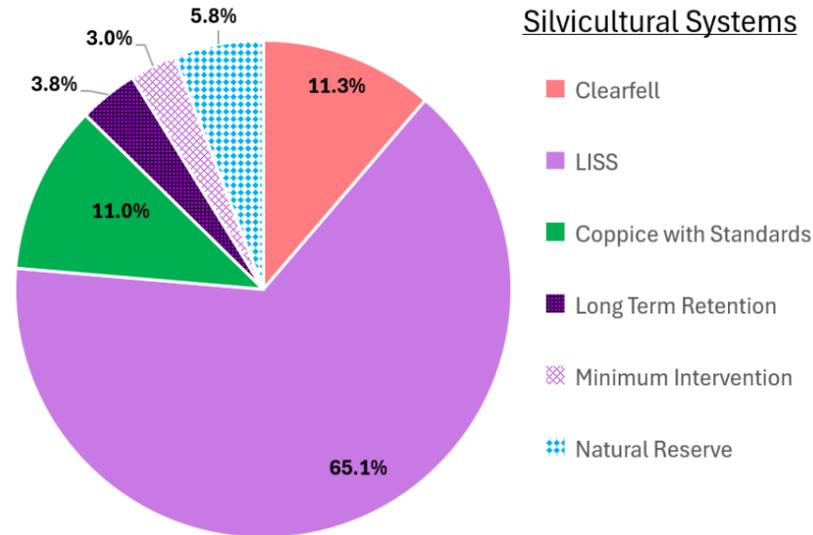


Fig.4: Silvicultural systems by forested area

11.6% of the total wooded area will remain managed under a clearfell* and restocking programme, providing economical timber production and transitional open space for wildlife. This clearfell proportion is expected to reduce considerably over future rotations as PAWS* restoration will increase the opportunities for forest management using LISS* going forward.

A total of 66ha of clearfell will be undertaken during the 10 year FP approval period comprising 16 coupes (see *Felling Phases Maps, p.31-36*). These clearfell coupes are mainly coniferous (40.3ha); involving PAWS or natural habitat restoration and the economic felling of mature conifer crops. The clearfells planned in broadleaf areas during the next 10yrs total 25.7ha and involve shorter rotation biomass production and management for ash dieback*.

11.2% of the Bardney Limewoods will be managed as coppice with standards*, mostly through mechanised operations. Traditional coppicing methods reminiscent of former times are not practically- nor economically- viable for large areas, although there are two discrete areas which we hope to continue working by volunteer groups using hand tools (one in Chambers Farm and one in Southrey). 70.1ha are intended to be worked as mechanised coppice on 25yr rotations during the forest plan period. These coupes align with the current SSSI Management Plans; the only exception is the inaccessible area in Cocklode Wood which is intended to be switched to additional areas in Hardy Gang and Stainfield. Some of the coppice areas have not been worked for many years and have now progressed into predominantly high forest. In such cases the conversion back to coppice with standards coupes will be undertaken in one or two interventions depending on the understorey present and guided by our Environment team.

73.6ha and 38.4ha of woodland is to be managed as Natural Reserve* and Minimum Intervention* respectively, with a further 48.6ha planned for Long Term Retention*. These management types prioritise conservation and environmental benefit over other objectives, and, in combination with the coppice and LISS systems, aim to achieve a diverse age-structure within each discrete woodland.

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 each 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. The designated areas of the Bardney Limewoods are highly important ecologically; this and the wet nature of woods regularly limits the working window available to undertake harvesting and mowing operations. Our planned forest operations in the Bardney Limewoods may therefore be delayed to a subsequent year should ground conditions be unsuitable, or potentially switched to an alternative workable coupe in the case of coppice areas.

5. Intended Landuse

The species composition within the Bardney Limewoods is currently split approximately 88% broadleaf to 12% conifer. PAWS* restoration and conversion from conifers to broadleaves elsewhere in other ecologically important areas will result in broadleaf woodland increasing to an estimated 95% of the forested area during the next rotation. (See *Fig.5 overleaf & Intended Landuse Maps, p.37&38*).

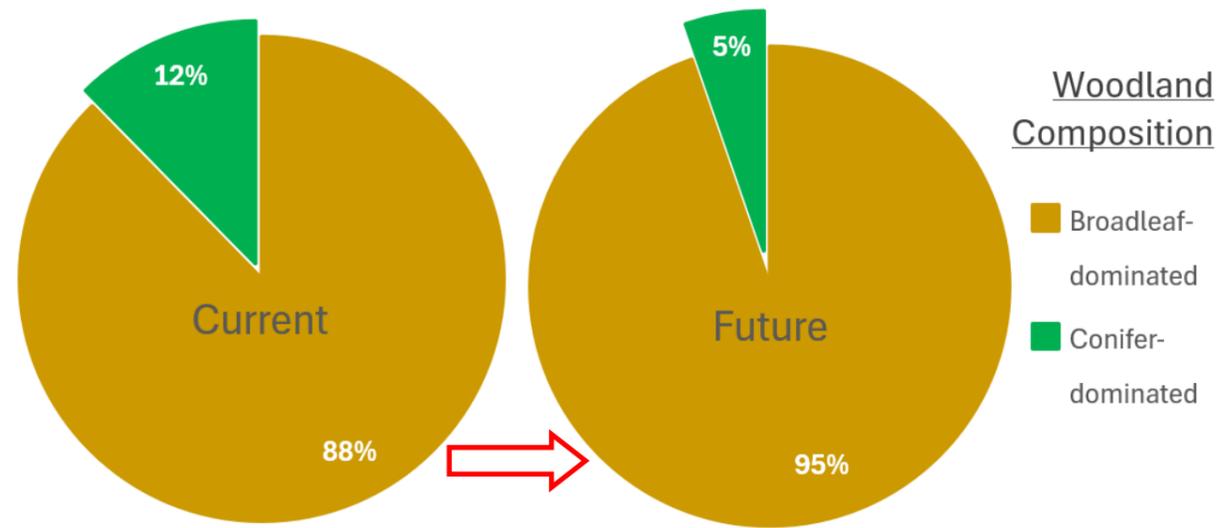


Fig.5: Woodland composition change over the next rotation

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

6. Contribution towards Forestry England Central District’s commitments to UKWAS and UKFS from the Bardney Limewoods FP

	Forest Plan Area (ha)	Forest Plan Percentage	Forest District Area (ha)	Forest District Percentage
Total Area	1320.8	100%	28101.3	100%
Total Wooded Area	1239.9	93.9%	23605.8	83.9%
Open Habitat (>10%)	80.9	6.1%	4495.5	16.1%
Natural Reserves* (1%)	73.6	5.6%	591.8	2.1%
Long-term Retentions*, Coppice, LISS* & Minimum Intervention* (>1%)	1123.8	85.1%	14,614.5	52%
Area of Conservation Value (>15%) including underlying land designations, Ancient Woodland*, PAWS*, Open Habitat, Minimum Intervention*, Natural Reserves, Long Term Retentions & LISS	1269.4	96.1%	17,654	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.	1) Adapting our management practices to suit the character and requirements of local woodlands whilst satisfying national standards and business requirements. 2) 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. Ensure stands are more structurally diverse, actively managing the woodland to promote age- and species-diversity. Consider emerging timber markets and evolving harvesting methods.	Forestry operations and restocking will be recorded in the Forestry England sub-compartment database and monitored at 5 year mid-term review and 10 year renewal. 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.	1) 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. 2) 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 3) Where possible, work with interested parties to explore ways to maintain or improve biodiversity and features of cultural or heritage value to the local community.	Manage the statutory NNR & SSSI areas as agreed with Natural England in the current NNR & SSSI management plans. Continue restoration of Ancient Woodland through the gradual reduction of non-native species and replacement with appropriate species better suited to the impacts of climate change, pests and diseases. Identify key species and habitats, including European Protected Species associated with Forestry England's land, and make appropriate provision for their requirements. Maintain the ecological value of priority habitats. Maintain and improve open and woodland edge habitats and structure to benefit flora and fauna, continuing the programme of ride-widening and coppice management throughout the woodlands. Identify existing Trees of Special Interest and manage appropriately to retain these, recruit future veteran trees and increase the volume and distribution of deadwood.	Monitoring as specified in the current NNR & SSSI management plans. Ancient Woodland restoration monitored as part of the 10 year forest plan renewal. 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 mid-term 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.	1) Provide safe and accessible woodlands. 2) Offering opportunities for quiet recreation and adventurous activities, to enable people to experience the potential health and wellbeing benefits. 3) Developing partnership with private businesses and public bodies to expand and improve recreational opportunities across the estate. 4) 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. 5) Encouraging third party environmental educators and other partners to offer learning opportunities on the public forest estate	Maintain informal public access on foot in all freehold areas and continue to make some provision for information and learning. Design, phase and scale harvesting and thinning operations sympathetically to maintain aesthetic value within the woodlands and integrate forest boundaries within the wider landscape where possible. Conserve heritage features in line with Forestry England's Historic Environment guidance. Engage with third party partners and businesses where compatible with wider Forest Plan objectives.	Monitor via Forestry England's lease & permit systems. 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. 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, long term 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.

Clearfelling

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). A scatter 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 out-competing other species.

Coppice

Coppicing is silvicultural system 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).

Forest Plan (FP)

A 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 promoting sustainable forest management to the forest industry and consumers.

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.

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...)

Low Impact Silviculture 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. LISS are generally compatible with windfirm conifer woodlands and most broadleaved woodlands.

Minimum intervention

Management with no systematic felling or planting of trees. Operations normally accepted are fencing, control of non-native plant species and vertebrate pests, maintenance of paths and rides and safety work.

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.

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 areas which 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.

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.

Near Native / Honorary Native Species

In a changing climate many tree species native to continental Europe will spread north. These species are classified as 'honorary/near-native': a species previously considered to be non-native, but whose climate envelope will expand over England as a result of climate change.

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

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*.

Phytophthora pluvialis

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 Monument

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.

Glossary (continued...)

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.

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.

Shelterwood

The shelterwood system involves the felling of a proportion of the mature trees within an area whilst leaving some trees as a seed source and shelter for natural regeneration. The seed trees are subsequently removed. Note that the term 'seed tree system' is often used to describe 'shelterwoods' with densities of <50 retained mature trees per hectare.

The spatial arrangement of the retained trees can be uniform, in groups, or in strips, so giving rise to the name of different shelterwood systems. The removal of the seed trees can involve several felling operations.

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 stated priorities which are to be delivered across an extensive landscape, such as a District or nation-wide, which then informs the vision and objectives of a Forest Plan at a more local scale.

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.

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.)

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

Areas of historical, cultural and ecological interest, where grazing may be/have been used in combination with a proportion of open tree canopy cover.

Yield Class

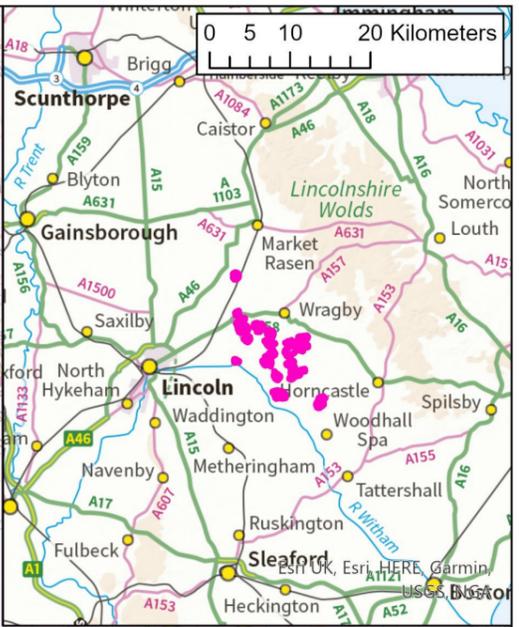
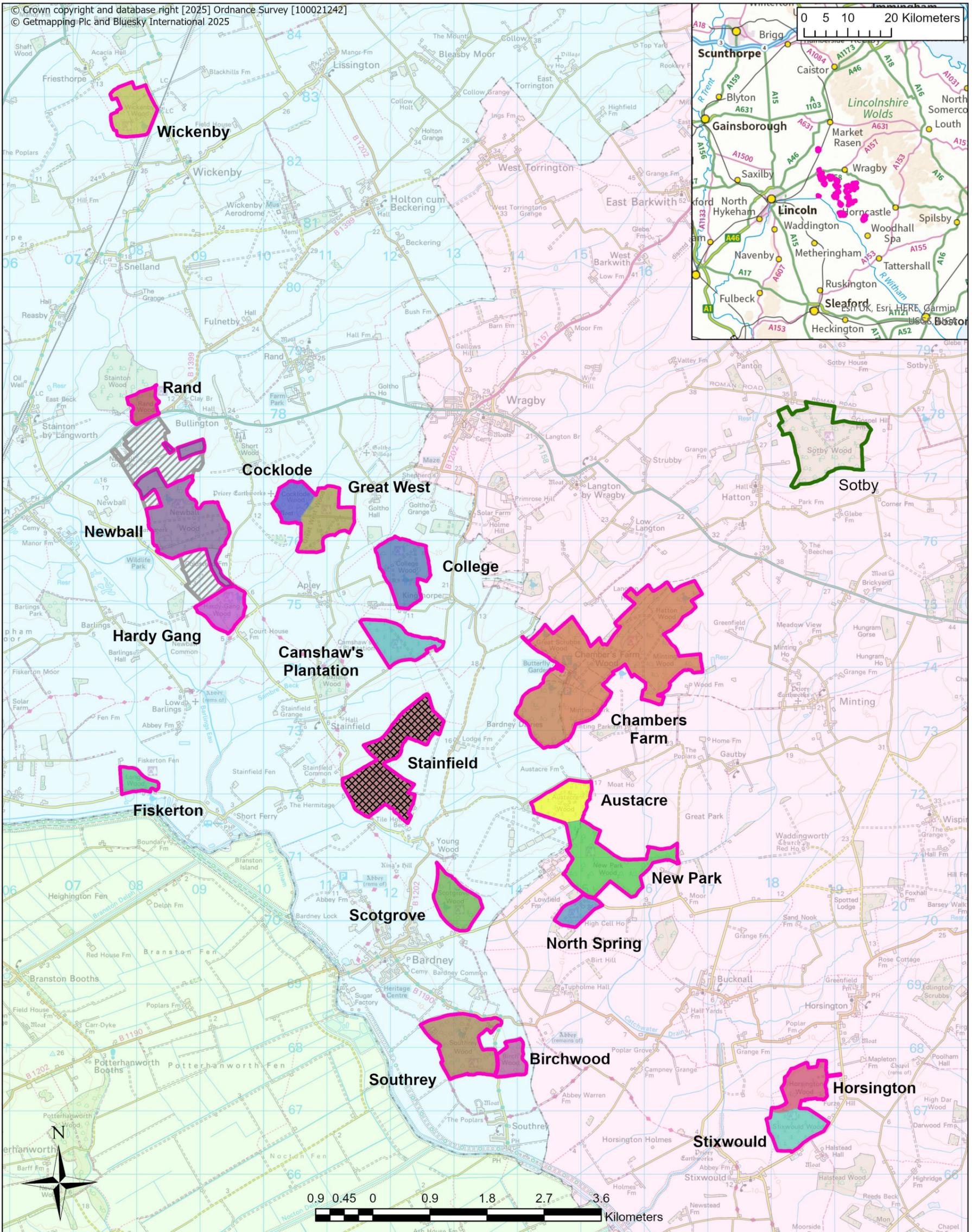
Yield class is a measure of the growth rate of a tree crop on a given site. It describes the maximum average volume increase that a particular crop can achieve on 1 ha of land each year. For example, a crop capable of a maximum annual growth of 14 m³ per hectare has a yield class of 14. Yield Class varies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

