



# Hardcastle Crag

Woodland Management Plan April 2017- March 2027

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 Forest and Land Ltd. On Behalf of  
the



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**The aim of this plan is to provide a ten year programme of woodland management will meet the Aims and Objectives of the National Trust at Hardcastle Crag in Hebden Bridge, West Yorkshire. The detail of the plan focusses on tree thinning and felling works at the site. Detail relating to the access and built structures at the site form the content of other plans.**

## **Background to the Woodlands at Hardcastle Crag**

Most of the woodland at Hardcastle Crag was planted in the 1870s as an attractive approach to Lord Savile's shooting lodge at Walshaw. There are also small remnants of semi-natural and ancient woodland and some later conifer plantations. The main appeal lies in the great diversity of tree species within the woodland. With the exclusion of livestock natural regeneration is increasing. The woodlands are covered by a Tree Preservation Order.

The nature conservation value of Hardcastle Crag is high in the context of its location (on the millstone grit of the Southern Pennines) supporting a range of species which are uncommon or rare in the area. This is mainly due to the deep, humid wooded valleys which provided some shelter from the air pollution which affected the region in the 19th and 20th Centuries.

The woodlands are of regional importance supporting a good range of plants, invertebrates, birds and mammals. The ground flora is typical of acid woodland with the richest areas associated with the streams and flushes. There is a low diversity of vascular plants, which is dominated by grasses with bracken in the more open parts. A number of uncommon species, mostly ferns, have been recorded. These are associated with the crags and riverside cliffs as well as man made structures such as walls and bridges. The woods are of particular interest for the bryophyte and lichen flora that thrive because of the high humidity in the deep valleys. The fungi are also of interest and have been well recorded by local naturalists with over 400 species noted.

The northern hairy wood ant dominates the invertebrate fauna of the property; their large nests are widely distributed through the woodland. At least three closely associated species are found with it, indicating a native population. The 1987 Biological Survey also found invertebrate fauna associated with relict ancient woodland or wood-pasture. A good variety of woodland birds have been recorded including many nationally scarce species. There is also a good range of mammals including bats, roe deer and badgers.

Hardcastle Crag (not just the NT ownership) is by far the largest block of woodland in the surrounding area. It lies at the heart of the Calder Ward with a population of over 12,000. National Trust holdings are open access, with approximately 25 kilometres of maintained footpath through the woodland, with approximately 2/3 of this total being statutory rights of way. An estimated 100,000 visitors a year use the site for recreation, mainly walking based activities.

The archaeology of Hardcastle Crag is predominated by industrial remains of a variety of forms and dates. The most obvious of these is Gibson Mill, a cotton mill constructed about 1800, with its associated waterworks, workmen's cottages and other domestic and service structures. Another aspect of the industrial archaeological resource is a large collection of charcoal burning platforms, spread throughout the property. These may, or may not, be associated with a third set of industrial features – evidence for iron smelting, arguably of medieval date – identified in the earlier decades of the 20th century.



# Section 2: Our Aims and Objectives



Native Bluebell (*Hyacinthoides non-scripta*)  
Photo Credit: Drew Marsh



What we want to do	Why we want to do it?	How can we achieve it?
Increase opportunities for our local wildlife.	<p>Britain’s woodland biodiversity is in trouble. Reports show that 60 per cent of our woodland species have decreased and 34 percent have decreased strongly over recent decades. Species decline is attributed to a lack of structural diversity in our woodlands with low management intervention and increased deer numbers resulting in uniform and aging woodlands. We want to do what we can to reverse this trend and help save Britain’s natural heritage. We’ve identified those species listed as being of high conservation importance and have categorised them by preferred habitat type below:</p> <p>Well-structured woodland, broadleaved woodland, native tree species, good shrub layer rides, glades, standing &amp; fallen deadwood, good age and species range  Common Bullfinch  Wood Warbler  Soprano pipistrelle  Lesser Spotted Woodpecker  Common Cuckoo  Northern Hairy Wood Ant</p> <p>Woodland edge, species-rich hedgerows, species-rich glades &amp; rides, flowering scrub  Moss Carder Bee  Soprano pipistrelle  Common Cuckoo  Wood Warbler  West European Hedgehog  Moss Carder Bee  Xanthoroe ferrugata, Dark-barred Twin-spot Carpet moth</p> <p>Areas of heathland, heathy woodland understorey and glades, short vegetation, bare ground, bracken, ruderal vegetation, woodland ponds  Common Toad  Common Lizard  Adder  Moss Carder Bee  Epirrhoe galiata, Galium Carpet moth  Hydraecia micacea, Rosy Rustic Moth  Xanthoroe ferrugata, Dark-barred Twin-spot Carpet moth  Ecliptopera silaceata, Small Phoenix Moth</p>	<p>1/ Increase light levels to the forest floor through thinning and selective felling: This is essential if we are to see the regeneration of new native trees and native wild flowers.</p> <p>2/ Plant trees where regeneration does not occur naturally.</p> <p>3/ Create deadwood, both standing and fallen. Deadwood is a key component of our woodland ecosystems, providing habitat for a host of species, from fungi, to beetles, to birds.</p> <p>4/ Progressively work towards the removal of invasive species, in particular Himalayan Balsam. These plants out compete our native flora and prevent tree regeneration.</p>

What we want to do	Why we want to do it?	How can we achieve it?
Slow the flow of water across our land.	<p>Following the devastating downstream flood events seen recently in the Calder Valley, we want to do everything we can to help to alleviate this problem. Natural Flood Management has been identified by the Environment Agency as a key component towards the prevention of flooding and the reduction in its impacts.</p> <p>Slowing the flow of water across our land has been identified as the best way of achieving this. This means making the ground rougher and more porous and slowing the passage of water through the numerous small streams and drains we have in the Craggs.</p>	<p>5/ We will increase the roughness and porosity of the soil through promoting natural regeneration of trees and wild plants and flowers (see 1 and 2 above).</p> <p>6/ We will continue to remove Himalayan Balsam. Himalayan Balsam is an invasive annual plant that suppresses all native vegetation leaving winter soils exposed and unsupported by perennial root systems. This significantly increases the potential for soil erosion and landslips.</p> <p>By cutting and pulling Himalayan balsam, native perennial plants and trees can regenerate restoring their function in supporting and stabilising soils.</p> <p>7/ Branch wood and small tree trunks sourced from within the Craggs will be used to create small dams in streams and drains to slow the flow of water though our valley.</p>
Reduce our carbon footprint	<p>The Earth’s temperature is warming a result of human activities. Global Warming is already having a terrible impact upon the lives of people and nature across the globe.</p> <p>If the global rise in temperature can be kept below 2 degrees Celsius, the negative effects of climate change can be minimised, this however will require a change in all of our carbon outputs.</p> <p>We therefore wish to minimise carbon outputs and sequester as much carbon as possible through natural processes.</p>	<p>8/Produce heat and electricity through sustainable sources. These include hydroelectric power generated by the Hebden Water and heating generated from firewood sourced on site.</p> <p>9/ To undertake woodland management that promotes the growth of new trees and protects soils from erosion. This means thinning woodlands to increase light levels to a point at which new trees can grow.</p>
Maintain the site’s visual amenity and give our visitors a great experience.	<p>The quality of experience for our visitors is of high importance. Visitor surveys have shown us that the beauty and wildness of our woodlands at Hardcastle Craggs is enjoyed by all of our visitors. This plan aims to maintain this wild feel and ensure that our woodlands remain to be enjoyed by generations to come.</p>	<p>10/All felling will be undertaken to ensure the wild feel of the woodlands are maintained. No clearfelling of woodland is proposed as part of this plan. Thinning and selective felling will allow new trees to grow ensuring continuity of afforestation in to the future.</p>
Protect and enhance the site’s natural and cultural heritage	<p>The site has a rich woodland and industrial heritage which we need to protect.</p>	<p>11/The National Trust are working with local partners to identify all areas of cultural and historical significance. These will be added to a constraints map that will be consulted prior to all operations. Significant features will be identified on the ground and protected from disturbance during operations.</p>



What we want to do	Why we want to do it?	How can we achieve it?
Contribute to the local economy	We want our land to contribute to the quality of life for local people. One of the ways we seek to achieve this is by contributing to the local economy.	<p>12/ Employing staff and contractors from the local area where appropriate.</p> <p>13/ Where timber or other forest products cannot be used within the estate, they will be sold in to local markets where possible</p>
To manage health and safety at the site in line with the ‘Tree Safety Management in the National Trust’ procedure Sep 2015	There are risks of injury to staff, volunteers and the public from falling trees and branches. There are also risks of damage to buildings, property and vehicles. The Trust has a statutory and common law duty to assess and manage these risks. The duty is established in criminal law under the Health and Safety at Work Act, and in civil law under the Occupier’s Liability Act. The Trust must take all precautions as far as is reasonably practicable to avoid risks to the safety of members of the public, staff and volunteers. Therefore there is a need to inspect trees in and near public places and adjacent to buildings and working areas, to assess whether they represent a risk to life and/or property, and to take remedial action as appropriate.	14/ To follow National Trust Health and Safety procedures.



# Section 3: Site Maps



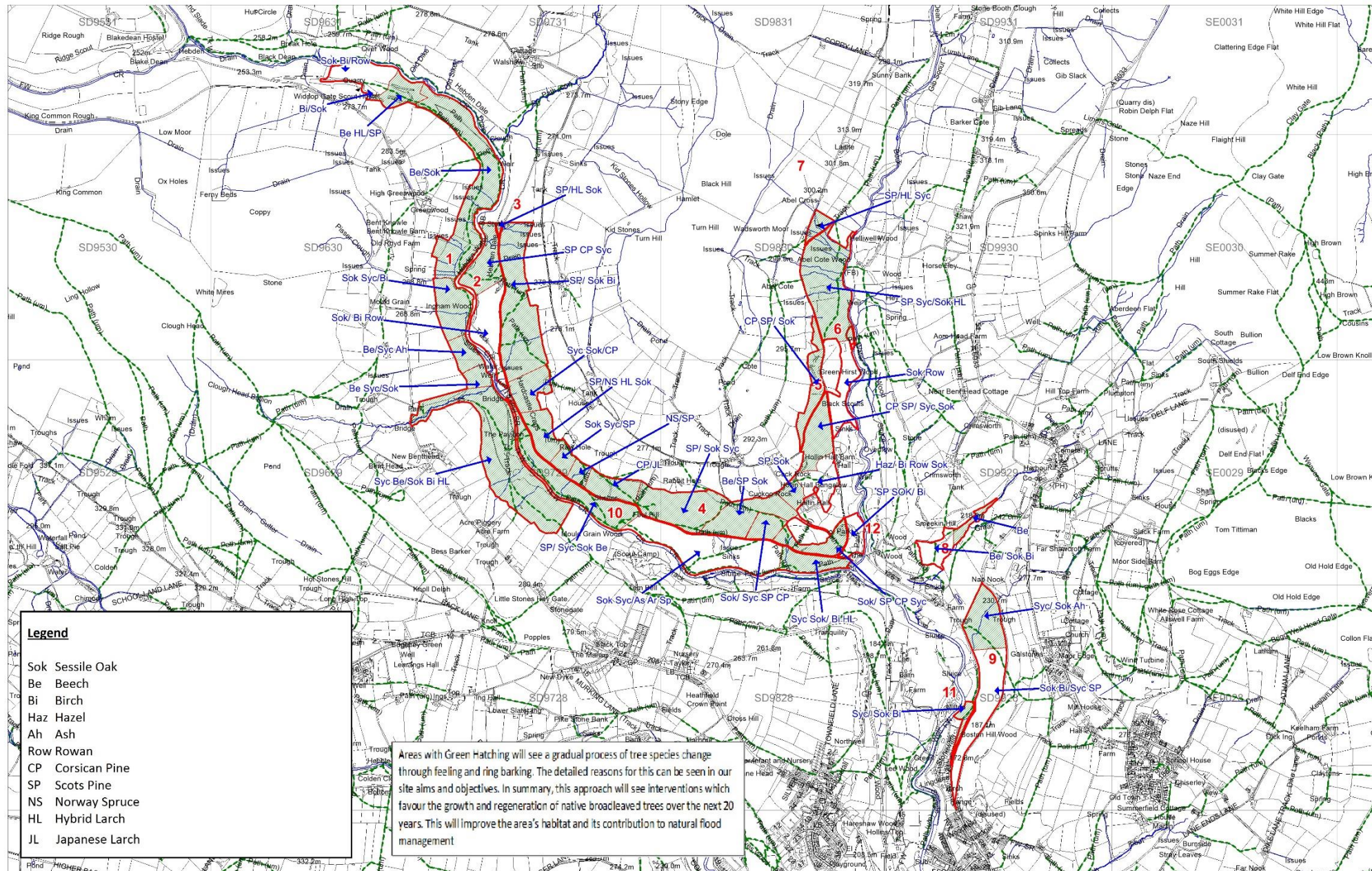
Horse Logging in Compartment 4c  
Photo Credit: Drew Marsh





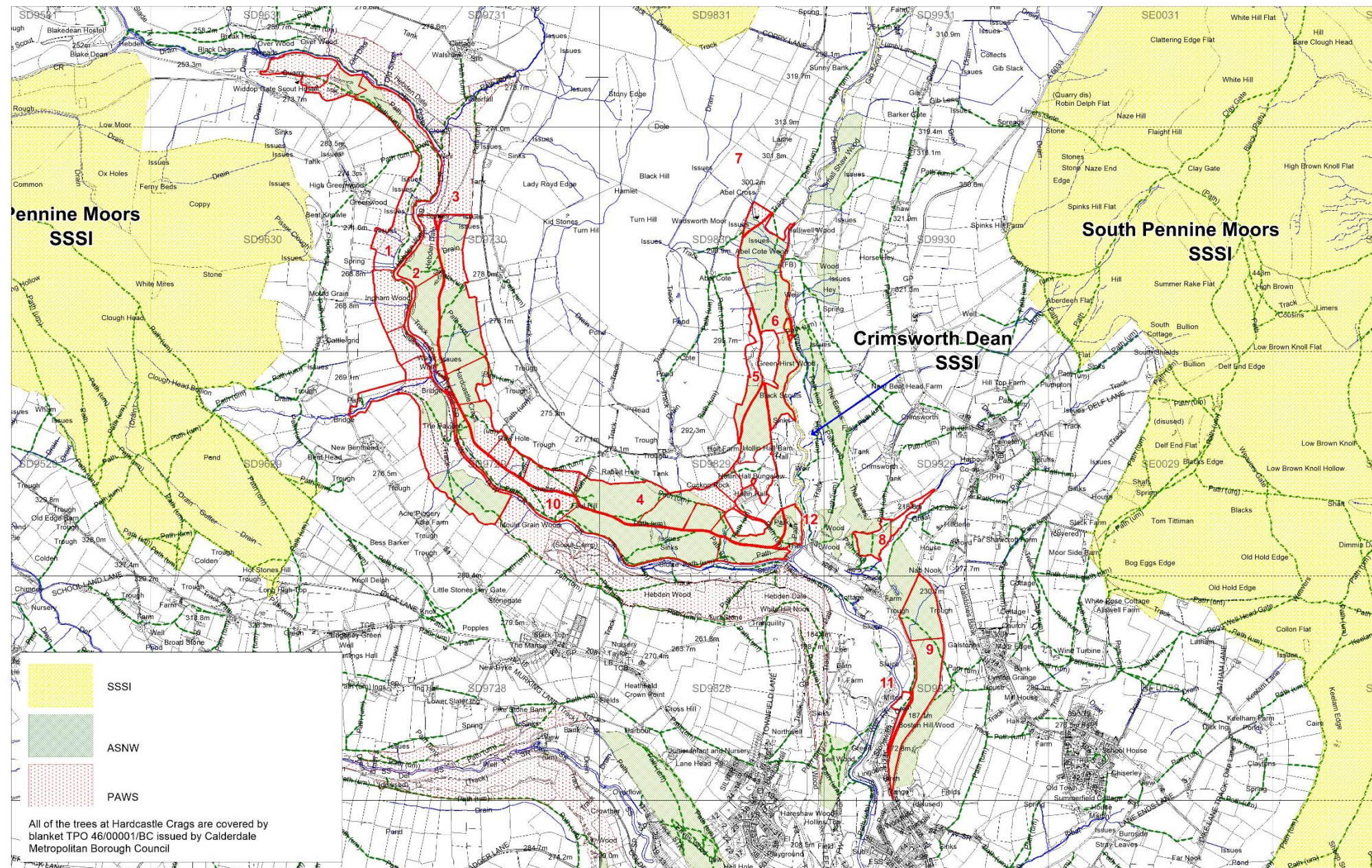
Hardcastle Crags Forest Plan: Map 1 Compartments





