

Snaizeholme

(Plan period – 2024 to 2029)



WOODLAND
TRUST

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Introduction to the Woodland Trust Estate

The Woodland Trust owns and cares for well over 1,250 sites covering almost 30,000 hectares (ha) across the UK. This includes more than 4,000ha of ancient semi-natural woodland and almost 4,000ha of non-native plantations on ancient woodland sites and we have created over 5,000ha of new native woodland. We also manage other valuable habitats such as flower-rich grasslands, heaths, ponds/lakes and moorland.

Our Vision is:

“A UK rich in native woods and trees for people and wildlife.”

To realise all the environmental, social and economic benefits woods and trees bring to society, we:

- **Create Woodland** – championing the need to hugely increase the UK’s native woodland and trees.
- **Protect Woodland** – fighting to defend native woodland, especially irreplaceable ancient woodland and veteran trees; there should be no loss of ancient woodland
- **Restore Woodland** – ensuring the sensitive restoration of all damaged ancient woodland and the re-creation of native wooded landscapes.

Management of the Woodland Trust Estate

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.

The following principles provide an overarching framework to guide the management of all our sites but we recognise that all woods are different and that their management also needs to reflect their local landscape, history and where appropriate support local projects and initiatives.

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity, safety and to further the development of more resilient woods and landscapes.
2. We establish new native woodland for all the positive reasons set out in our Conservation Principles, preferably using natural regeneration but often by planting trees, 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. Where possible, we pro-actively engage with people to help them appreciate the value of woods and trees.
4. The long term vision for all our 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 natural and cultural heritage value of sites is taken into account in our management and in particular, our ancient trees are retained for as long as possible.
7. Land and woods can generate income both from the sustainable harvesting of wood products and the delivery of other services. We therefore consider the appropriateness of opportunities 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 encourage our woods to be used for 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. We maintain a network of sites for long-term monitoring and trials leading to reductions in plastics and pesticides.
10. Any activities we undertake are in line with our wider Conservation Principles, conform to sustainable forest management practices, are appropriate for the site and balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

The Public Management Plan

This public management plan describes the site and sets out the long term aims for our management and lists the Key Features which drive our management actions. The Key Features are specific to this site – their significance is outlined together with our long, 50 years and beyond, and our short, the next 5 years, term objectives for the management and enhancement of these features. The short term objectives are complemented by an outline Work Programme for the period of this management plan aimed at delivering our management aims.

Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. Any legally confidential or sensitive species information about this site is not included in this version of the plan.

There is a formal review of this plan every 5 years and we continually monitor our sites to assess the success of our management, therefore this printed version may quickly become out of date, particularly in relation to the planned work programme.

Please either consult The Woodland Trust website

www.woodlandtrust.org.uk

or contact the Woodland Trust

operations@woodlandtrust.org.uk

to confirm details of the current management programme.

A short glossary of technical terms can be found at the end of the plan.

Location and Access

Location maps and directions for how to find and access our woods, including this site, can be found by using the following link to the Woodland Trust web-site which contains information on accessible woodlands across the UK

<https://www.woodlandtrust.org.uk/visiting-woods/find-woods/>

In Scotland access to our sites is in accordance with the Land Reform Act (of Scotland) 2003 and the Scottish Outdoor Access Code.

In England, Wales and NI, with the exception of designated Public Rights of Ways, all routes across our sites are permissive in nature and where we have specific access provision for horse riders and/or cyclists this will be noted in the management plan.

The Management Plan

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Appendix 1 : Compartment Descriptions

GLOSSARY

1. SITE DETAILS

Snaizeholme

Location:

Snaizeholme, Hawes Grid reference: tbc OS 1:50,000 Sheet No. 0

Area:

563.62 hectares (1392.74 acres)

External Designations: Access Land, National Park

Internal Designations: Within WT Focus Area

2. SITE DESCRIPTION

Overview & vision

Snaizeholme is a unique and complex project where habitat restoration and nature recovery are as much a part of the plan as planting. One of the boldest projects in the English uplands, being the largest contiguous new native woodland in England, situated in an unforgiving landscape which witnesses everything our weather has to throw at it, where tree planting links across restoration and reintroduction, and will become a vibrant mosaic of native woodland, and unique, ecological habitat restoration across upland blanket bog, acid grassland, limestone pavement and riparian meadows. This is an exemplar project that leads the way, demonstrating and delivering woodland creation, habitat restoration and academic research at scale within the Northern Uplands

