

Bessy Bank, Arklid & Old Hall Wood Forest Plan 2022

North Forest District



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



Planning and District Context

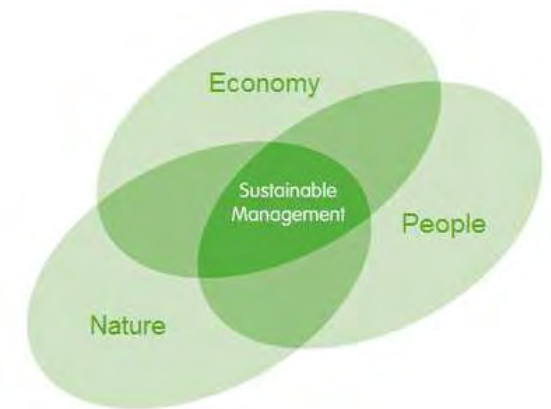
The Strategic Plan for the **Nation's Forests** outlines the delivery of forest policy at a national level. At a regional level there are six Forest Districts covering the country that directly oversee the implementation of policy actions in **the nation's forests**. North Forest District (NFD) is an extensive area encompassing 9 county or unitary authority areas from the Scottish border to Durham and Lancashire.



Our task is to realise the potential of each of the forests in our care for sustainable business opportunities, wildlife and nature conservation, and the enjoyment and well-being of local people and visitors. Each of our forests supports the economy through local jobs, sustainable timber production and the provision of recreation and tourism opportunities. All are funded by revenue from timber sales and recreation provision.

The woodlands of the district are currently arranged in 59 management areas, and their management is covered by individual ten-year Forest Plans that identify local issues and the broad silvicultural management of the woods. Forest Plans are reviewed every five years.

These plans and their associated forest operations ensure that produce from the woodlands is endorsed by the Forest Stewardship Council® (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC) as being produced from woodlands under good management that meet the requirements of the UK Woodland Assurance Standard (UKWAS) and the UK Forest Standard (UKFS). Individual Forest Plans aim to deliver a range of public benefits with achievable objectives that deliver the three drivers of sustainable land management outlined in the North Forest District Strategy.



These key drivers are supported by the following Forest District Policy;

- we will optimise the financial return from timber production compatible with achievement of other forest district objectives while complying with the UK Forestry Standard and meeting the requirements of the UK Woodland Assurance Standard;
- we will provide public access to all our forests and woodlands where there are no legal or safety restrictions. We will encourage and permit a wide range of recreational activities from walking and quiet enjoyment to more specialised activities;
- we will ensure that rare and threatened habitats are protected and managed to maintain or enhance their conservation value;

Bessy Bank, Arklid, and Old Hall Wood Forest Plan

This plan brings together two woodland blocks into one Forest Plan. The Old Hall Wood plan was last revised in 2011, while the Bessy Bank & Arklid plan was revised in 2009. Bringing these plans together reflect their shared characteristics, proximity, and similar future management objectives.

This plan follows a largely comparable approach to the previous revisions. It has been brought up to date in terms of work achieved over the last plan period, and ongoing implementation of the management objectives. The impacts and threats associated with emerging pests and diseases, particularly *Phytophthora Ramorum*, have necessitated the largest changes, with some larch crops already felled prior to this revision under Statutory Plant Health Notices. The continued restoration of ancient woodland areas continues to drive the restocking plan.

Part 1 Background Information

Introduction

Bessy Bank & Arklid is an irregular shaped woodland of 170ha, situated on the Furness fells south-east of Coniston Water, and is wholly within the Lake District National Park. It is a major landscape feature of the Crake Valley and is part of a wider wooded landscape which is predominantly ancient natural woodland. The majority of the land is leasehold, commencing in 1956, with a freehold strip known as Park Wood being purchased in 1975.

Old Hall is approximately 1.5km south east of Bessy Bank and is a 36ha woodland block. It is situated between the Rusland Valley to the east, and the Colton Valley on the west, near the small village of Bouth.

The majority of both woodlands can be categorised as either ancient semi-natural or plantation on ancient woodland sites. Species range from areas of pure oak, through to mixed broadleaves, larch components and areas of spruce. Reflecting their nature as ancient woodland areas the previous plans for both sites aimed for gradual conversion to native broadleaf species, and this new plan looks to continue toward this ambition.

Recreationally both sites see low numbers of predominantly local visitors on foot, who enjoy the scenery and quiet atmosphere, observing the wildlife or taking the opportunity for exercise within the forests.

Current woodland composition

Of the 206ha of land the forests occupy, 95% is woodland. Of this wooded area 95% currently has tree cover, while 2.5% is felled or windblown, either awaiting restocking or natural regeneration. Broadleaf species dominate both forests, with Old Hall Wood being 90% broadleaves, and Bessy Bank & Arklid 75%. Oak is an important species for both forests, reflecting their status as ancient woodland sites, Old Hall Wood is 42% Oak, while Bessy Bank & Arklid is 25%. Coniferous species make up a smaller percentage of both blocks, at 10% in Old Hall and 25% in Bessy Bank.

Larch has provided useful variety in the landscape at just under 10% of the current species composition for both forests. Outbreaks of *Phytophthora Ramorum* in the last plan period have reduced this component due to mandatory felling owing to plant health notices, and this plan seeks to minimise the larch component to reduce future disease risk and continue conversion of the woodlands in line with their ancient woodland status.

The species composition reflects both **blocks'** positions as Ancient Semi-Natural Woodlands (ASNW), with a prominence of broadleaves which will continue to increase over this plan period. Average yield classes are low across the blocks owing to the prominence of broadleaf species, although the remaining conifer crops have high yields between classes 18-20, reflecting their productive capability.

The average wind hazard class for both forests is 2, which is low. The low wind hazard class allows for greater options for low intensity silvicultural systems when compared to other forests in the area, meaning less reliance on clear felling and greater options for continuous cover practices.

Designated areas

The woodlands are situated wholly within the Lake District National Park and the English Lake District World Heritage Site, which was inscribed as a cultural landscape in 2017. The National Park and World Heritage Site provide the opportunity to demonstrate, at a practical level, how activities such as forestry, which have been prominent in shaping the landscape we see today, can create greater public benefit through sustainable land management delivering for people, the landscape, nature and the economy. For example, this can be achieved through conserving and enhancing the landscape, scenic beauty, and cultural heritage of the Lake District, whilst **also providing wider ecosystem services to support communities' social and economic wellbeing** in a sustainable way.

Both blocks are located within the Coniston section of the WHS nomination document, and the forests can be seen to contribute to the agropastoral landscape of the area, with the area noted in the nomination for silvicultural industries in a working landscape. The nomination document acknowledges commercial forestry plantations as part of the valley landscape.

The majority of Bessy Bank (105ha) and all of Old Hall Wood (36ha) are classified as Ancient Woodland, with both Ancient & Semi-Natural Woodland (ASNW) and Plantations on Ancient Woodland Sites (PAWS) present in both. The extent of these designations feed directly into the ambitions of this forest plan which aims to continue the gradual restoration of both forests to native broadleaf species, linking the existing ancient woodland areas with new restock and regeneration of broadleaves to expand the area of this habitat type.

Semi-Natural Woodland is measured using Semi-Natural Woodland scores. SN1 refers to Ancient or fully restored woodland with 80% of species native, either planted or natural regeneration, SN2 50-80% native species, SN3 20-50% native species, and SN4 less than 20% native species.

The Ancient Woodland areas of Bessy Bank and Old Hall Wood are 24% SN1, 46% SN2, 15% SN3, 13% SN4 as of 2021.

Historic environment

Bessy Bank & Arklid contains one unscheduled heritage feature, a potash kiln which survives in relatively good condition in the Stock Wood area of Bessy Bank. Potash kilns were used to produce potash prior to the industrial revolution and relied on the surrounding woodland for material to burn, adding to the history of the block having continuous woodland cover for hundreds of years. The kiln is well documented, and the location will be marked on the ground prior to any operations in the area to protect this feature.

Old Hall Wood contains no known heritage sites, although historic environment records will continue to be updated should a site be found, and operations will be screened for sites of historic interest prior to works commencing.

Natural environment

Habitats vary across the blocks between coniferous, broadleaf, and mixed woodlands. Neither block has significant areas of open space, owing to the small scale of the woodlands, and the largely natural ancient woodland composition. Both blocks are surrounded by open farmland, out of Forestry England ownership, and internally forest edges, roads and internal patchy open space created by operations contribute to this habitat type. Opportunities for new permanent open space are limited by the Ancient Woodland Designated in both blocks, and instead operations focus on the creation of internal open space through thinning operations, and transient open space has been created through previous felling operations and will continue over this plan period. Grizedale forest, (also managed by Forestry England) to the north of these blocks contributes significant open space for the wider woodland management area.

Bessy Bank has areas that are botanically very rich, with the varied woodland structure and species contributing to a variety of flora in the forest. As previous conifer areas have been felled, they have quickly regenerated with broadleaf species, giving a natural appearance to the restructuring programme in the forest. Areas of priority habitat across both blocks are limited to deciduous woodland habitat types and are part of a wider wooded landscape across the area.

The conservation interest in both forests is mainly attributed to the status of the woodlands as Ancient Woodland sites, and the primary objective in this regard is to maintain the condition of these areas, through restoration and the removal of conifer where appropriate, and through the extension and linking of these habitats in Bessy Bank & Arklid through new broadleaf areas.

