WOODLAND TRUST

# Stray Head Banks

# Management Plan 2018-2023

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## MAPS

# THE WOODLAND TRUST

## INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

## PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.
Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

## WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland.

Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
10. Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

## SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site – their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

## 1.0 SITE DETAILS

| | |
|---|---|
| **Site name:** | Stray Head Banks |
| **Location:** | Littlebeck, nr Whitby |
| **Grid reference:** | NZ876053, OS 1:50,000 Sheet No. 94 |
| **Area:** | 20.58 hectares (50.85 acres) |
| **Designations:** | Ancient Semi Natural Woodland, National Park |

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

Ancient woodland situated in the Littlebeck Valley which has a fascinating industrial history. Lots of wildlife to enjoy as you stroll along the network of footpaths. Park in nearby Falling Foss, Old May Beck or Sleights Village. Bus stop at Sleights.

### 2.2 Extended Description

Stray Head Banks is situated within the North York Moors National Park, in the Little Beck valley a north facing valley approximately 6km to the south west of Whitby town centre. Located immediately to the north of the tiny village of Littlebeck on the west bank of the Little Beck, a stream/ small river, which is one of the main tributaries of the River Esk. This occasionally steep sloped streamside site faces east over the valley of Littlebeck and forms part of the Esk Valley complex, considered to be one of the most significant areas of ancient woodland in the north of the county.

The surrounding landscape is interspersed with a patchwork of woodlands too small to be registered on the NCC inventory of ancient woodland, as well as some significant woodland blocks which extend approximately 6km along the valley to the north and south. Stray Head Banks can be seen to occupy a prominent position amongst these existing woodlands and contributes to the linking and buffering of ancient woodland. Significant blocks of woodland abut the site to the southeast ( Little Beck Woods 12.6ha) and northwest (Alum Wood Works 10.5ha). These have predominantly been identified as NVC communities W9 and W10. Little Beck Woods is an ancient semi natural woodland

and a Site of Special Scientific Interest, and is part owned and under the management of the Yorkshire Wildlife Trust, with very similar aims and objectives to the Woodland Trust. To the south of this is the 6km2 of the Forestry Commission's conifer plantations at Sneaton High Moor.

The woodland is sited on a range of soil types depending on the bedrock, which varies from calcareous boulder clays through to more acid shale, which varies the tree species and ground flora accordingly. Littlebeck has a very industrial past, surprisingly for its rural location, with mining for alum, ironstone and probably most famously for jet, a semi precious stone formed from fossilised Araucaria pine found in the shale deposits, which have the alum rich shale and ironstone found in the sedimentary layers above. In places the shale at Stray Head Banks have been eroded by the Little Beck forming river cliffs up to 20m in height exposing the shale containing jet, and a number of disused adit mines, just big enough for a single miner, can still be seen in the cliffs, though most have collapsed or are blocked. Alum (potassium aluminium sulphate) was also mined from the rich shale at Stray Head during the climax of the industry in the 18th and 19th centuries, one of over 20 sites in the Whitby area, some dating back as far as 1600, used as a crucial raw material - a fixing agent, in the dyeing of cloth and to make leather more soft and supple in the tanning process. The footings of some of the buildings associated with the production of alum remain in compartment 3b, along with the settling ponds. It was here that the roasted shale was transferred to allow the alum to form in solution after which the salts were produced by evaporating off the water. Consequently through mining and the need for wood fuel, much of the Littlebeck valley would have been deforested during the 18th and 19th centuries, and only the remnants of the ancient woodland can still be found along the course of the Little Beck and its tributaries at Stray Head.

Stray Head is composed of 14.13 hectares of former grassland, 1.77 hectares of unplanted open ground and a further 4.79 hectares of woodland - a mixture of ancient semi natural, plantation and natural regeneration. The areas of former grassland were planted in December 2003 (9.15Ha) and January 2007 (4.98Ha) using local provenance stock. The compartments 2a through to 2f (p. 2003) and 4 (p.2007) are composed of a mixture of oak, ash, gean, rowan, goat willow, hawthorn, alder, crab apple, holly, hazel, guelder rose and Dog rose, planted in a species mix which extends the NVC communities found in the adjacent existing woodland through into the new native woodland planting. Selections have been biased towards the canopy species with various shrub mixes use to border the rides and break up the line of powerline way leaves. Given sufficient time, natural regeneration from the shrub layers of adjacent blocks is expected to supplement the choice of planted species particularly blackthorn, field maple, hawthorn, holly, birch is likely and hazel should appear with time.