Three phases of planting between Q1 2023 – Q1 2025, will establish 291ha of new woodland planting, comprising 126.61ha glades (25–400 trees/ha), 70.65ha open woodland habitat (400–800 trees/ha) and 94.15ha groves (800–1600 trees/ha). Predominantly on the upper slopes, montane and sub-montane tree and shrub species will be re-introduced. This is a habitat has effectively been lost from Dales, and Snaizeholme would be one of the first sites to re-introduce these species - including various dwarf birches, dwarf willows, bog myrtle, providing an important habitat in its own right and as a future donor site for cuttings and seed. 113ha of deep peat will be restored and retained in good condition, 77ha of valley bottom riparian meadows will be managed through low density conservation grazing with native breed cattle, and 81ha of limestone pavement will be managed across a variety of habitats, from sparse scrub, through to conservation grazed grassland. Archaeology on site will be protected and the remnant farm barns restored, and new access tracks created to enable the delivery of the long term ambitions. Academic research, water quality & flood mitigation, carbon sequestration, landscape and significant biodiversity gains along with the protection of soils and the protection of archaeological features are just part of the wider benefits the site will deliver.

Physical description (landform, hydrology and soils)

Snaizeholme sits in a north-east facing symmetrical glacial bowl, formed during the Anglian glaciation, which started c.460k years ago, peaking some 18,000 years ago, and then starting to recede 16,000 years ago. The re-advance of the Anglian glaciation c.11,000 years ago is when the smaller valley glaciers appeared. The glacier at Snaizeholme, as with those in the 7 parallel valleys facing north-east, would have been several hundred metres thick. The land sits between 300 and 600m (c. 1000-2000ft), with a gently sloping valley bottom containing Snaizeholme Beck, fed by in excess of 20 tributary streams (c. 42km of streams) issuing from the valley sides which become increasingly steep, in some places with scree and cliffs, and with very deeply incised and eroded streams - again especially to the south eastern slopes and the south western slopes from Grove Head. Rainfall is estimated to be in the region of 2m per year, with the site boundary accounting for 92% of the watershed for that part of the valley (Snaizeholme accounts for 42% of the whole water flow for the valley). Snaizeholme Beck feeds the River Widdale and then the Ure, part of the SUNO catchment (Swale, Ure Nidd and Ouse) which exit to the North Sea via the Humber Estuary. Immediately to the South, water flows into the Wharfe catchment, and to the south west the Ribble. Normal flow is around 8-10cm deep on average, although the beck will easily flood to 1-2+m.

Almost treeless from several hundred years of clearances and sheep grazing, the land is dominated by grasses and rush, with pockets of richer ground flora, acid grassland and on the valley tops upland peatbog with limestone

pavement sitting above. The geology of the site is complex, with a series of bedrock changes - from shales in the valley bottom, gritstones and sandstones and then capped with outcrops of limestone, which makes the hydrology even more complex, with issues, sink holes, and a multitude of just sub-surface streams, especially at the junction with the limestone. Overlying the majority of the slopes is a thick layer of glacial till. Also known as boulder clay, this is an unstratified mixture of silts, sand, gravel, rocks and boulders, a product of the repeated glacial processes of erosion, transportation and deposition. This lack of structure makes the soils extremely vulnerable to the very visible and active erosion and slippage. On the higher ground, peat bog has formed, which would have started some 5-6000 years ago, following the glaciers receding and on the flatter plateaus overlying the limestone, Grove Head has depths in excess of 2.5m in places, equally in areas in the valley bottom peat pockets have formed where the ground has been permanently saturated, held by the undulations in the glacial till.