The quality and variety of the habitats found in both blocks are reflected in the animals which can be found, with notable bird, mammal, and insect life, see Table 1 for details. Red squirrel are present in both blocks and sightings are reported to Red Squirrels Northern England. While most of the forest is currently quite young, the increased areas of Low Impact Silvicultural Systems management presented in this plan will be of benefit to this species in years to come.

Several minor watercourses run through both Bessy Bank and Old Wood, and operations close to these areas will follow standard forest and water guidelines to ensure that works do not disturb them, and that any future planting within riparian corridors is designed to enhance watercourses.

Table 1: EPS, BAP Species and actions supported by this forest plan		
Species	Objective	Actions supported by this forest plan
Red Squirrel, Schedule 5 & 6 WACA 1981	Maintain habitat suitable for breeding & feeding.	Largely a native woodland with diverse broadleaved species. Clearfell/thinning of non-native conifers planned during this plan period to meet ancient woodland objective.
Bats, EPS	Enhance & maintain roosting opportunities.	Through coupe checks or other recordings during site visits, integrate protection of breeding/roost sites by retaining deadwood/feature trees during woodland management operations.
Badger, Badger Act 1992	Protect existing setts.	Coupe checks prior to operations & apply appropriate mitigation.
Red Kite, Schedule 1 WACA 1981	Sightings recorded in the wood. No nest confirmed.	Mature forest structure provides possible nesting opportunities. Coupe checks prior to operations & apply appropriate mitigation.
Dormice, Schedule 5 of WACA 1981	Record any sightings. Continued monitoring for previous 20 years, no sightings to date.	Species recorded in vicinity, will continue to monitor for any sightings.
Pine Marten, Schedule 5 of WACA 1981	Species in county. Not currently recorded in this forest but potential to colonise here.	Good potential pine marten habitat across the forest. Retention of mature trees would provide potential den sites.

Landscape and topography

Both blocks are in **the ‘Rusland and Crake Valleys’ distinctive** Landscape Character Area (LCA), (LDNPA 2011). The distinctive characteristics of this landscape type reflect both woodlands, **with the area noted for ‘large patches of deciduous woodlands and some conifer plantations’ which ‘provide a sense of enclosure and intimacy as well as texture and seasonal colour’**. The **area is also noted for the ‘mature landscape structure’ which incorporates the ancient woodland areas of both blocks.**

The guidelines for managing change in this distinctive character area discuss the need for **‘conversion of conifer plantation to broadleaved woodland’ which this forest plan works**

towards through the felling of conifer crops in Bessy Bank & Arklid, and the gradual thinning of conifer in Old Hall Wood, resulting in both blocks being converted to entirely broadleaves in the medium term. Through outlining our planned management for the future of the woods, this Forest Plan contributes **to the LCA’s call to “conserve, enhance and encourage appropriate management of large patches of deciduous woodland”**.

Bessy Bank & Arklid is prominent in the landscape, in particular it forms part of the view east from the Coniston valley, with visibility along the valley, and in particular from the A5084 Coniston - Lowick Green road. In addition, it forms the backdrop of many views within the Rusland Valley, and ties into adjacent woodland to form part of a broadleaved corridor throughout the valley.

In contrast, Old Hall Wood is not visible from any major roadway, but is very prominent from the village of Bouth, and from the summit of Rusland Heights, forming an important part of the local landscape. Together with neighbouring woodland, including Bessy Bank & Arklid, Old Hall Wood forms part of an almost continuous block of native woodland of considerable size.

Communities and recreation

Bessy Bank and Old Hall Wood are mostly used for quiet and informal recreational purposes, primarily, but not exclusively, by members of the local community. While there are no formal Forestry England trails in the woodland, two footpaths and a bridleway cross Bessy Bank & Arklid, which are maintained by the Lake District National Park Authority.

There are no public footpaths through Old Hall Wood, however a series of informal tracks and paths exist throughout the block which are utilised by walkers.

In addition, the entirety of Old Hall Wood, and the Park Wood area of Bessy Bank are dedicated under The Countryside and Rights of Way Act 2000 as open access, which enables extensive use of the forests by those on foot.

Neither wood has formal car parking, however visitors often park at the entrance to Bessy Bank, and off the unclassified road leading into Old Hall Wood, providing sufficient capacity for the small number of visitors each block receives.

Pests and diseases

Red and roe deer are present throughout the area and the population is monitored to ensure that deer numbers do not compromise other objectives of management, particularly the promotion of natural regeneration. Deer are culled by Forestry England wildlife staff, and to aid their efforts this plan has a renewed focus on the creation of deer glades from which safe wildlife management can be undertaken. In addition, the use of fences during restock operations should be considered where necessary to aid the establishment of new planting.

Bessy Bank, Arklid and Old Hall Wood are well connected to other woodland in the Rusland Valley which increases the potential for intrusions by grey squirrels. These have the potential to cause damage to mature trees and displace native red squirrels. Sightings are reported to Red Squirrels Northern England (RSNE). We will provide opportunities for engagement with groups for squirrel management into the future.

Larch is under threat from the disease *Phytophthora Ramorum* and following several outbreaks in adjacent woodlands, Bessy Bank saw a large infection during 2020. Outbreaks are subject to a process of swift response work following the issue of Statutory Plant Health Notices by the Forestry Commission, and during the revision of this plan trees are currently being felled in response to such a notice. These notices enforce the felling of infected trees to reduce the spread of the disease within the forest and to neighbouring woodland. The remaining pure larch areas of Bessy Bank have been placed into coupes in the next felling periods to facilitate their felling in a structured manner. While larch in Old Hall Wood is to be removed during thinning operations. There is a requirement for ongoing vigilance from staff in thinned areas of continuous cover where larch occurs as natural regeneration.

Access and roading

Access to Bessy Bank & Arklid is poor owing to steep and narrow public roads connecting to the site, restricting the size of vehicles for haulage. The internal road in Bessy Bank is in good condition and allows access through the wood. Arklid is served by a short stretch of internal road which will require maintenance prior to use for the upcoming conifer clearfell coupe, and potentially would require extension. Arklid has similar restrictions for timber transport as Bessy Bank regarding the surrounding public road network.

There are no internal roads in Old Hall Wood, and lorries would be required to load from the small public road adjacent to the site.

Part 2 Review of Previous Plan

Table 2: Previous Plan Objectives	
Objective	Comment
Natural environment Continue with the phased restoration of Bessy Bank to a locally native broadleaf woodland.	Areas of broadleaf restock and natural regeneration are progressing well. 3.9ha restocked in 2010 with Downy birch, 10.9ha planted with Pedunculate oak in 2014. 9.31ha of PAWS thinned in 2021 to remove larch for plant health reasons in Bessy Bank.
Encourage broadleaf regeneration by controlling conifer regeneration.	Western hemlock regeneration cleared, larch regeneration removed under plant health notices.
Determine if dormice are present.	Dormouse nesting boxes sited, no dormice found during box checks.

Produce a harvesting plan that produces an attractive landscape.	Thinning over last plan period has increased diversity in the forest. Small coupes designed to minimise landscape impact will balancing other objectives.
<p>Quality of life</p> <p>Work with Lake District National Park Authority and Colton Parish Council to ensure that Public Rights of Way are not obstructed and are clearly way marked.</p> <p>Investigate whether there are opportunities for permissive paths in the area.</p>	<p>Regeneration along PROW cleared</p> <p>Two new permissive paths, Arklid Intake and Bessy Bank, providing access to fell</p>
<p>Business and markets</p> <p>Provide sustainable employment and contribute to rural economy by producing a renewable resource of timber, primarily hardwood in the future.</p>	Approx. 10ha felled in 2010. Birch regeneration used for creation of horse jump hurdles locally.

Part 3 Analysis and Concept

The factors outlined in Part 1, and previous objectives in Part 2, present various opportunities and constraints. These are summarised below:

Table 3: Analysis of opportunities and issues		
Factor	Opportunities	Issues
Management type	<p>Continued use of Low Impact Silvicultural Systems (LISS) to bring gradual change to the woods.</p> <p>Small clear-felling operations in Bessy Bank to remove last of conifer crops.</p>	Unplanned clearfells may still be necessary to respond to plant health notices in the event of <i>P. Ramorum</i> infections. Western hemlock regeneration on previous clearfell sites has potential to out compete broadleaf species.
Biodiversity and heritage	<p>Protection of features including veteran/feature trees, deadwood, or ground flora during operations to benefit biodiversity.</p> <p>Protection of heritage features during operations.</p>	PAWS designation limits future for non-native species which can produce highly valuable timber and are easier to regenerate than light demanding native species.

Access/Roading	Internal roads in Bessy Bank with planned operational areas served.	No access to larch in Old Hall wood for mechanised harvesting should a <i>P. Ramorum</i> infection occur.
Pests and disease	Potential for planting of new species, increasing speed of Ancient Woodland restoration to replace larch threatened by <i>P. Ramorum</i> .	<p><i>P. Ramorum</i> infection in existing larch crops.</p> <p>Deer present challenges to natural regeneration and grey squirrels threaten native red squirrels.</p>
Future Species	<p>Transition away from larch through proactive thinning regime and underplanting, or clear felling where plant health notices are issued.</p> <p>Good natural regeneration of broadleaf species.</p>	Larch is no longer desirable due to disease risk and ASNW status in much of the forest.
Landscape	<p>LISS management in larch crops provide gradual change with limited landscape impact.</p> <p>Clearfell operations in Bessy Bank & Arklid adjusted from the last plan to minimise visual impact of adjacency of felled areas.</p>	<p>Clearfells associated with <i>P. Ramorum</i> health notices have potential to cause large short term landscape impacts.</p> <p>Conifer crops in Bessy Bank & Arklid to be removed by clearfell operations.</p>
Current species	Extensive broadleaf coverage in both forests with good natural regeneration.	<p>Presence of larch which is at risk from <i>P. Ramorum</i> will need regular monitoring.</p> <p>Some conifer crops remaining which will need to be removed in time.</p> <p>Small area of larch in Arklid which is vulnerable to <i>P. Ramorum</i> infection and is isolated from conifer felling coupe by an area of Natural Reserve.</p>
Public access	<p>Location within Lake District National Park and proximity to other Forestry England Sites.</p> <p>Value as quiet, diverse, and interesting landscapes by visitors.</p>	Blocks not suitable for larger recreational activities.