The trees were planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. The shrubs planted in a mix abutting pure species groups besides rides and beneath power lines. This non linear planting pattern will allow areas of open space and dense scrub to develop in the short term, imitating the natural colonisation and producing a more natural woodland effect in a s short a period as possible. The planting design has produced an average planting density across the whole of the planted area and open space of 1100 trees per hectare. The design incorporates 20% open ground, some of which has been absorbed in the planting density and the rest was reserved for the unimproved grassland area of sub-compartment 3b (1.33ha) noted for its flora, which is indicative of ancient meadowland containing such species as adders tongue (Ophioglossum vulgatum), insect populations and archaeological remains. This area has been stock fenced to allow continued grazing on this ancient meadow, to allow the grazing dependant development of this specialist flora to continue. Planting and the first 5 years of

management (through to the end 2008 for cpts 1-3 and 2013 for cpts4) will be undertaken through two separate planting contracts.

The ancient woodland area is a mixture of communities ranging from NVC communities W8 through to W10 following the changes in topography and soil type. W9 areas represent most of the residual woodland occupying most of the shallow slopes nearer to the river edge and stream sides with a canopy of ash, sycamore with frequent bird cherry and occasional sessile oak over a sparse under storey of holly, hawthorn and rowan. The field layer is mostly composed of ferns, dogs mercury and bramble. The W10 areas occupy the steeper river slopes to the northern and southern extremes of Stray Head, and are characterised by a canopy of predominantly sessile oak with a more abundant and richer shrub layer where hawthorn, elder, rowan, hazel and honeysuckle, with crab apple and European gorse in the drier areas. The field layer is predominantly composed of bluebell (Hyacinthoides non-scripta), with woodrush (Luzula pilosa) and broad buckler fern (Dryopteris dilatata). Areas of W8 can be found on the higher slopes where a less abundant campy of sessile oak and ash grow over an extremely abundant shrub layer of blackthorn, hawthorn and Goat willow. The field layer is also quite profuse and enchanters nightshade (Circaea lutetiana), dogs mercury (Mercurialis perennis), common dog violet (Viola reichenbachiana), herb Robert (Geranium robertianum) and St Johns wort (Hypericum perforatum) can all be found.

Parking near to the site is very difficult as the lanes surrounding the woodland are all single track with little or no provision made for parking, no parking provision has been made on site due to the difficult topography. Some limited space may be found in Littlebeck village. Ample parking and picnic areas are available off site close to Falling Foss (1.5km) and Old May Beck (2.5km) to the south, which are accessed via minor roads at a junction of the B1416, to the west of Littlebeck. Parking is also available on the A169 to the south of Sleights village, approximately 1km to the northwest of Littlebeck, as well as in Sleights itself, which is 1.5km to the north.

A public footpath passes through compartment 4a and leaves the woodland after approximately 300m. This public footpath is linked via permissive routes which utilise the now planted former grassland areas to give access to, or adjacent to all the compartments within the wood. Three other Woodland Trust entrances - at the north west from the public footpath, and from the north and south from minor roads form part of the same permissive network, marked by Woodland Trust welcome signs. None of the routes are surfaced, are grassy underfoot and many have steep and muddy areas due to the nature of the topography and the soil type and at any time of year would be described as strenuous.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

Parking near to the site is very diffcult as the lanes surrounding the woodland are all single track, often steep, with little or no provision made for parking, no parking provision has been made on site due to the difficult topography. Parking is VERY LIMITED in Littlebeck village. Ample parking and picnic areas are available off site close to Falling Foss (1.5km) and Old May Beck (2.5km) to the south, which are accessed via minor roads at a junction of the B1416, to the west of Littlebeck. Parking is also available on the A169 to the south of Sleights village, approximately 1km to the northwest of Littlebeck, as well as in Sleights itself, which is 1.5km to the north.
A public footpath runs along the western boundary to the site and enters the wood at one point for less than 100m. This public footpath is linked via permissive routes which utilise the newly planted former grassland areas to give access to, or adjacent to all the compartments within the wood. Three other Woodland Trust entrances - at the north west from the public footpath, the north from a minor road, and south from Littlebeck Lane form part of the same permissive network, marked by Woodland Trust welcome signs. None of the routes are surfaced, are grassy underfoot and many have steep and muddy areas due to the nature of the topography and the soil type and at any time of year a walk of the circular route around the site would be described as strenuous.