Within the streams, the exposed bedrock and littering the limestone walls are copious fossils, clearly showing the transitioning landscape - from the fossil burrows and the trace footprints of arthropods during the Cambrian and Ordovician periods when the land was a shallow tropical sea, some 450 million years ago, through to the Carboniferous period 300 million years ago, with the presence of Lycopod trees - the first large land plants, and their distinctive rhizome roots, corals, large brachiopod shells (large cockle/ scallop), and crinoids (sea lilies related to starfish and sea urchins)

Site history & context

Snaize may be a corruption of *snaer* meaning snow and *holme* is a corruption of *Holmr* - *SnaerHolme*, flat land or a homestead next to a river/or a boggy area. Widdale - the valley that Snaizeholme meets is translated directly as meaning Wooded Valley in Old Norse

The first records from the 12th and 13th centuries the forest contained only 'vaccaries' - dairy farm/ cattle scattered in wild and desolate country. One of which is called 'Snaysum,' There was no village or entry in Domesday for Bainbridge or Hawes 1086, so unlikely that there was anything apart from 'forest' . With comments on the forest being uninhabited and impassable, lonely and dangerous for the traveller. Men living in 1609 still remembered that there had been a 'guide law' for those passing through the forest, obliging each to pay 'three farthings to some guide to guide them through the forest by reason of the wildness of the said forest and for that the same was not inhabited in former times nor passable'. By the 15th century the inhabitants of Hawes were numerous enough to build themselves a chapel, and in the 17th century that town obtained market rights and became the centre of a flourishing agricultural district. The forest of Wensleydale / Forest of Bainbridge is also referred to - 'Bainbridge being the headquarters of forest government and for centuries the only place of importance south of the river. The 1847 inclosure (also call enclosure) act included Snaizeholme - Before the enclosures in England, a portion of the land was categorized as "common" or "waste". "Common" land was under the control of the lord of the manor, The Inclosure Acts, created legal property rights to land previously held in common. Between 1604 and 1914, over 5,200 individual enclosure acts were passed, affecting 28,000 km², and likely the same time the lime kilns on site at Snaizeholme were built to try improve the pasture. There were further changes to the land during the 1970's – with drained land more than doubling up to 110,000ha per year with an increase in grant to 70% (for severely disadvantaged areas), following the MAFF assessments in 1969. 11m ha in agriculture, 3m relied on drainage already and a further 2.6m needed draining. It would appear that the grassland on site has an extensive pattern of shallow surface drains following the contours every 10ft or so - often invisible on the ground they are clearly identifiable on aerial photographs, and at the same time extensive gripping (drainage) of the Grove Head peatbog has taken place, with deep and shallow drainage across the entire bog, including the land to the north east where a remnant area of deep peat remains. The water flow from Snaizeholme Beck has records back to 1966 via the river monitor some mile

downstream, and indicates a significant change in flow and peak flow events from the late 1970's and increasingly flashy nature of the watercourses in the last 20 years. Sheep grazing has been the predominant landuse, and extensive seasonal grazing has reduced the tree cover to almost zero and has had a significant detrimental effect on the floristic diversity and as a result the breeding birds and animals present.

The site in the local area

Snaizeholme sits within the Yorkshire Dales National Park, almost central to the Park area, nearest to the Village of Hawes and close to the iconic Ribbleshead Viaduct and the Yorkshire 3 peaks ((Penyghent, Wharfedale and Ingleborough). Surrounded to the south east and west by the predominantly peat moorland of Dodd Fell, Gayle Moore and Redshaw Moss, mostly sheep grazed with occasional cattle. Some of the land (Dodd Fell and Fleet Moss to the east) is upland peatbog undergoing restoration and recovery through the activity of the Yorkshire Peat Partnership (Yorkshire Wildlife Trust).

Woodland cover- as across the Dales is limited. Within the National Park only some 4% of the land is woodland, and less than 1% of that being ancient woodland - the remainder predominantly commercial conifer plantations. To the south west is the large Cam/ Greenfield woodlands - commercial plantations planted in the 1960s, to the north commercial plantations which continue in Widdale. Within the Snaizeholme Valley there are a series of plantations - Snaizeholme Plantation and High Houses (clearfelled and replanted 2014), Mirk Pot Allotment (p2019) and Mirk Pot. Part of the Mirk Pot woodlands, planted in the 1970's is the Red Squirrel refuge and trail, one of 17 Red Squirrel Refuges in northern England. Hugh and Jane Kemp, the then owners of Mirk Pot Farm, originally planted their land with Christmas trees. As the conifers grew, red squirrels were attracted to the abundant food supply and squirrel-friendly habitat. This led to the woodland being specially managed for red squirrel conservation. Working with the Yorkshire Dales National Park Authority there is now a viewing point where visitors can pause to watch the red squirrels.