Appendix II
Designations Summary Table

Wood	Area (ha)	% Bardney FP Area	SSSI designation			Ancient Woodland						Secondary Woodland	
			(ha)	% Wood Area	Notes*	ASNW		PAWS		Total		(ha)	% Wood Area
						(ha)	% Wood Area	(ha)	% Wood Area	(ha)	% Wood Area		
Wickenby	46.6	3.5%	43.6	93.7%	Wickenby SSSI	43.2	92.8%	3.4	7.2%	46.6	100.0%	0.0	0.0%
Rand	19.0	1.4%	0.0	0.0%	n/a	10.0	52.7%	8.9	47.0%	18.9	99.7%	0.1	0.3%
Newball**	134.0	10.1%	69.1	51.6%		120.1	89.6%	0.0	0.0%	120.1	89.6%	13.9	10.4%
Great West & Cocklode	86.3	6.5%	51.2	59.3%		57.5	66.6%	28.8	33.4%	86.3	100.0%	0.0	0.0%
College	63.9	4.8%	49.6	77.6%		40.6	63.5%	20.0	31.3%	60.6	94.8%	3.3	5.2%
Hardy Gang	35.6	2.7%	26.8	75.3%		35.6	100.0%	0.0	0.0%	35.6	100.0%	0.0	0.0%
Camshaw's Plantation	48.5	3.7%	0.0	0.0%	n/a	0.0	0.0%	0.0	0.0%	0.0	0.0%	48.5	100.0%
Chambers	348.4	26.4%	67.9	19.5%	includes 1.7ha of Little Scrubbs Meadow SSSI	127.5	36.6%	74.7	21.4%	202.2	58.0%	146.2	42.0%
Fiskerton	16.7	1.3%	0.0	0.0%	n/a	13.8	82.2%	2.9	17.5%	16.7	99.7%	0.0	0.3%
Stainfield	124.1	9.4%	124.0	99.9%	not part of NNR	101.1	81.5%	23.0	18.5%	124.1	100.0%	0.0	0.0%
Austacre, New Park & North Spring	164.3	12.4%	0.0	0.0%	n/a	72.8	44.3%	59.3	36.1%	132.1	80.4%	32.2	19.6%
Scotgrove	45.0	3.4%	29.2	64.9%		0.0	0.0%	45.0	100.0%	45.0	100.0%	0.0	0.0%
Southrey & Birch	103.2	7.8%	69.7	67.5%		73.1	70.8%	30.1	29.2%	103.2	100.0%	0.0	0.0%
Horsington & Stixwold	85.2	6.5%	0.0	0.0%	n/a	2.2	2.5%	9.1	10.7%	11.2	13.2%	74.0	86.8%
TOTALS	1320.8	100.0%	531.1	40.2%		697.5	52.8%	305.1	23.1%	1002.5	75.9%	318.2	24.1%

* Bardney Limewoods NNR & SSSI unless otherwise stated

** Includes existing woodland within the recently acquired landholding proposed for woodland creation



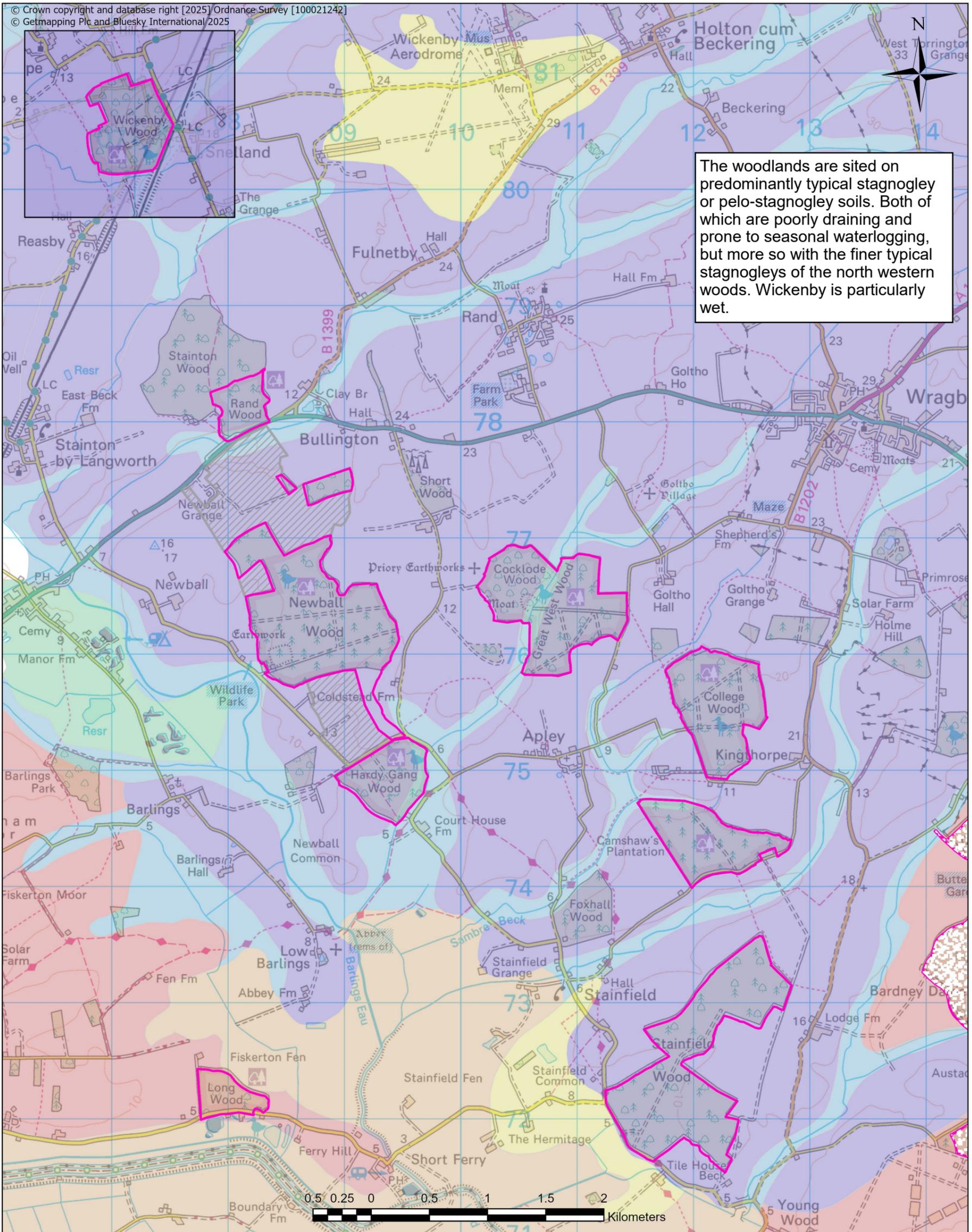
Bardney Limewoods Forest Plan 2025
Location Map
 Date: June 2025
 Main Map Scale @ A3: 1:55,000

- Bardney Woodlands FP Area
 - Recently acquired land proposed for woodland creation
 - Other Forestry England existing Woodland
 - No public access (leasehold woodland)
- Local Authority
- East Lindsey
 - West Lindsey
 - North Kesteven

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

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The woodlands are sited on predominantly typical stagnogley or pelo-stagnogley soils. Both of which are poorly draining and prone to seasonal waterlogging, but more so with the finer typical stagnogleys of the north western woods. Wickenby is particularly wet.

Bardney Limewoods Forest Plan 2025
North West Woods
Soils Map
 Date: June 2025
 Scale @ A3: 1:30,000

^ Soil Type Classification

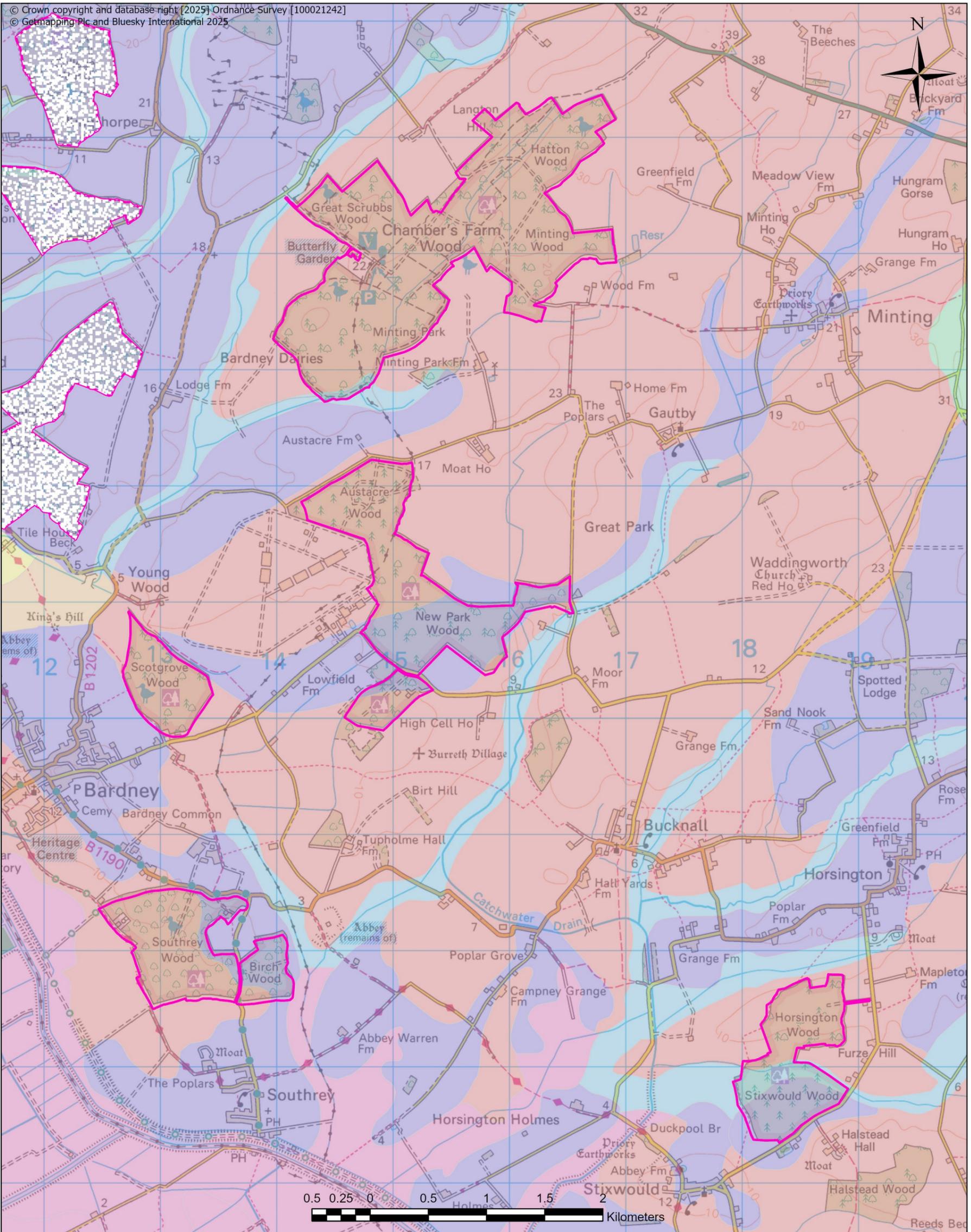
Green	Brown calcareous earths (511e, 512c, 513)	Yellow	Typical sandy gley (821b)
Blue	Typical stagnogleys (711fmrst)	Pink	Typical humic-alluvial gleys (851ab)
Red	Pelo-stagnogley (712g)	Light Brown	Earthy eutro-amorphous peat (1024b)
Light Blue	Pelo-alluvial gley (813c)	Grey	Lake
Pink outline	Bardney Woodlands FP Area		
Grey hatched	Proposed for woodland creation		

^ Soil data from the National Soil Map and Soil Classification (Copyright Cranfield University, 2018)

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Bardney Limewoods Forest Plan 2025

South East Woods
Soils Map

Date: June 2025
Scale @ A3: 1:30,000

^ Soil Type Classification

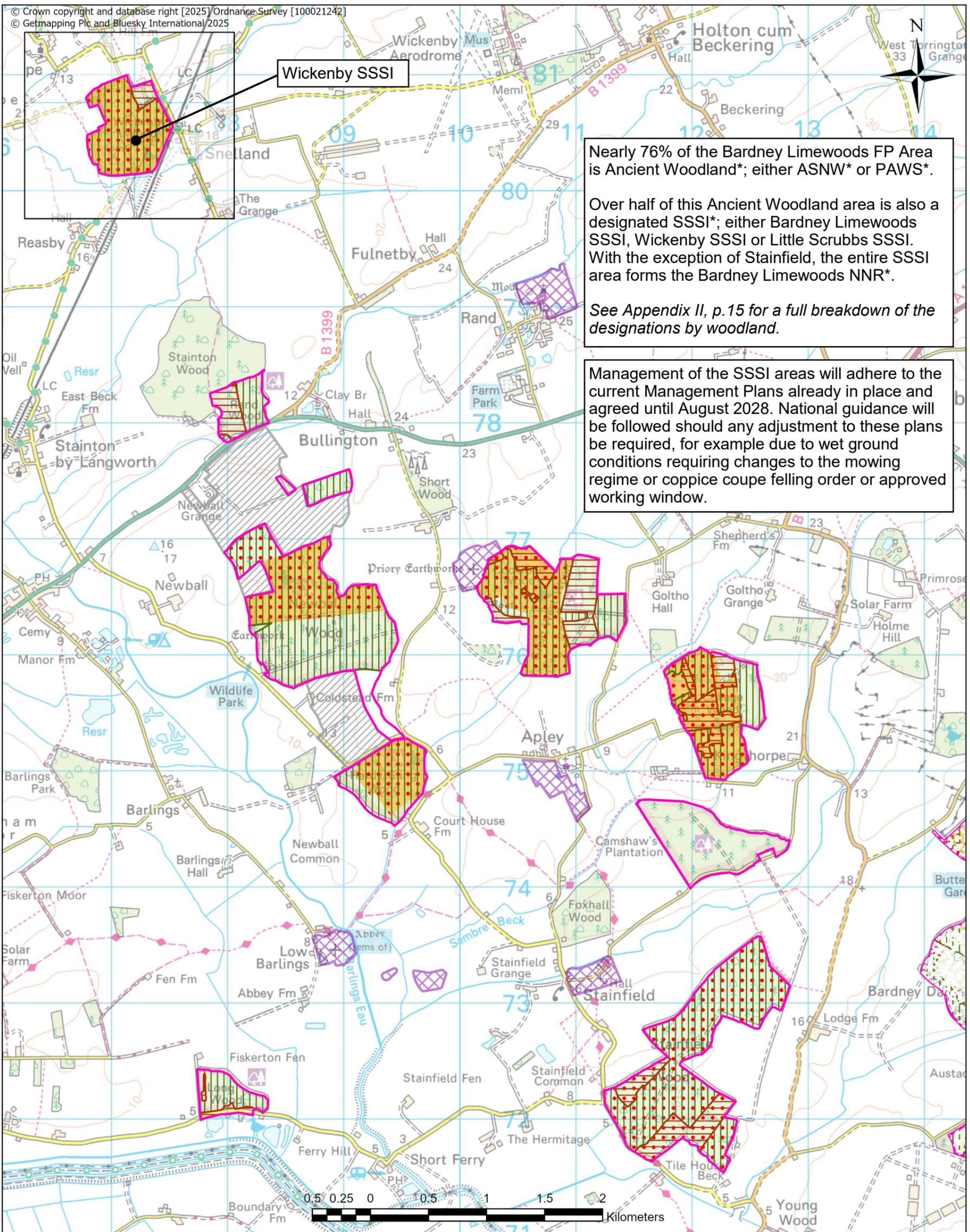
Brown calcareous earths (511e, 512c, 513)	Typical sandy gley (821b)
Typical stagnogleys (711fmrst)	Typical humic-alluvial gleys (851ab)
Pelo-stagnogley (712g)	Earthy eutro-amorphous peat (1024b)
Pelo-alluvial gley (813c)	Lake
Bardney Woodlands FP Area	

^ Soil data from the National Soil Map and Soil Classification (Copyright Cranfield University, 2018)

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PEFC
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Bardney Limewoods Forest Plan 2025