Hardcastle Crags Forest Plan: Map 2-Tree Species



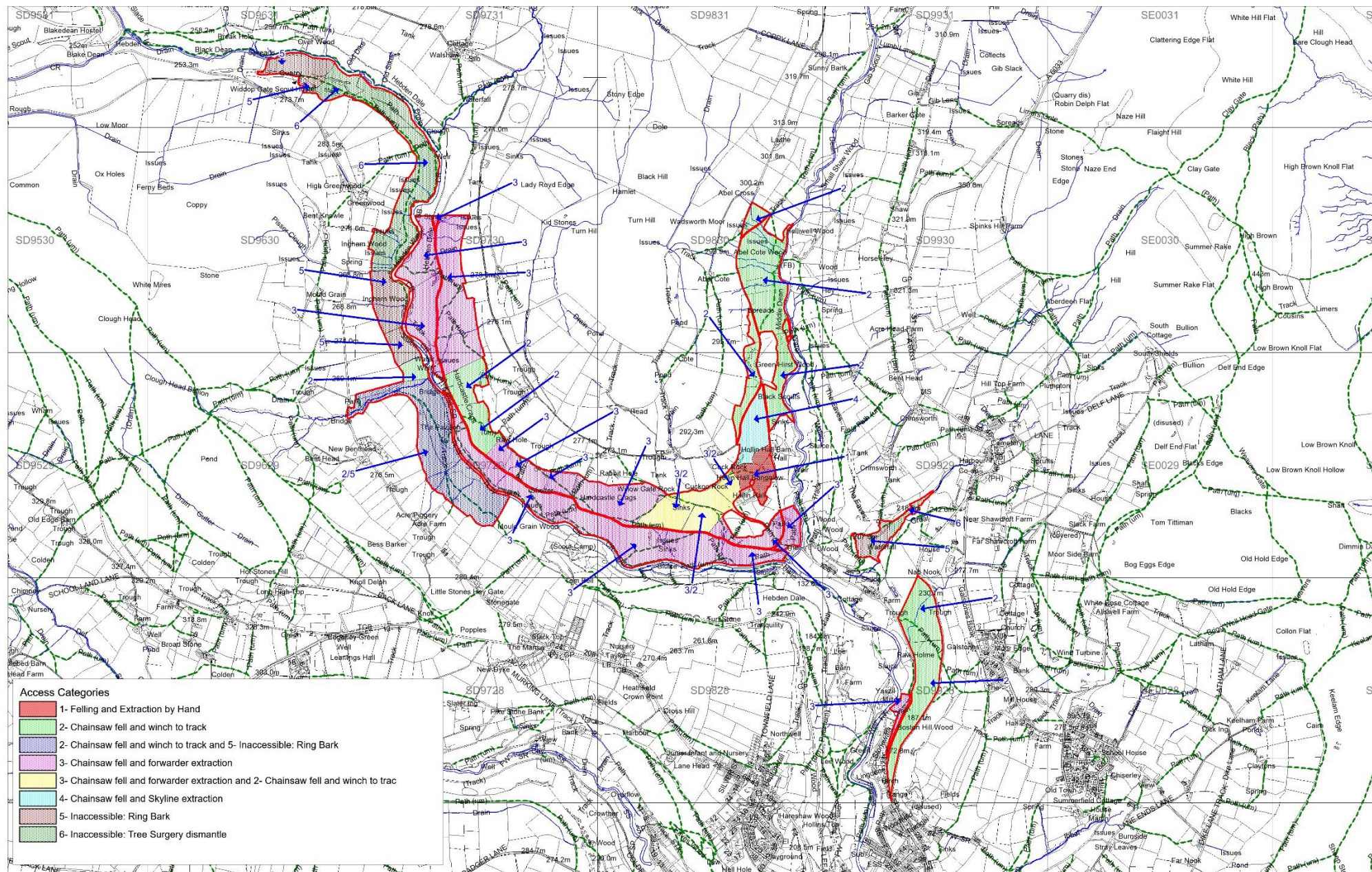


## Hardcastle Craggs Forest Plan: Map 3-Designations

Scale 1:15000 at A3

Contains Ordnance Survey data © Crown copyright and database right 2016



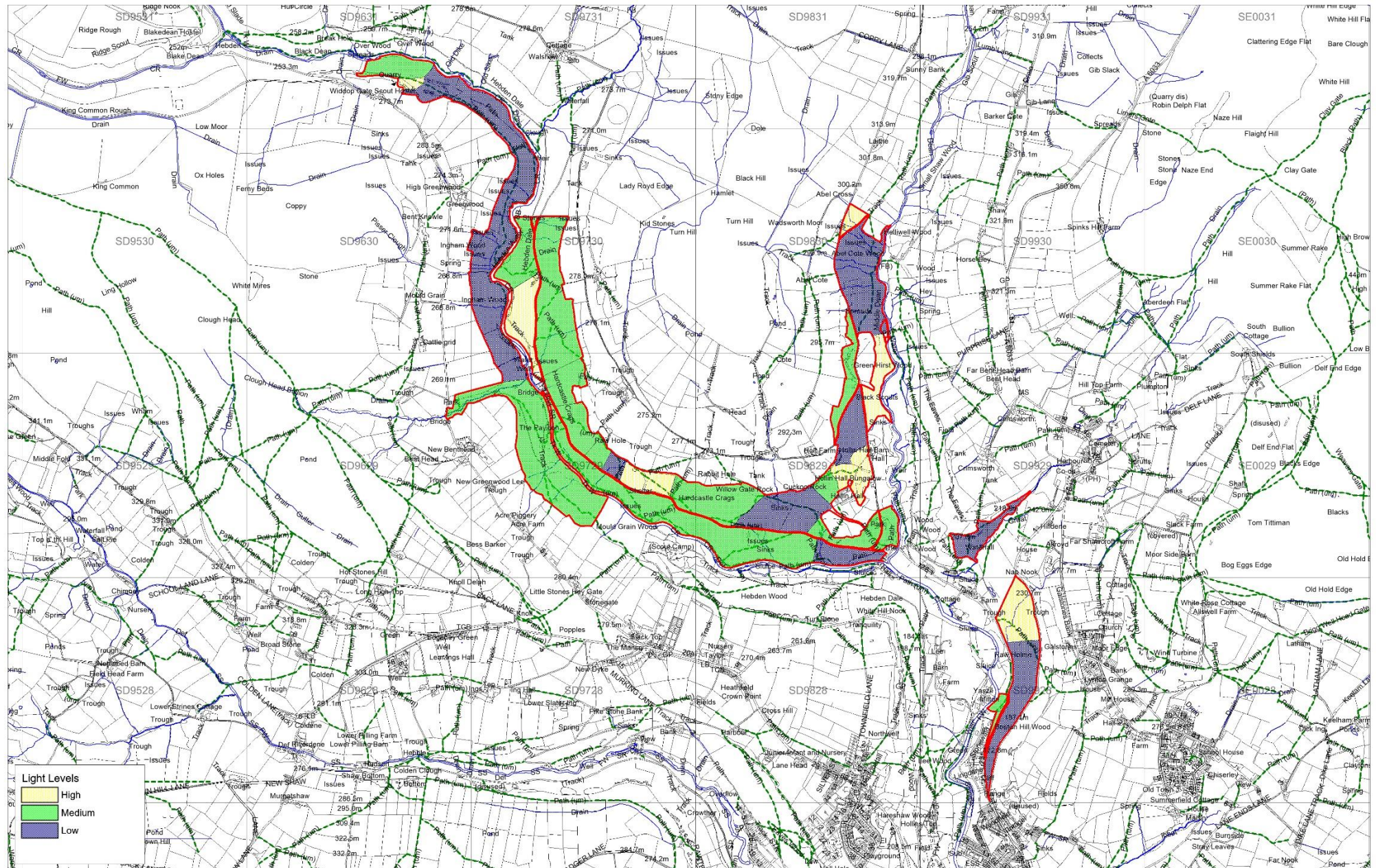


Hardcastle Craggs Forest Plan: Map 4- Works Access



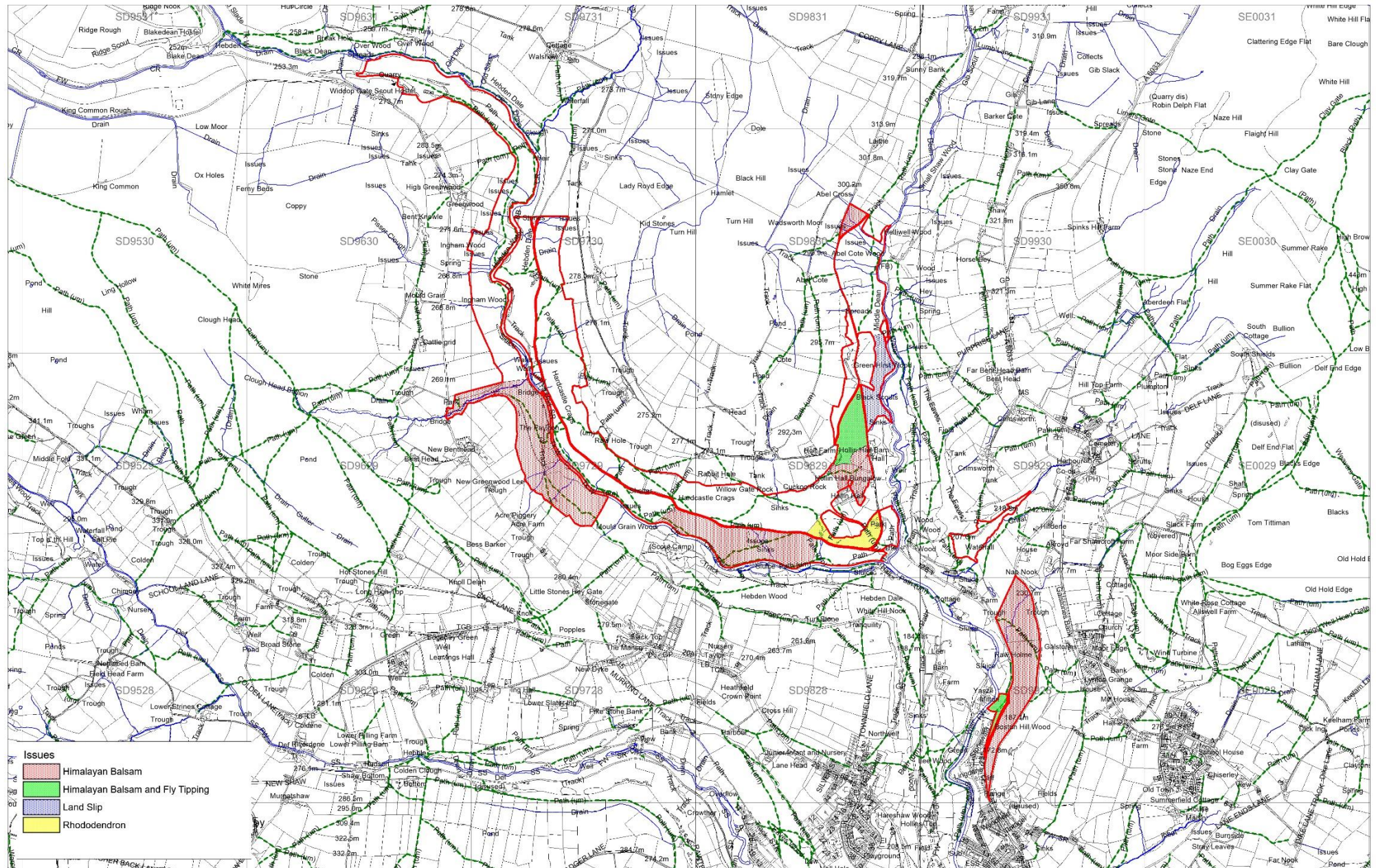






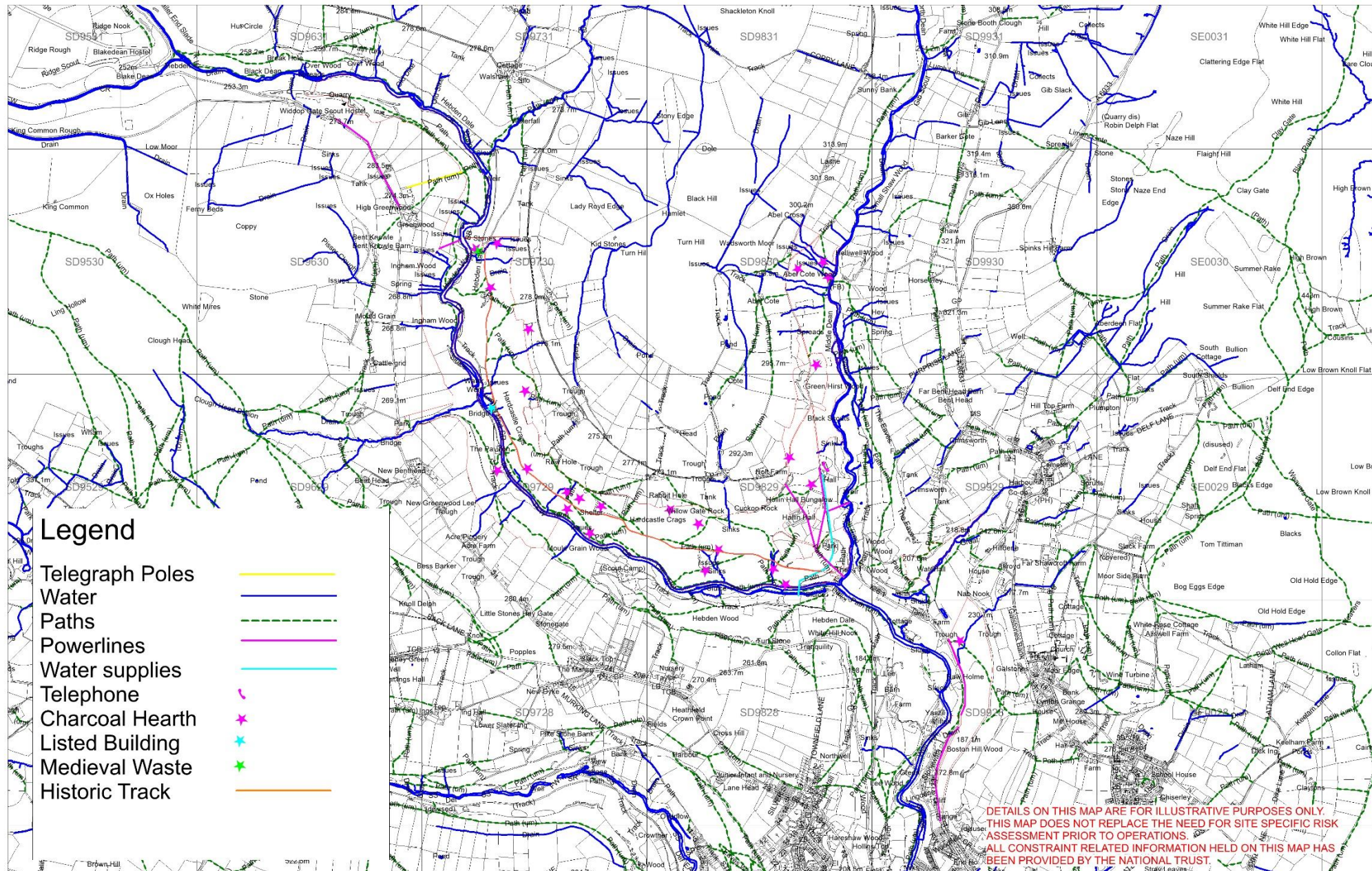
Hardcastle Craggs Forest Plan: Map 6- Light Levels





Hardcastle Craggs Forest Plan: Map 7- Issues





Hardcastle Craggs Forest Plan: Map 8- Constraints

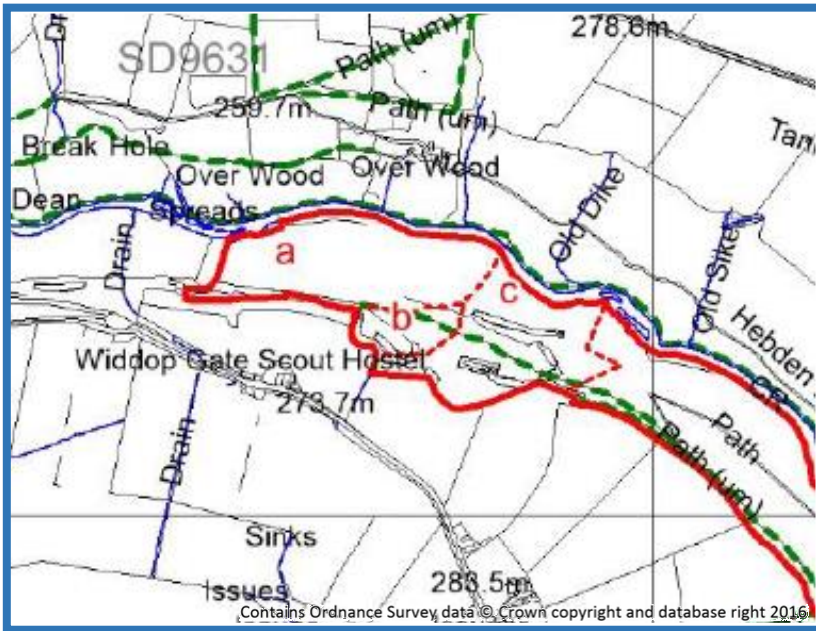


# Section 4: Compartment Summaries

Beech Avenue In Compartment 1d  
Photo Credit: Drew Marsh







**Compartment:** 1a

**Species:** Sessile Oak, Birch and Rowan

**Hectares:** 2.5

**Designations:** PAWS

**Constraints:** Paths and Water

**Light Level:** Medium

**Issues:** None

**Intervention:** None

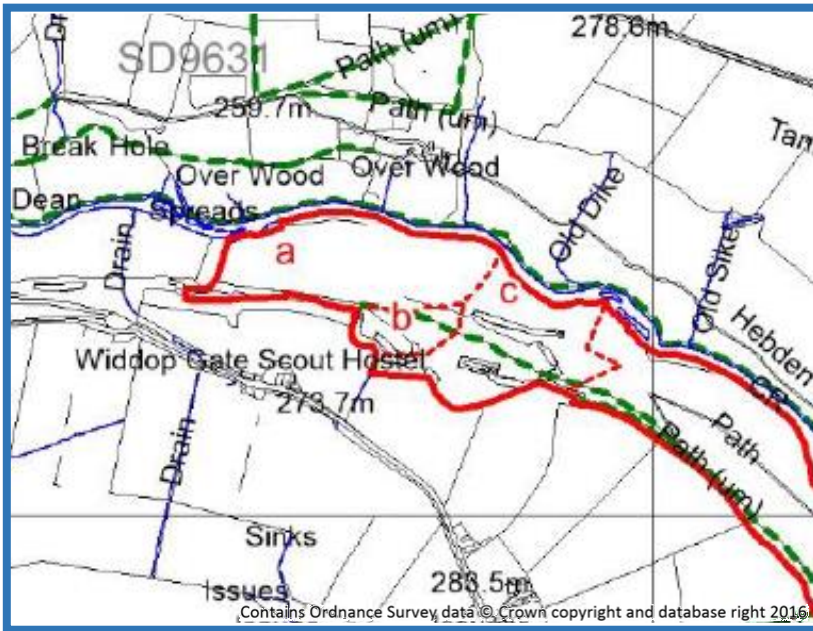
**Description:** A broadleaved woodland with mixed age structure in good ecological condition.