Much of the remaining land within Snaizeholme Valley and the adjacent valleys of Widdale and Sleddale and down the Ure catchment - still with sparse or absent tree cover, is managed as sheep and cattle grazing, the predominant landuse throughout the valleys and moors of the dales. Upland peatbog and areas of deep peat across the adjoining valleys are some of the most heavily drained in the country and are in need of restoration and sensitive management.

The majority of the land within the WT estate is designated as open access, and the majority marked as within the moorland boundary - although that does not indicate deep peat as traditionally assumed by the moorland designation. In fact the majority of the moorland area does not differ from the remaining grazed grassland and rushy pasture. Only part of the land area - in the vicinity of Stonegill Foot (smallholding) is not designated as open access or moorland.

Public rights of way include the UUR - Unclassified Unsurfaced Road, which runs along the northern side of the valley bottom from the end of Snaizeholme Road for some 1800m, ending at the valley head, and for the last 500m along the definitive line is unsurfaced and not visible on the ground (tractor routes are present but vary from this line). A public footpath exits Mirk Pot and the squirrel refuge through Stonegill Foot land and onto the UUR. On Grove Head the Pennine Bridleway runs along the limestone pavement, from Cold Keld Gate to Gavel Gap, and outside the site boundary links with the Pennine Way (forming 2km of the south east boundary) and the Dalesway long distance footpaths.

Woodland description (broad-brush sketch of designations, age and species structure), stand types (e.g. mixtures or

single species); general condition, overstorey, understory and ground flora (quality plus any dominant or special species)

Trees on site are limited to a handful of remnants within the area known as Riggs/ Great Pasture in deeply incised eroded gills. As, alder, hawthorn, larch are the main species, likely to be post war remnants, with a small number of trees and shrubs planted under a countryside stewardship scheme in 1996, although mostly failed. Other tree remnants can be found to the south west along Long Sike - rowan and goat willow, generally regeneration on the limestone cliff edges inaccessible to grazing livestock. Two isolated, small (0.2ha) 19thc plantations of Scots pine and sycamore sit on the western slopes. Often planted in the Dales areas these small plantations were often around springs (providing water) or sink holes (to prevent the loss or injury of animals), walled off to prevent access by animals, and then planted to attempt to gain some advantage - financial or timber from the land excluded from grazing

Description of other habitats

Across the site the mapping of NVC habitats shows a very complex mosaic of habitats, some of which are priority habitats, some linked to deep peat and other hydrological linkages. As mosaic that has been carefully mapped, assessed and accounted for within the woodland creation design. In direct association with the habitat types, detailed mapping of the soils and peat has been undertaken to fully understand the complexities of plant habitat and the links with soils type. Woodland creation will cover just over 50% of the total land area, the remainder managed as key habitats - upland peat bog, riparian meadows, priority habitats and limestone pavement.

Within that mosaic there are a series of broad vegetation types:

- Upland calcareous Grassland, which covers very little area on site and exists on shallow, steep, calcareous sub-soil and in association with limestone crags in the east of the site.
- Upland flushes, fens and swamps - this vegetation is limited in extent and can be divided into alkaline, neutral and acid mire dependent on the pH of the water feeding the spring or flush. The acid and neutral mire is intimately linked with deep peat expressions, whilst the alkaline fen and springs occur sporadically, often associated with limestone crags and, in the south of the site and base-rich seepages. There are also several alkaline springs associated with becks.
- Purple moor grass and rush pastures- This vegetation covers a large proportion of the north-west end of the site and historical grazing levels has reduced its diversity,
- Upland Heath and Blanket Bog, In the main body of the site this vegetation is limited in extent and is intimately linked with deep peat expressions, and at Grove Head blanket bog is extensive mainly on deep peat
- Inland Rock Outcrops and Scree - These vegetation communities cover little area on site and exist directly on exposed rock substrates. Tall herb vegetation on crags and around waterfalls has been recorded and recognised as important woodland ground flora refuges from the once extensive forest cover. Limestone pavement was recorded over considerable areas in the south and the north west of the site, however, the grikes are not substantial and little flora usually associated with them is present, although the base rich soils do support large populations of mountain pansy
- Good quality acid grassland - This grassland was encountered in just one gill in the north of the site having been fenced from grazing and management in the past. It is considered likely that much of the agriculturally improved grassland in adjacent fields is derived from this species-rich acid grassland