North West Woods Designations Map

Date: June 2025
Scale @ A3: 1:30,000

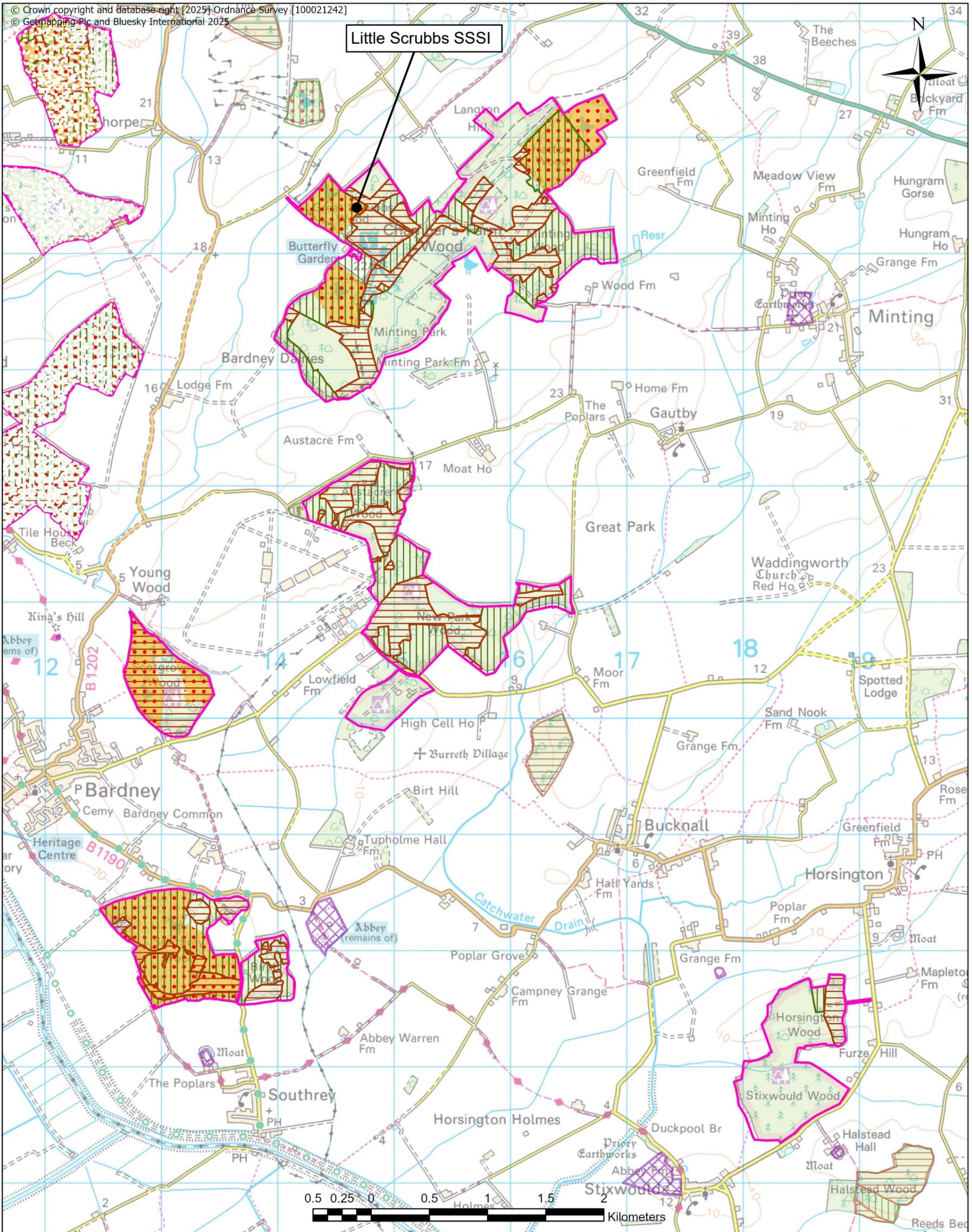
- Bardney Woodlands FP Area
- Proposed for woodland creation
- Ancient & Semi-Natural Woodland (ASNW)
- Ancient Replanted Woodland (PAWS)
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserves (NNR)
- Scheduled Monuments

Lighter shading of legend elements indicates designation is outside Bardney Limewoods FP area



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



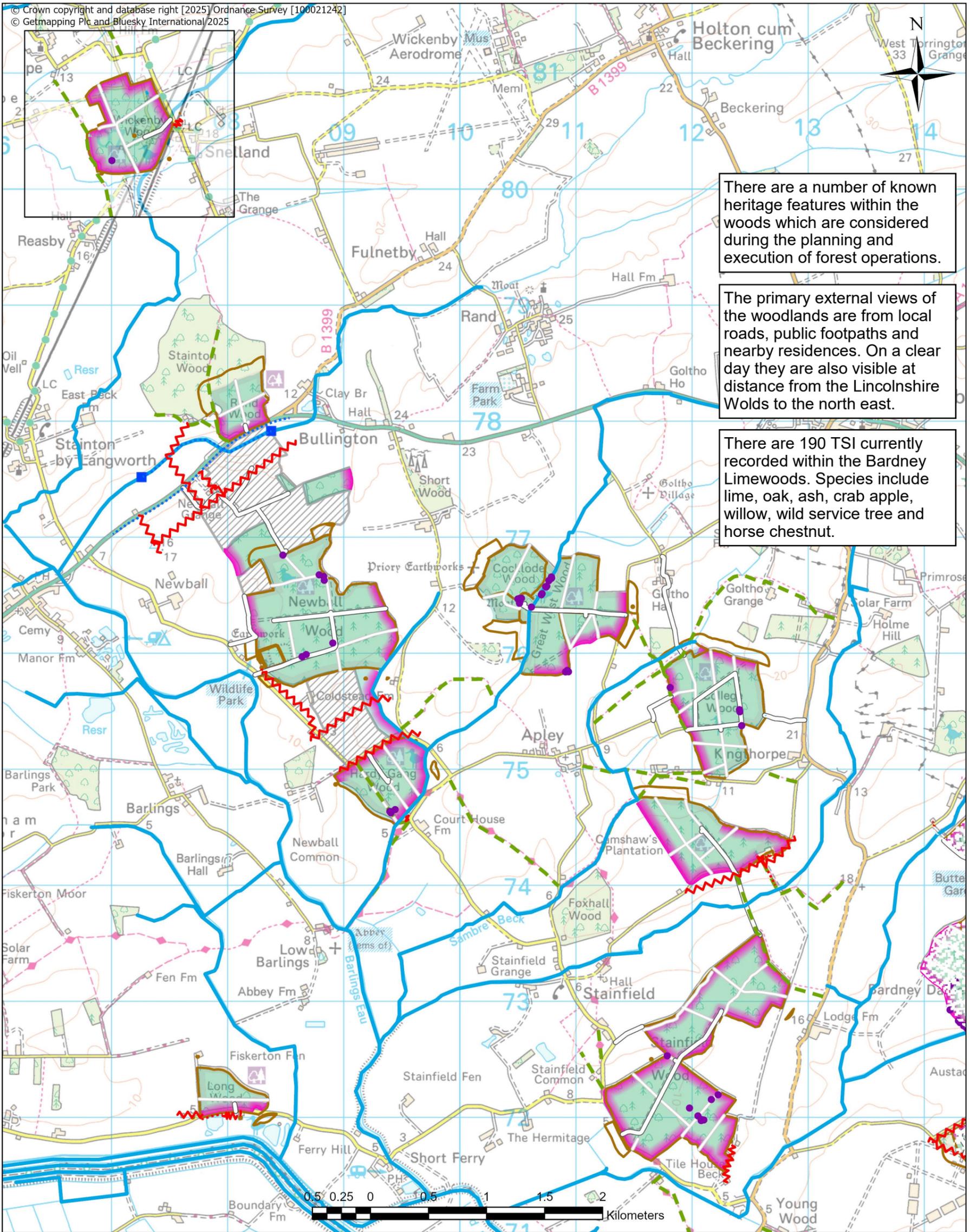


Bardney Limewoods Forest Plan 2025
South East Woods Designations Map
 Date: June 2025
 Scale @ A3: 1:30,000

- Bardney Woodlands FP Area
- National Nature Reserves (NNR)
- Sites of Special Scientific Interest (SSSI)
- Ancient & Semi-Natural Woodland (ASNW)
- Ancient Replanted Woodland (PAWS)
- Scheduled Monuments

Lighter shading of legend elements indicates designation is outside Forestry England management area

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



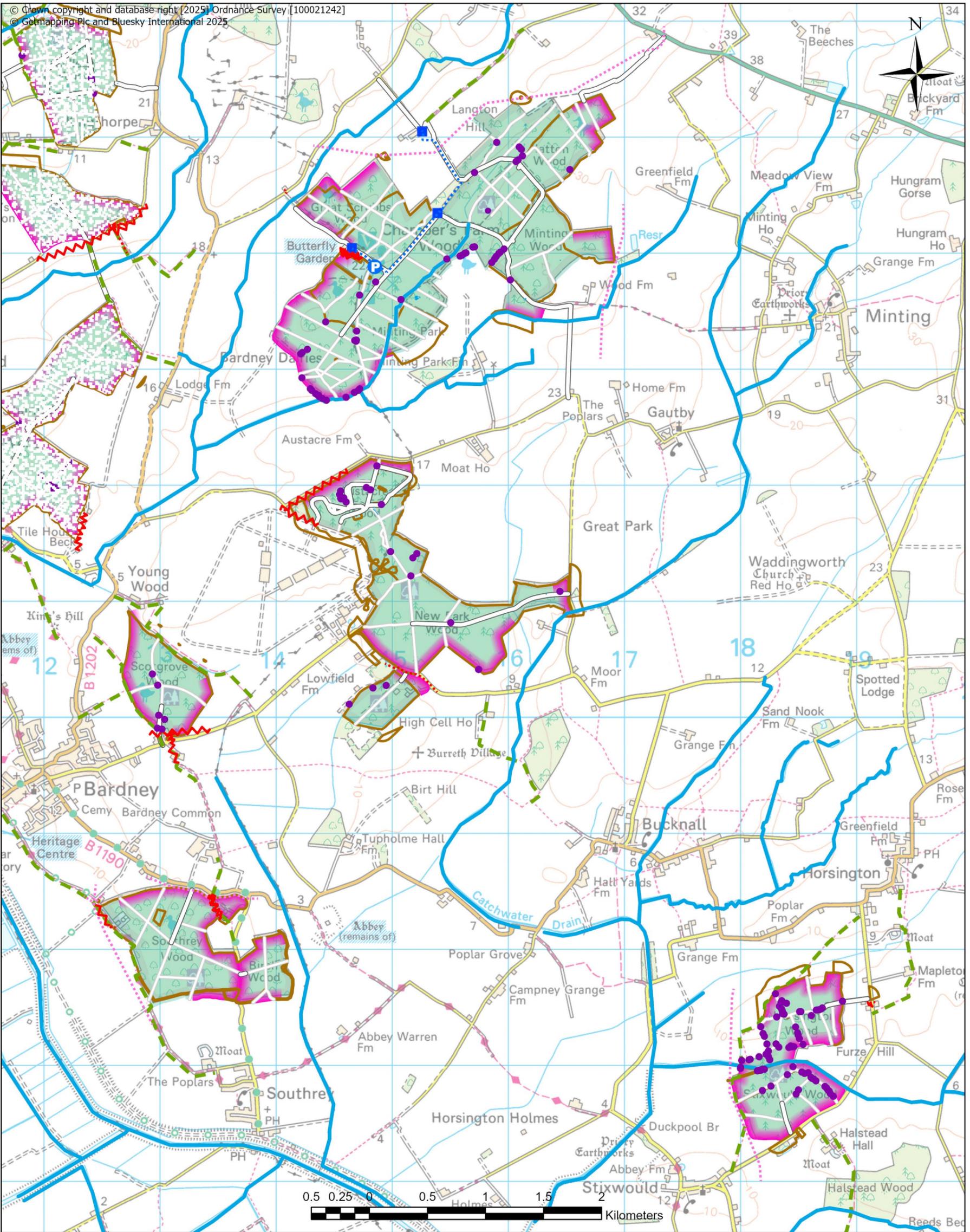
Bardney Limewoods Forest Plan 2025
North West Woods
Survey Map
 Date: June 2025
 Scale @ A3: 1:30,000

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| <ul style="list-style-type: none"> Bardney Woodlands FP Area Proposed for woodland creation Heritage Features TSI Principal Watercourses Ponds | <p>Utilities</p> <ul style="list-style-type: none"> Overhead Powerlines Underground Powerlines Gas Pipelines Water Pipelines Water Supply Points | <p>Access</p> <ul style="list-style-type: none"> Public Rights of Way Carpark Forest Roads Rides Visually Sensitive Boundaries |
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Forestry England

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

Promoting Sustainable Forest Management



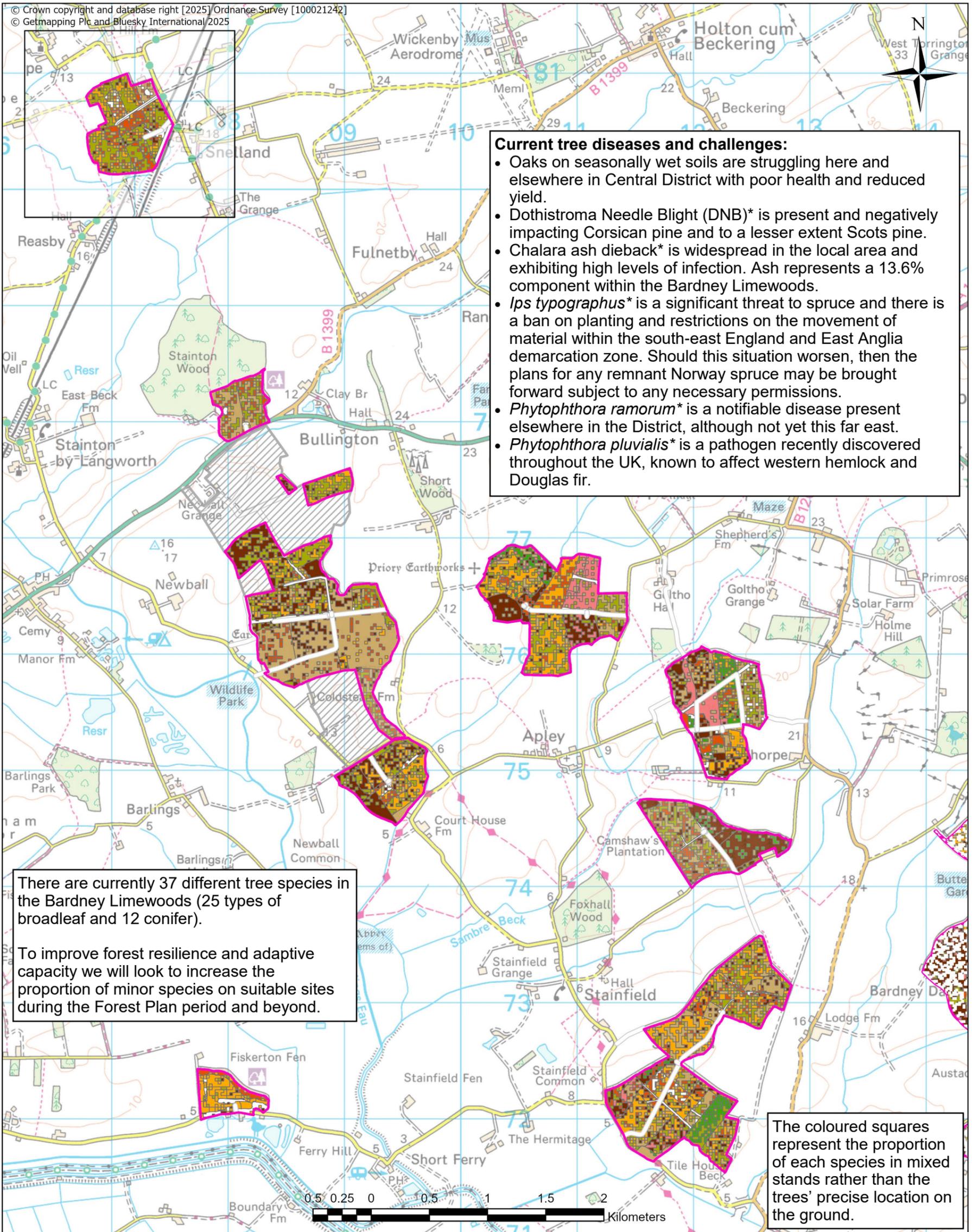
Bardney Limewoods Forest Plan 2025
South East Woods
Survey Map
 Date: June 2025
 Scale @ A3: 1:30,000

- | | | |
|---------------------------|------------------------|-------------------------------|
| Bardney Woodlands FP Area | Utilities | Access |
| Heritage Features | Overhead Powerlines | Public Rights of Way |
| TSI | Underground Powerlines | Carpark |
| Principal Watercourses | Gas Pipelines | Forest Roads |
| Ponds | Water Pipelines | Rides |
| | Water Supply Points | Visually Sensitive Boundaries |

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Current tree diseases and challenges:

- Oaks on seasonally wet soils are struggling here and elsewhere in Central District with poor health and reduced yield.
- Dothistroma Needle Blight (DNB)* is present and negatively impacting Corsican pine and to a lesser extent Scots pine.
- Chalara ash dieback* is widespread in the local area and exhibiting high levels of infection. Ash represents a 13.6% component within the Bardney Limewoods.
- *Ips typographus** is a significant threat to spruce and there is a ban on planting and restrictions on the movement of material within the south-east England and East Anglia demarcation zone. Should this situation worsen, then the plans for any remnant Norway spruce may be brought forward subject to any necessary permissions.
- *Phytophthora ramorum** is a notifiable disease present elsewhere in the District, although not yet this far east.
- *Phytophthora pluvialis** is a pathogen recently discovered throughout the UK, known to affect western hemlock and Douglas fir.