Appraisal of Opportunities and Constraints

1. Present *Phytophthora Ramorum* infection in Bessy Bank, and threat of future potential infection in Old Hall Wood, which would require larch areas to be felled under Statutory Plant Health Notices. While potentially having a large, short-term impact, this provides opportunity to restructure the forest over the period of the plan to increase diversity and restore ancient woodland areas, while increasing the use of LISS management across both blocks.
2. Two clearfells are required in Bessy Bank & Arklid to harvest the last of the commercially planted conifer crops, while neither of these crops are in Ancient Woodland areas, and thus restoration is not necessary, this forest plan seeks to restock these areas utilising natural regeneration of native broadleaves, to expand, enhance, and connect the existing ancient woodland areas in the forest.
3. Following interventions in either forest, the use of natural regeneration of native broadleaves should be utilised where possible to allow for conversion to be undertaken in a sympathetic way, increasing variety in the age and density of the woodlands. This will require good deer management to ensure that regeneration is allowed to develop and over time thinning interventions to encourage seed production and good growth will help this process along. Conifer regeneration should be controlled to ensure it does not out compete broadleaves.

Part 4 Objectives and Proposals

The following objectives have been identified based on Forestry England National Policy and NFD Strategic Plan

Table 4: Forestry England goals supported by this Forest Plan	
Forest District Strategic Goal	How Forest Plan delivers
ECONOMIC <u>Wood Production -</u> <i>‘we will optimise the financial return from timber production compatible with the achievement of other district objectives whilst complying with the UK Forestry Standard and meeting the requirements of the UK Woodland Assurance Standard’</i>	Small clearfell sites of productive conifer in harvesting plan to provide yield of timber. Conifer regeneration in ancient woodland areas to be felled when economically viable as part of PAWS restoration strategy. Restocking the non-ancient woodland areas of Bessy Bank with productive broadleaf species to provide small-scale timber production for the future. Use of LISS across both blocks will allow for increased diversity in forests while also improving the quality of the crop.
NATURE, HERITAGE and LANDSCAPE <i>‘we will continue to diversify the age class structure of our even-aged woodlands and increase the value of all our woodlands and forest for wildlife’</i> <i>‘we will ensure that rare and threatened habitats are protected and managed to maintain or enhance their conservation value’</i>	Retention of older crop where physically possible to help increase structural diversity in the forest to provide landscape and environmental benefits. Features of interest associated to the Ancient Woodland, such as veteran or feature trees, will be protected and enhanced during operations through sympathetic management. Use of LISS management will allow for increased light and resulting improvements to diversity via thinning. Historic features will be routinely identified and protected during our planning and implementation of forest operations.
PEOPLE <i>‘we will utilise the land and resources at our disposal to assist communities close to our forests to enhance their environments and hence their quality of life’</i> <i>‘we will provide public access to all our forests and woodlands where there are no legal or safety restrictions...’</i>	Restructuring of woodland for ancient woodland restoration will reduce amount of conifer and increase diversity of broadleaf species to improve the visual appeal of the forest for visitors. Continued current low-key recreational use of Bessy Bank suited for walking, cycling or horse riding utilising the existing infrastructure.

Part 5 Monitoring plan

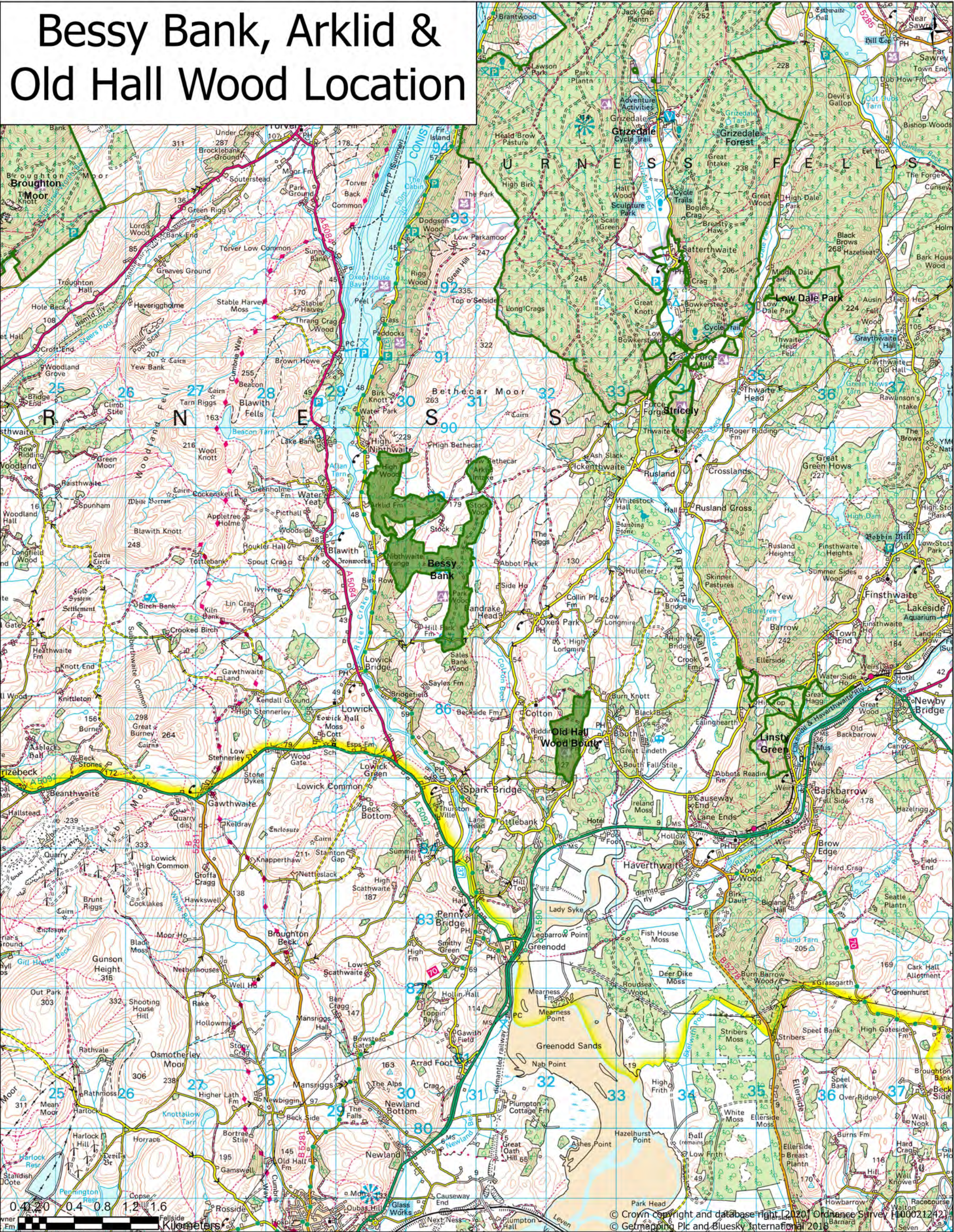
The objectives identified in section 4 will be monitored in the following ways;

Table 5: Monitoring plan		
Objective	Criteria for success	Assessment
ECONOMIC		
Wood production	Marketable parcels of timber on offer to the market. Maintain timber harvesting access and infrastructure	Contract and sales records
Sustainable economic regeneration	Successful restock sites and underplanting operations with minimised pest damage, and controlled regeneration of conifer species.	Five year Forest Plan review
NATURE, HERITAGE and LANDSCAPE		
Restructuring and PAWS restoration	Restoration to native species. Thinning and clearfell programme to continue to reduce presence of non-native conifers and to increase structural diversity in the broadleaved components. Improved semi-natural woodland scores, increased areas in SN1 & SN2.	Five year Forest Plan review, review of semi-natural woodland scores
Condition of historic features	Protect and enhance features through operational best practice	Operational constraints and five year review
PEOPLE		
Visual enhancement and access for visitors.	Ongoing restructuring of the woodland and local community engagement as appropriate.	Five year Forest Plan review

Part 6 Forest Plan Maps for Bessy Bank, Arklid & Old Hall Wood

- Location - 1:50,000 scale showing location in context of other woodland in the local area.
- Current Species - species composition in 2021.
- Yield Class - representing the productivity of the current species.
- Wind Hazard Class - indicating the windiness of the sites.
- Planting Year - representing the age class distribution of the woodlands.
- Conservation and Heritage - statutory and non-statutory conservation and heritage features.
- Access and recreation - formal public rights of way, FC access and local services.
- Design Concept - broad management prescriptions and zoning of the woodlands.
- Hazards & Constraints - operational hazards and constraints.
- Operations Proposals - showing felling proposals and areas managed under Low Impact Silvicultural Systems or Continuous Cover Forestry.
- Future Species - representing the 20-year vision for future species composition.