Other features description)

An archaeology walkover, GPS and photographic survey found a landscape that appears to have changed very little over time, very much a landscape utilised for its natural resources through small scale (likely site based) industrial activity and agricultural grazing. But did identify a number of zones within the Snaizholme Valley which are archaeologically sensitive. The findings were seen to be in keeping with what could be expected from an upland rural site in the Yorkshire Dales. In terms of local and regional significance, the remains being typical of their setting and none of the sites were deemed as having a 'high importance'. However, all the remains will be respected and incorporate into areas of open space or through buffers within the woodland creation planting scheme, in order to best preserve and retain the unique archaeological landscape that the Yorkshire Dales has to offer.

There were 89 features identified within the site boundary, most of which were in a poor condition and a generally ruined state. The sites were predominantly from a post-medieval industrial and agricultural origin, ranging from field boundaries, field barns, lime kilns and limestone quarries and lead mines to sheepfolds and shielings. Possible prehistoric remains were also identified - comprising of a group of linear banks and mounds which could relate to small enclosures or platforms, tumulus surrounded by a larger circular earthwork, and a cluster of hollows encircled with stones which could relate to a cluster of small huts, shelters and cairns. Outside the site boundary - the Pennine Way and the Pennine Bridleway, Cam Road are important Romano-British features in their own right - part of a series of important Roman roads crossing this part of the uplands, as well as earlier features - including bronze age cairns adjacent to the south west. Within the valley - part of Stonegill Foot (management access to site) a historic humpbacked bridge has been restored (2023), and the 3 two storey stone barns will be restored, one developed into a welfare refuge for site staff, contractors and researchers given the adverse weather, remote site and lack of signal/ distance from A&E.

Monitoring and evidence, demonstration

At Snaizholme we are establishing extensive baselines and long term monitoring across a huge range of metrics in association with the University of Leeds and the University of York (including future, as yet unknown academic collaborations and research projects). Long term monitoring of habitats and species in conjunction with key stakeholder organisations will act as evidence for future woodland creation and habitat enhancement schemes, supporting, developing and influencing wider Local, Regional and National woodland and habitat restoration policy, and allowing evidence-led management. And with the potential for using the momentum created by this concentration of activity, and as the vehicle for bigger more extensive research through a consortium of academic institutions. Baseline and ongoing surveys will look at

- Impacts on hydrology and NFM in an upland landscape
- Impacts on carbon sequestration and storage of organo-mineral soils
- Consequences of tree planting and vegetation change for nearby areas of deeper peat soils
- Impacts on microclimate
- Impacts on biodiversity
- Socio-economic impacts
- Catchment and interventions NFM models

Overview of Key Features, other points of interest, conservation features.

The key features for the site are based around the key open ground habitats, the woodland creation, archaeology, watercourses, access and the priority and species of note within the site. Species of note include white clawed crayfish, the population at Snaizholme being one of the UK's best and potentially highest, however under serious threat from invasive signal crayfish which are only a matter of a few KM's away downstream, brown trout, otter, kingfisher, barn/ tawny and short eared owls, hawks including kestrel, sparrowhawk, buzzard, peregrine falcon and red kite have been seen, ravens, black grouse, grey heron, dippers and grey wagtails as well as a range of ground nesting birds and waders - including curlew, snipe, lapwing, oystercatcher, golden plover and woodcock (full species lists are included within the site surveys from 2021 and 2022) Roe deer, hares, along with occasional rabbits, fox stoats and weasels are occasionally seen. Red squirrels often use the drystone walls as routes between woodlands (Mirk Pot into Snaizholme Plantation) but rarely venturing much further than Stonegill Foot Farmhouse into the valley itself due to the lack of habitat and cover. The species present on site are limited, given the lack of available habitats, and as the woodland develops and the other habitats are restored and brought back into good ecological conditions it is expected that both populations and the range of species will increase - as indicated in the Wider Site Benefits documents (part of the EIA assessment) . NFM, - Natural Flood Management will be seen a key part of delivery. Whilst the whole site is in effect a massive NFM intervention, smaller individual interventions will be put in place, including woody debris and stone leaky dams, extensive grip blocking as part of the peatland restoration programme, and wetland scrapes as pools - holding water on site but also creating additional wildlife habitats. The deep peat within Grove Head will be subject to a peatland restoration programme, delivered through the Yorkshire peat Partnership, reprofiling damaged peat and peat hags, grip blocking through a combination of stone and wooden dams, after which a programme of maintenance and management will ensure the upland peatbogs and deep peat elsewhere on site will be maintained in good ecological condition. In order to undertake agricultural conservation grazing, to access the eastern half of the site for management a new access track has been installed, including a substantial bridge crossing of Snaizholme Beck, from the UUR to the New Barn (1885), this will ensure that all of the activity planned for the site can be undertaken efficiently and safely and with the minimum of ecological disturbance in the long term. Wildfire management plans have been considered, given the risk of fire, access routes across the site will be put in place during 23/24 (unsurfaced, but demarcated and cut for quad/ 4x4 access), the restoration of the barn, hardstanding and creation of new tracks being a vital part of this activity.