There are currently 37 different tree species in the Bardney Limewoods (25 types of broadleaf and 12 conifer).

To improve forest resilience and adaptive capacity we will look to increase the proportion of minor species on suitable sites during the Forest Plan period and beyond.

The coloured squares represent the proportion of each species in mixed stands rather than the trees' precise location on the ground.

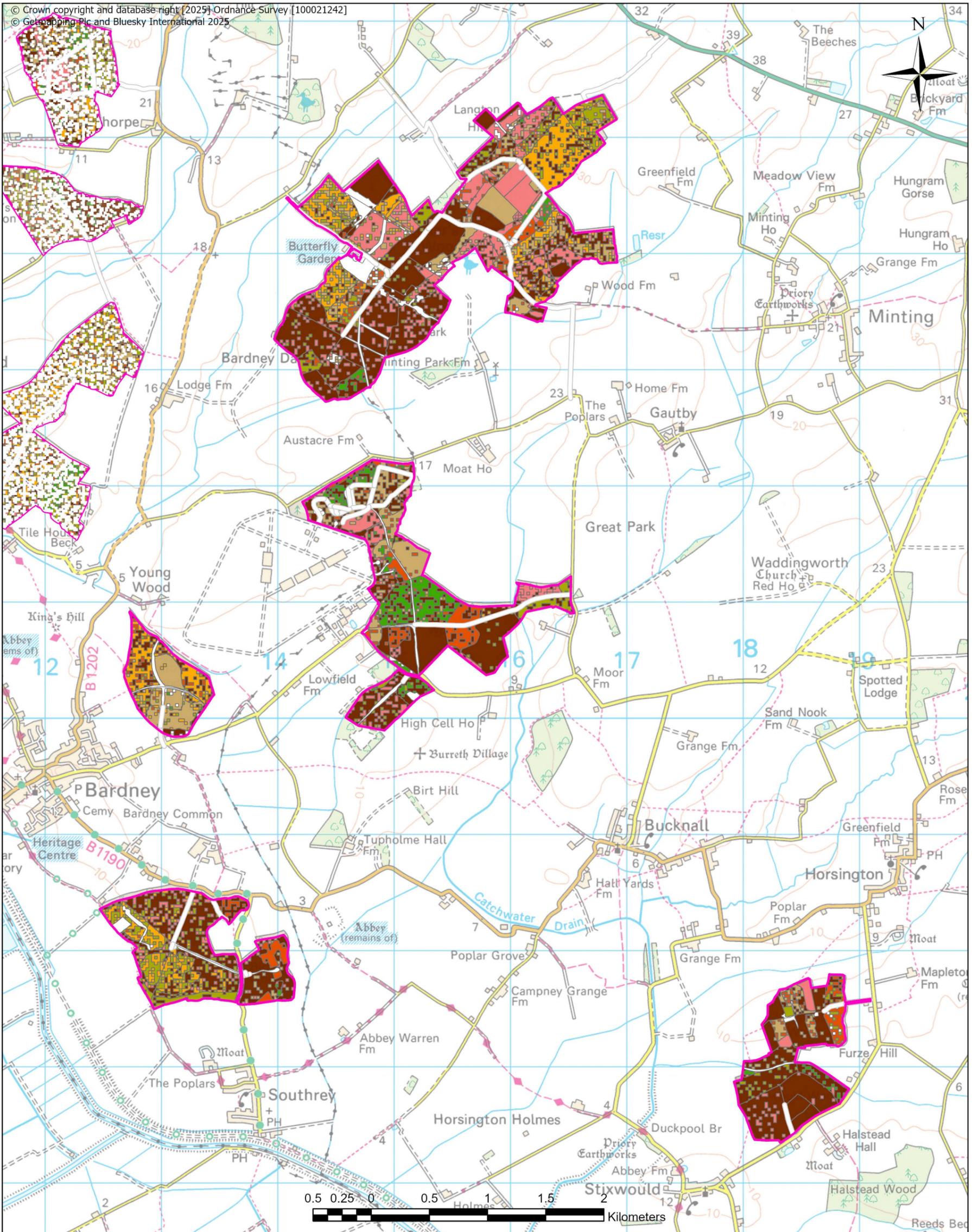
Bardney Limewoods Forest Plan 2025

North West Woods Current Species Map

Date: June 2025
Scale @ A3: 1:30,000

Bardney Woodlands FP Area	Oaks	Other Broadleaves
Proposed for woodland creation	Ash	Pines
Forest Roads	Birch	Other Conifers
Open	Limes	

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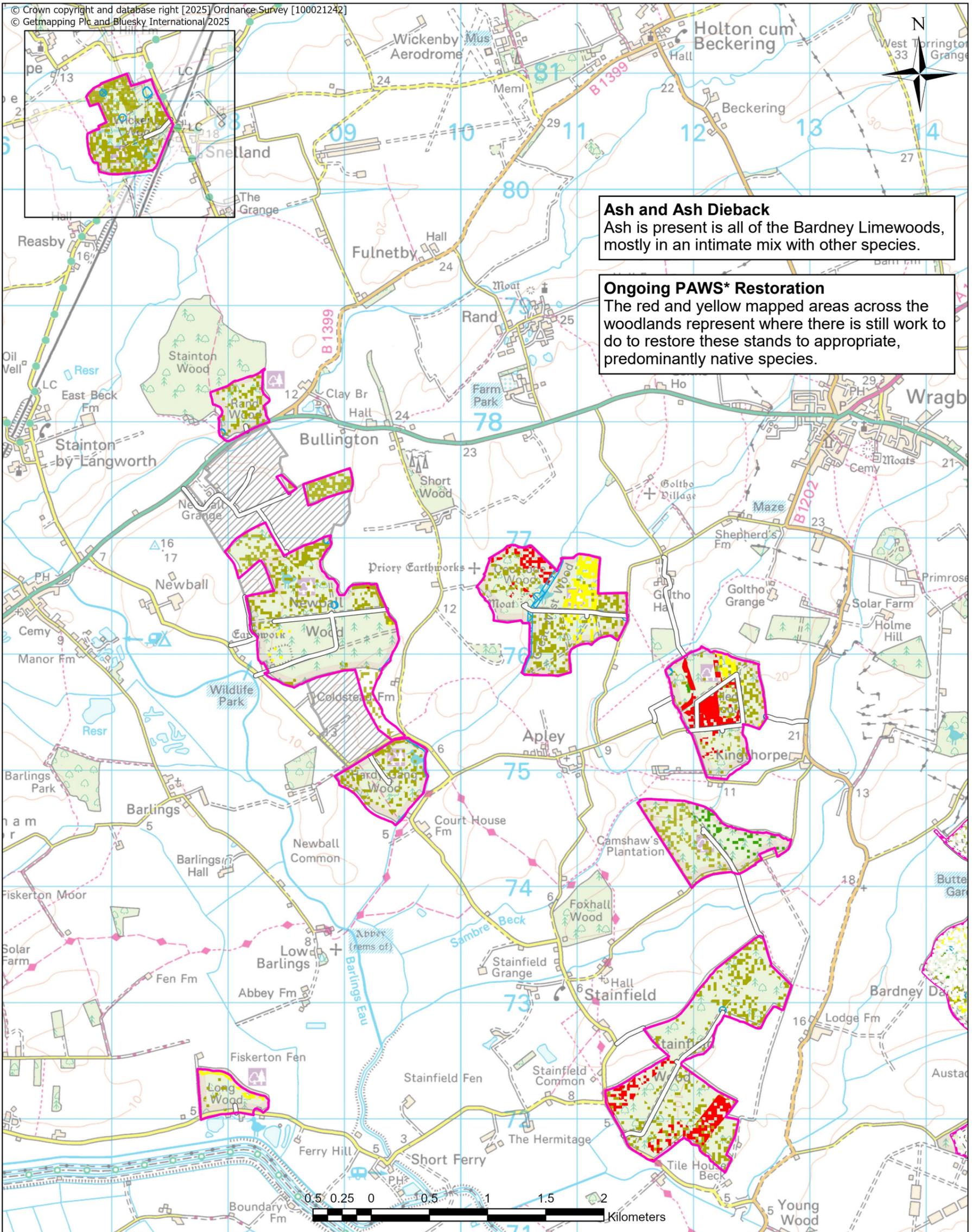
Bardney Limewoods Forest Plan 2025
South East Woods
Current Species Map
 Date: June 2025
 Scale @ A3: 1:30,000

<p>□ Bardney Woodlands FP Area</p> <p>— Forest Roads</p> <p>□ Open</p>	Species	
	■ Oaks	■ Other Broadleaves
	■ Ash	■ Pines
	■ Birch	■ Other Conifers
	■ Limes	

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Bardney Limewoods Forest Plan 2025
North West Woods Analysis Map
 Date: June 2025
 Scale @ A3: 1:30,000

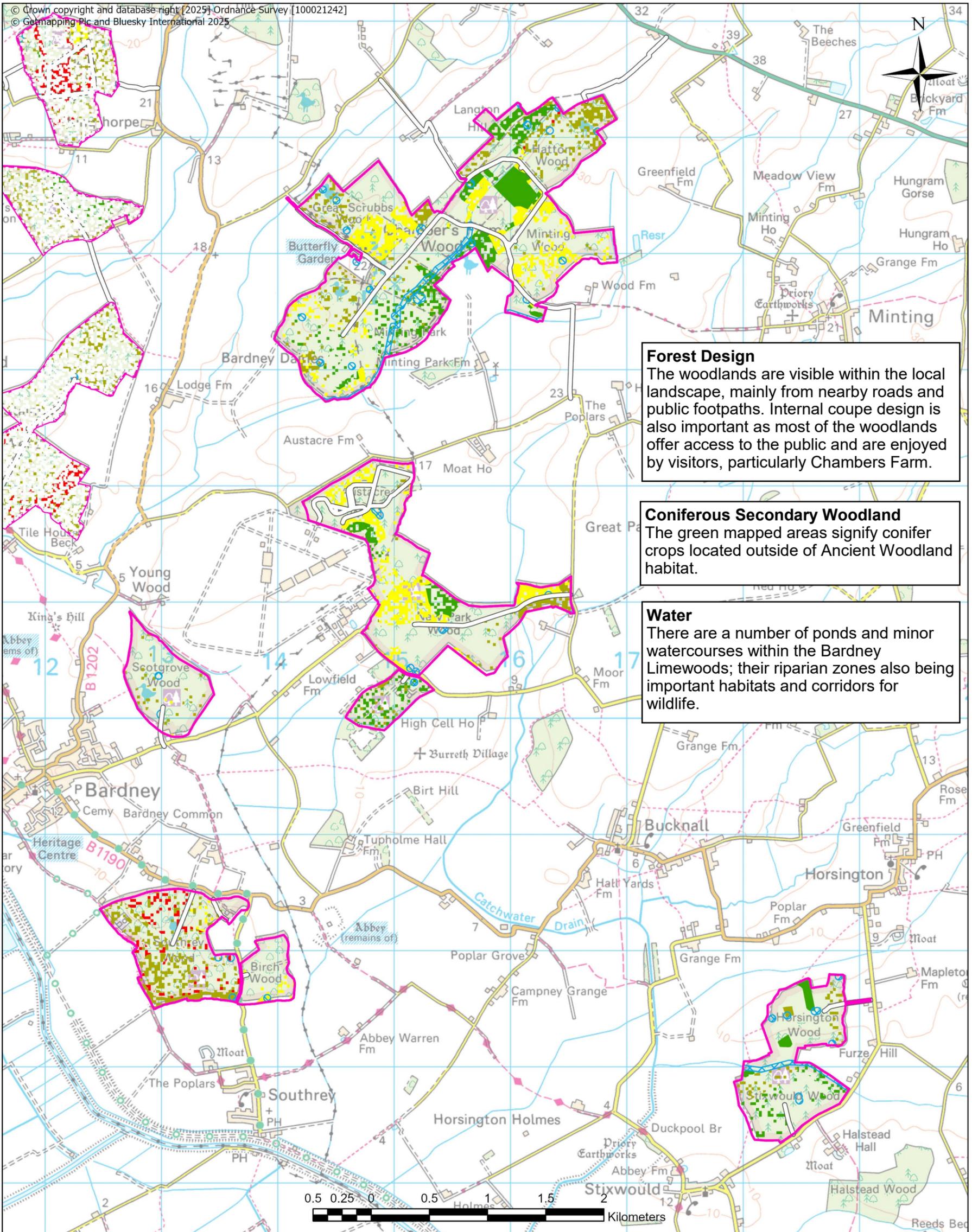
- Bardney Woodlands FP Area
- Proposed for woodland creation
- Forest Roads
- Riparian Areas
- Coniferous Secondary Woodland
- Ash
- Unrestored PAWS
- Unrestored PAWS in SSSI

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Forest Design
The woodlands are visible within the local landscape, mainly from nearby roads and public footpaths. Internal coupe design is also important as most of the woodlands offer access to the public and are enjoyed by visitors, particularly Chambers Farm.

Coniferous Secondary Woodland
The green mapped areas signify conifer crops located outside of Ancient Woodland habitat.

Water
There are a number of ponds and minor watercourses within the Bardney Limewoods; their riparian zones also being important habitats and corridors for wildlife.