Bus routes stop in Sleights to the north east, from where it is a walk of approximateky 1.5km across farmland to reach the nearest accessible point of the woodland. Information from the traveline website as of May 2007, Further information about public transport is available from Traveline- www.traveline.org.uk or phone 0870 608 2608

The nearest public toilets are available in Whitby approximately 6km to the north east, where there is also number of public (pay and display) car parks.

## 3.2 Access / Walks

## 4.0 LONG TERM POLICY

The long term intention will be to create, new native broadleaved woodland. This will be achieved by management of the existing woodland planting and through any natural regeneration from the existing ancient woodland and from adjacent woodlands. Planting at Stray Head Banks also enhances the Ancient Semi Natural Woodland along the streamsides, both Woodland Trust and adjacent landowners, through the increase in core woodland area, also removing animal grazing pressure allowing the development of natural regeneration. There will be a reduction in the effects of farming on the woodland and ground flora and fauna- particularly the use of herbicides and artificial fertilisers . Rides and open space which are an important feature of the woodland design will change little - although public and permissive paths will be cut annually to maintain access, the rides and open space will be left uncut, which may allow for the establishment of some natural regeneration . Once mature this woodland may provide an opportunity for additional land purchase and woodland planting on adjacent land within the North York Moors National Park. It may also act as an incentive for sensitive management of some of the adjacent woodland, which is also believed to be ancient semi natural.. The existing mature woodland areas will be managed wherever possible through minimum intervention, towards restoration of predominantly native woodland, as it is expected that the existing mature sycamore on site will not become dominant and regeneration on site will be mostly native. Unimproved grassland in compartment 3b, will be managed through grazing to ensure the maintenance of the grassland species of flora and fauna, whilst compartment 3a will be allowed to develop natural scrub woodland. Informal public access is an important feature of the site and the current level of facilities and accessibility will be maintained which reflect the relatively low levels of use the woodland receives and is expected to receive over the coming years. The industrial archaeology will remain undisturbed as a key feature of the site and the wider area. Further non-intrusive investigation may well be carried out by other organisations.

# 5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

## 5.1 Historic Features

### Description

The remains of former alum workings (just visible footings/ foundations), with 2 associated settling ponds still remain in the northern compartments of the site, along with a number of disused jet mines - which are simple adit mines big enough for a single miner.

### Significance

The alum workings and especially the jet mines are a remnant of two of the former industries along with fishing, that made Whitby famous and have an important place in the local areas industrial archaeology.

### Opportunities & Constraints

Opportunity for the promotion of the site through its past history in the alum industry centred around Whitby, and the use of this information in articles and promotional material for the site. The jet mines are equally famous but do pose a considerable safety hazard if explored, although most of the entrances are now blocked.

### Factors Causing Change

### Long term Objective (50 years+)

To maintain the present visible industrial archaeology within compartment 3b in an undisturbed state, preserved for future record and non-intrusive study. This could include allowing woodland regeneration as even under woodland cover the features will still be preserved, however, due to the association of the features with the ancient meadow, wholesale woodland regeneration will not be allowed. Jet mines and their associated workings will bellowed to degrade naturally, as most have already collapsed under woodland cover.

### Short term management Objectives for the plan period (5 years)

An annual grazing let to a neigbouring farmer will ensure the fenced open grassland areas over archaeology will be maintained in a staus similar to that found on acquisition of the site in 2002. Annual inspection to assess grazing on the fields containing the former alum workings as well as the whole site.

## 5.2 Informal Public Access

### Description

A single public footpath passes through the site for only approximately 300m before passing onto farmland and then exiting onto Littlebeck Lane. However this public footpath is linked by a network of permissive routes which utilise the areas of former grassland, now planted, to access or run adjacent to all compartments within the entire woodland. The permissive routes allow a further three entrances to the woodland to be used for informal pedestrian access.

### Significance

The creation of new routes and a policy of free and full public access as well as meeting the Trusts own objectives, increases the area of land in the Littlebeck valley which does have sucjh an access policy - with the Yorkshire WildlifeTrust and Forestry Commission woodland areas to the south which form an almost unbroken chain of accessible woodland habitat for over 6km

### Opportunities & Constraints

There is an opportunity to create new permissive access through or into the areas of ancient semi natural woodland. Whilst this would increase visitor enjoyment, the loss of ancient woodland, flora and damage to the surrounding habitats could not be justified in an area with little remaining ancient semi natural woodland. The greatest constraint to public access on site is the topography - with steeps slopes, incised stream valleys, areas of wet ground and the Little Beck, which effectively cuts off the site from the neighbouring land. The routes proposed use the easiest routes through the site with the minimum of disturbance whist providing a good level of access.