Public access and usage

The vast majority of the land is currently designated and will remain as Open Access land and under Woodland Trust ownership, the whole site is now publicly accessible. Where fences are erected to protect the woodland, public access will be incorporated via management gates. The Pennine Way Runs along the eastern boundary of site, immediately outside the site boundary. Shrub planting will occur at the very lowest densities (25-200 stems/ ha) along this boundary, utilising low growing trees and shrubs, montane varieties, and will take into account natural sight lines aided by the steep slopes dropping away into the valley. Fencelines along this boundary will be planned to minimise any impacts on views and take into account natural sight lines and visibility, landscape, birds, habitats, efficient site management and existing landforms, topography and structures (eg gills, walls and slopes). The Pennine Bridleway, crossing the head of the valley to the south. This is located up at the very highest elevations of the site on the shallow limestone/limestone pavement, and whilst the majority of the valley is hidden from view, the expanse of upland blanket bog at Grove Head provides a new perspective, along with the interpretation opportunity to introduce the landscape scale activity in the wider area , such as Wild Ingleborough. The existing definitive public footpath enters the site from the north, incorporating a round trip – along Snaizholme Road & into the adjacent plantations as part of the Red Squirrel Trail, which is also accessed via the Little White Bus

Service from Hawes Museum. Over time there may be the opportunity to develop a permissive route into the site, once the woodland areas are establishing, farm management practices are more clearly defined and as nature recovery, especially waders, are more secure. The Unsurfaced Unclassified Road (UUR) will primarily be an access route that is utilised for activity on site, resurfaced, increasing accessibility of the site for forestry operations, farming & emergency access but also having a visitor opportunity to get views and access further into the valley on an easy level route.

Signage & Interpretation initially will be focused along the Pennine Way and the Pennine Bridleway, as well as on Snaizholme Road and the area close to the Red Squirrel Trail, interpretation panels will inform visitors about the project, habitats and the landscape scale recovery taking place. Engagement and volunteering activity will be relatively low during the initial development of site, likely linked to key specialist activity such as monitoring and photography. Corporate and community work days will be undertaken throughout, and working with neighbours and stakeholders on or off site, where there are joint volunteer opportunities – eg working with the YDNPA on the red squirrel trail, Pennine way, drystone walling etc. Ongoing Consultation with neighbours, landowners and key stakeholders will continue throughout the project as the site develops and as decisions are adapted (eg grazing) based on the available evidence. This will also open up additional opportunities for engagement and collaboration.

3. LONG TERM POLICY

In 50 years Snaizholme will be the first of many projects in the English uplands where habitat restoration and nature recovery are as much a part of the plan as planting. The valley being used as a national case study and demonstration site for habitat improvement and connectivity. It will have linked restoration and reintroduction, developing as a vibrant mosaic of habitats. with grassland, regenerating native woodlands, riverside meadows and montane woodland/scrub on the valley slopes below an upland peatbog and grazed limestone pavements. Managed through an evidence led approach. This is likely to be a fluid process changing as the site develops and as other pressures or opportunities dictate, but will include cattle grazing, seasonal animal grazing, areas of cyclical cutting (eg priority rush habitat) wildlife control (herbivores/ predators to ground nesting species and priority species). Woodland management clearly led by the available evidence, likely minimum intervention, but may be through interventions such as cutting, coppice, wider grazing within the woodland areas.