Bessy Bank, Arklid & Old Hall Wood Location





Bessy Bank, Arklid & Old Hall Wood Location

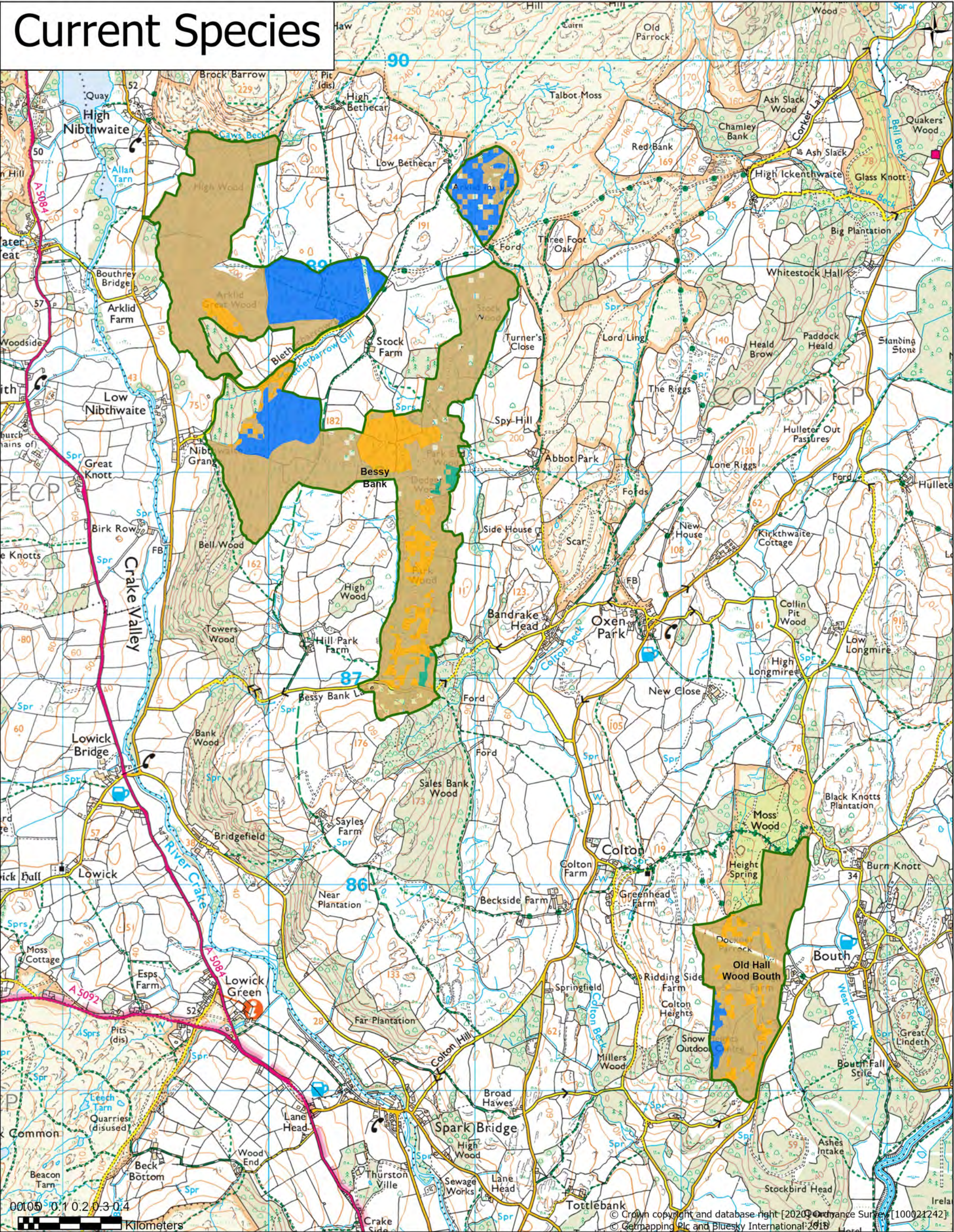
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Bessy Bank, Arklid & Old Hall Wood

Other Forestry England Woodland

Current Species



Forestry England

Current Species

02/07/2021

Scale: 1:17,000



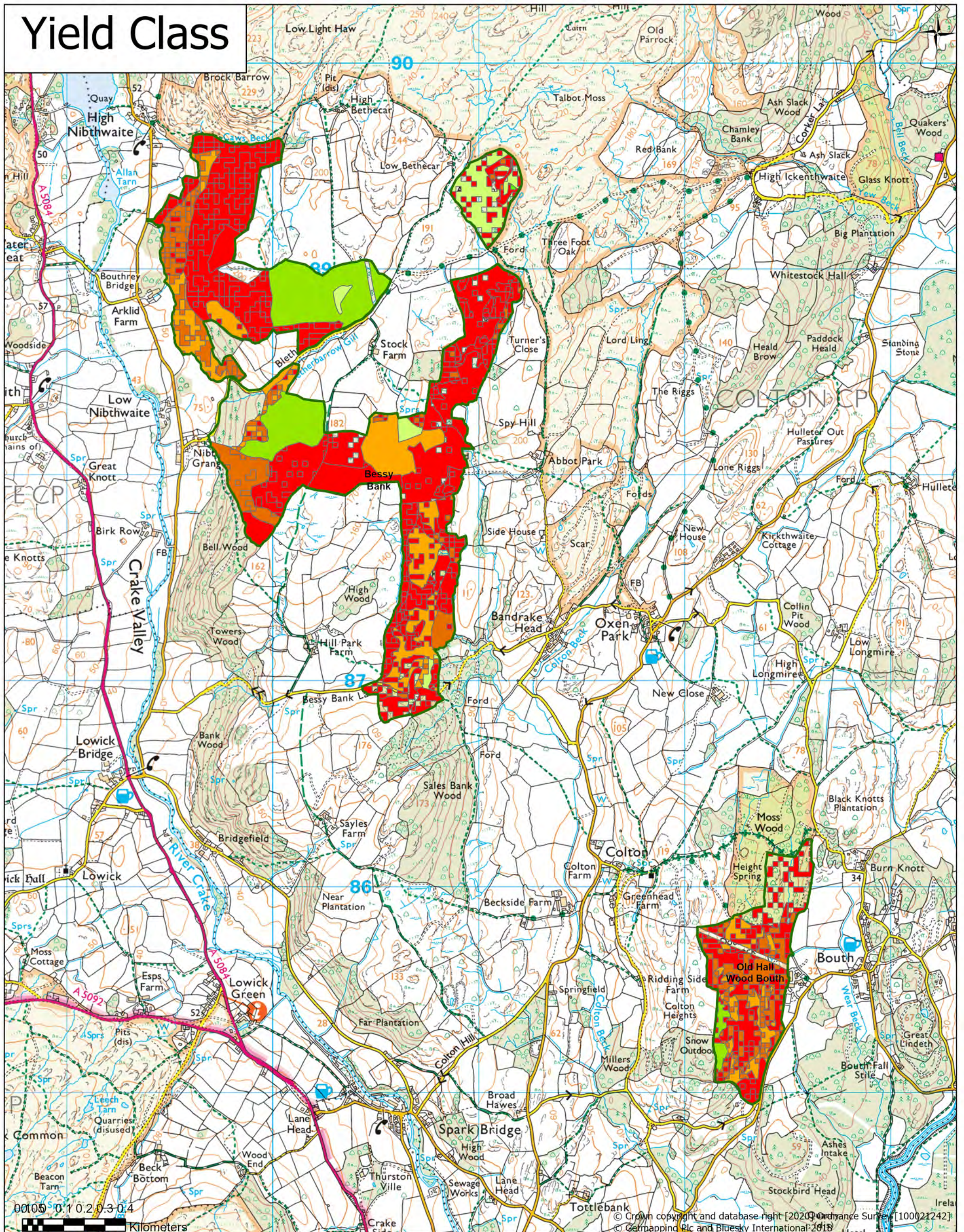
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Current Species