### Factors Causing Change

Little change, access remains at the original level planned in 2004, and visitor numbers remain relatively low

### Long term Objective (50 years+)

Maintain existing network of permissive and public footpaths. Paths maintained through annual mowing to ensure easy and welcoming public access to the site, although it is likely that open areas will eventually start to regenerate with native broadleaved species. The existing entrances (x4 stiles and a gate), welcome signs (x5 at entrances) to be maintained at the current standards given that only a small increase in visitor numbers is expected with the development of the woodland.

### Short term management Objectives for the plan period (5 years)

Cut permissive and public footpaths (1200m) twice per year to ensure easy and welcoming public access to the site.
Check entrances (x6) signs (x5) twice a year, cutting back vegetation as necessary to ensure easy and welcoming access to the site.
Repair/replace 5x entrance signs ,4x stiles, and management gates as required.

## 5.3 Ancient Semi Natural Woodland

### Description

Remnant ancient semi natural woodland following the course of Little Beck and six further small tributary streams. Dominated by oak and ash with a shrub layer of predominatly thorn, hazel and holly and a generally sparse understorey due to many years of grazing, with pockets of dense ancient woodland indicator ground flora.

### Significance

Although woodland cover in this part of North Yorkahire is relatively high, much of it is due to large scale coniferous plantations, there is very little ancient semi natural woodland, and much of it is in scattered or isolated remnants on the more inaccessible land - such as that at Stray Head where it is limited to the steep slopes alongside the stream valleys. It also provies the seed sources for both trees and ground flora - and the associated fauna, to slowly establish into the areas of new native woodland planting.

### Opportunities & Constraints

Opportunity to return the site back to native broadleaved woodland.

### Factors Causing Change

Ash disease

### Long term Objective (50 years+)

Maintain native broadleaved woodland on this Ancient Semi Natural Woodland site. The woodland will be managed whenever possible through minimum intervention maintaining predominantly oak/ ash high forest through natural regeneration.

### Short term management Objectives for the plan period (5 years)

Monitor the woodland for the signs of regeneration once during the plan period. Limited regeneration is expected due to the grazing but some areas may develop, oak, ash, thorn, gorse and broom regeneration. Ash disease effects will be monitored over the plan period as will other tree diseases such as alder phytopthora. A plan for additional native woodland planting on site will be developed during the plan period

## 5.4 Semi Natural Open Ground Habitat

### Description

Unimproved grassland and scattered scrub thorn, around and associated with the areas of former alum workings to the north east of the site. Containing a large number of grass species along with adderstongue ferns, indicating the ancient grassland staus of the site,

### Significance

The species found on site, associated with remnants of ridge and furrow agriculture, with the overlying layers of spoil from the alum workings, indicate an ancient meadow area, where chemicals and improvement have been minimal, which is equally as important as the remnants of ancient woodland which still survive in this area. Probably more thareatened as the habitats are so isolated from the next unimproved ancient eadow area.

### Opportunities & Constraints

The locally important industrial archaeology, and the important unimproved grassland prevent the planting of new native woodland in this area, and the grassland will continue to require management in the future through a grazing regime within a fenced boundary. This low intensity grazing will maintain this important scrub woodland habitat. It will provide excellent views for the future across the Littlebeck valley and can be the featured through future promotional material about the site.

### Factors Causing Change

Uncontrolled grazing.

### Long term Objective (50 years+)

To maintain a mosaic of predominantly open grassland over visible archaeology, with pockets of uneven aged scrub woodland. Retaining roughly the same proportion of scrub (approximately 5%) through a grazing regime with a relatively low stocking density of cattle and/or sheep, and through ensuring no additional fertilisers , other than maure are used on site, and no re-seeding is permitted, which has been the regime over certainly the last 45 years (since 1961)

### Short term management Objectives for the plan period (5 years)

Ensure grassland area is fenced and grazed to a specified stocking density and seasonal timing devised by the Land and Properties managers. Annual inspection of the site to be undertaken to check impact of grazing and to ensure safe guards are in place for both public and to avoid over grazing the open ground areas. No additional fertilizing or seeding other than through the application of manure to be applied to the land.