Bardney Limewoods Forest Plan 2025
South East Woods Analysis Map
Date: June 2025
Scale @ A3: 1:30,000

- Bardney Limewoods FP Area
- Forest Roads
- Riparian Areas
- Coniferous Secondary Woodland
- Ash
- Unrestored PAWS
- Unrestored PAWS in SSSI



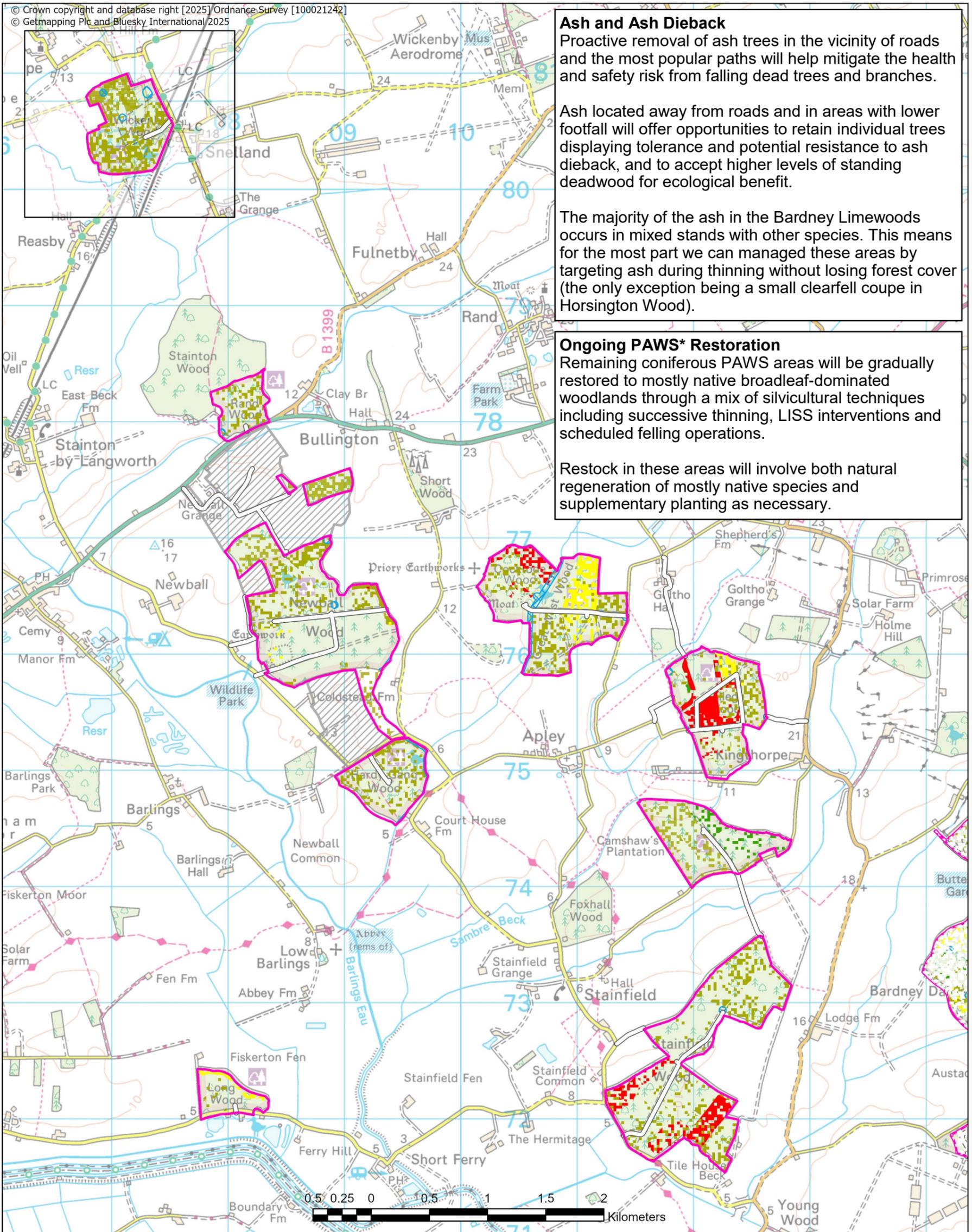
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Ash and Ash Dieback
Proactive removal of ash trees in the vicinity of roads and the most popular paths will help mitigate the health and safety risk from falling dead trees and branches.

Ash located away from roads and in areas with lower footfall will offer opportunities to retain individual trees displaying tolerance and potential resistance to ash dieback, and to accept higher levels of standing deadwood for ecological benefit.

The majority of the ash in the Bardney Limewoods occurs in mixed stands with other species. This means for the most part we can managed these areas by targeting ash during thinning without losing forest cover (the only exception being a small clearfell coupe in Horsington Wood).

Ongoing PAWS* Restoration
Remaining coniferous PAWS areas will be gradually restored to mostly native broadleaf-dominated woodlands through a mix of silvicultural techniques including successive thinning, LISS interventions and scheduled felling operations.

Restock in these areas will involve both natural regeneration of mostly native species and supplementary planting as necessary.

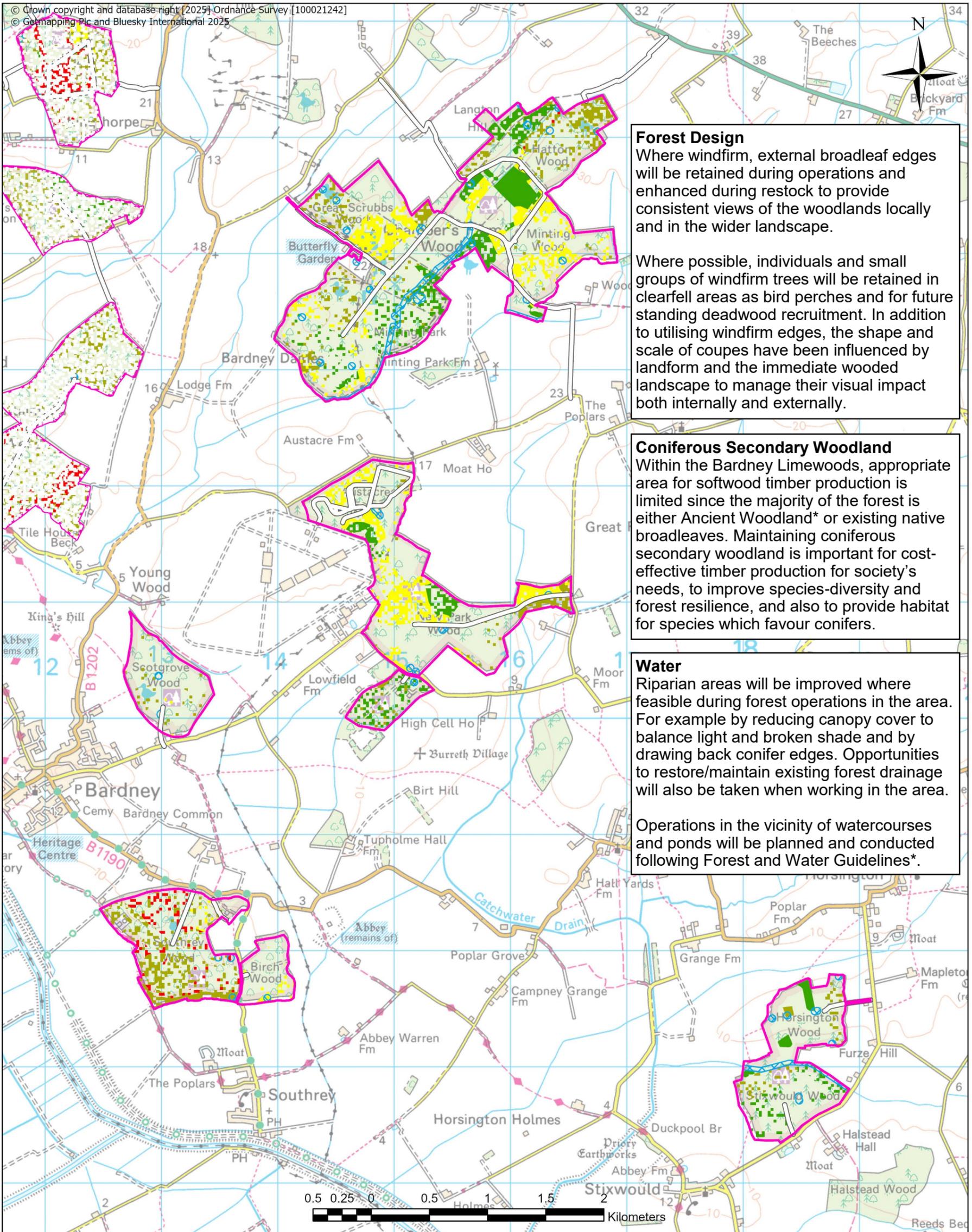
Bardney Limewoods Forest Plan 2025
North West Woods Concept Map
Date: June 2025
Scale @ A3: 1:30,000

- Bardney Woodlands FP Area
- Coniferous Secondary Woodland
- Ash
- Unrestored PAWS
- Unrestored PAWS in SSSI
- Proposed for woodland creation
- Forest Roads
- Riparian Areas

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Forest Design
 Where windfirm, external broadleaf edges will be retained during operations and enhanced during restock to provide consistent views of the woodlands locally and in the wider landscape.
 Where possible, individuals and small groups of windfirm trees will be retained in clearfell areas as bird perches and for future standing deadwood recruitment. In addition to utilising windfirm edges, the shape and scale of coupes have been influenced by landform and the immediate wooded landscape to manage their visual impact both internally and externally.

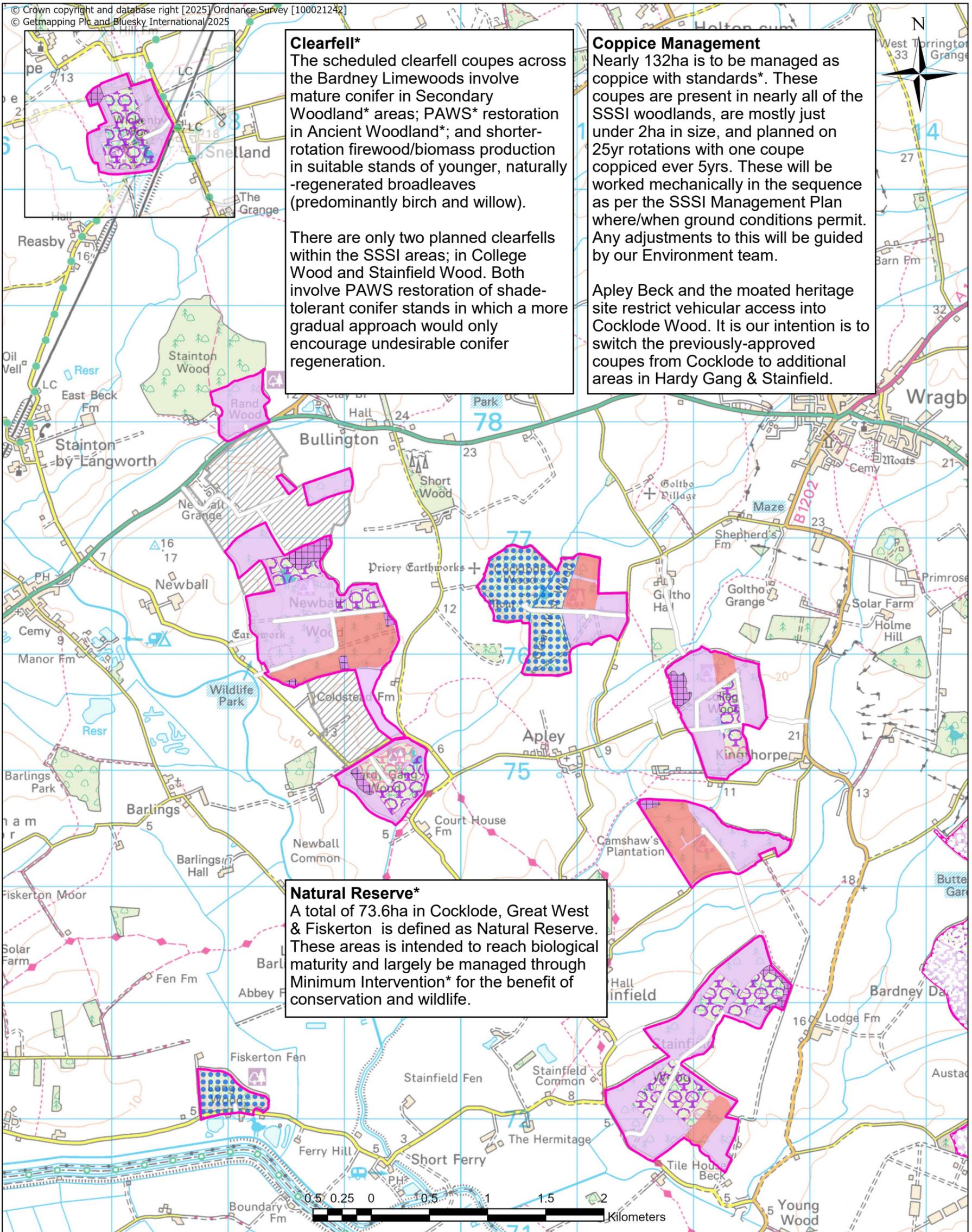
Coniferous Secondary Woodland
 Within the Bardney Limewoods, appropriate area for softwood timber production is limited since the majority of the forest is either Ancient Woodland* or existing native broadleaves. Maintaining coniferous secondary woodland is important for cost-effective timber production for society's needs, to improve species-diversity and forest resilience, and also to provide habitat for species which favour conifers.

Water
 Riparian areas will be improved where feasible during forest operations in the area. For example by reducing canopy cover to balance light and broken shade and by drawing back conifer edges. Opportunities to restore/maintain existing forest drainage will also be taken when working in the area.
 Operations in the vicinity of watercourses and ponds will be planned and conducted following Forest and Water Guidelines*.

Bardney Limewoods Forest Plan 2025
**South East Woods
 Concept Map**
 Date: June 2025
 Scale @ A3: 1:30,000

- Bardney Limewoods FP Area
- Forest Roads
- Riparian Areas
- Coniferous Secondary Woodland
- Ash
- Unrestored PAWS
- Unrestored PAWS in SSSI

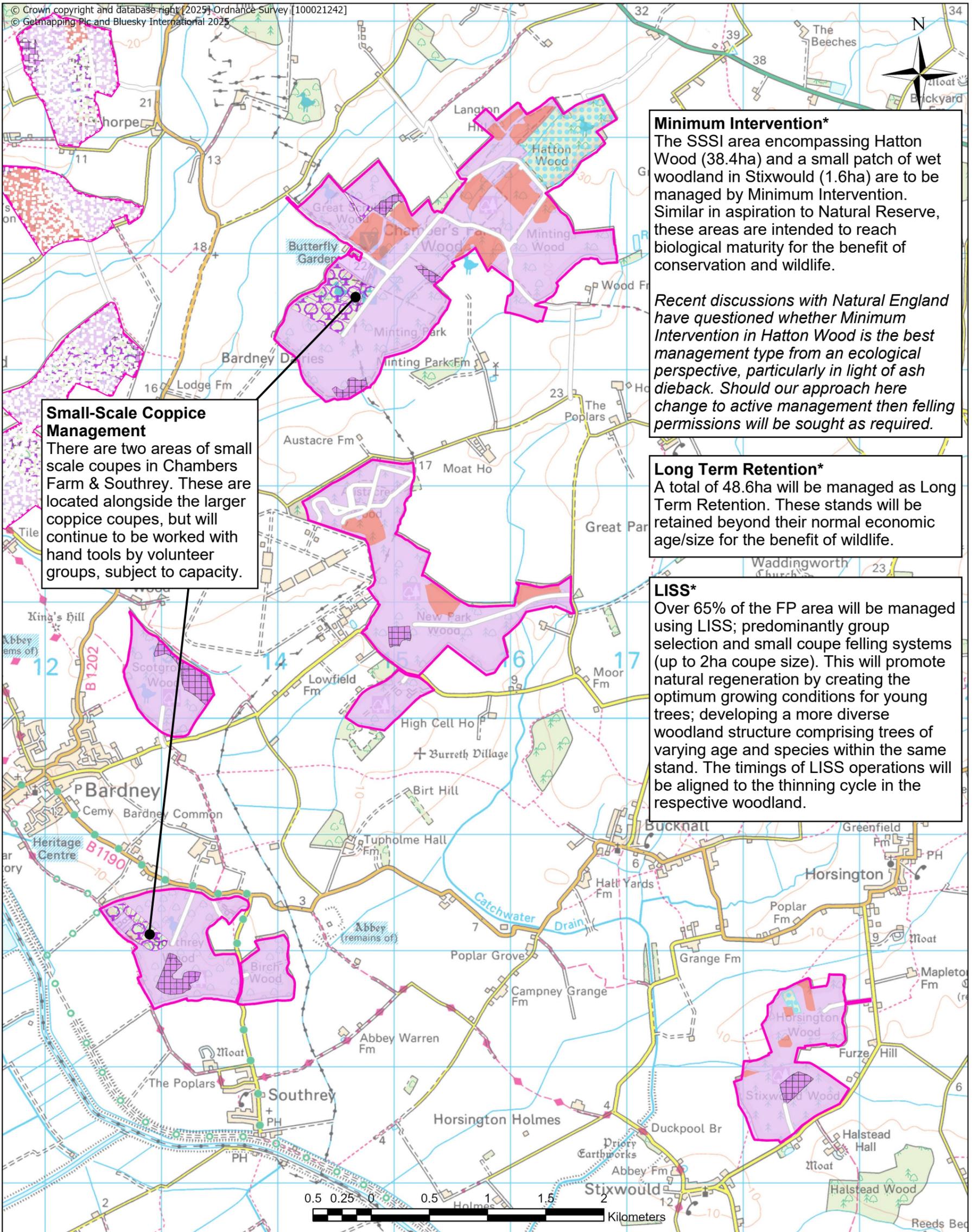
Forestry England
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Bardney Limewoods Forest Plan 2025
North West Woods
Silvicultural Systems Map
 Date: June 2025
 Scale @ A3: 1:30,000

Bardney Woodlands FP Area		Silvicultural System	
	Bardney Woodlands FP Area		Clearfell
	Proposed for woodland creation		LISS / Open
	Forest Roads & Rides		Natural Reserve
			Long Term Retention
			Coppice with Standards (as SSSI Mgt Plan)
			Coppice with Standards (new/intended)

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Minimum Intervention*
 The SSSI area encompassing Hatton Wood (38.4ha) and a small patch of wet woodland in Stixwold (1.6ha) are to be managed by Minimum Intervention. Similar in aspiration to Natural Reserve, these areas are intended to reach biological maturity for the benefit of conservation and wildlife.