The woodlands will be structurally diverse native, predominantly wet woodland, providing connectivity and transitions between wider habitats (from farmed valley, riparian and aquatic habitats through zones of native woodland, peatland and upland blanket bog, limestone pavement) and within habitats, (eg through woodland densities, and wider habitat restoration), and will be part of wider ecological landscape scale change. Priority breeding woodland bird species will have benefitted from woodland creation including common cuckoo, black grouse, tree pipit, crossbill, pied flycatcher, spotted flycatcher, redstart, wood warbler, nuthatch, siskin, goldcrest. Also possibly specially protected WL&C Act Sch.1 raptor species, such as hobby, goshawk and red kite. Tall vegetation or low scrub, providing cover and nesting sites for increased populations of black grouse, using the opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland. There will be a significant expansion in woodland habitat and food availability for red squirrels (WL&C Act Sch.5 and BAP species) in the valley, increasing the population, and with landscape scale protection from grey squirrel incursions. Reintroduced montane and submontane woodland will be established throughout the woodland matrix, providing diversity and a source of material for new woodland projects.

The woodland will help landscape the predominantly single species coniferous plantation woodlands to the west and north, creating a much more unified, connected, balanced woodland, , in proportion to the scale of the existing dominant u-shaped glacial valley. The majority of identified historic features remaining in an undisturbed state, through sensitive woodland design and low intensity grazing/ agricultural activity.

Water flow within Snaizholme Beck will have reduced flood peaks, excellent water quality (reduced sediment load, agri chemicals etc) and a improved habitat for those species reliant on water - otter, kingfisher, dipper, wagtail, waders, although it is likely that white clawed crayfish will not be present due to the march of signal crayfish from the Ure. Fish populations (as well as invertebrates) will be healthy and well established with increased habitat - pools, riffles and shade.

Restored upland blanket bog, pockets of deep peat, reduced agricultural impacts, and native woodland creation will have catchment scale NFM interventions through: improved soil permeability, woodland/ tree canopy interception, rougher vegetation, reductions in overland flow, natural processes (eg the development of woody debris) individual NFM interventions (eg stone leaky dams) improved structural diversity, with trees, shrubs and

Scrub providing occasional shading whilst maintaining generally open aspects of watercourse, and more stable riverbanks, hugely beneficial for foraging riparian species, with species increasing in number including kingfisher (WL&C Act Sch.1 species) & soprano pipistrelle bat (WL&C Act Sch.5 species). Riparian trees with roots and woody debris NFM works along the riverbank could support otter holts (WL&C Act Sch.5 and Yorkshire Dales BAP species). Catchment scale NFM interventions will also be reducing downstream flooding impacts within the SUNO catchment. University research and modelling will be used to evidence the impacts and feed into outreach, 3rd party visits,

demonstrating flood resilience and UK case study. As part of responsible water stewardship, private water supplies will be safeguarded and water quality and consistency of flow improved through the woodland and habitat interventions

Wetlands will have been established and be a source of water retention and important habitats in their own right - with pools, scrapes created across the valley bottom along with seasonal flooding will provide enhanced opportunities for common toad, common frog and potentially smooth newt and palmate newt. The upland peat bogs will retain water and seasonal surface water pools and springs as the water table fluctuates, peatland restoration will aid summer base flow and water quality, improving the habitat for resident and migratory fish within Snaizholme Beck.

Bare and eroding peat will have stabilised through restoration intervention and changes to grazing. Upland peat bogs and cells of deep peat on the lower slopes will be actively sequestering carbon and peat volumes increasing, with an established upland peatbog vegetation. Water flow from the peatbogs will be slow and consistent, with little or reduced erosion within the feeder gullies into the valley. These improvements will contribute to increased blanket bog key species (eg sphagnum, cloudberry). Breeding birds on peatlands, especially blanket bogs, include a very high proportion of species that are covered by conservation designations, the much improved upland breeding bird habitat will have a much greater assemblage of priority species including obligate species such as red grouse and dunlin - using other habitats as well as the moorland environment: The wettest habitats (open pools and un-drained bog) utilised by wildfowl, vital for dunlin and golden plover. A mosaic of tall heather and grasses providing cover and nesting sites for black grouse, red grouse, curlew, dunlin, hen harrier, merlin and skylark, whilst golden plover, dunlin and redshank preferentially selecting shorter vegetation. improved habitat availability within the landscape The shelter of tall heather, tall vegetation or low scrub, providing cover and nesting sites for black grouse, with opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland, with every expectation that black grouse will be breeding on site and the population within the YDNPA increasing - habitat management needing to involve whole integrated landscapes (as in the Snaizholme valley) rather than single fragmented or isolated habitats