## 5.5 New Native Woodland

### Description

Planting (December 2003 and December 2008) composed of sessile oak, ash, gean, birch, field maple and rowan, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of hawthorn, crab apple, hazel, guelder rose, and dog rose planted on the edges of open space (rides/ paths/ properties and power lines) using 0.75m shrubshelters. The variable spacing across the site will achieve an average of 1600 trees per hectare. The ground flora is predominantly improved grassland - on an heavy red clay soil type over shale bedrock. The compartments range from the gentlest of slopes to steep slumping slopes, most of which are north facing .

### Significance

Within the North York Moors National Park and the local area there is a higher than average woodland cover, but much of this relates to plantation conifer woodlands, and in reality there is a very low percentage of broadleaved woodland cover and particularly ancient semi natural woodland. This site forms part of a much larger chain of ancient woodlands following the Littlebeck tributary and the continuation along the main River Esk valley. The new native woodland planting extends the core area of woodland and buffers and extends the remnant ancient woodland on site and may encourage further planting to link with other woodland , and to increase the woodland cover within the National Park

### Opportunities & Constraints

The opportunity exists to allow grazing beneath the young trees to maintain an informal mixture of different habitat types, woodland, scrub and pasture. The controlled grazing will also aid maintenance by controlling the grass on paths, especially as the site has a limited number of visitors.

### Factors Causing Change

Grazing by sheep will need to be monitored to ensure minimal damage to trees.

### Long term Objective (50 years+)

Creation of mature, un-even aged native broadleaved woodland with shrub edges and open rides. Linking in with the existing mature ancient semi-natural woodland of Stray Head Banks.

### Short term management Objectives for the plan period (5 years)

The area will be managed as minimim intervention as per the remainder of the mature woodland with informal grazing by sheep during summer months. Annual inspections to ensure woodland area is grazed to a specified stocking density and seasonal timing devised by the Land and Properties managers Inspection to take note of any damage to the relatively young woodland. A plan for additional native woodland planting on site will be developed during the plan period

# 6.0 WORK PROGRAMME

| Year | Type of Work | Description | Due By |
|---|---|---|---|

## APPENDIX 1: COMPARTMENT DESCRIPTIONS

| Cpt No. | Area (ha) | Main Species | Year | Management Regime | Major Management Constraints | Key Features Present | Designations |
|---|---|---|---|---|---|---|---|
| 1a | 1.68 | Mixed broadleaves | 1900 | High forest | Gullies/Deep Valleys/Uneven/ Rocky ground, Housing/infrastructure, structures & water features on or adjacent to site, Mostly wet ground/exposed site, No/poor vehicular access to the site, No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site | Informal Public Access | Ancient Semi Natural Woodland, National Park |

Ancient semi natural woodland following the southern bank of Little Beck and a small deeply incised tributary flowing from the south west, over a variable soil type, ranging from calcareous boulder clays to loose acid shales.The northern area of the compartment is mature riverside oak, with alder and ash in the wetter areas, moving south into semi mature pole stage ash, sycamore with occasional oaks and moving east and south onto a shale ridge dominated by sessile and pedunculate oak. The shrub layer is quite sparse though it is showing good signs of regeneration with oak, ash, rose, hazel and hawthorn following recent stock exclusion. Less common - spurge laurel is present in the areas near to the river. The ground flora is generally species poor, due to past stock grazing mainly grasses but with often species rich pockets of species more associated with ancient woodland, including Dogs mercury, greater woodrush, bluebell, sanicle, wood anemone, enchanters nightshade and dog violet.  The site is on a moderate to very steep north east facing slope. Bounded to the north west, west and south east by new native woodland planting (December 2003), by ancient semi natural woodland following the opposite bank of the Little Beck to the north east and to the south by Little Beck Lane - a minor single track road. Management access is available from compartment 2a, 2b and 2c, No permissive access has been created in this compartment due to the availability of access through the new planting areas, the difficulty of construction and to protect the ancient woodland.