**Aims:** To maintain the good ecological condition.









**Compartment:** 1c

**Species:** Beech, Hybrid Larch, Scots Pine

**Hectares:** 2.04

**Designations:** PAWS & ASNW

**Constraints:** Paths, Water

**Light Level:** Low

**Intervention:** 40% selective fell

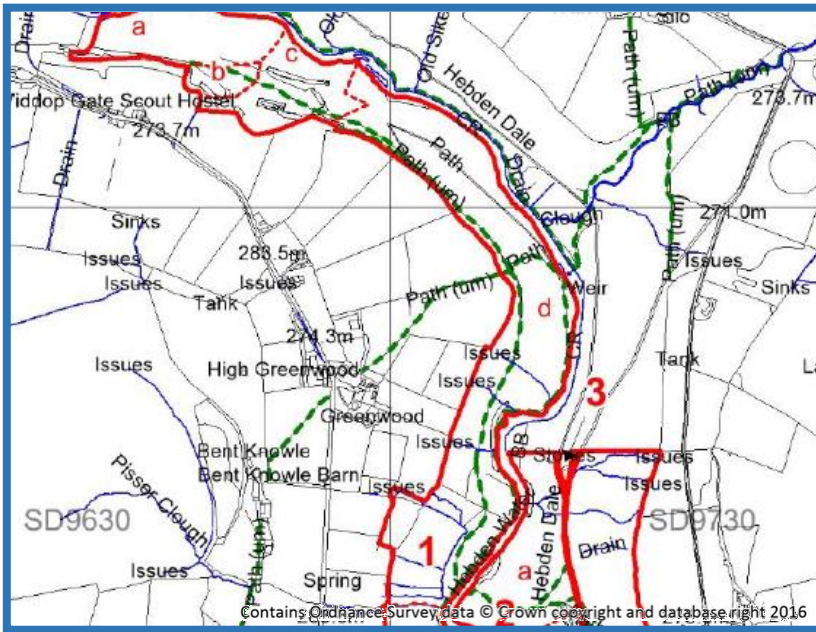
**Work Period:** April 2021-March 2023

**Issues:** Lack of understory, lack of regenerating native tree species, dense shade, poor access, poor age structure.

**Description:** A mature mixed woodland with an even age structure sitting directly adjacent to the Hebden Water.

**Aims:** To diversify age structure, increase deadwood and species diversity, and to increase light levels.





**Compartment:** 1d

**Species:** Beech, Sessile Oak

**Hectares:** 10.65

**Designations:** PAWS

**Constraints:** Path, Water, Powerlines

**Light Level:** Low

**Intervention:** 40% selective fell

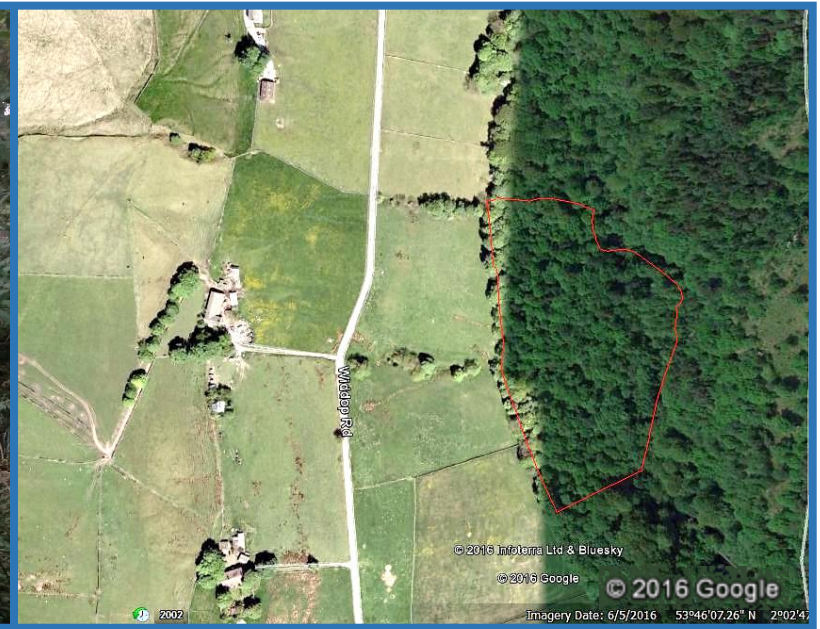
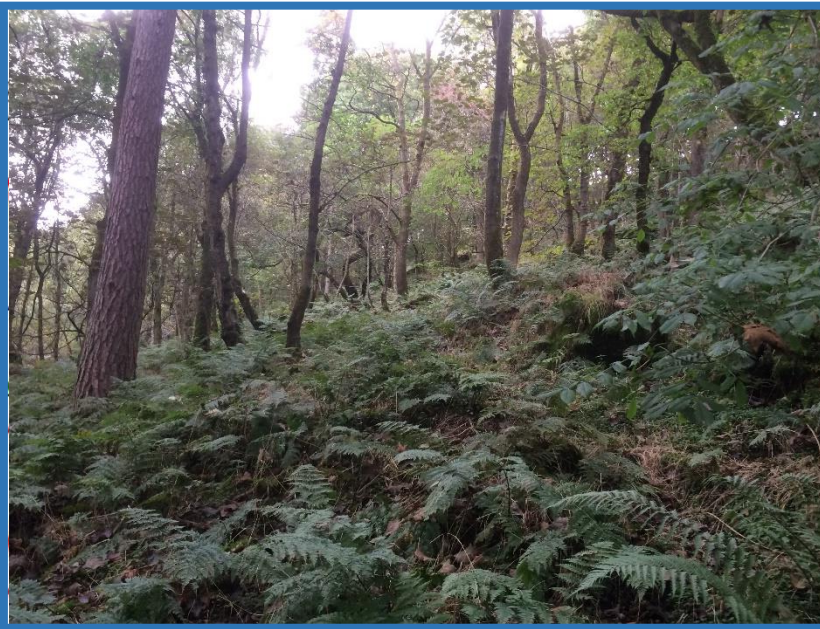
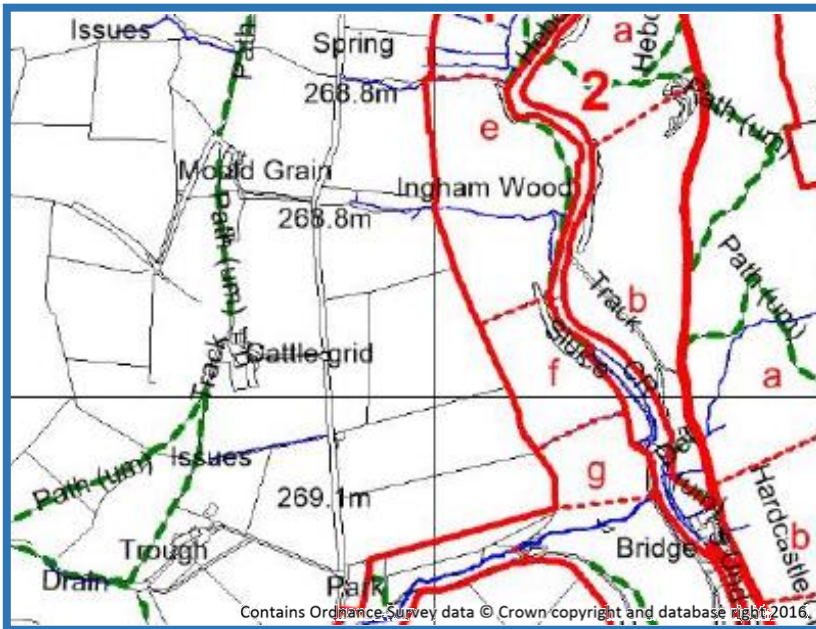
**Work Period:** April 2021-March 2023

**Issues:** Lack of understory, lack of regenerating native tree species, dense shade, poor age structure.

**Description:** An even aged area of planted non-native broadleaved woodland directly adjacent to the Hebden Water.

**Aims:** To diversify age structure, restore ground flora, increase proportion of native trees and increase light levels.





**Compartment:** 1e

**Species:** Sessile Oak, Sycamore, Birch

**Hectares:** 3.48

**Designations:** PAWS

**Constraints:** Path, Water

**Light Level:** Low

**Intervention:** 10% thin

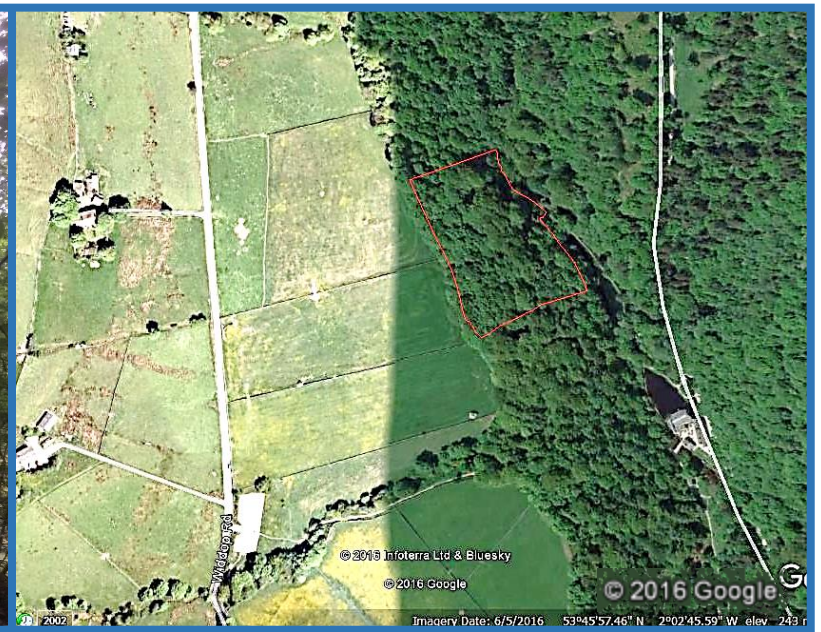
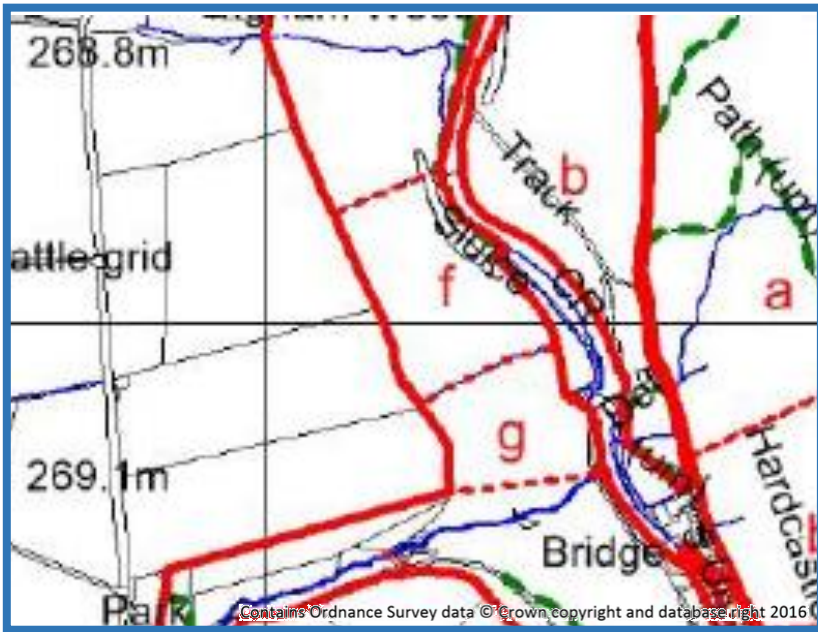
**Work Period:** April 2021-March 2023

**Issues:** Lack of regenerating native tree species, dense shade.

**Description:** An area of mixed non-native woodland with a diverse age structure directly adjacent to the Hebden Water.

**Aims:** To diversify age structure and increase deadwood component, native tree proportion, and light levels.





**Compartment:** 1f

**Species:** Beech, Sycamore, Ash

**Hectares:** 1.54

**Designations:** PAWS

**Constraints:** Path, Water

**Light Level:** Low

**Intervention:** 40% selective felling

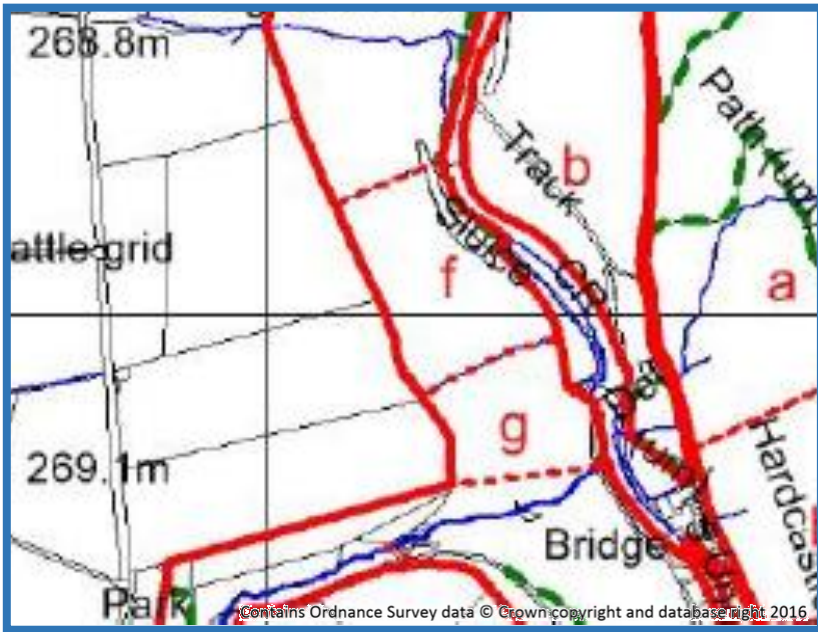
**Work Period:** April 2021-March 2023

**Issues:** Lack of understory, lack of regenerating native tree species, dense shade, poor age structure.

**Description:** An even aged area of primarily non-native broadleaved woodland.

**Aims:** To diversify age structure and increase the deadwood component and light levels.





**Compartment:** 1g

**Species:** Beech, Sycamore, Sessile Oak

**Hectares:** 0.98

**Designations:** PAWS

**Constraints:** Path, Water

**Light Level:** Low

**Intervention:** 30% thin

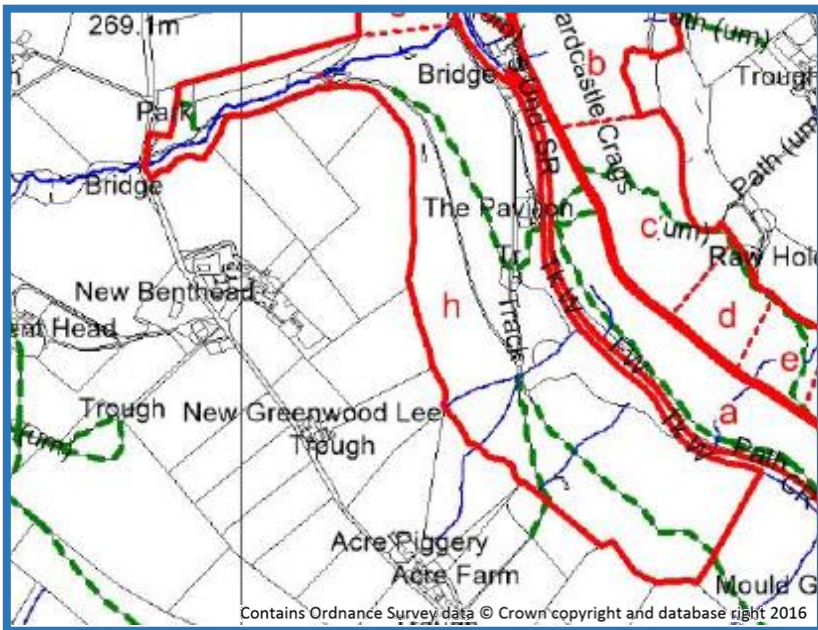
**Work Period:** April 2021-March 2023

**Issues:** Low proportion of native tree species in both stand and regeneration, dense shade.

**Description:** An area of planted non-native broadleaved woodland with uneven age structure directly adjacent to the Hebden Water.