Recent discussions with Natural England have questioned whether Minimum Intervention in Hatton Wood is the best management type from an ecological perspective, particularly in light of ash dieback. Should our approach here change to active management then felling permissions will be sought as required.

Long Term Retention*
 A total of 48.6ha will be managed as Long Term Retention. These stands will be retained beyond their normal economic age/size for the benefit of wildlife.

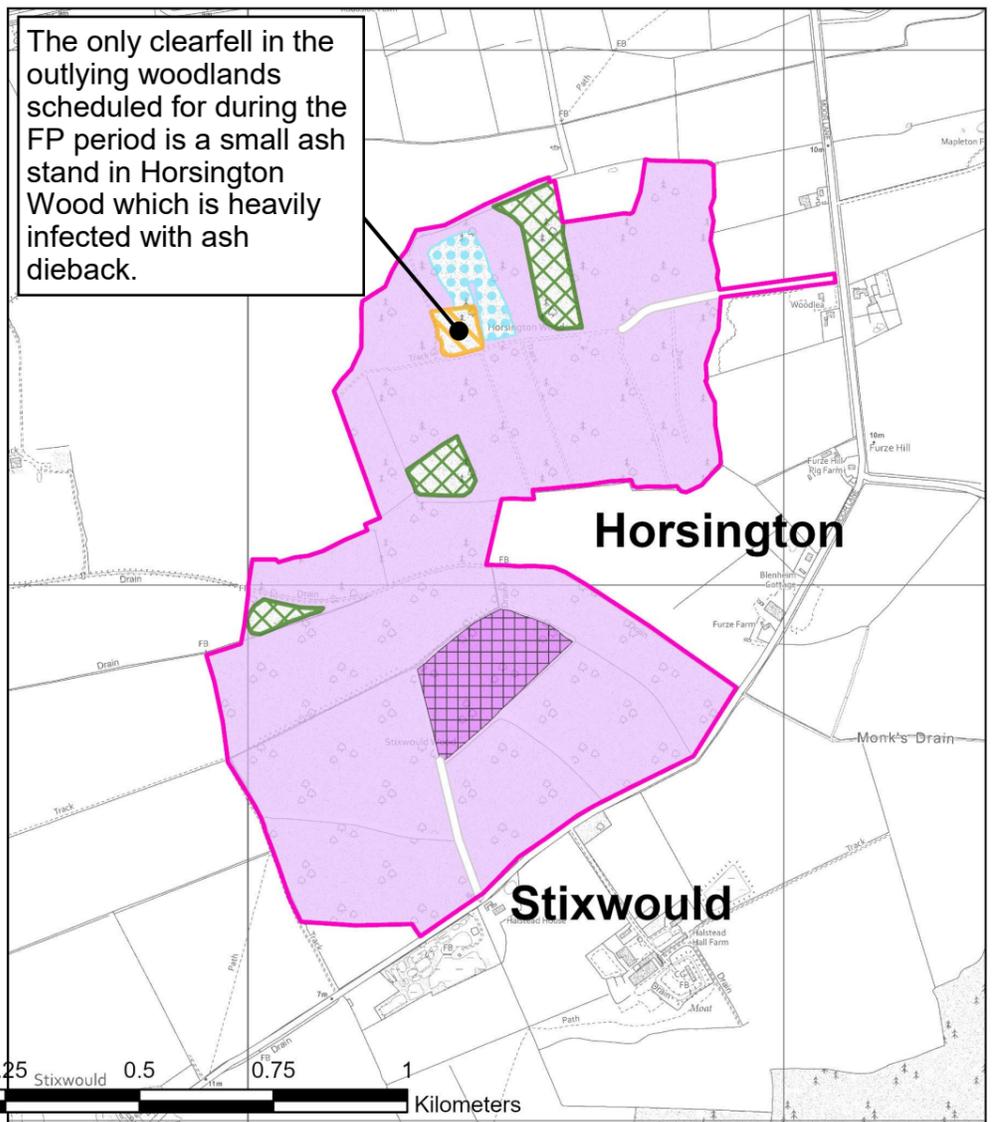
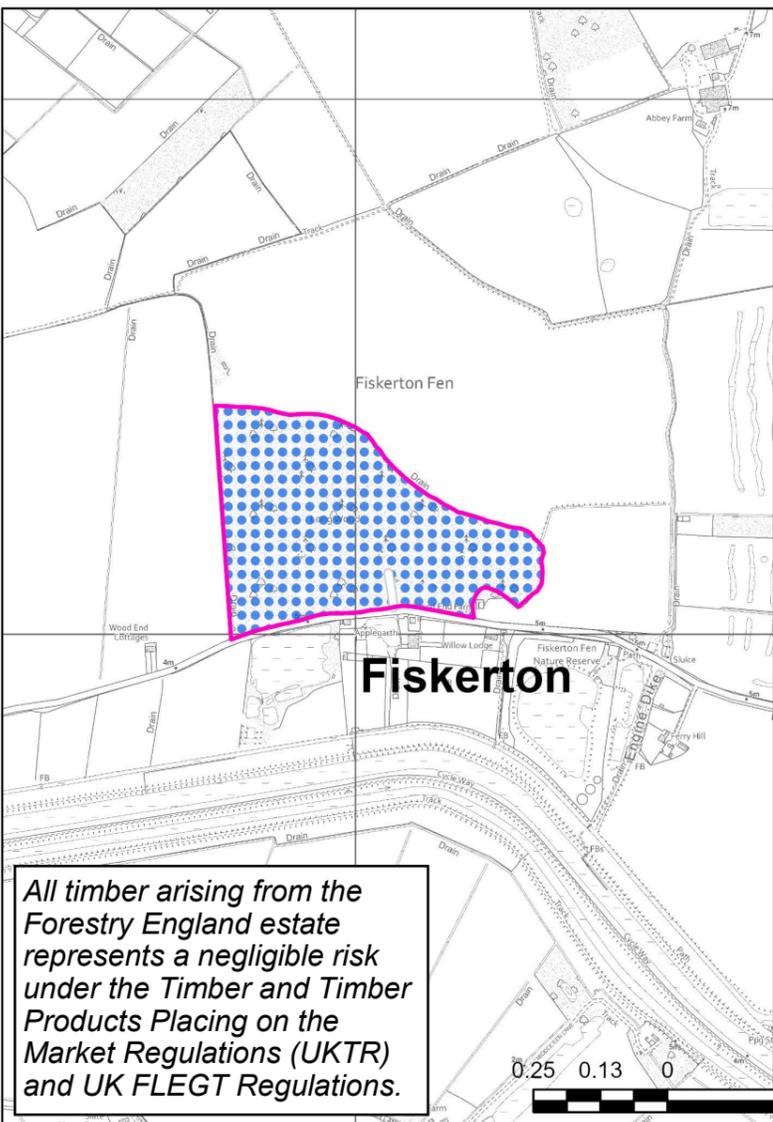
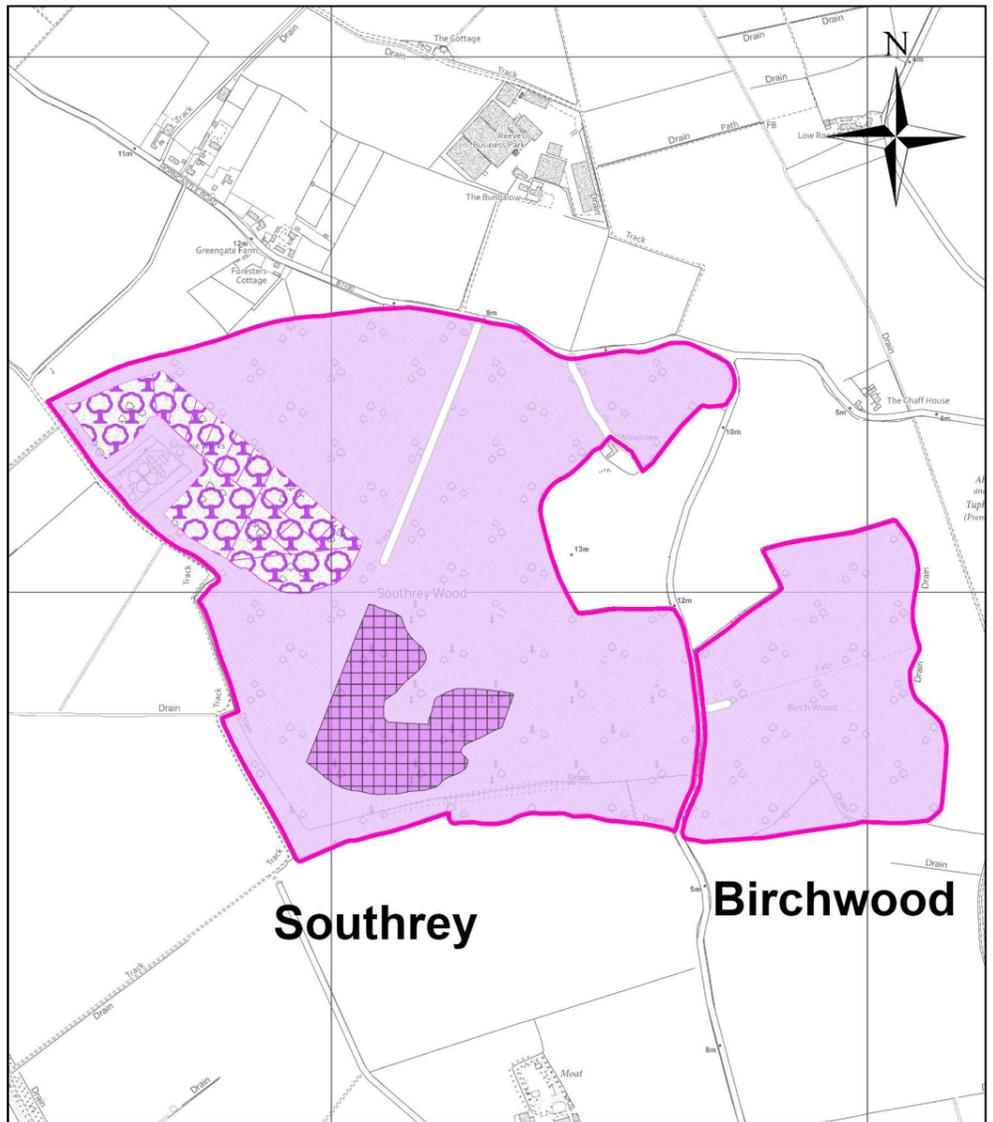
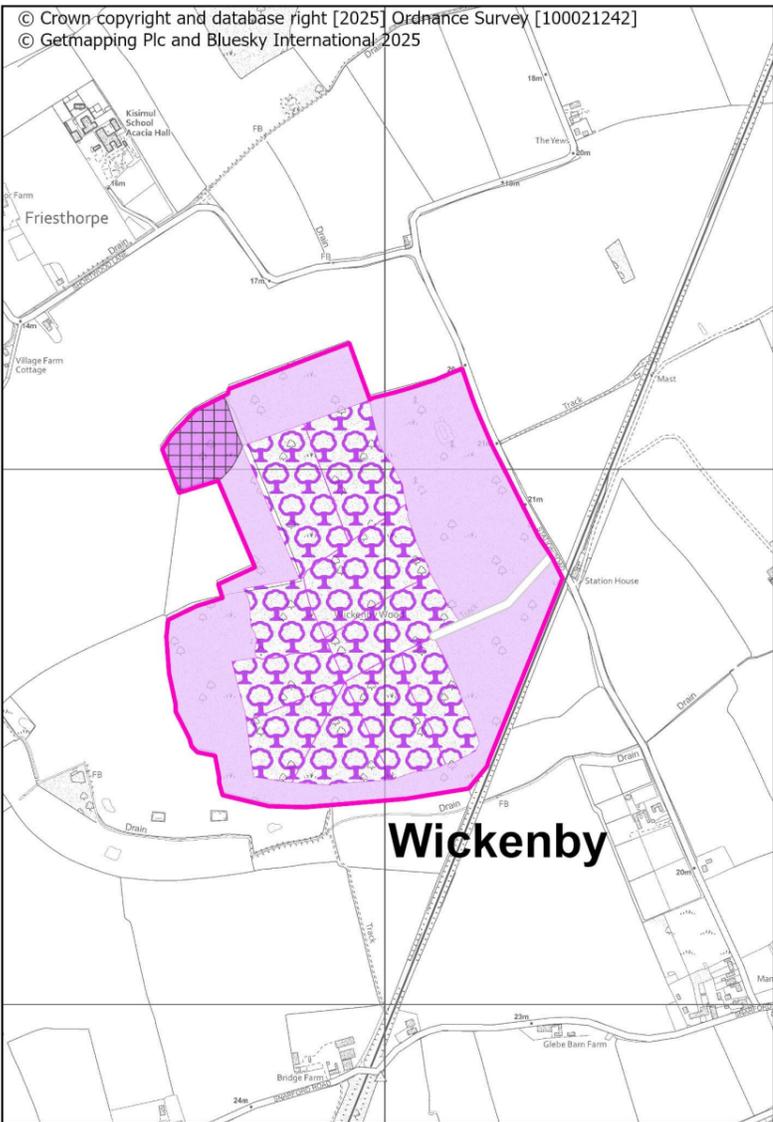
LISS*
 Over 65% of the FP area will be managed using LISS; predominantly group selection and small coupe felling systems (up to 2ha coupe size). This will promote natural regeneration by creating the optimum growing conditions for young trees; developing a more diverse woodland structure comprising trees of varying age and species within the same stand. The timings of LISS operations will be aligned to the thinning cycle in the respective woodland.

Small-Scale Coppice Management
 There are two areas of small scale coupes in Chambers Farm & Southrey. These are located alongside the larger coppice coupes, but will continue to be worked with hand tools by volunteer groups, subject to capacity.