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|---|---|---|---|---|---|---|---|
| 1b | 1.09 | Mixed broadleaves | 1983 | High forest | Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Informal Public Access | Ancient Semi Natural Woodland, National Park |
| The southern part of this compartment known as Mission Room Thorns, formerly a field until approximately 70 years ago (1930) which became regenerating scrub woodland and had additional planting in the early 1980's under a scheme assisted by the North York Moors National Park. Composed of a mixture of broadleaved species of unknown origin or provenance, containing ash, oak, cherry and a variety of shrub species. The northern part of the compartment- part of Bungalow Field, was again planted under a North York Moors National Park Scheme in the early 1990's with mixed broadleaved species including more exotic species such as red oak. The ground flora in this compartment is poor, having been former grassland, but does contain helleborines and golden saxifrage, on an gravelly sand soil type into which a pond was created - although a liner had to be used to hold water. The site is on a steep north east facing slope. Bounded to the north and west by unimproved grassland,improved grassland to the south west, scrub woodland and new planting (december 2003) to the north east and east. Management access is available through ompartments 2b,2c,2e, along a steep unsurfaced route, or from the south via improved grassland (permission required) direct from Little Beck Lane. No public or permissive access has been created in this area. | | | | | | | |
| 1c | 1.10 | Mixed broadleaves | 1900 | High forest | Gullies/Deep Valleys/Uneven/ Rocky ground, No/poor vehicular access to the site, No/poor vehicular access within the site | Informal Public Access | Ancient Semi Natural Woodland, National Park |
| A mixture of naturally regenerated scrub woodland composed of oak ash and mature sycamore across the slope, with a shrub layer/ scrub edge of hawthorn, blackthorn, holly, dog rose, gorse and broom. All of which shrub species are regenerating well without grazing pressure. A linear strip of remnant ancient semi natural woodland, runs north east following the deeply incised tributary of a minor tributary of the Little Beck. Dominated by oak, with a sparse understorey of holly, hazel, thorn and holly and little ground flora, due to continuous stock grazing. Bounded to the south, east north and north west by new native woodland planting (December 2003), and by unimproved grassland to the west Management access is available from compartment 2b, 2c and 2e, No permissive access has been created in this compartment due to the availability of access through the new planting areas, the difficulty of construction and to protect the ancient woodland areas. | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1d | 0.37 | Mixed broadleaves | 1900 | High forest | No/poor vehicular access to the site, No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site | Informal Public Access | Ancient Semi Natural Woodland, National Park |
| Ancient semi natural woodland following the west bank of Little Beck and two small deeply incised tributaries flowing from the south west, over a variable soil type, raning from calcareous boulder clays to more acid loose shales. Predominantly mature riverside oak, with alder and ash in the wetter areas and occasional large mature sycamore. The shrub layer is quite sparse though it is showing good signs of regeneration with oak, ash, rose, hazel and hawthorn. The ground flora is generally species poor, due to past stock grazing mainly grasses but with often species rich pockets of species more associated with ancient woodland, including Dogs mercury, greater woodrush, bluebell, sanicle, wood anemone, enchanters nightshade and dog violets. Bounded to the east by the Little Beck and then a continuation of ancient semi natural woodland and to the west by new native woodland planting (December 2003). Management access is available from compartment 2b, 2c and 2e, No permissive access has been created in this compartment due to the availability of access through the new planting areas, the difficulty of construction and to protect the ancient woodland. | | | | | | | |
| 1e | 0.55 | Mixed broadleaves | 1900 | High forest | Gullies/Deep Valleys/Uneven/ Rocky ground, No/poor vehicular access within the site | Informal Public Access | Ancient Semi Natural Woodland, National Park |
| Mature broadleaved woodland known as Alum House Wood. Predominantly oak, ash and sycamore on a steep north west facing slope down to a minor tributary of the Little Beck. Some elm is still present in this compartment . The majority of the large mature elm from this compartment was lost due to Dutch Elm Disease, but the remainder of the stems were felled and coppiced in an attempt to keep the stools alive during 1996, which has succeeded in maintaining elm in the understorey in the short term. Some additional oak was planted (grown on from the largest oaks on Long Bank (cpts 1c and 1d)) There is a remnant ground flora indicating ancient woodland as well as martagon lillies, under a shrub layer of hazel, thorn and holly. Management access is available directly from the minor road to the south east. This part of the Stray Head is separated from the rest of the site by a minor road, and bounded to the north west by mixed woodland, semi-improved pasture/ paddocks. | | | | | | | |