- Larches
- Mixed Broadleaves
- Pines
- Sitka Spruce
- Other Spruces

Other Conifers

Yield Class



Yield Class

02/07/2021

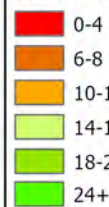
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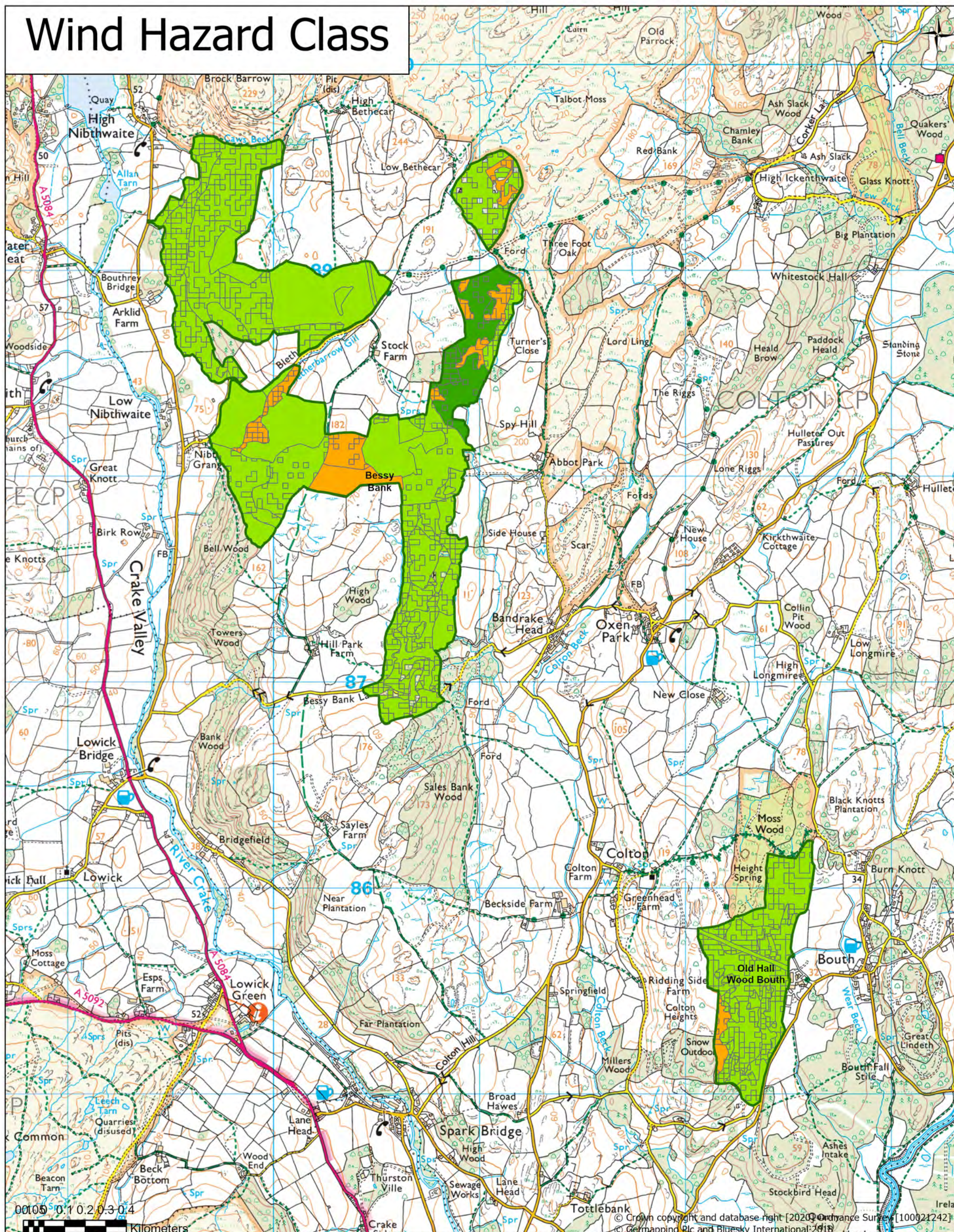


Yield Class



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Wind Hazard Class



Wind Hazard Class

02/07/2021

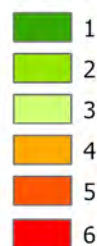
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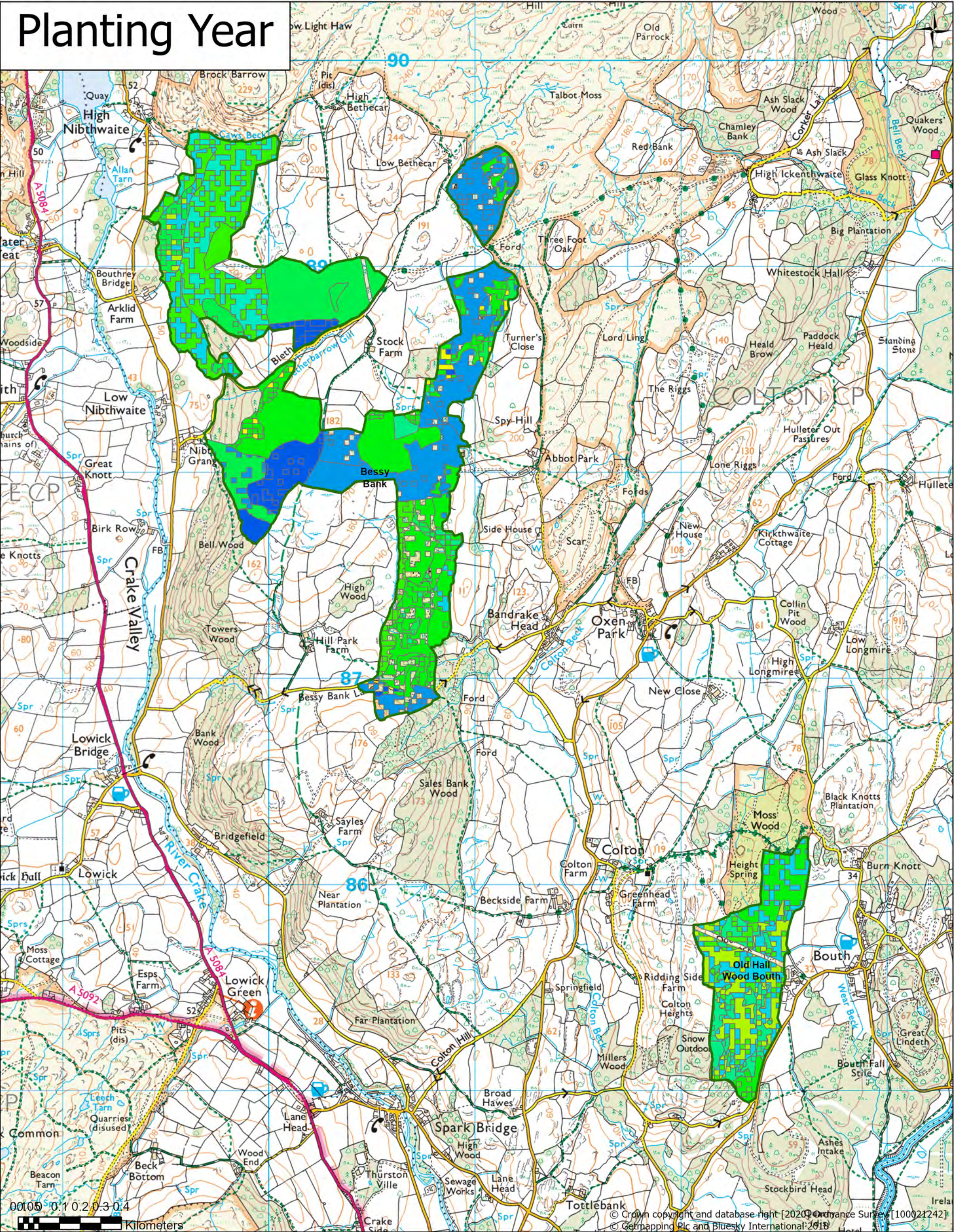
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Wind Hazard Class



Planting Year



Planting Year

02/07/2021

Scale: 1:17,000



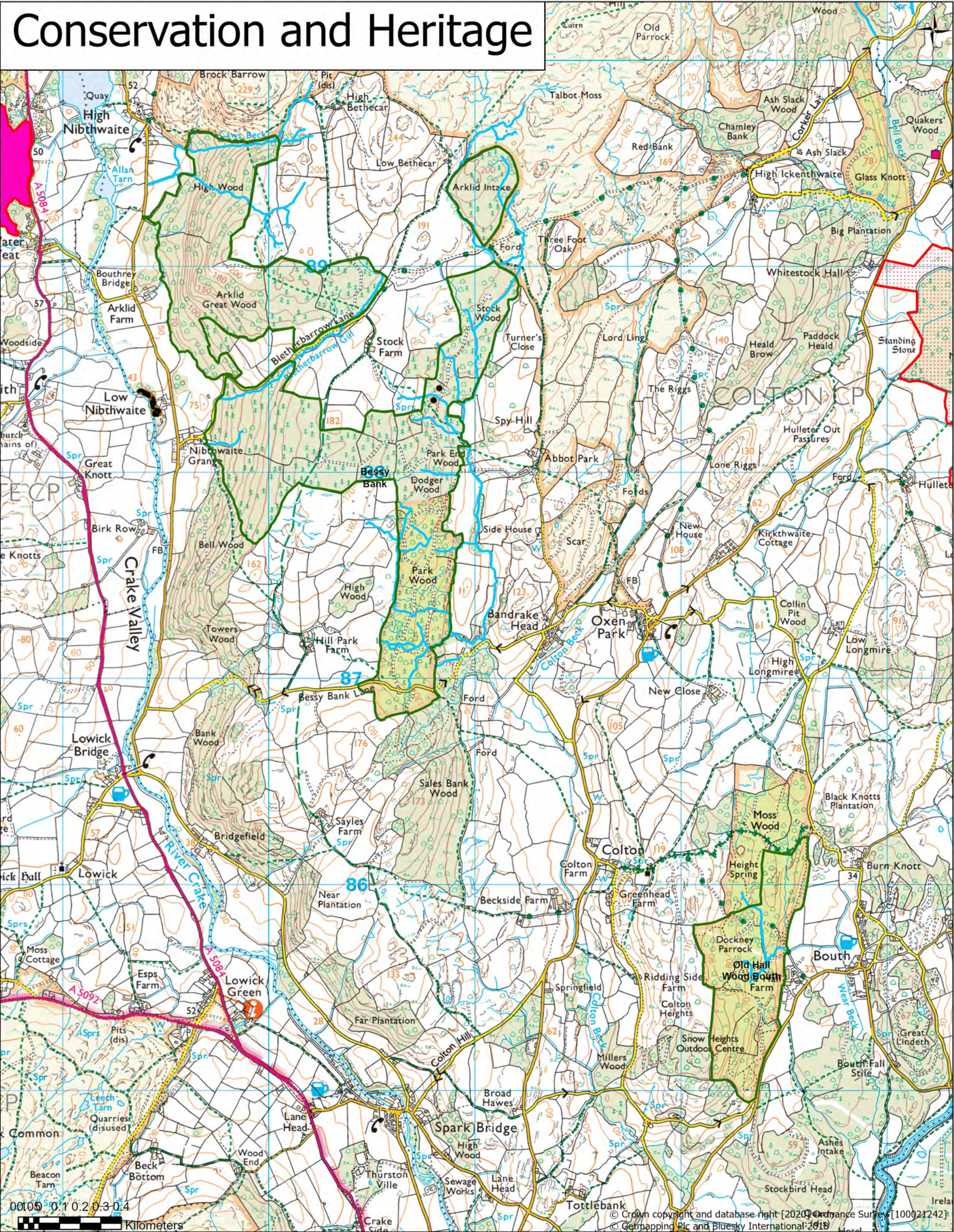
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Planting Year