**Aims:** To diversify age structure and increase native species component and light levels.





**Compartment:** 1h

**Species:** Beech, Sycamore, Sessile Oak, Birch, Hybrid Larch

**Hectares:** 13.11

**Designations:** PAWS & ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Medium

**Intervention:** 30% thin

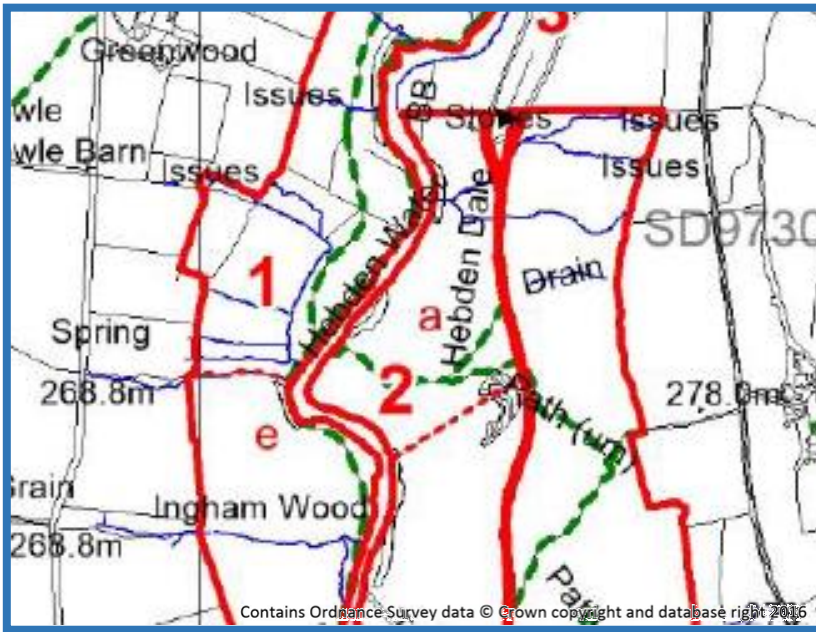
**Work Period:** April 2021-March 2023

**Issues:** Lack of understory in some areas, lack of regenerating native tree species, shade. Himalayan Balsam.

**Description:** An area of planted non-native broadleaved woodland with uneven age structure directly adjacent to the Hebden Water.

**Aims:** To diversify age structure and increase deadwood component and light levels. Remove Balsam.





**Compartment:** 2a

**Species:** Scots and Corsican Pine, Sycamore

**Hectares:** 3.2

**Designations:** PAWS & ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Medium

**Intervention:** 50% selective felling

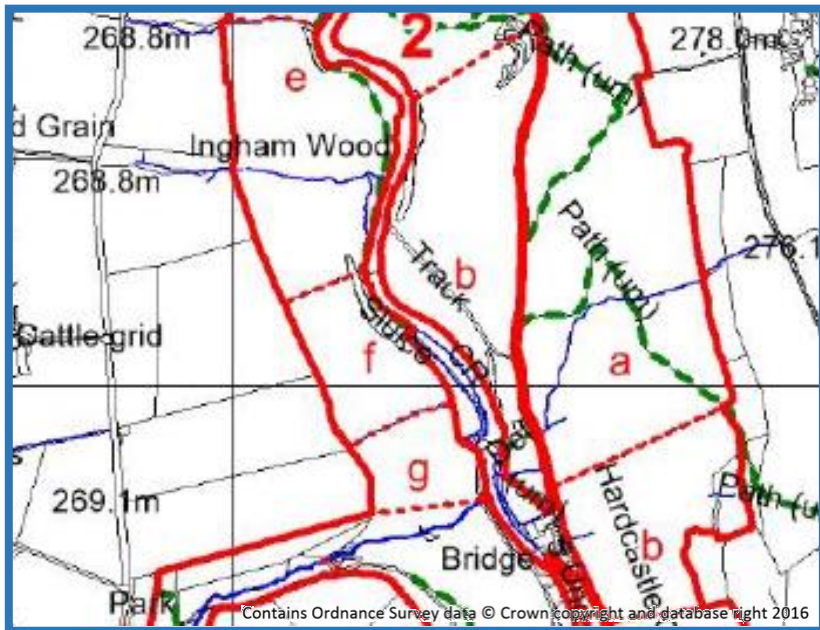
**Work Period:** April 2019-March 2021

**Issues:** Lack of regenerating native tree species, shade.

**Description:** An area of planted non-native mixed woodland with uneven age structure directly adjacent to the Hebden Water.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 2b

**Species:** Sessile Oak, Birch, Rowan

**Hectares:** 3.89

**Designations:** ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** High

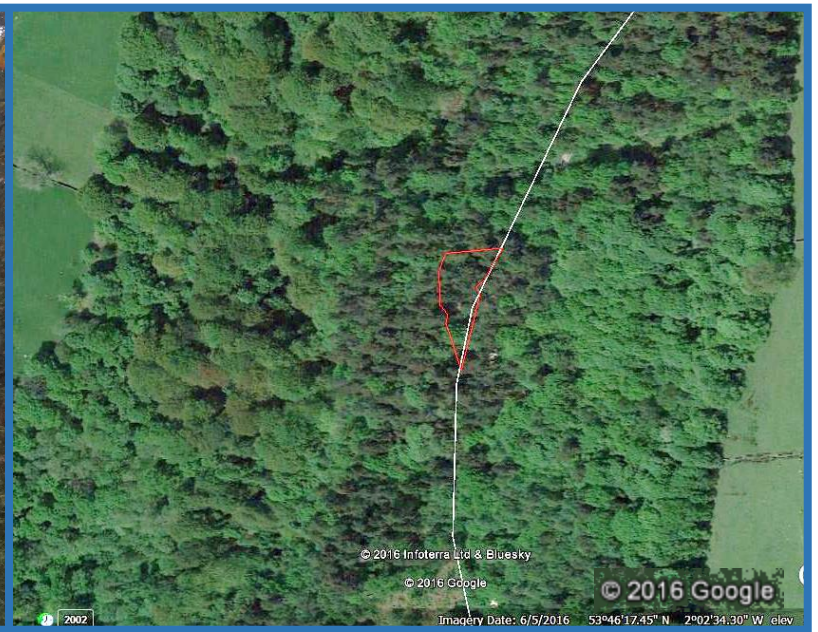
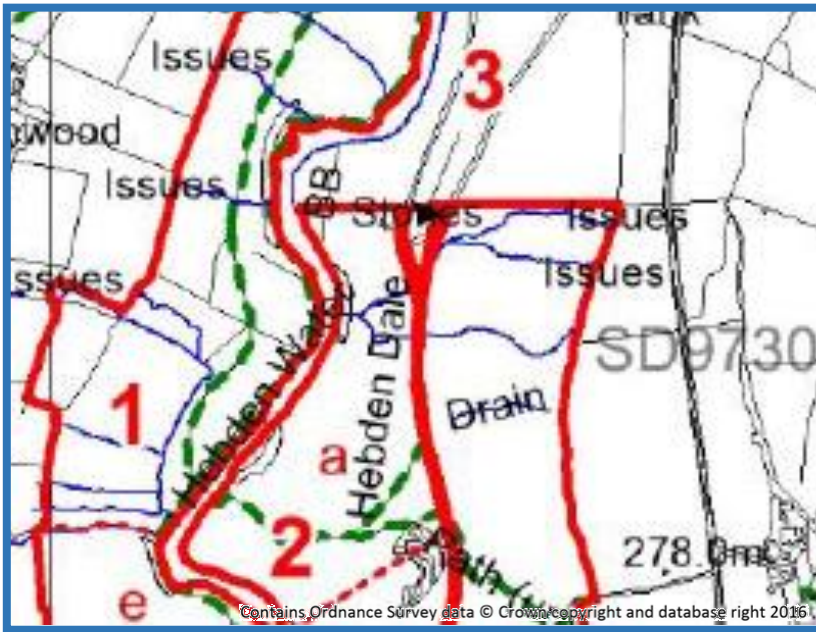
**Intervention:** Areas to be kept open to expose the 'Crag's'

**Issues:** None

**Description:** An area of native broadleaved woodland with a diverse age structure directly adjacent to the Hebden Water.

**Aims:** To maintain diversity and varied structure and to maintain views of the 'Crag's'





**Compartment:** 3

**Species:** Scots Pine Hybrid Larch and Sessile Oak

**Hectares:** 0.1

**Designations:** PAWS

**Constraints:** Paths

**Light Level:** Medium

**Intervention:** 50% selective felling

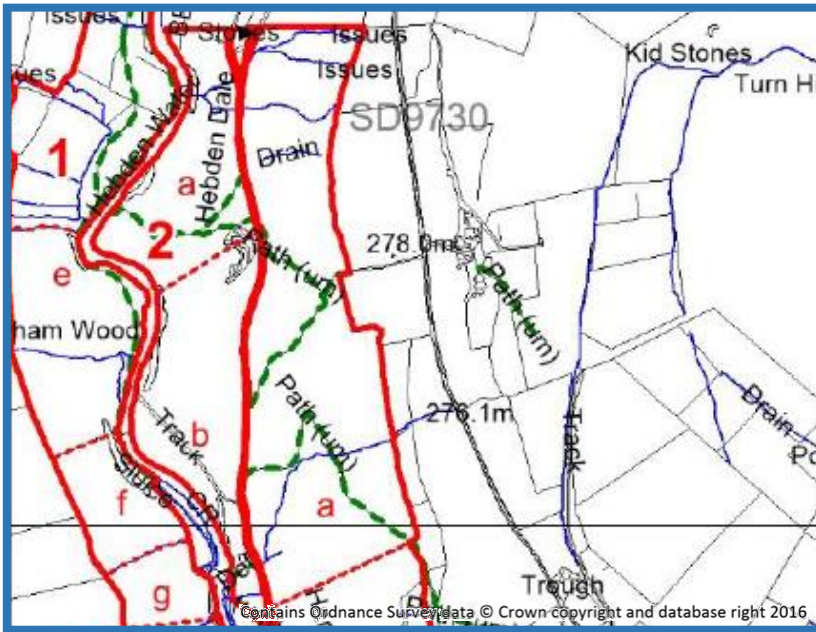
**Work Period:** April 2019-March 2021

**Issues:** Lack of regenerating native tree species, shade , poor age structure.

**Description:** An area of mixed non-native woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





## Compartment: 4a

**Species:** Scots Pine, Sessile Oak, Birch

**Hectares:9.57**

## Designations: PAWS & ASNW

## Constraints: Path, Archaeology

**Light Level:** Medium

## Intervention: 30% thin

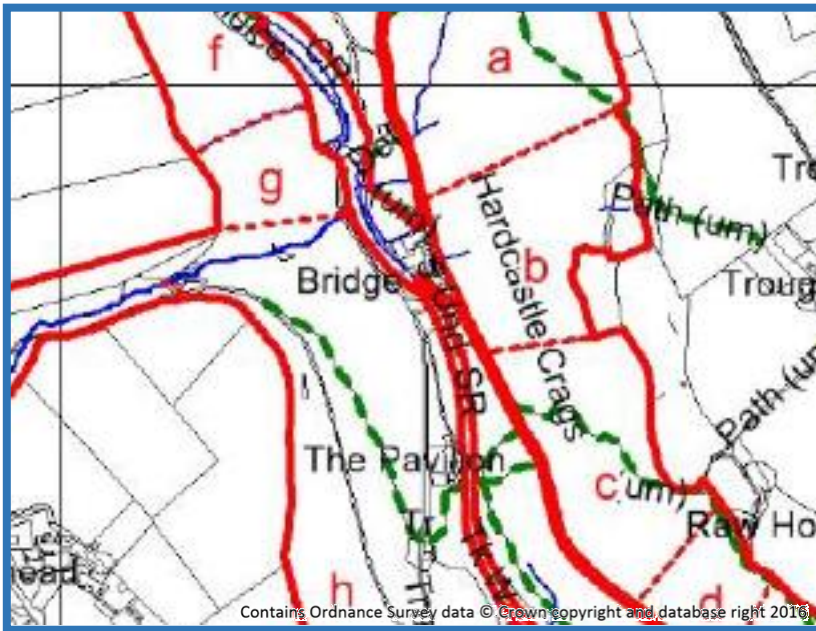
**Work Period:** April 2019-March 2021

**Issues:** Lack of regenerating native tree species, shade , poor age structure.

**Description:** An area of planted mixed woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4b

**Species:** Sessile Oak, Sycamore, Corsican Pine

**Hectares:** 2.52

**Designations:** ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Medium

**Intervention:** 30% thin

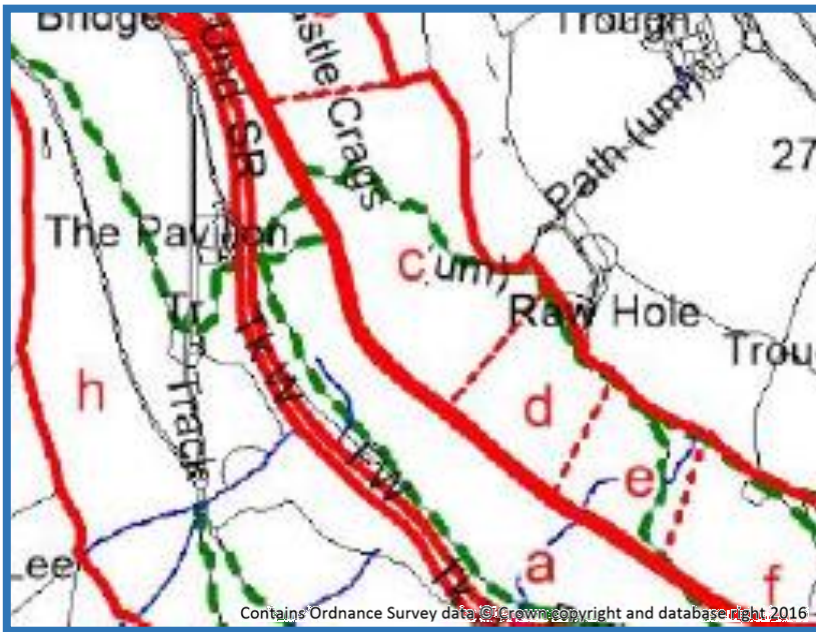
**Work Period:** April 2023-March 2025

**Issues:** Lack of regenerating native tree species, shade.

**Description:** An area of predominantly broadleaved woodland with some conifers and a diverse age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4c

**Species:** Scots Pine, Norway Spruce, Hybrid Larch, Sessile Oak,

**Hectares:** 2.42

**Designations:** PAWS & ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Medium

**Intervention:** 50% Selective Fell

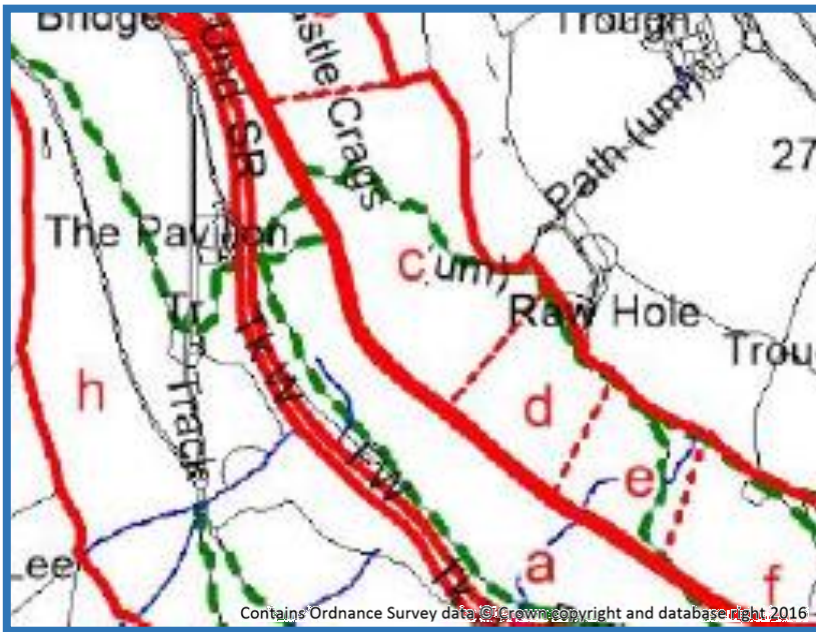
**Work Period:** April 2023-March 2025

**Issues:** Lack of tree regeneration, lack of native tree species, shade , poor age structure.

**Description:** An area of planted predominantly coniferous woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment: 4d**