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| 2a | 1.20 | Sessile oak | 2004 | High forest | Housing/infrastructure, structures & water features on or adjacent to site, No/poor vehicular access to the site | Informal Public Access | National Park |
| New planting (December 2003) composed of 60% sessile oak, 15% ash, 7% gean and 2% rowan, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 5% hawthorn, 1% crab apple, 3% hazel, 1% guelder rose, and 1% dog rose planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacing across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland - formerly known as Mill Field, on an heavy red clay soil type over shale bedrock. The site is on a gentle south west facing slope with steep north facing slopes to the south and west . Bounded to the north, east and west by Ancient Semi Natural Woodland and to the south by Little Beck Lane - a minor single track road. Management access is available from compartment 2b, via a recently (September 2003) re-constructed) culvert. Permissive access is limited to a single dead-end path giving foot access to the compartment which has been dedicated and called Bull Copse. | | | | | | | |
| 2b | 0.60 | Ash | 2004 | High forest | Very steep slope/cliff/quarry/mine shafts/sink holes etc | Informal Public Access | National Park |
| New planting (December 2003) composed of 22% sessile oak, 30% ash, 12% goat willow, 22% hawthorn, 5% crab apple, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 1% holly, 1% hazel, 1% guelder rose, and 1% dog rose planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacings across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland - known as Ripleys Bank, on an heavy red clay soil type over shale bedrock, which has been slumping and slipping over the last few years. The site is on a steep north east facing slope. Bounded to the north and east by Ancient Semi Natural Woodland, established new planting (1990) to the west and to the south by Little Beck Lane and the private property (house and garden) of Well Close. Management access is available direct from the lane via a management gate and steep unsurfaced route. Permissive access is available along a route leading to the north west and a route to the east through into Bull Copse (cpt 2a) | | | | | | | |
| 2c | 1.21 | Ash | 2004 | High forest | Housing/infrastructure, structures & water features on or adjacent to site, No/poor vehicular access to the site | Informal Public Access | National Park |

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| New planting (December 2003) composed of 10% sessile oak, 60% ash, 15% gean, 5% rowan, 2% hawthorn, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 1% holly, 2% hazel, planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacings across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland, known as Jet Hole Field, on an heavy red clay soil type over shale bedrock, over a number of disused jet mines. The site is on a gentle to moderate north east facing slope. Bounded to the north west, north and east by Ancient Semi Natural Woodland, established new planting (1990) to the south west and to the west by further new native woodland planting (cpt 2e). Management access is available from cpt 2b and from cpt 2d with the farmers permission to cross a single field.. Permissive access is available along a route leading to the north west. | | | | | | | |
| 2d | 0.88 | Ash | 2004 | High forest | No/poor vehicular access to the site | Informal Public Access | National Park |
| New planting (December 2003) composed of 22% sessile oak, 30% ash, 12% goat willow, 22% hawthorn, 5% crab apple, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 1% holly, 1% hazel, 1% guelder rose, and 1% dog rose planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacings across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland, known as Bungalow Field, (where a former WW1 army hut was sited as a holiday cottage) on an heavy red clay soil type over shale bedrock.. The site is on a very gentle north east facing slope. Bounded to the north , east and south east by existing improved grass farmland and a priveate residence, established new planting (1990) to the east. Management access is available from a route to the south east via cpts 2e, 2c and 2b. A route (given permission from the landowner) can access Little Beck Lane direct from the south east Permissive access is available along a route leading to the north east (cpt 2e) and a short section of public footpath running out to the south east. | | | | | | | |
| 2e | 1.66 | Ash | 2004 | High forest | No/poor vehicular access to the site | Informal Public Access | National Park |
| New planting (December 2003) composed of 10% sessile oak, 60% ash, 15% gean, 5% rowan, 2% hawthorn, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 1% holly, 2% hazel planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacings across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland, known as Middle Field and Long Bank, on an heavy red clay soil type over shale bedrock.. The site is on a gentle to moderate north east facing slope. Bounded to the north , east and south east by Ancient Semi Natural Woodland, established new planting (1980s and 1990) to the west and to the south, and new native woodland planting (cpt 2c planted december 2003) to the south east. Management access is available from a route to the south east via cpts 2e, 2c and 2b. Permissive access is available along a route leading through to the north west. | | | | | | | |