Pre 1700	1931-1940	2001-2010
1701-1800	1941-1950	2011-2020
1801-1850	1951-1960	
1851-1900	1961-1970	
1901-1920	1971-1980	
1921-1930	1981-1990	
	1991-2000	

Conservation and Heritage





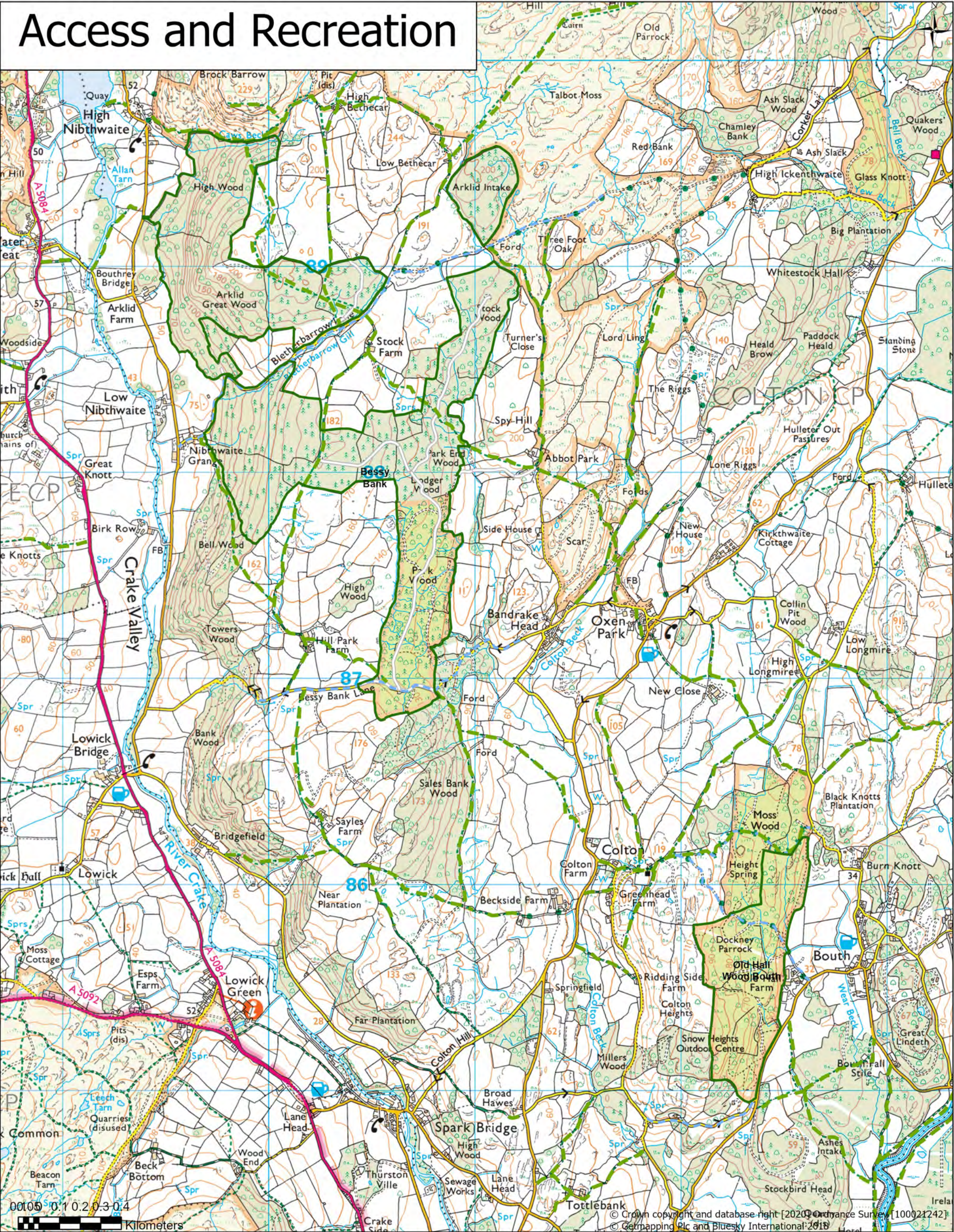
Conservation and Heritage

02/07/2021
Scale: 1:17,000



-  Watercourses
-  Heritage Feature
-  Ancient & Semi-Natural Woodland
-  Ancient Replanted Woodland
-  Sites of Special Scientific Interest
-  Special Areas of Conservation

Access and Recreation



Access and Recreation

02/07/2021

Scale: 1:17,000

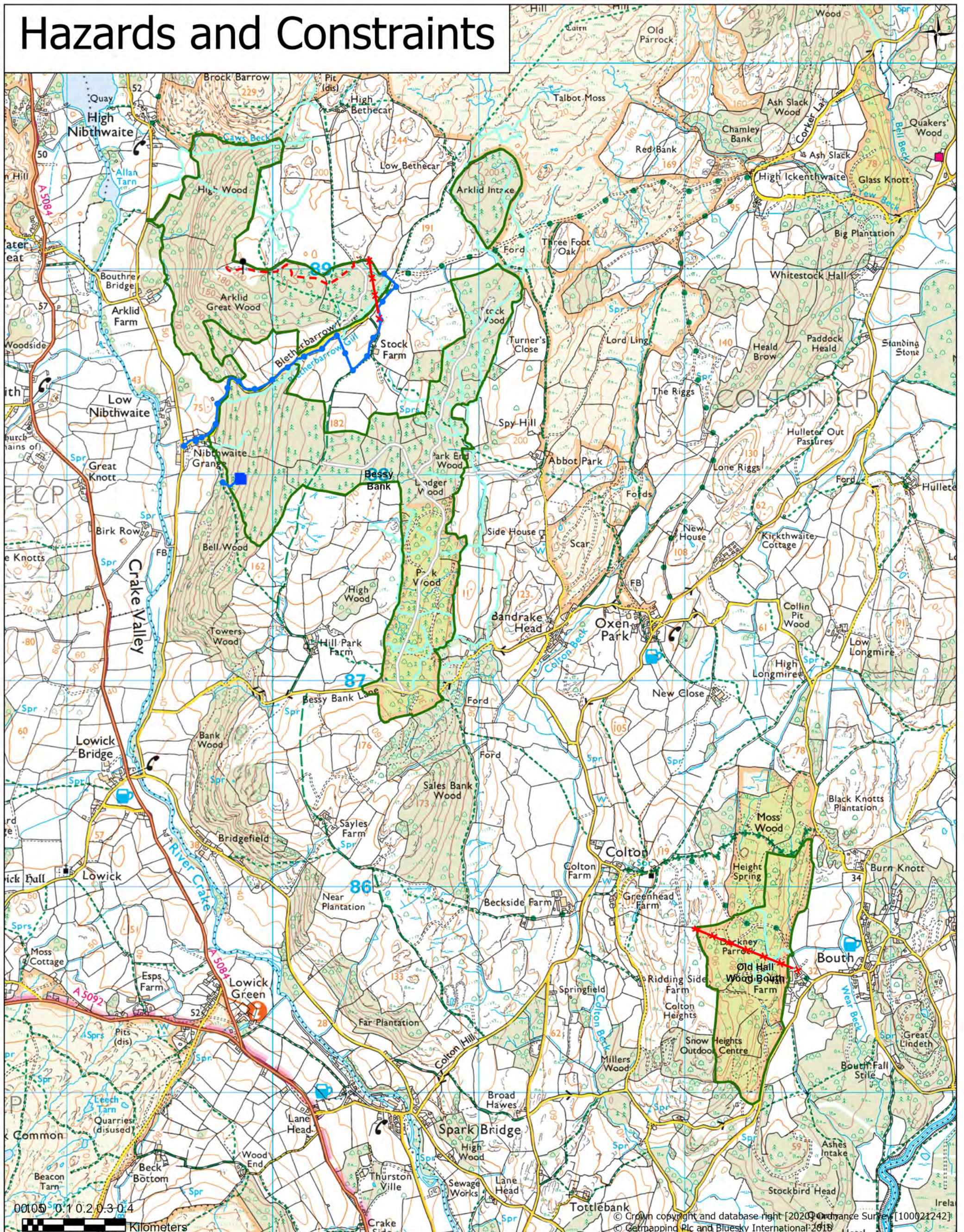


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- Public Right of Way
- Other Trails
- Forest Road