**Species:** Sessile Oak, Sycamore, Scots Pine

**Hectares:0.89**

**Designations: PAWS**

## Constraints: Path, Water

**Light Level:** Medium

## Intervention: 30% thin

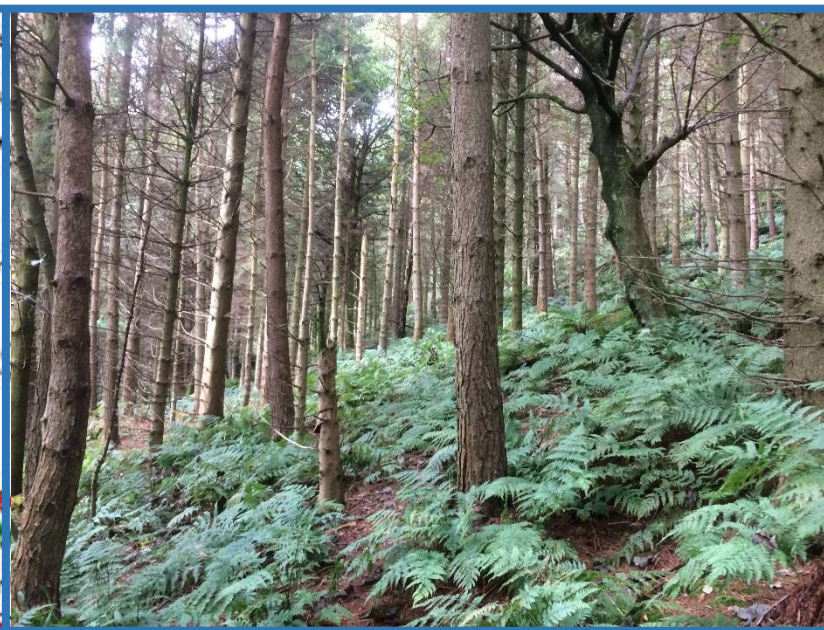
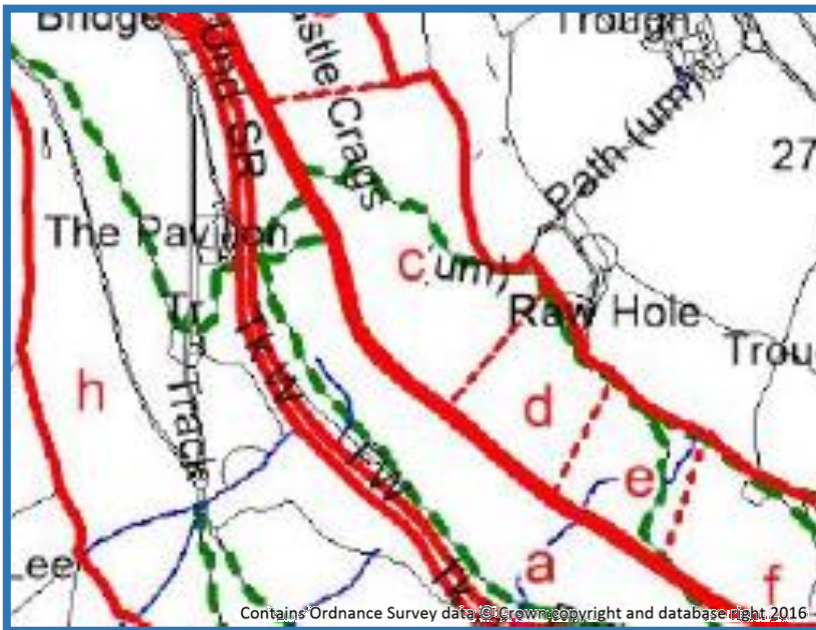
**Work Period:** April 2023-March 2025

**Issues:** Lack of regenerating native tree species, shade.

**Description:** An area of non-native, predominantly broadleaved woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4e

**Species:** Norway Spruce, Scots Pine

**Hectares:** 0.81

**Designations:** PAWS

**Constraints:** Path, Water, Archaeology

**Light Level:** Low

**Intervention:** 30% thin

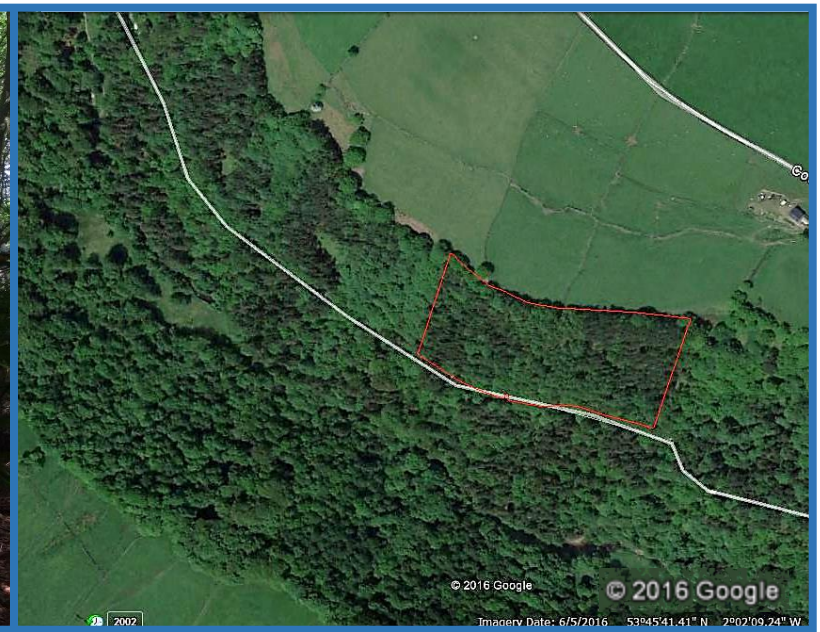
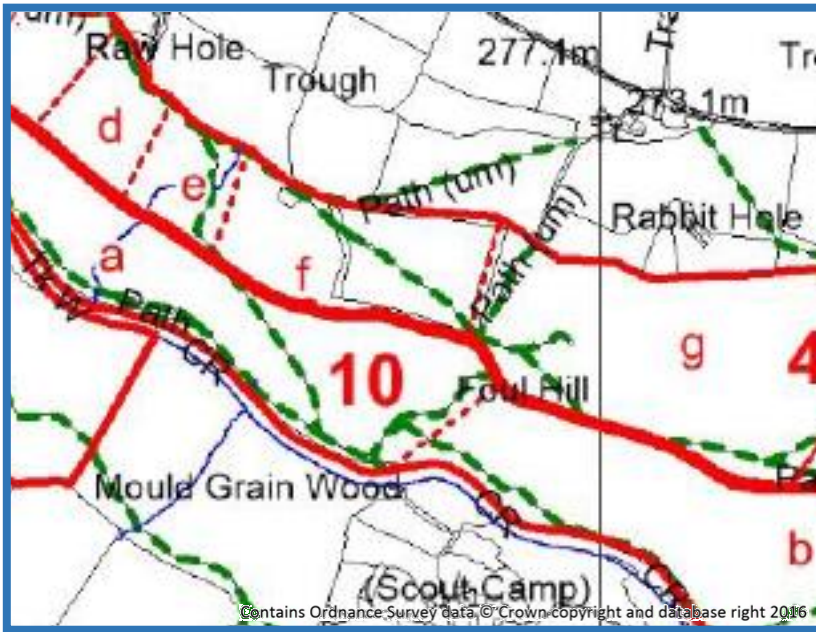
**Work Period:** April 2023-March 2025

**Issues:** Poor understory, lack of regenerating native tree species, shade.

**Description:** An area of conifer woodland with an even age structure

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4f

**Species:** Japanese Larch, Corsican Pine

**Hectares:** 2.26

**Designations:** PAWS

**Constraints:** Path, Water, Archaeology

**Light Level:** High

**Intervention:** 75% Selective Fell

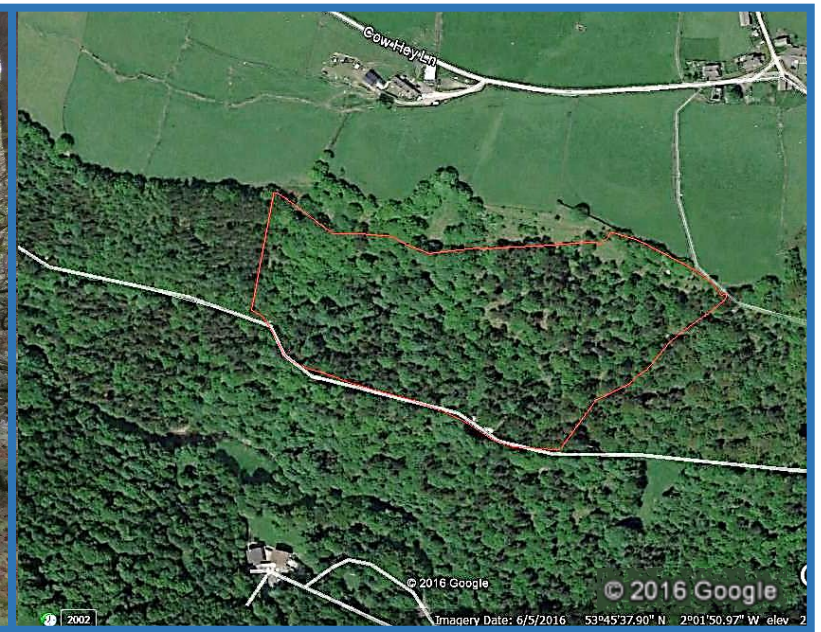
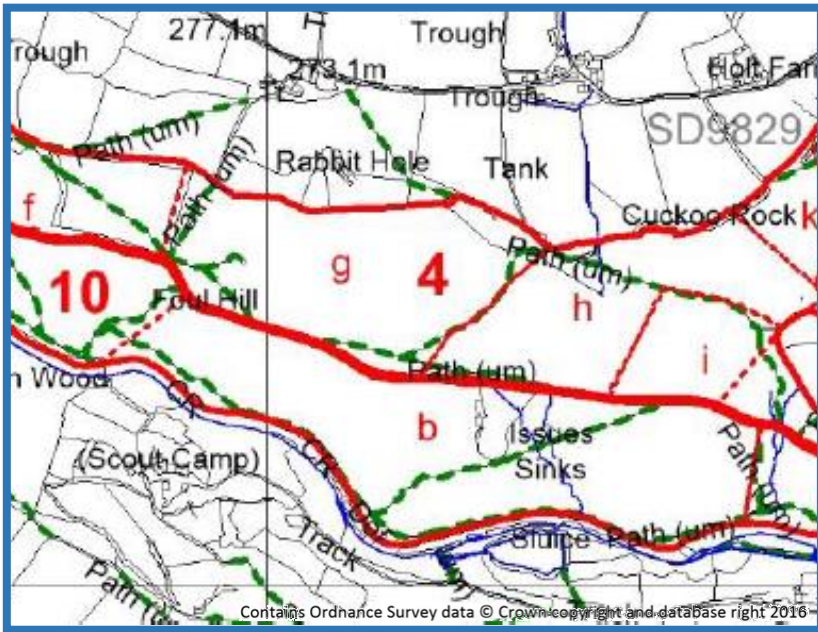
**Work Period:** April 2023-March 2025

**Issues:** Lack of regenerating native tree species.

**Description:** An area of predominantly coniferous woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component.





**Compartment:** 4g

**Species:** Scots Pine, Sessile Oak, Sycamore.

**Hectares:** 5.53

**Designations:** ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Medium

**Intervention:** 40% Selective Fell

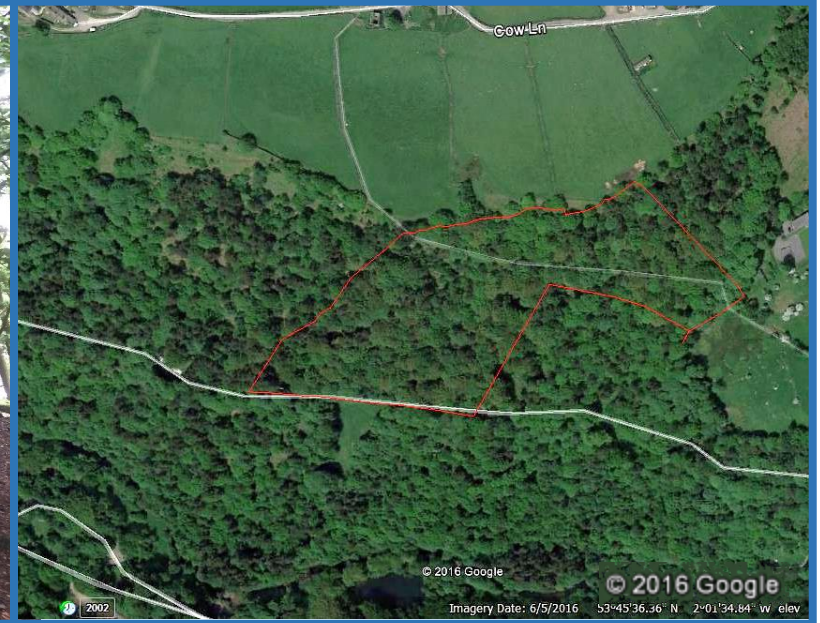
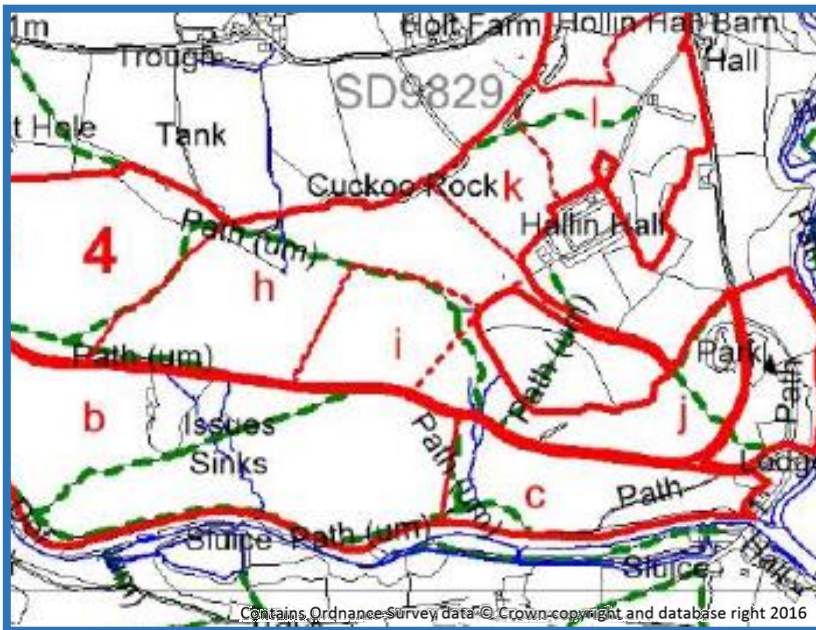
**Work Period:** April 2023-March 2025

**Issues:** Lack of regenerating native tree species, shade.

**Description:** An area of mixed woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4h

**Species:** Beech, Scots Pine, Sessile Oak

**Hectares:** 4.10

**Designations:** ASNW & PAWS

**Constraints:** Paths

**Light Level:** Low

**Intervention:** 40% Selective fell

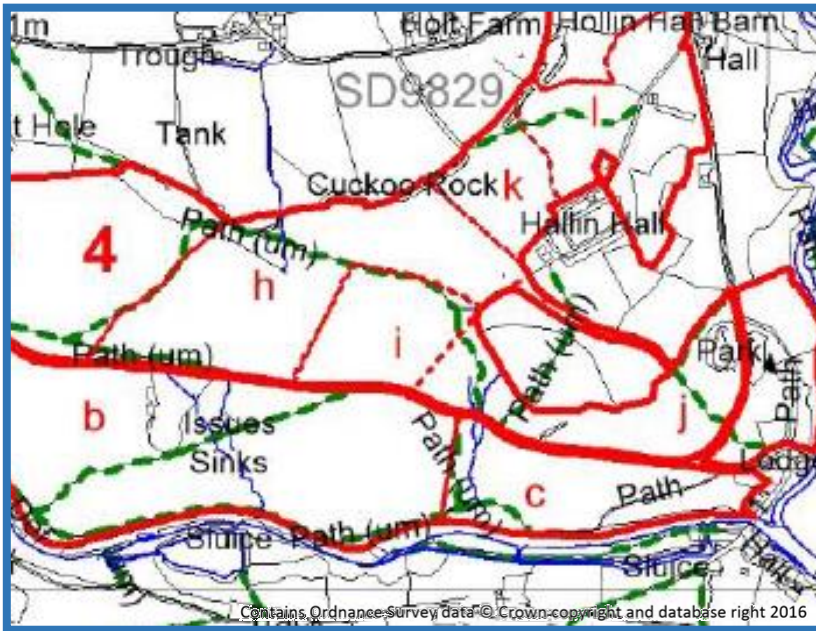
**Work Period:** April 2023-March 2025

**Issues:** Lack of understory, Lack of regenerating native tree species, dense shade.

**Description:** An area of mixed woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels. Restore understory.





**Compartment:** 4i

**Species:** Sessile Oak, Sycamore, Scots Pine

**Hectares:** 1.47

**Designations:** ASNW

**Constraints:** Path, Water, Archaeology

**Light Level:** Low

**Intervention:** 30% thin

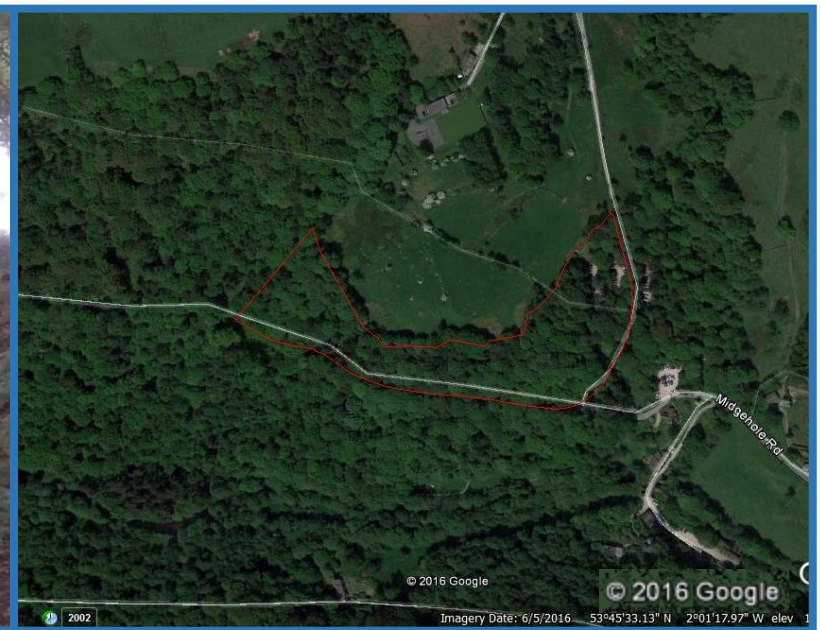
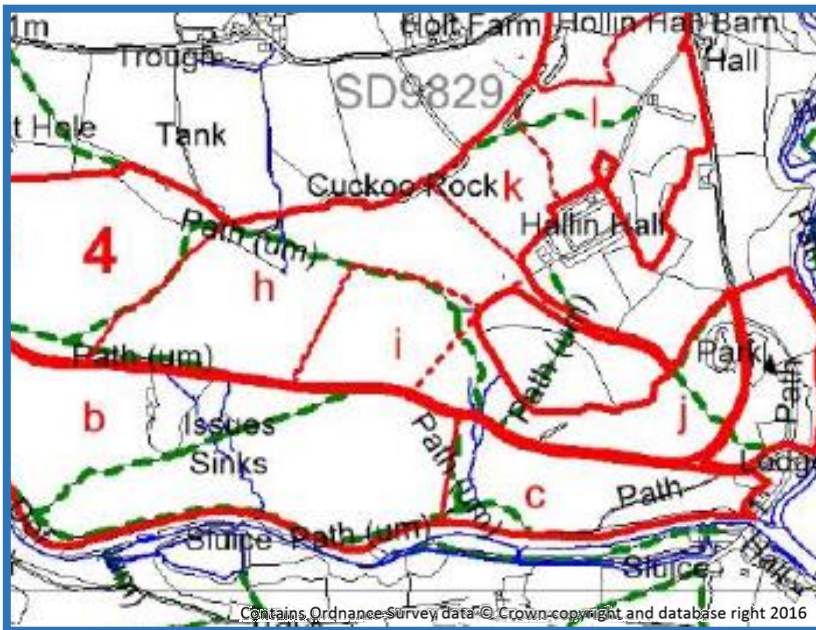
**Work Period:** April 2023-March 2025