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| 2f | 3.60 | Ash | 2004 | High forest | No/poor vehicular access to the site | Informal Public Access | National Park |
| New planting (December 2003) composed of 10% sessile oak, 60% ash, 15% gean, 5% rowan, 2% hawthorn, planted in single species groups of 30-50 trees with a uniform spacing of between 1 and 5 metres using 1.2m tubex tubes. A shrub mixture of 1% holly, 2% hazel planted on the edges of open space (rides and power lines) using 0.75m shrubshelters. The variable spacings across the site will achieve an average of 1100 trees per hectare. The ground flora in this compartment is predominantly improved grassland, known as Cowslip Field and Round Hill Field, on an heavy red clay soil type over shale bedrock.. The site is on a gentle to moderate north east facing slope. Bounded to the north west by a minor road, to the south east by Ancient Semi Natural Woodland, open unimproved grassland to the north (Woodland Trust) and improved pasture to the south west and north east. Management access is available direct from the minor road to the north west by management gate. Permissive access is available along a route leading through to the south east. | | | | | | | |
| 3a | 0.33 | Open ground | | Non-wood habitat | Mostly wet ground/exposed site, No/poor vehicular access to the site | Informal Public Access | National Park |
| Open ground element of the design to the north east of the private residence called Stray Head, at the top of the area called as Long Bank. As well as providing open space around this property, this grassland is at the junction of 3 overhead electiricity lines making planting difficult. The grassland here appears unimproved with uneven ground surface and a variety of scrub species including rose and hawthorn. Vehicular access is difficult but available from the north west cpt 2e and 1c. | | | | | | | |
| 3b | 1.44 | Open ground | | Non-wood habitat | Archaeological features, No/poor vehicular access to the site, Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Informal Public Access | National Park |
| 16% of the open ground element of the design, a moderate to steep north east facing slope of unimproved grassland called Pond Field, noted for its flora, with adderstongue fern, cowslips and various halfbred primula spp. A large number of grass species be found in this area and it is especially noted for the insect populations - most visibly the large numbers of anthills. This compartment also contains locally important industrial archaeological remains in the form of Alum workings. Two small settling ponds still exist along with mounds where the footings of former buildings stood. Spoil from the workings covers remnants of earlier ridge and furrow. | | | | | | | |

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| 4a | 3.70 | Sessile oak | 2003 | High forest | | Informal Public Access | National Park |
| 3.7 Ha of new planting (December 2007/ January 2008) composed of 50% sessile oak, 25% ash, 1% gean and 0.75% rowan, 2.5% birch, and 0.25% field maple planted in single species groups of 15-40 trees with a random spacing of between 1 and 5 metres using 1.2m tubex tubes. A 20% shrub mixture made up of hawthorn, hazel, holly, Crab apple, Bird cherry, blackthorn and Dog rose planted on the edges of open space using 0.75m shrubshelters. The variable spacing across the site will achieve a minimum of 1600 trees per hectare. The ground flora in this compartment is predominantly improved grassland -composed of predominantly ryegrass on an heavy red clay soil type over shale bedrock. The site is on a very gentle east facing slope . The site is bounded to the north and west by ancient semi natural woodland and new native woodland planting (1997 and 2003) and a private dwelling, to the south by Little Beck Lane - a minor single track road, and to the west by 1.23 Ha of grassland undergoing organic conversion (Woodland Trust ownership under farm tenancy) and improved grassland to the north-west. Management access is available direct from Little Beck Lane via a field gate. Footpath access is available from Little Beck Lane , continuing through compartment 2d and from there into farmland outside the Woodland Trust ownership. | | | | | | | |
| 4b | 1.23 | Open ground | 2008 | Non-wood habitat | Management factors (eg grazing etc) | Informal Public Access | National Park |
| 1.23 Ha of farmland let under a Farm Business Tenancy agreement, in conversion to Organic status. Predominantly improved ryegrass on an heavy red clay soil type over shale bedrock.Situated on a very gentle east facing slope. Annual village fair held on site and utilises the whole grassland area of this compartment. | | | | | | | |

# GLOSSARY

### Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

### Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

### Ancient Woodland Site

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

### Beating Up

Replacing any newly planted trees that have died in the first few years after planting.

### Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

### Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

### Clearfell

Felling of all trees within a defined area.

### Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

### Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

### Continuous Cover forestry

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

### Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

### Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

### Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

### Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

### Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

### Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

### Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

### National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

### Native Species

Species that arrived in Britain without human assistance.

### Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

### Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

### Re-Stocking

Re-planting an area of woodland, after it has been felled.

### Shrub Layer

Formed by woody plants 1-10m tall.

### Silviculture

The growing and care of trees in woodlands.

### Stand

Trees of one type or species, grouped together within a woodland.

### Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

### Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

### Tubex or Grow or Tuley Tubes

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

### Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

### Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.