Bardney Limewoods Forest Plan 2025
**South East Woods
 Silvicultural Systems Map**
 Date: June 2025
 Scale @ A3: 1:30,000

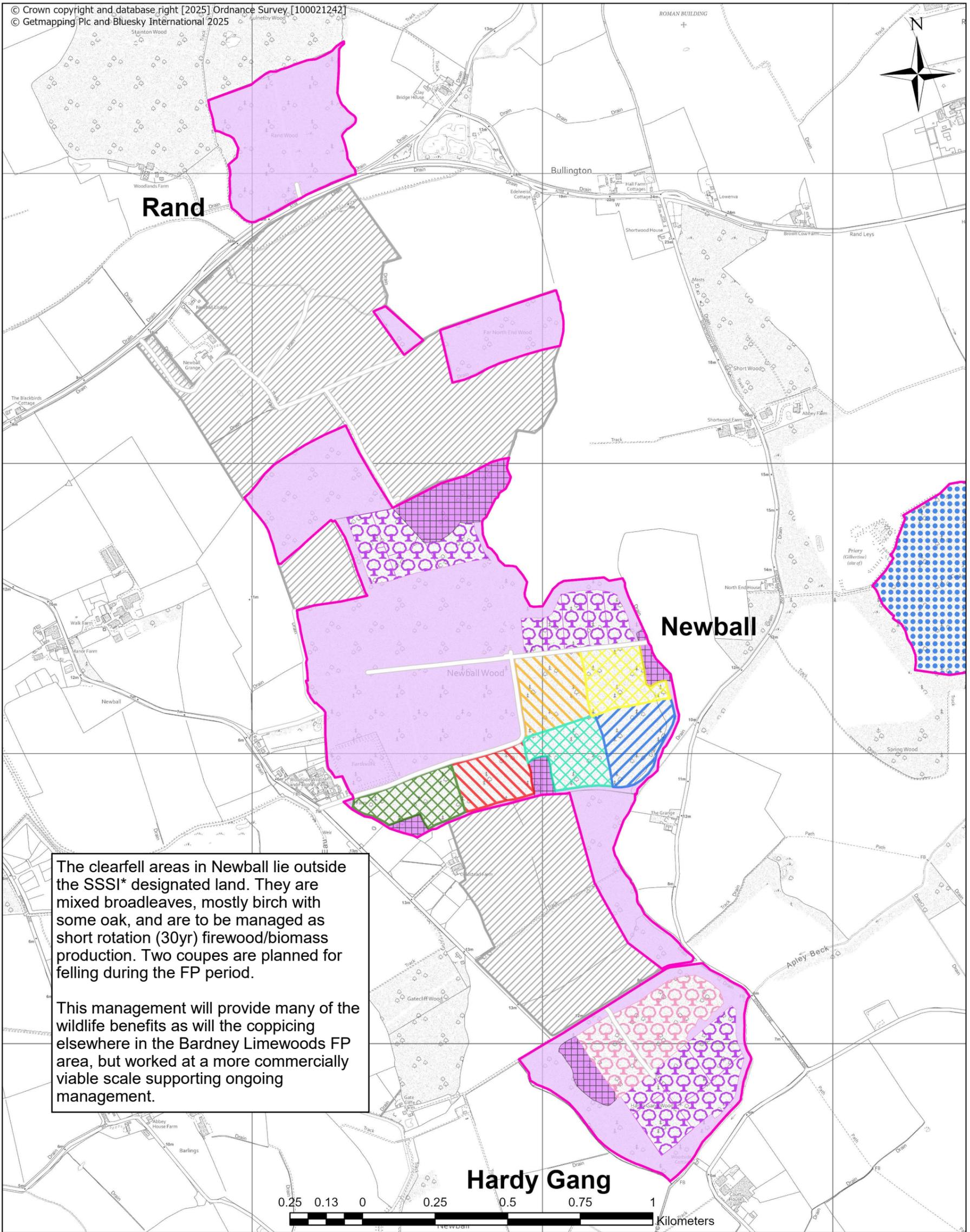
<p>Bardney Woodlands FP Area</p> <p>Forest Roads & Rides</p>	Clearfell	Long Term Retention
	LISS / Open	Coppice with Standards (as SSSI Mgt Plan)
	Minimum Intervention	
	<p>Silvicultural System</p>	

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Bardney Limewoods Forest Plan 2025
Wickenby, Southrey & Birch, Fiskerton and Horsington & Stixwoud Felling Maps
Date: June 2025
Scale @ A3: 1:12,000

<p> Bardney Woodlands FP Area</p> <p> Forest Roads & Rides</p>	<p>Clearfell Phase</p> <ul style="list-style-type: none"> 2025-2026 2027-2031 2032-2036 2037-2041 2042-2046 2047-2051 2052 & beyond 	<p>Other Silvicultural Systems</p> <ul style="list-style-type: none"> LISS / Open Minimum Intervention Natural Reserve Long Term Retention Coppice with Standards (as SSSI Mgt Plan) Coppice with Standards (new/intended) 	<p>Forestry England</p> <p>Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)</p> <p>Promoting Sustainable Forest Management www.pefc.co.uk</p>
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The clearfell areas in Newball lie outside the SSSI* designated land. They are mixed broadleaves, mostly birch with some oak, and are to be managed as short rotation (30yr) firewood/biomass production. Two coupes are planned for felling during the FP period.

This management will provide many of the wildlife benefits as will the coppicing elsewhere in the Bardney Limewoods FP area, but worked at a more commercially viable scale supporting ongoing management.

Bardney Limewoods Forest Plan 2025

Rand, Newball & Hardy Gang Felling Map

Date: June 2025

Scale @ A3: 1:12,000

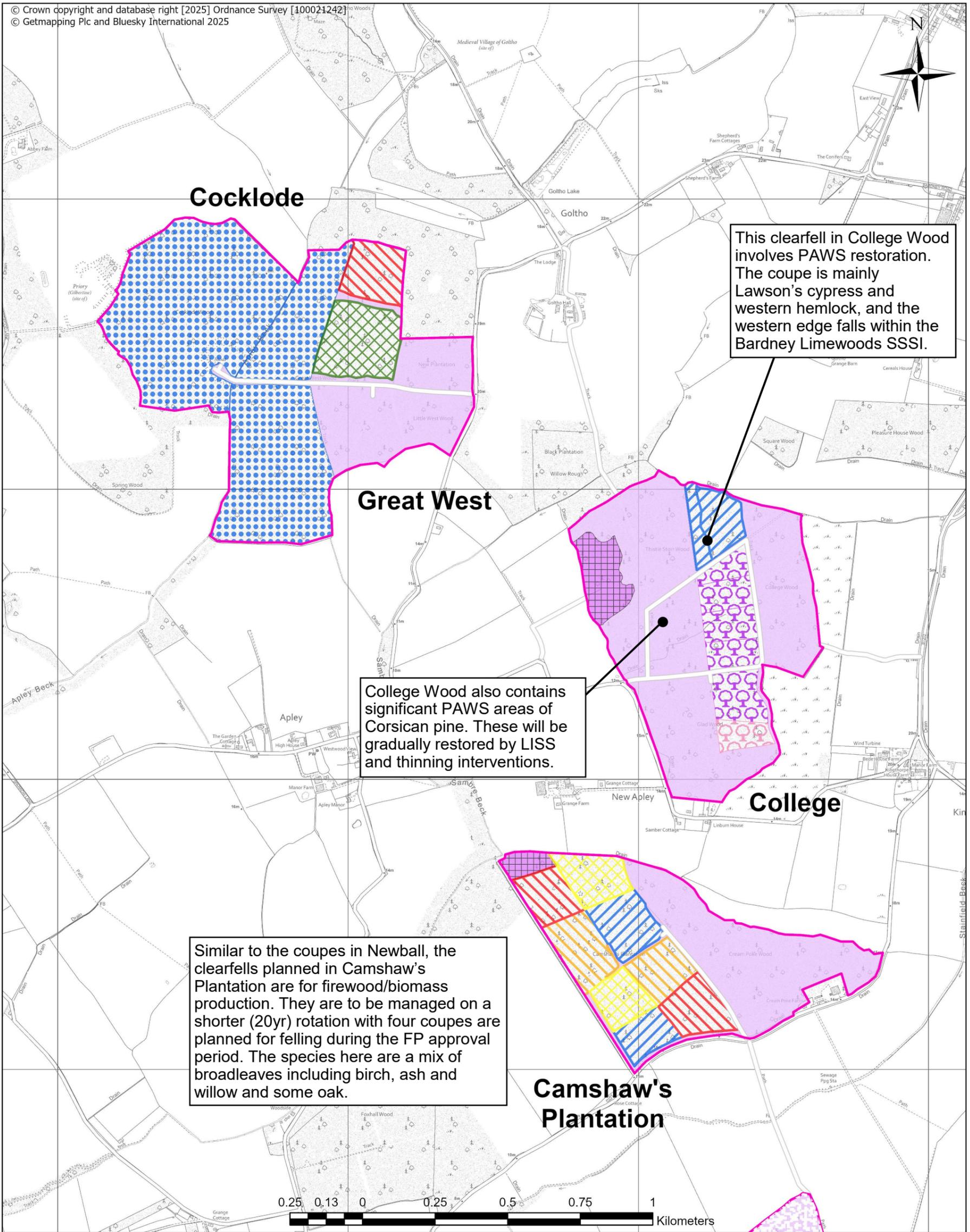
Bardney Woodlands FP Area	Clearfell Phase 2025-2026	Other Silvicultural Systems LISS / Open
Forest Roads & Rides	Clearfell Phase 2027-2031	Minimum Intervention
Proposed for woodland creation	Clearfell Phase 2032-2036	Natural Reserve
	Clearfell Phase 2037-2041	Long Term Retention
	Clearfell Phase 2042-2046	Coppice with Standards (as SSSI Mgt Plan)
	Clearfell Phase 2047-2051	Coppice with Standards (new/intended)
	Clearfell Phase 2052 & beyond	

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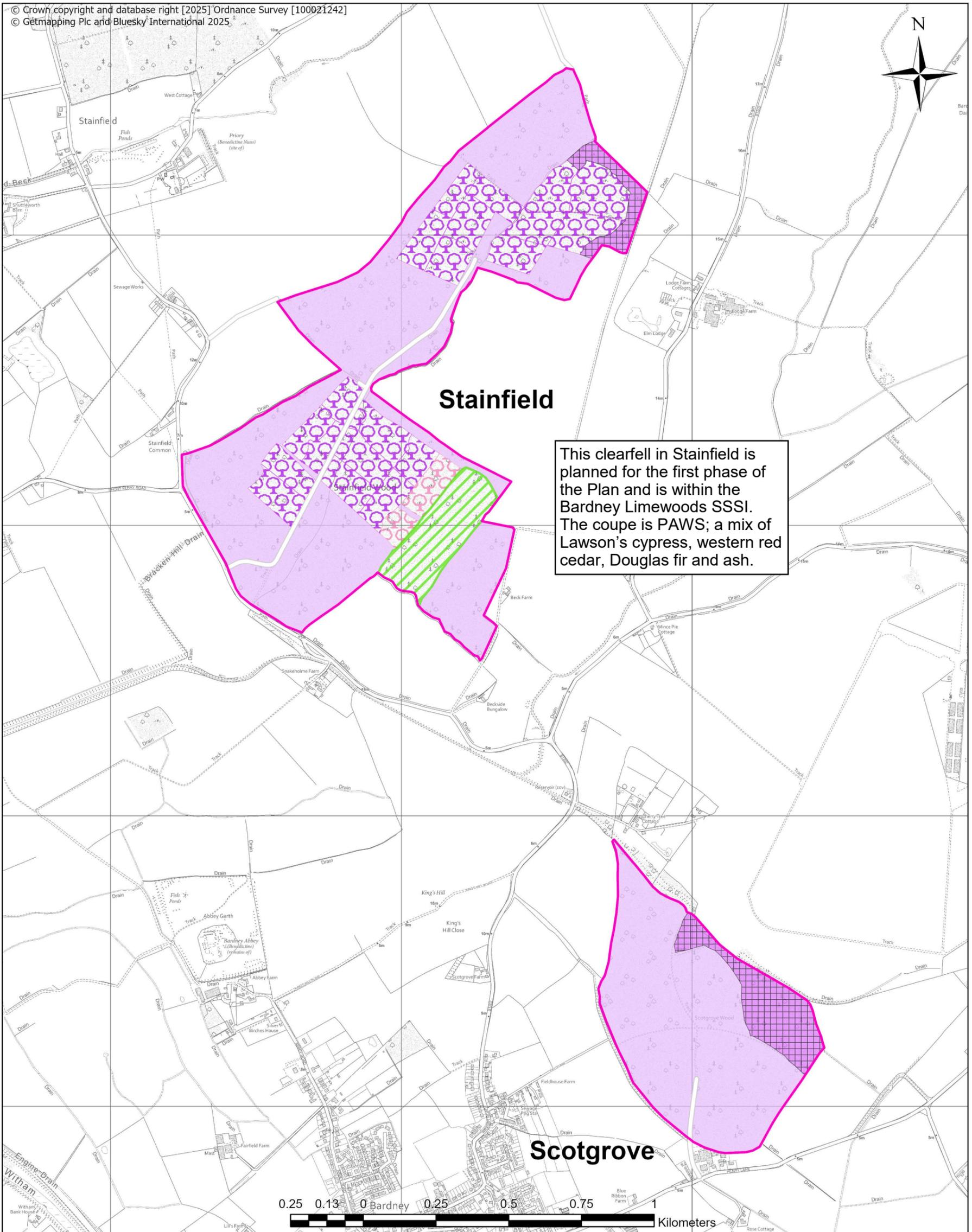
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Bardney Limewoods Forest Plan 2025
**Cocklode, Great West,
 College & Camshaw's
 Felling Map**
 Date: June 2025
 Scale @ A3: 1:12,000

<p> Bardney Woodlands FP Area</p> <p> Forest Roads & Rides</p>	<p>Clearfell Phase</p> <ul style="list-style-type: none"> 2025-2026 2027-2031 2032-2036 2037-2041 2042-2046 2047-2051 2052 & beyond 	<p>Other Silvicultural Systems</p> <ul style="list-style-type: none"> LISS / Open Minimum Intervention Natural Reserve Long Term Retention Coppice with Standards (as SSSI Mgt Plan) Coppice with Standards (new/intended) 	<p>Forestry England</p> <p>Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)</p> <p>FSC® C123214 The mark of responsible forestry</p> <p>PEFC Promoting Sustainable Forest Management www.pefc.co.uk</p>
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This clearfell in Stainfield is planned for the first phase of the Plan and is within the Bardney Limewoods SSSI. The coupe is PAWS; a mix of Lawson's cypress, western red cedar, Douglas fir and ash.

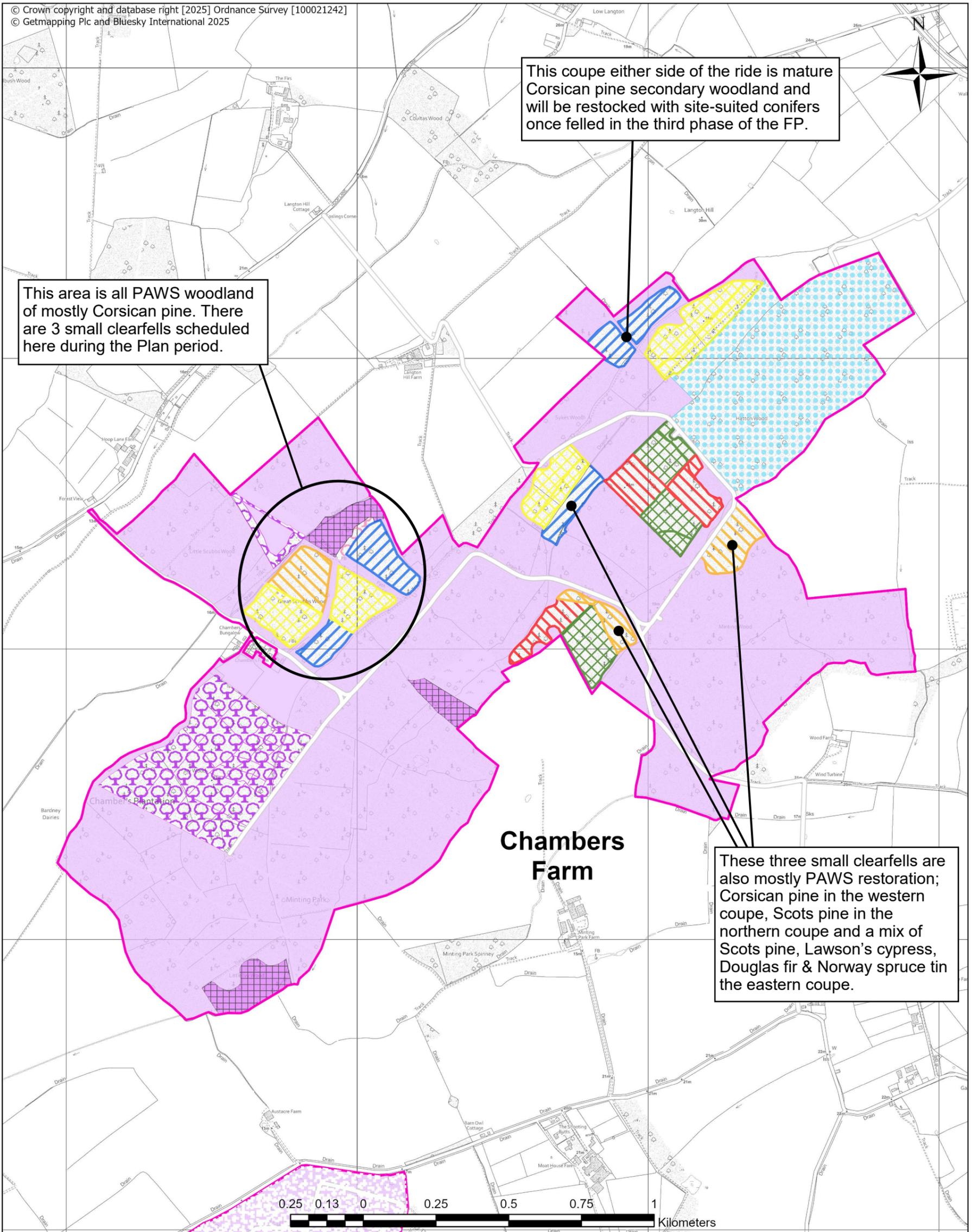
Bardney Limewoods Forest Plan 2025
Stainfield & Scotgrove Felling Map
 Date: June 2025
 Scale @ A3: 1:12,000