**Issues:** Lack of regenerating native tree species, dense shade.

**Description:** An area of predominantly broadleaved woodland with an uneven age structure

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 4j

**Species:** Sessile Oak, Sycamore, Scots Pine, Corsican Pine

**Hectares:** 2.17

**Designations:** ASNW

**Constraints:** Path, Water, Powerline

**Light Level:** Medium

**Intervention:** 40% Selective Fell

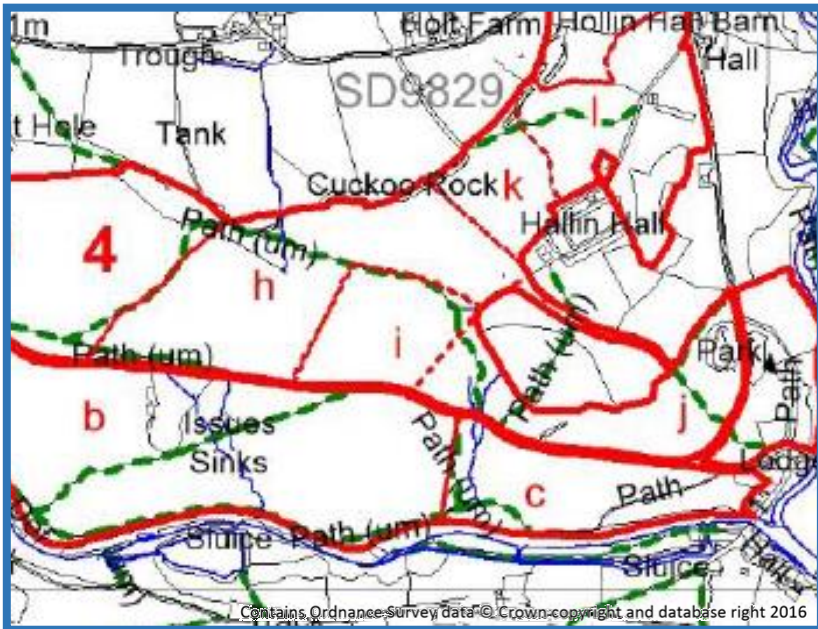
**Work Period:** April 2023-March 2025

**Issues:** Lack of understory, Lack of regenerating native tree species, shade.

**Description:** An area of mixed woodland with an uneven age structure.

**Aims:** To diversify age structure and increase native tree component and light levels. Restore understory.





**Compartment:** 4k

**Species:** Sessile Oak, Scots Pine

**Hectares:** 1.06

**Designations:** PAWS

**Constraints:** Path, Power Line, Archaeology

**Light Level:** Medium

**Intervention:** 30% thin

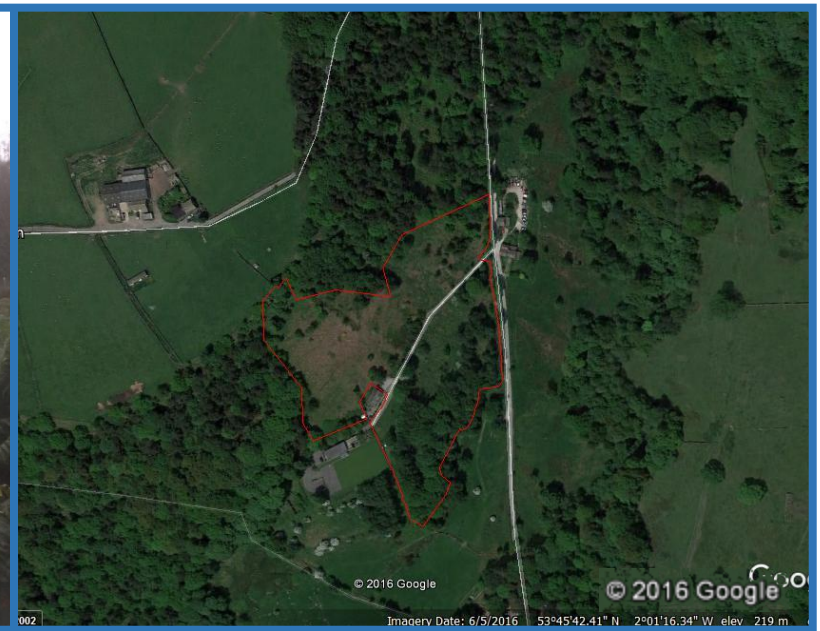
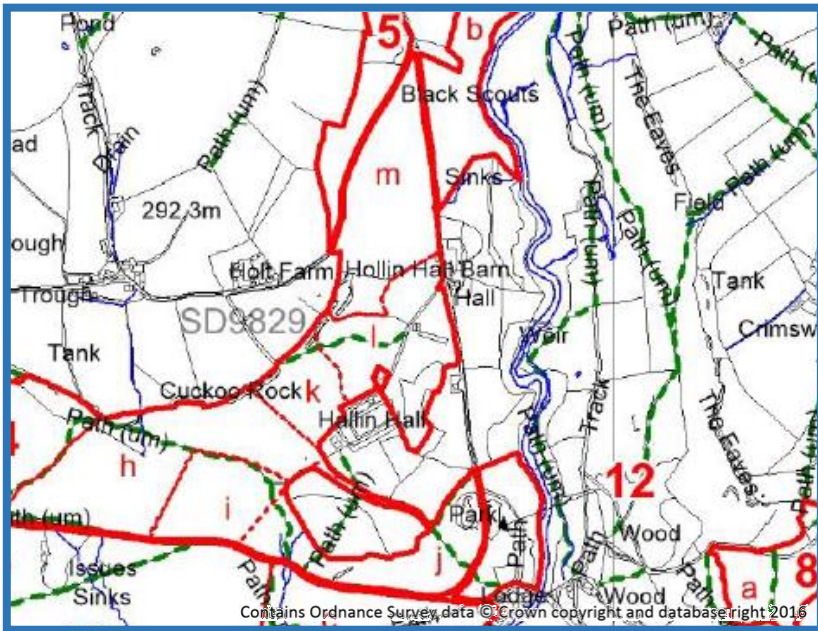
**Work Period:** April 2023-March 2025

**Issues:** Poor understory, Lack of regenerating native tree species, shade.

**Description:** An area of planted mixed woodland with an even age structure

**Aims:** To diversify age structure and increase native tree component and light levels. Restore ground flora.





**Compartment:** 4l

**Species:** Sessile Oak, Hazel, Birch, Rowan

**Hectares:** 2.56

**Designations:** None

**Constraints :** Path, Archaeology

**Light Level:** High

**Intervention:** Selectively Fell 5%

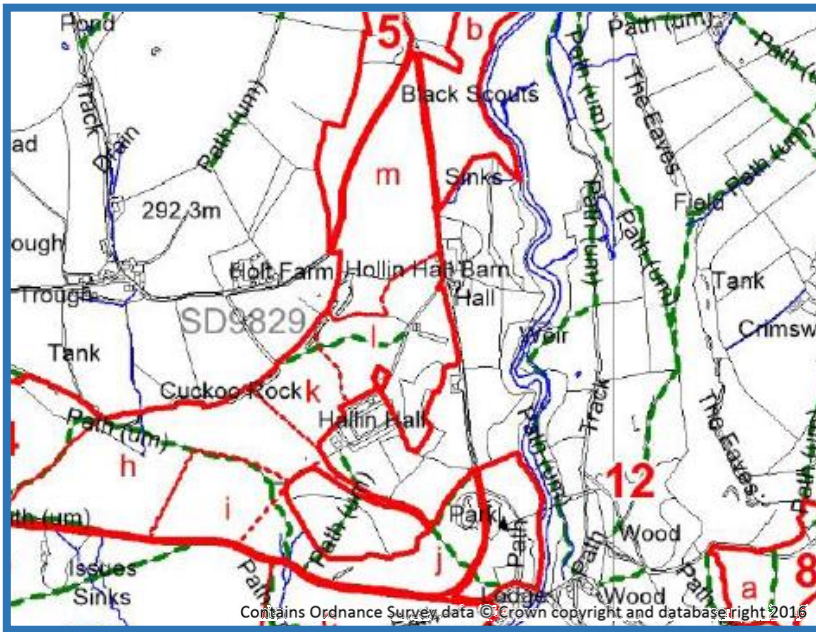
**Work Period:** April 2023-March 2025

**Issues:** None

**Description:** An area of newly planted native woodland with some mature trees remaining.

**Aims:** To ensure successful establishment of new woodland.





**Compartment:** 4m

**Species:** Sycamore, Sessile Oak, Scots Pine, Corsican Pine

**Hectares:** 3.01

**Designations:** ASNW

**Constraints:** Path, Himalayan Balsam, Fly-tipping

**Light Level:** Low

**Intervention:** 30% thin

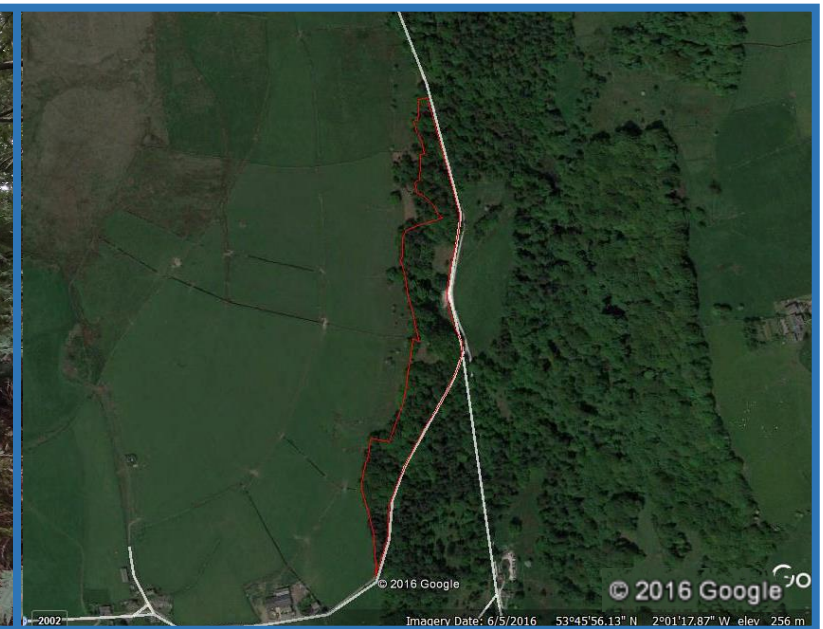
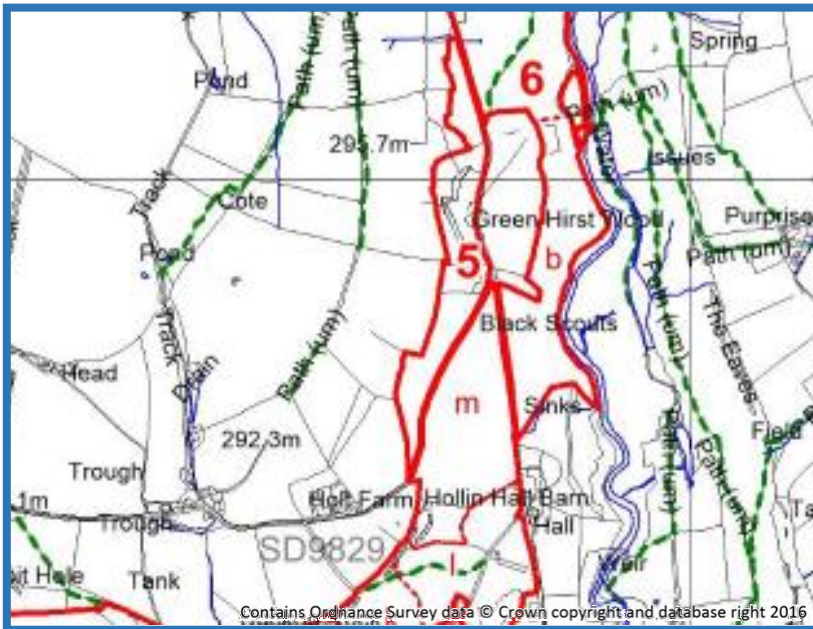
**Work Period:** April 2017-March 2019

**Issues:** Lack of regenerating native tree species, dense shade.

**Description:** An area of mixed woodland with an uneven age structure.

**Aims:** To diversify age structure and increase native tree component and light levels. To reduce Himalayan Balsam.





**Compartment:** 5

**Species:** Sessile Oak, Scots Pine, Corsican Pine

**Hectares:** 2.45

**Designations:** ASNW

**Constraints:** Archaeology

**Light Level:** Medium

**Intervention:** 40% Selective Fell

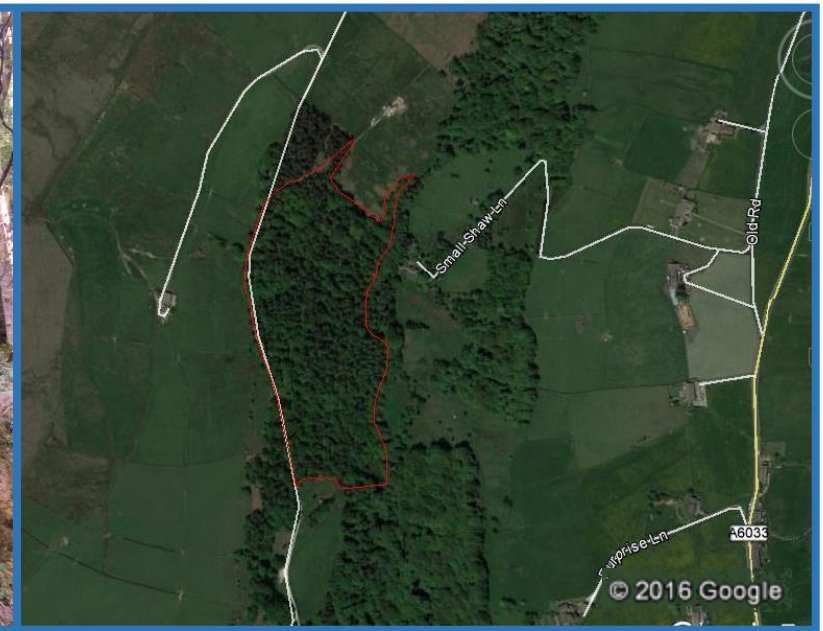
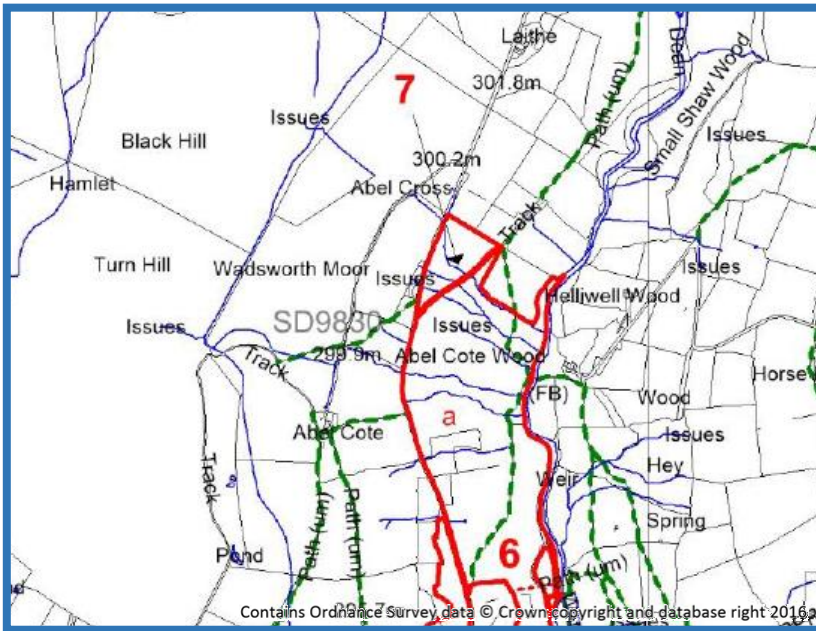
**Work Period:** April 2017-March 2019