Hazards and Constraints



Hazards and Constraints

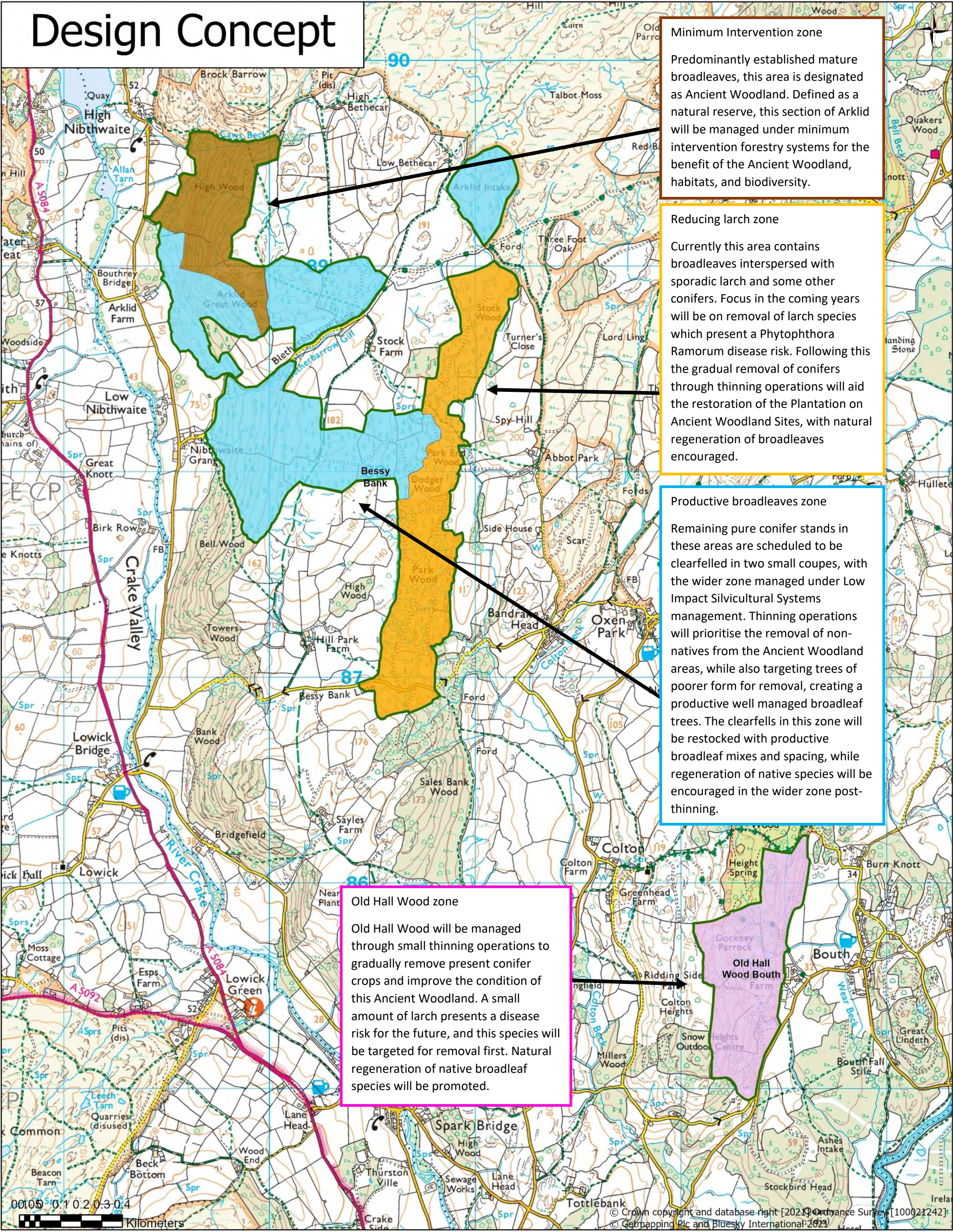
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Scale: 1:17,000



- Water Supply Points
- Masts/Aerials
- ✕ Overhead powerline
- Underground powerline
- Overhead telephone or fibreoptic
- Water Pipelines
- A Road
- Minor Road
- Forest Road
- Watercourses

Design Concept



Design Concept

07/07/2021

Scale: 1:17,000

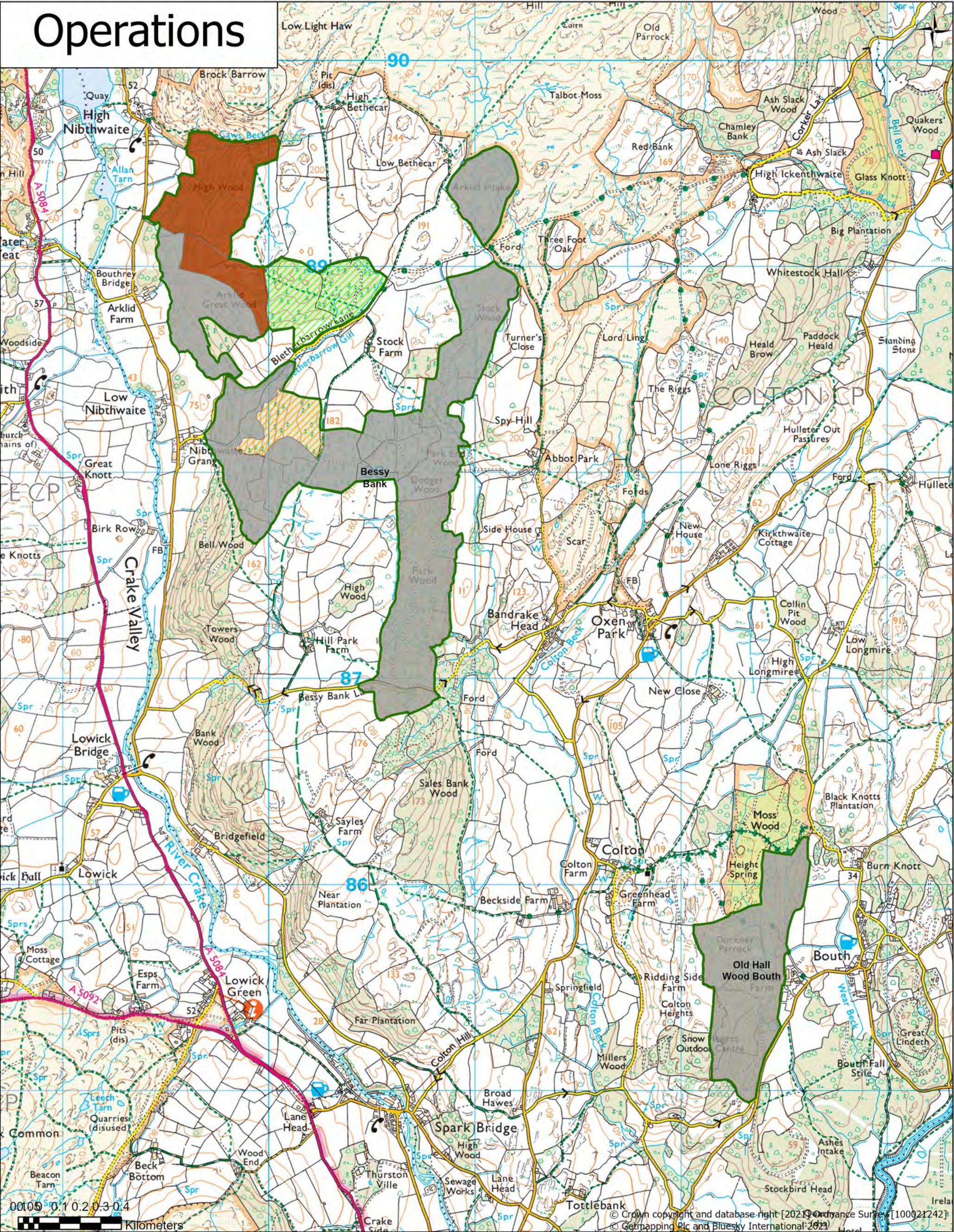


Forestry England
forests and woodlands
have been certified in
accordance with the UK
Woodland Assurance
Standard (UKWAS)



- Bessy Bank, Arklid & Old Hall Wood
- Reducing Larch
- Productive Broadleaves
- Old Hall Wood
- Minimum Intervention