Bardney Woodlands FP Area	Clearfell Phase 2025-2026	Other Silvicultural Systems LISS / Open
Forest Roads & Rides	Clearfell Phase 2027-2031	Minimum Intervention
	Clearfell Phase 2032-2036	Natural Reserve
	Clearfell Phase 2037-2041	Long Term Retention
	Clearfell Phase 2042-2046	Coppice with Standards (as SSSI Mgt Plan)
	Clearfell Phase 2047-2051	Coppice with Standards (new/intended)
	Clearfell Phase 2052 & beyond	

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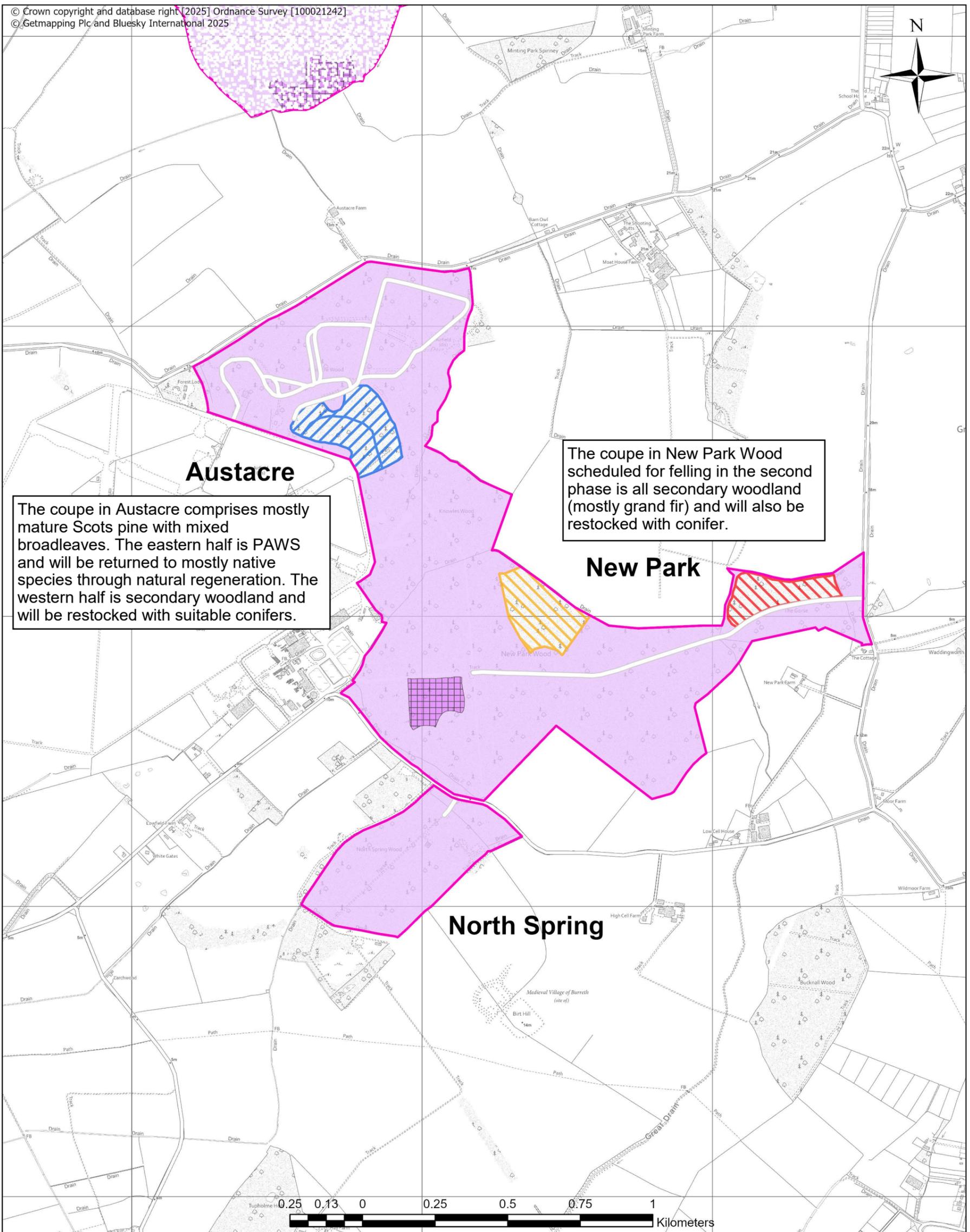


Bardney Limewoods Forest Plan 2025

Chambers Farm Felling Map

Date: June 2025
Scale @ A3: 1:12,000

<p> Bardney Woodlands FP Area</p> <p> Forest Roads & Rides</p>	<p>Clearfell Phase</p> <p> 2025-2026</p> <p> 2027-2031</p> <p> 2032-2036</p> <p> 2037-2041</p> <p> 2042-2046</p> <p> 2047-2051</p> <p> 2052 & beyond</p>	<p>Other Silvicultural Systems</p> <p> LISS / Open</p> <p> Minimum Intervention</p> <p> Natural Reserve</p> <p> Long Term Retention</p> <p> Coppice with Standards (as SSSI Mgt Plan)</p> <p> Coppice with Standards (new/intended)</p>	<p> Forestry England</p> <p> FSC www.fsc.org FSC® C123214 The mark of responsible forestry</p> <p> PEFC www.pefc.co.uk</p> <p>Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)</p>
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The coupe in Austacre comprises mostly mature Scots pine with mixed broadleaves. The eastern half is PAWS and will be returned to mostly native species through natural regeneration. The western half is secondary woodland and will be restocked with suitable conifers.

The coupe in New Park Wood scheduled for felling in the second phase is all secondary woodland (mostly grand fir) and will also be restocked with conifer.

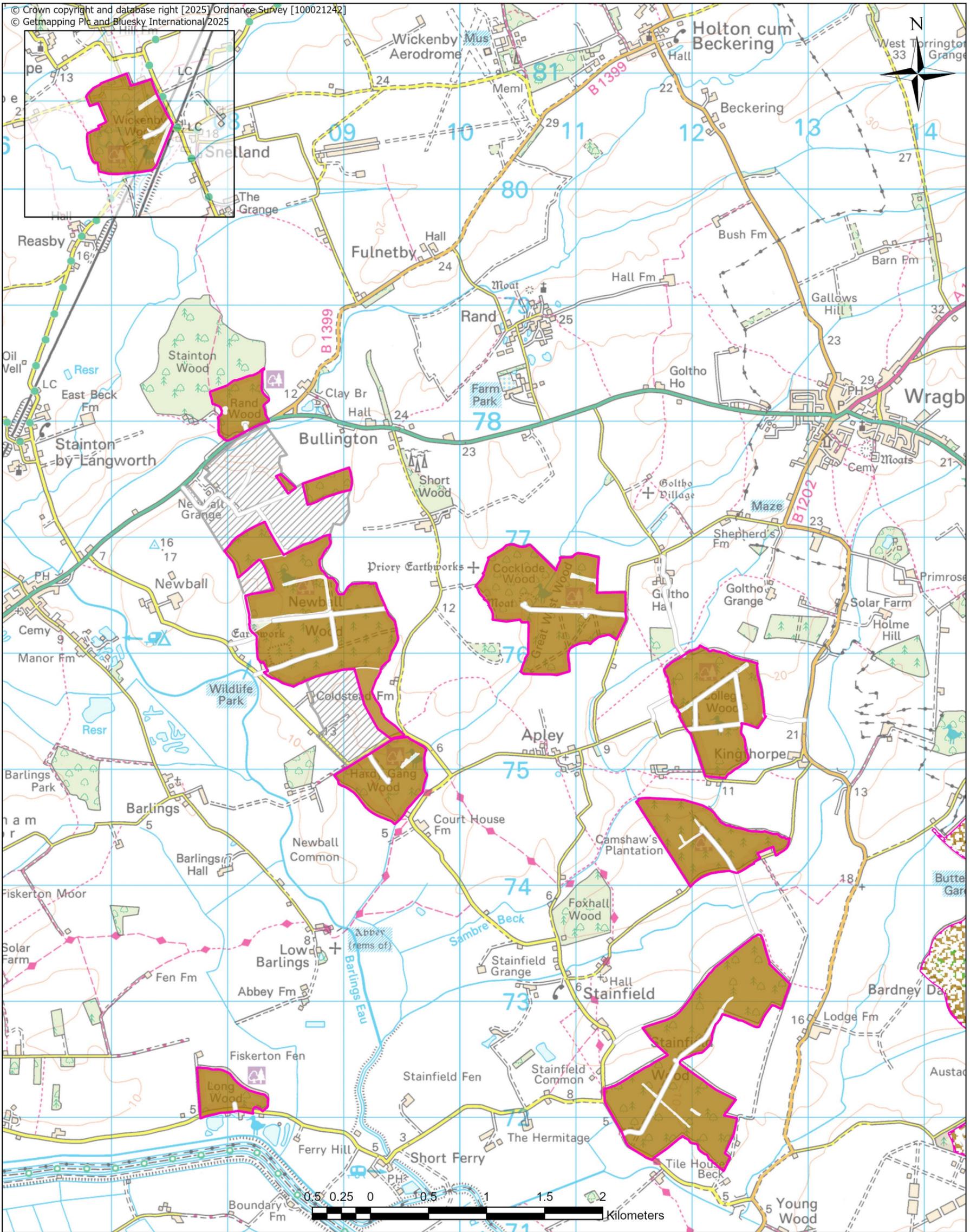
Bardney Limewoods Forest Plan 2025
Austacre, New Park & North Spring Felling Map
 Date: June 2025
 Scale @ A3: 1:12,000

<ul style="list-style-type: none"> Bardney Woodlands FP Area Forest Roads & Rides 	<p>Clearfell Phase</p> <ul style="list-style-type: none"> 2025-2026 2027-2031 2032-2036 2037-2041 2042-2046 2047-2051 2052 & beyond 	<p>Other Silvicultural Systems</p> <ul style="list-style-type: none"> LISS / Open Minimum Intervention Natural Reserve Long Term Retention Coppice with Standards (as SSSI Mgt Plan) Coppice with Standards (new/intended)
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Bardney Limewoods Forest Plan 2025
North West Woods
Intended Landuse Map
 Date: June 2025
 Scale @ A3: 1:30,000

- Bardney Woodlands FP Area
- Forest Roads & Rides
- Proposed for woodland creation
- Broadleaf-dominated
- Open
- Future Woodland



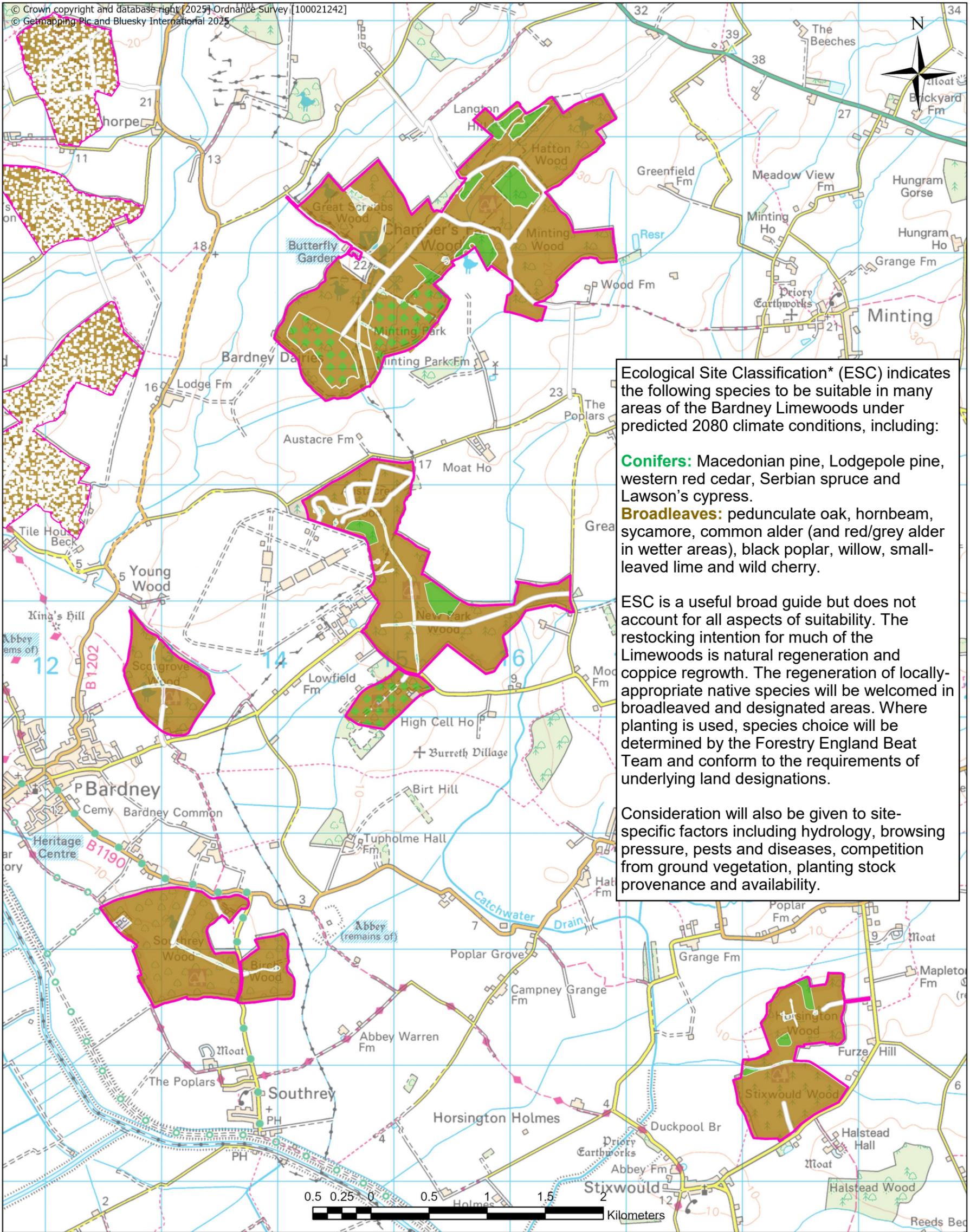
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Ecological Site Classification* (ESC) indicates the following species to be suitable in many areas of the Bardney Limewoods under predicted 2080 climate conditions, including:

Conifers: Macedonian pine, Lodgepole pine, western red cedar, Serbian spruce and Lawson's cypress.

Broadleaves: pedunculate oak, hornbeam, sycamore, common alder (and red/grey alder in wetter areas), black poplar, willow, small-leaved lime and wild cherry.

ESC is a useful broad guide but does not account for all aspects of suitability. The restocking intention for much of the Limewoods is natural regeneration and coppice regrowth. The regeneration of locally-appropriate native species will be welcomed in broadleaved and designated areas. Where planting is used, species choice will be determined by the Forestry England Beat Team and conform to the requirements of underlying land designations.

Consideration will also be given to site-specific factors including hydrology, browsing pressure, pests and diseases, competition from ground vegetation, planting stock provenance and availability.

Bardney Limewoods Forest Plan 2025
**South East Woods
 Intended Landuse Map**
 Date: June 2025
 Scale @ A3: 1:30,000

Bardney Woodlands FP Area	Future Woodland
Forest Roads & Rides	Broadleaf-dominated
	Conifer-dominated
	Mixed
	Open

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