**Issues:** Lack of regenerating native tree species, dense shade.

**Description:** An area of mixed woodland with a diverse age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 6a

**Species:** Sycamore, Sessile Oak, Scots Pine, Hybrid Larch

**Hectares:** 8.13

**Designations:** ASNW & PAWS

**Constraints:** Archaeology

**Light Level:** Low

**Intervention:** 40% Selective Fell

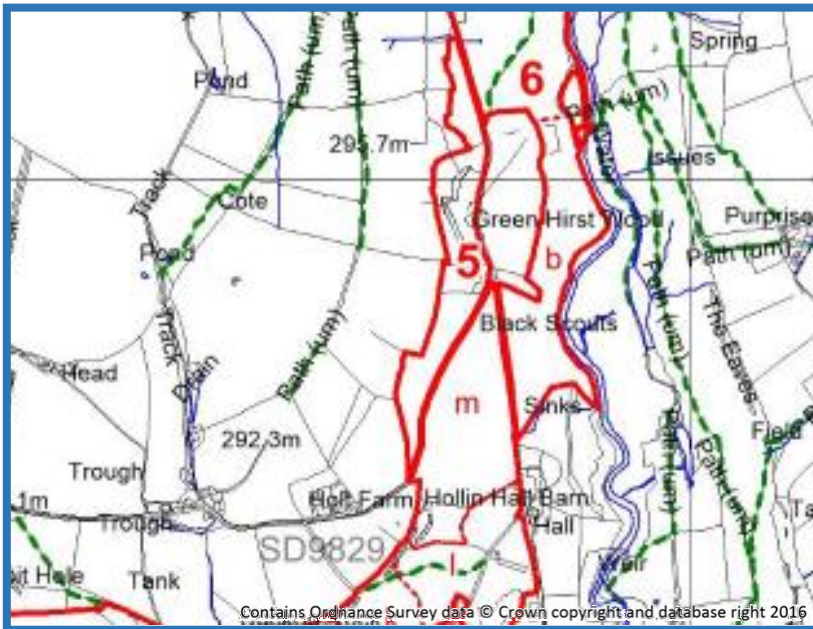
**Work Period:** April 2017-March 2019

**Issues:** Poor understory, Lack of regenerating native tree species, shade.

**Description:** An area of mixed woodland with uneven age structure.

**Aims:** To diversify age structure and increase native tree component and light levels.





**Compartment:** 6b

**Species:** Sessile Oak, Rowan,

**Hectares:** 2.78

**Designations:** ASNW Constraints: Water

**Light Level:** High

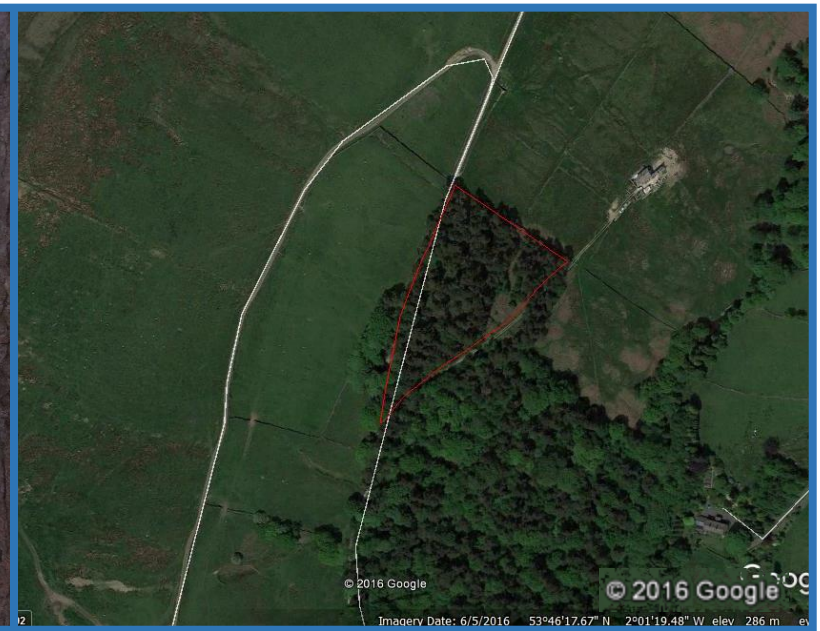
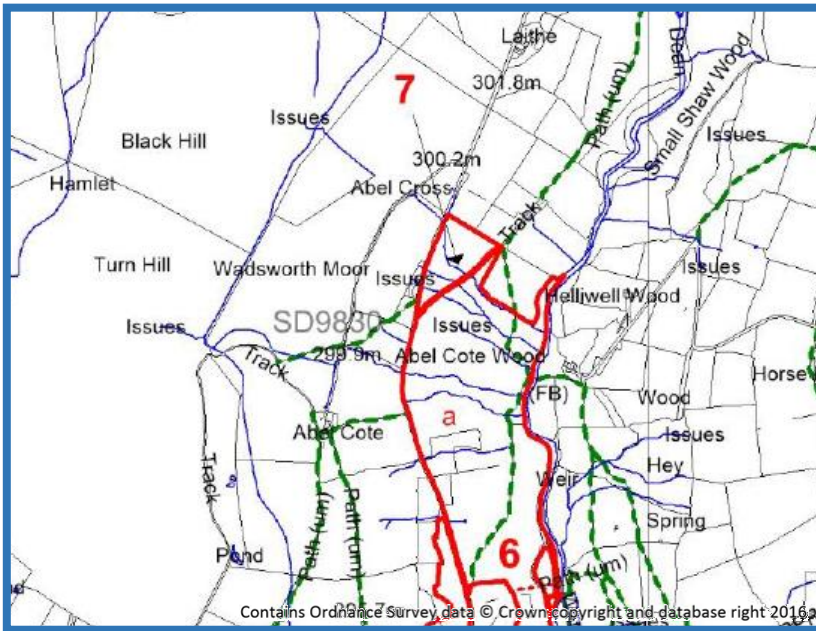
**Intervention:** None

**Issues:** Land slip

**Description:** An area of mixed woodland with an uneven age structure.

**Aims:** To restore land slip.





**Compartment:** 7

**Species:** Sycamore, Scots Pine, Hybrid Larch

**Hectares:** 0.82

**Designations:** ASNW & PAWS

**Constraints:** Himalayan Balsam

**Light Level:** High

**Intervention:** 40% Selective Fell

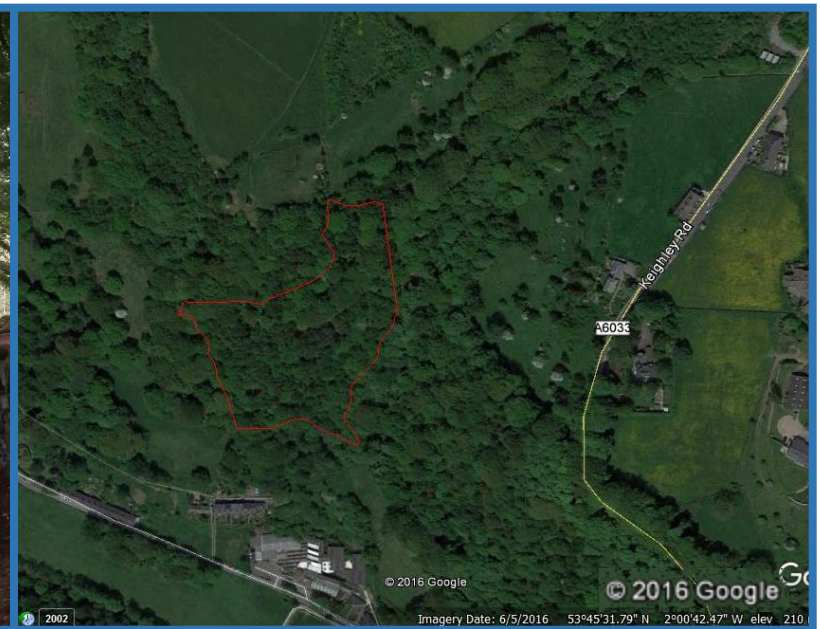
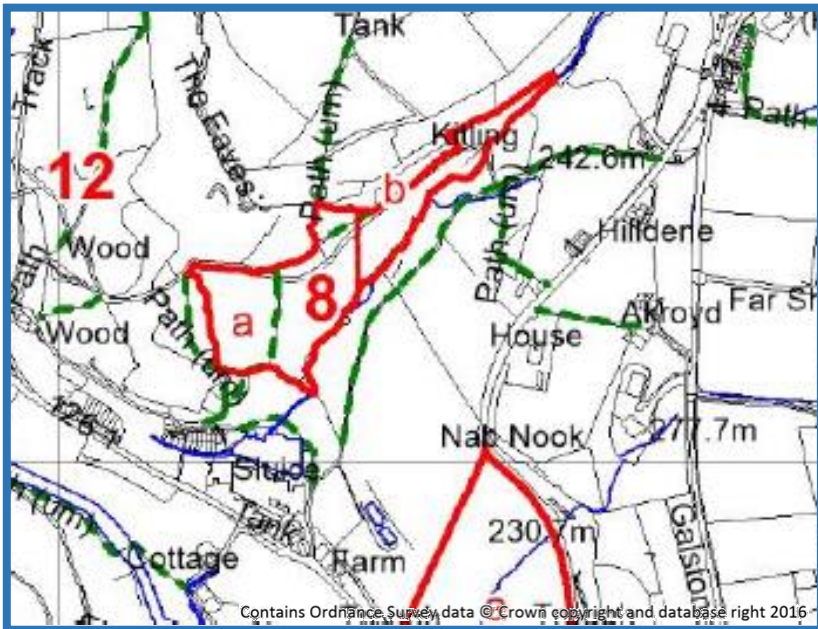
**Work Period:** April 2017-March 2019

**Issues:** Lack of regenerating native tree species.

**Description:** An area of mixed woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component and light levels. To reduce Himalayan Balsam.





**Compartment:** 8a

**Species:** Beech, Sessile Oak, Birch

**Hectares:** 1.63

**Designations:** ASNW

**Constraints:** Path

**Light Level:** Low

**Intervention:** None

**Issues:** None

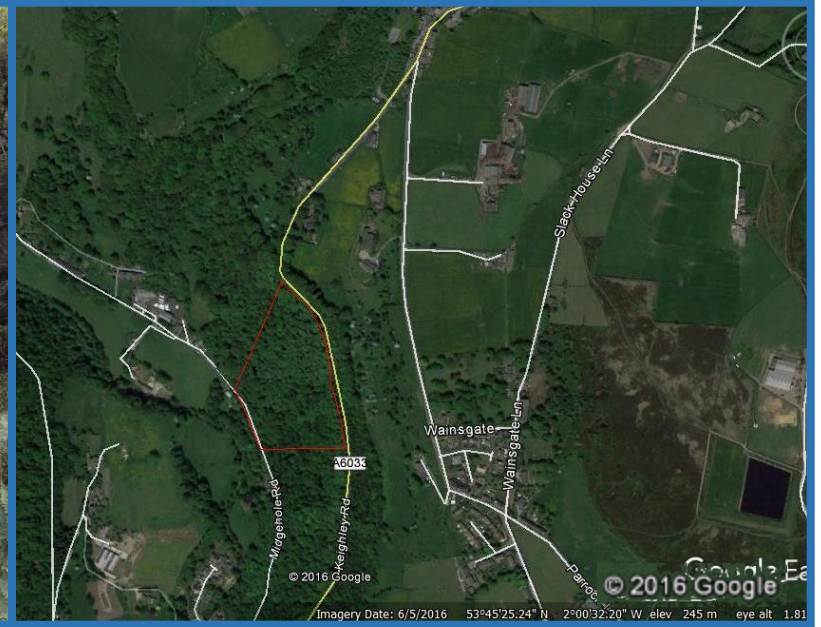
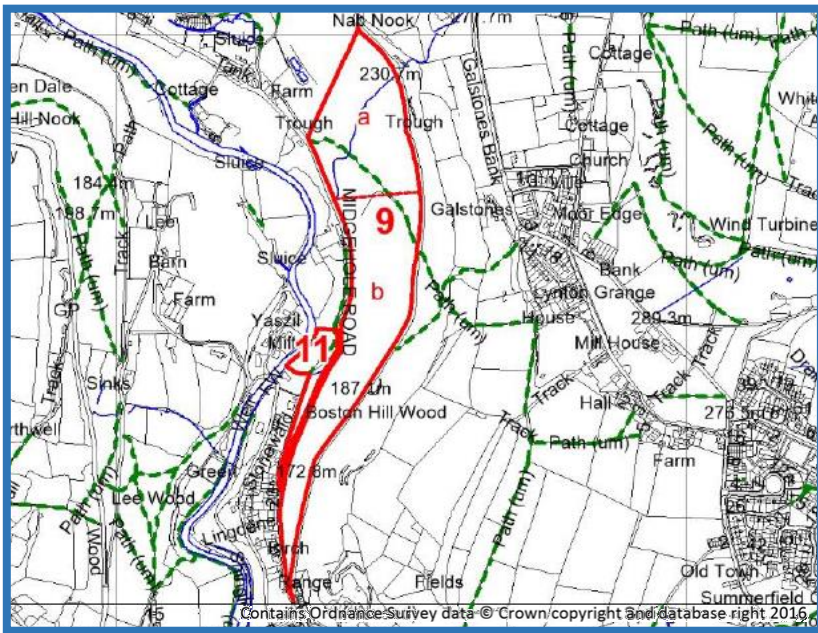
**Description:** An area of mixed broadleaved woodland with an uneven age structure.

**Aims:** To maintain the sites ecological and aesthetic qualities.









## Compartment: 9a

**Species:** Sycamore, Sessile Oak, Ash

**Hectares:3.71**

**Designations: ASNW**

## Constraints: Power Lines, Path

**Light Level: High**

### Intervention: 50% Selective Fell

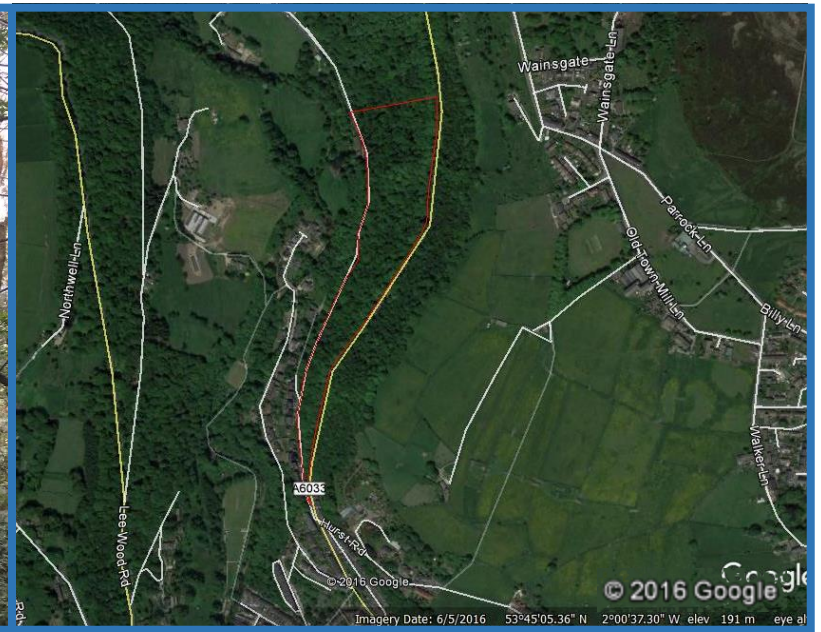
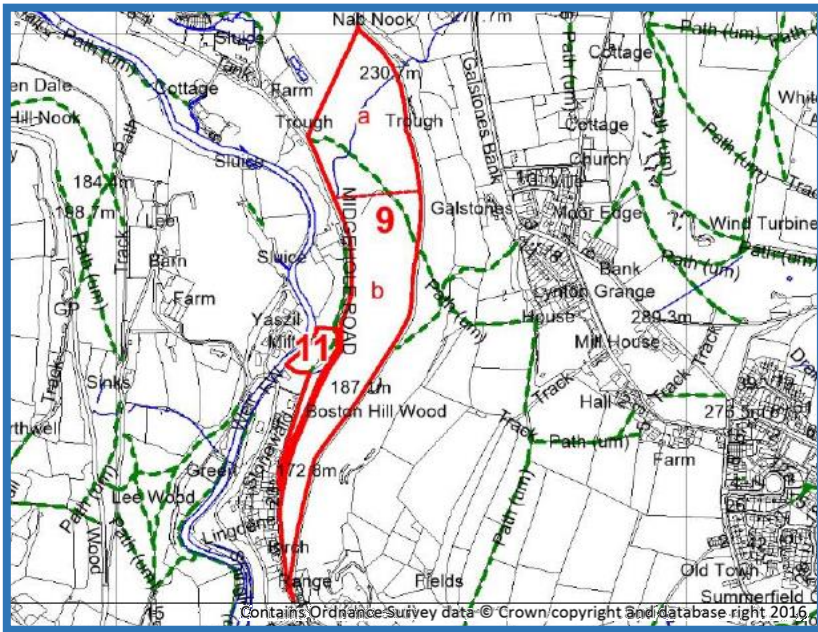
**Work Period:** April 2019-March 2021