Operations



Operations

02/07/2021
Scale: 1:17,000



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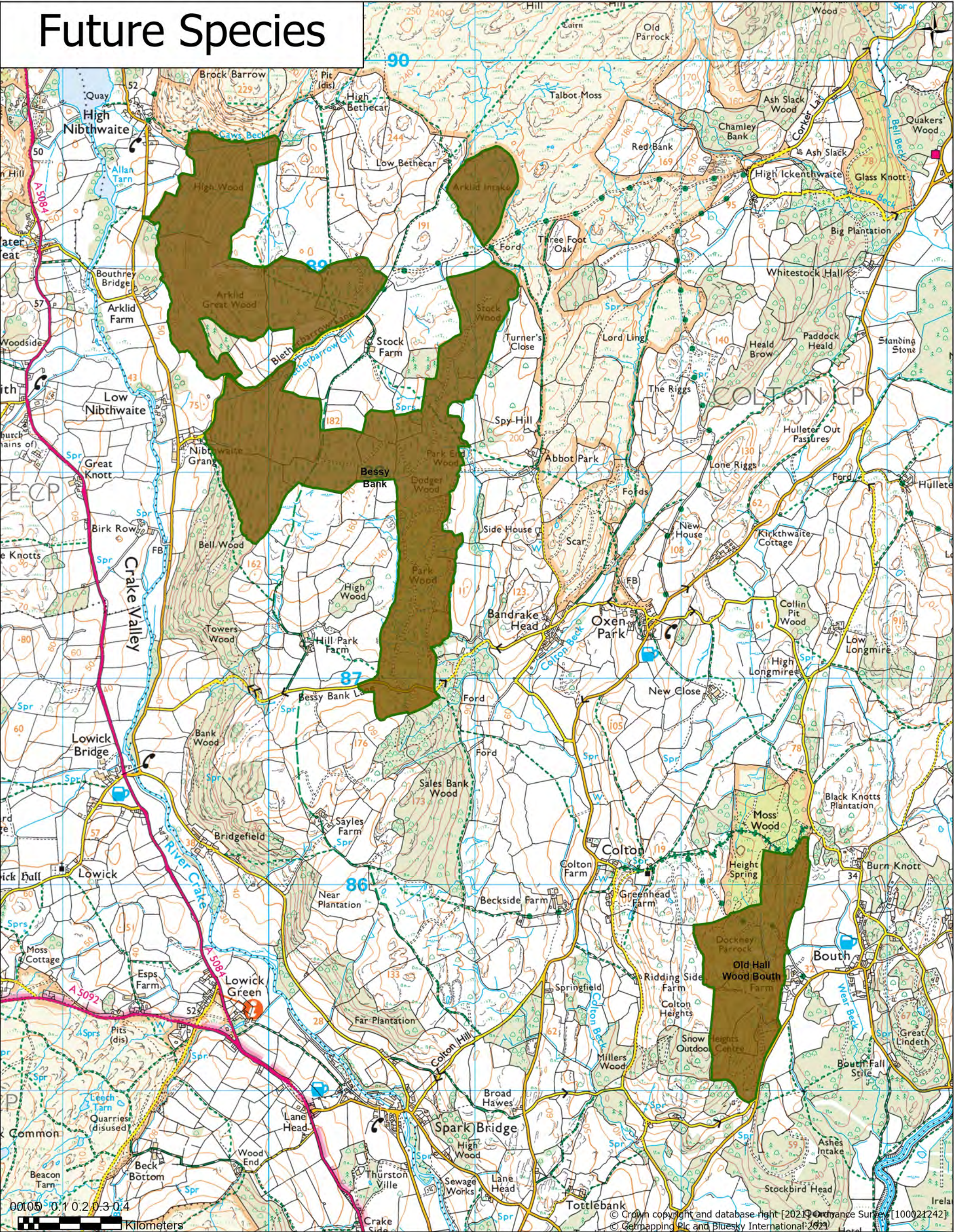
Felling Year

- 2022-2026
- 2027-2031
- 2032-2036
- 2037-2041
- 2042-2046
- 2046+

LISS

Minimum Intervention
Open

Future Species



Forestry England

Future Species

02/07/2021
Scale: 1:17,000



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Future Species

Broadleaves

Part 7 Forest Plan Outcomes

Nature Conservation

Restoration and expansion of Ancient Semi Natural Woodland habitat is a primary objective of management. This will be slowly achieved through the ongoing removal of non-native species, principally by thinning, and supplemented with some localised felling of remaining conifer crops in Bessy Bank & Arklid. Removal of larch species as a response to disease outbreaks will increase this rate of restoration.

Through the ongoing management of Bessy Bank & Arklid, and Old Hall Wood we will;

- Restore species richness of the semi-natural woodland communities.
- Connect areas of ancient woodland with new broadleaf planting and regeneration.
- Maintain and enhance other habitats of local and national importance.

Controlling deer populations is an important aim to support the restructuring of the forest and secure the future of restock sites, and this plan aims to make this control easier through the allocation of additional open space within the forest for deer management.

Timber production

While timber production is not the primary objective of the Forest Plan, production will continue from these blocks into the future. Harvesting of timber, through either the removal of any conifer or non-native broadleaved species will largely be dictated based on progress toward PAWs restoration guided by ongoing Ancient Woodland survey. Broadleaf woodland outside of Ancient Woodland Designation in Bessy Bank will be routinely thinned to sustain small scale production. Silvicultural decisions such as intensity and timing of thinnings will aim to optimise income from these crops.

It is estimated that upcoming conifer clearfell operations will produce 1900m³ of timber, while routine thinning of broadleaf crops will produce approximately 4000m³ of timber over the 10-year period of this forest plan.

Natural capital

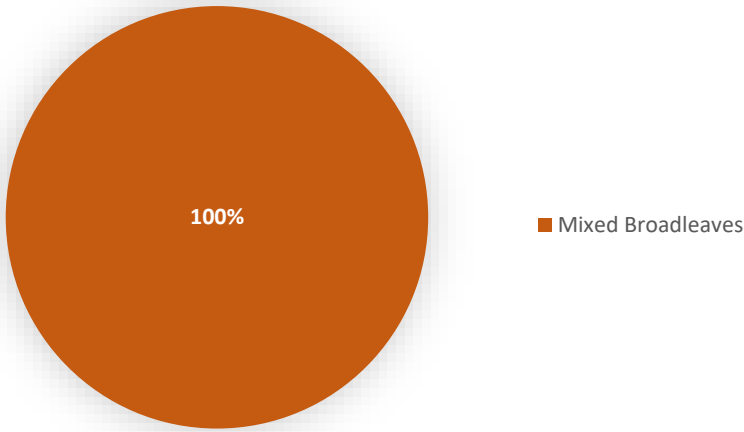
Timber represents only one of the products of a successfully managed forest. Natural Capital refers to the stock of all natural assets upon which the economy and society is built. Natural capital produces **value for people in the form of ‘goods’ such as timber or minerals and ‘services’ such as climate regulation and air purification.** To realise the benefits of some natural assets, humans need to intervene (e.g. harvesting timber) but in other instances natural capital produces value through natural processes (e.g. trees reducing flooding).

The Bessy Bank, Arklid & Old Hall Wood Forest Plan delivers natural capital benefits in biodiversity, public access and landscape and carbon sequestration in timber and soil.

Future species

The future species indicated below represents how the composition could be in 20 years’ time based on the restock proposals contained in this plan. The future species composition shown below includes minimum requirements for UK Woodland Assurance Scheme, UK Forest Standard and Forestry England policy for the restoration of Ancient Woodland sites.

Bessy Bank, Arklid & Old Hall Wood
Future Species



UKWAS compliance table

Table 6: UKWAS Figures						
Component	Forest Plan Area (ha)	Forest Plan Percentage	Forest District Area (ha)	Forest District Percentage		
Total area	207	100%	85888	100%		
Total wooded area	199	96.14%	58069	67.61%		
Area of conservation value*	182	87.92%	11322	13.18%		
Long-term Retentions and Low Impact Silvicultural Systems	182	87.92%	10449	12.17%		
Open space	8	3.86%	27819	32.39%		
Natural Reserves	28	13.53%	873	1.02%		

*Area of conservation value is the sum of designated areas including any Ancient Woodland, Long-Term Retentions, Low Impact Silvicultural Systems, and areas of Natural Reserve.

The United Kingdom Forest Standard (UKFS)

The UKFS is the reference standard for sustainable forest management in the UK. The UKFS is supported by a series of guidelines which outline the context for forestry in the UK, defines standards and requirements and provides a basis for regulation and monitoring. These include General Forestry Practice, Forests and Biodiversity, Climate Change, Historic Environment, Landscape, People, Soil and Water.

The Bessy Bank, Arklid and Old Hall Wood Forest Plan can demonstrate that relevant aspects of sustainable forest management have been considered and the stated objectives in Part 3 show how sustainable forest management will be achieved. The plan provides a clear means to communicate the proposals and to engage with interested parties and serves as an agreed statement of intent against which implementation can be checked and monitored.

In addition to conforming to general sustainable forest management principles UKFS is demonstrated in the following key areas:

Productivity	Productive potential is optimised through the delivery of the small clearfell programme of existing conifer crops, and long-term thinning programme of broadleaf species, ecosystem services and other non-market benefits included in biodiversity, climate change mitigation, water, people, and landscape.
Structure	Long term future species composition: 100% native species meets UKWAS and UKFS requirements. Long term structure will improve through expansion and linking of permanent broadleaved and open habitats.
Silvicultural	Low Impact Silvicultural Systems (LISS) principles will be adopted with long term retention (LTR) of areas of broadleaved woodland as these develop. This will improve species and age class diversity over time.
Biodiversity	Ecological connectivity achieved by extending and linking areas of native broadleaved woodland and open space will be enhanced ensuring that the area is managed with conservation and biodiversity as a major objective.
Climate change	Increase of LISS areas will minimise soil disturbance. Natural regeneration where possible and species diversification will benefit forest resilience.
Landscape	The planning process refers to the Local Landscape Character Assessment to inform the appropriate woodland management and design.
Historic	Historic features are recognised and their safeguard will be incorporated into operational management.
People	The Forest Plan is consulted with individuals, the local community and organisations with an interest in the management of the area.

Water	Quality will be protected through adherence to Forest and Water guidelines as a minimum during any harvesting and forest management operations.
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Longer term management proposals

The proposals in this plan continue to build on the success of previous plans to support the management of Bessy Bank, Arklid & Old Hall Wood, and future management will continue focus on the continued conversion to native broadleaf crops through the gradual thinning of any remaining conifer species. Small scale production from coppicing or thinning of broadleaves will continue timber production at a low level into the future. Public access and low-key recreational use will remain an objective for the future of the forests, with provision of public access on foot guaranteed through rights of way and CRoW where applicable.