**Issues:** Lack of regenerating native tree species. Himalayan Balsam

**Description:** An area of mixed broadleaved woodland with an uneven age structure.

**Aims:** To diversify age structure and increase native tree component and light levels. To reduce Himalayan Balsam.





**Compartment:** 9b

**Species:** Sessile Oak, Birch, Sycamore, Scots Pine

**Hectares:** 5.16

**Designations:** ASNW

**Constraints:** Powerlines, Path

**Light Level:** Low

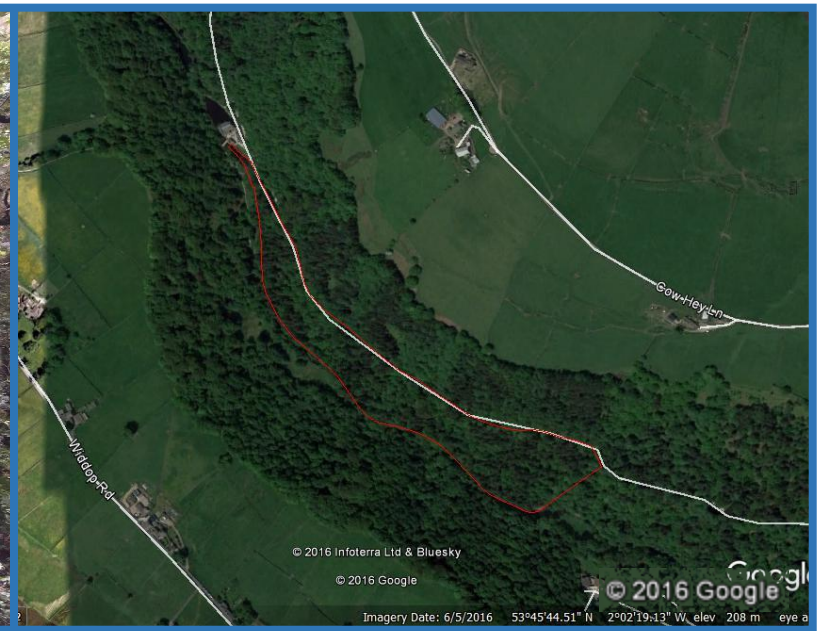
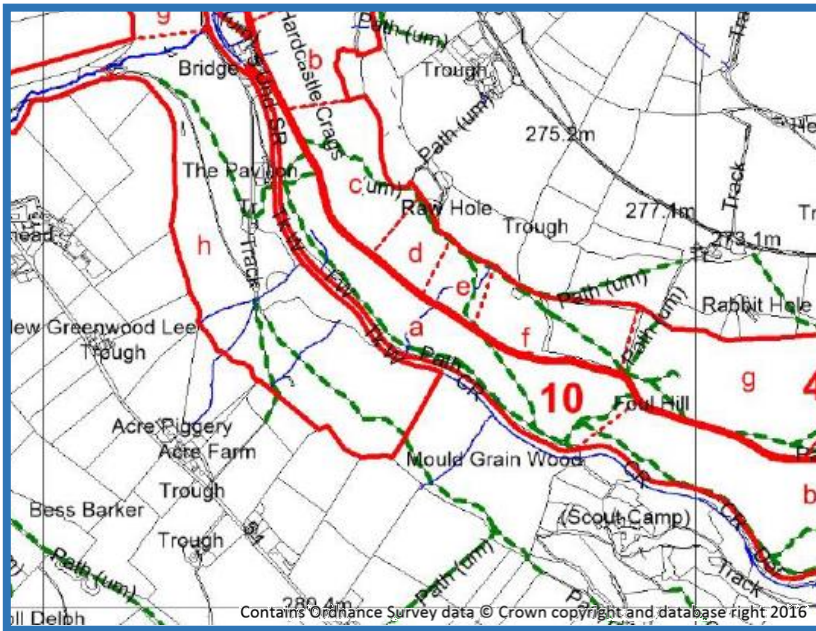
**Intervention:** None

**Issues:** Himalayan Balsam

**Description:** An area of mixed woodland with an uneven age structure.

**Aims:** To reduce Himalayan Balsam





**Compartment:** 10a

**Species:** Sycamore, Scots Pine, Sessile Oak, Beech

**Hectares:** 5.79

**Designations:** PAWS

**Constraints:** Himalayan Balsam

**Light Level:** Medium

**Intervention:** 30% Thin

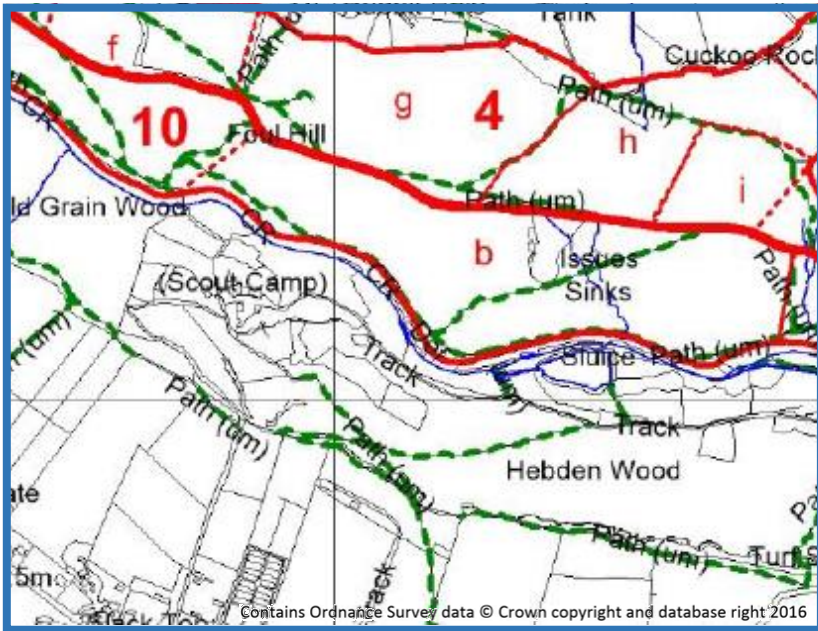
**Work Period:** April 2025-March 2027

**Issues:** Lack of regenerating native tree species.

**Description:** An area of mixed woodland with an uneven age structure. Sitting on the main route to Gibson Mill.

**Aims:** To diversify age structure and increase native tree component. To increase light and reduce Himalayan Balsam.





**Compartment:** 10b

**Species:** Sycamore, Scots Pine, Ash, Alder, Sessile Oak

**Hectares:** 8.88

**Designations:** ASNW

**Constraints:** Paths, Archaeology

**Light Level:** Medium

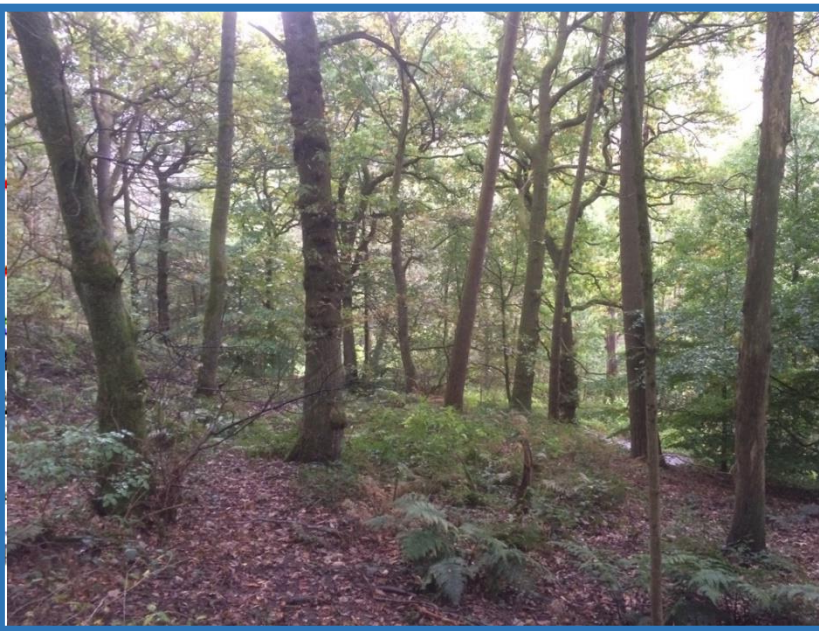
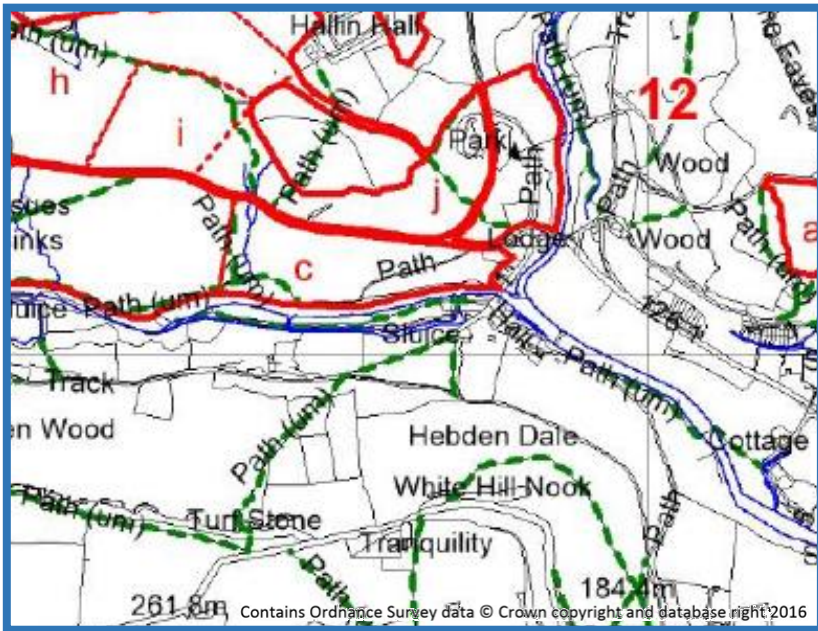
**Intervention:** None

**Issues:** Lack of regenerating native tree species. Himalayan Balsam

**Description:** An area of mixed woodland with an uneven age structure. Sitting on the main route to Gibson Mill.

**Aims:** To maintain the aesthetic qualities of the site while ensuring health and safety of staff and visitors. Reduce Himalayan Balsam





**Compartment:** 10c

**Species:** Sycamore, Sessile Oak, Birch, Hybrid Larch

**Hectares:** 2.25

**Designations:** ASNW

**Constraints:** Paths

**Level:** Low

**Intervention:** 50% Selective Fell

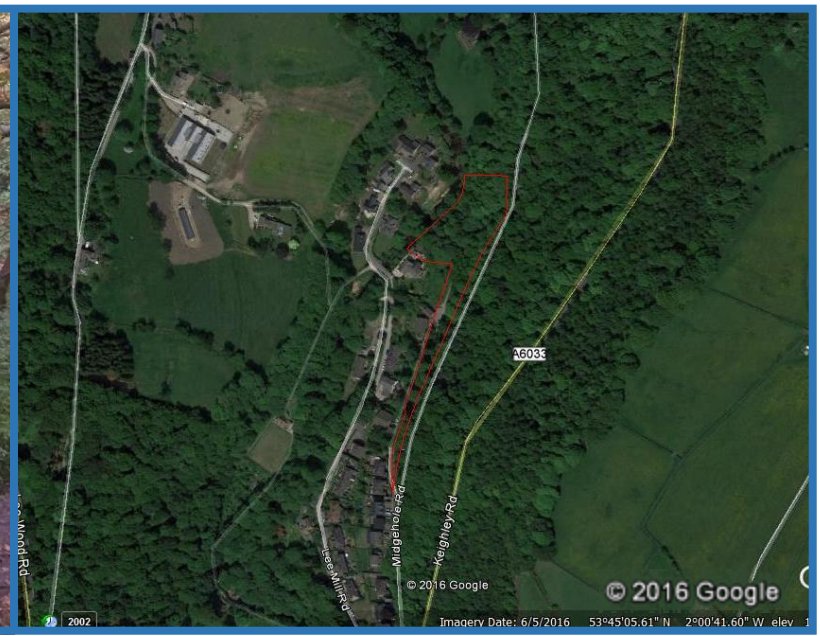
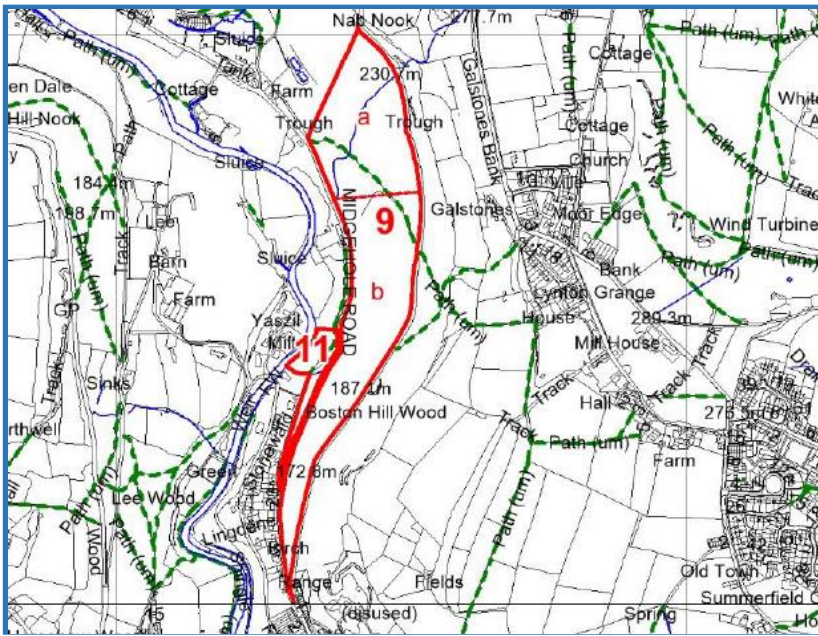
**Work Period:** April 2025-March 2027

**Issues:** Poor understory, lack of native tree regeneration, dense shade. Himalayan Balsam

**Description:** An area of mixed woodland with an uneven age structure. Sitting on the main route to Gibson Mill.

**Aims:** To diversify age structure and increase native tree component. To increase light and reduce Himalayan Balsam.





**Compartment:** 11

**Species:** Sycamore, Sessile Oak, Birch

**Hectares:** 0.65

**Designations:** None

**Constraints:** Path

**Level:** Medium

**Intervention:** 60% Selective Fell

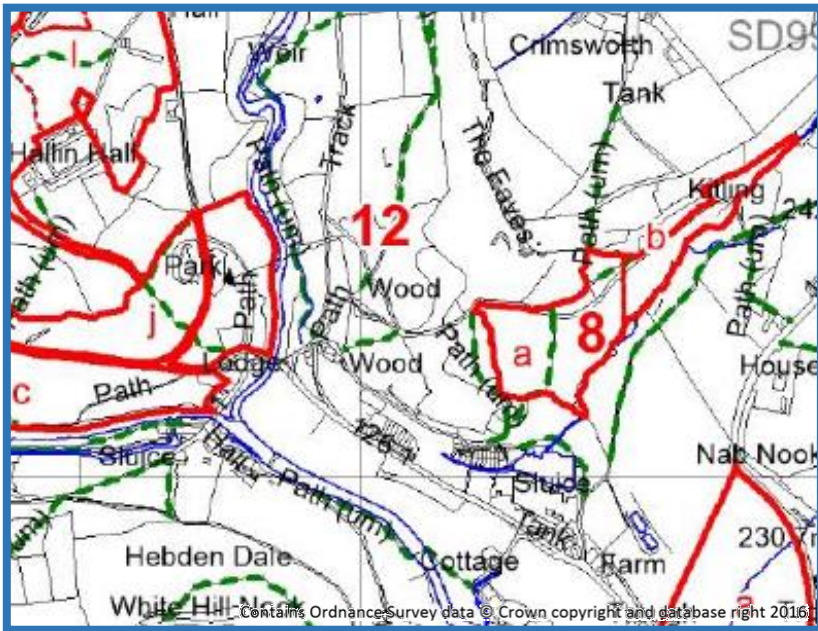
**Work Period:** April 2017-March 2019

**Issues:** Lack of native tree regeneration, shade. Himalayan Balsam, Fly Tipping

**Description:** An area of Broadleaved woodland with an even age structure.

**Aims:** To diversify age structure and increase native tree component. To increase light and reduce Himalayan Balsam.





**Compartment:** 12

**Species:** Scots Pine, Sessile Oak, Birch

**Hectares:** 1.37

**Designations:** ASNW

**Constraints:** Himalayan Balsam

**Light Level:** Medium

**Intervention:** None

**Issues:** None.

**Description:** An area of mixed woodland around the main carpark with an even age structure.

**Aims:** To maintain the aesthetic qualities of the site while ensuring health and safety of staff and visitors.