120ha of valley bottom, riverside meadows, and areas of unplanted limestone pavement will be a permanent fixture within a local farming business, incorporating a much improved upland bird habitat.

Access maintained across the key existing routes - visible from the Pennine Way, with viewpoints looking out over the established valley habitats, along with the existing route through the site on the Pennine Bridleway. Extensions of permissive routes from the Red Squirrel Reserve will allow limited access into the valley following the existing tracks and the UUR. No wider permissive routes are planned, retaining the valley as very much a location for biodiversity rather than recreation

4. KEY FEATURES

4.1 Connecting People with woods & trees

Description
Use of site and barns by visitors..... etc etc.
Significance
Opportunities & Constraints
Factors Causing Change
Long term Objective (50 years+)
Short term management Objectives for the plan period (5 years)

4.2 f1 New Native Woodland

Description
291ha of new native, predominantly wet woodland planted almost exclusively through contractors, forming an uninterrupted band of woodland around the mid and upper slopes at the head of the Snaizeholme Valley. This comprises 94.15ha of Groves (800-1600/ha) Groves to be predominantly tree species. (Alder, Aspen, Birches, Scots pine, Rowan) with willow dominating the wetter flushes. 70.65ha of open woodland habitat (400–800/ha). Open Woodland to be a mixture of shrubs & high canopy trees, with a higher percentage of shrub in transition zone between open woodland and glades. 126.61ha of glades (25–200/ha) Glades to be planted mainly with scrub species (Willows, Hawthorn, Blackthorn - with some Scots & Rowan). , oaks are to be planted in clusters & distinct pockets on the most easily accessible ground, being more attracted to acorns it should simplify the management and monitoring of any grey squirrel incursions. Zones of variable density, species and structural diversity allowing the opportunity for the widest possible range of habitats. A diverse tree and shrub mix including birch, aspen, alder, rowan, Scots pine and oak providing exemplary ecological connectivity and transitions between wider habitats (from farmed valley, riparian and aquatic habitats through zones of native woodland, peatland and upland blanket bog, limestone pavement) and within habitats. The woodland (in particular the Scots pine element) will also make significant inroads into the integration of the

predominantly single species coniferous plantation woodlands to the west and north, creating a much more unified, connected, balanced woodland, within the whole valley, in proportion to the scale of the existing dominant u-shaped glacial landform. Reintroduced montane and sub-montane woodland will be established throughout the woodland matrix, providing diversity and a source of material for new woodland projects. Where opportunities exist, the direct seeding will be undertaken (eg active erosion areas/ bare ground) along with the use of willow setts (eg NFM interventions). Regeneration will be expected as grazing is reduced. Within the woodland matrix are areas of open ground, either archaeological features (including drystone walls, barns etc), natural features - eg gullies, ravines and waterfalls ('ares of authenticity' - eg long sike waterfall) or important areas of vegetation (noted on the NVC survey mapping). These will be left open and generally unmanaged, allowing natural process to flourish.

Significance

The delivery of new native woodland and habitat restoration at Snaizeholme hits key targets for local projects, with local, regional, national and international strategy and environmental commitments including:

- Nature recovery projects 2024 (Ure Dales - Yorkshire Wildlife Trust/ Heart of the Dales - National Trust)
- Dales Woodland Strategy 2020-2030/ Yorkshire Dales National Park, 'Nature in the Dales: 2020 Vision'/ Yorkshire Dales National Park Management Plan 2019-2024
- The Northern Forest Manifesto 2018/ Yorkshire and Humber Regional Biodiversity Strategy
- Environment Act 2021/ England Trees Action Plan 2021-2024/ Natural England Action Plan 2022-2023
- A Green Future: Our 25 Year Plan to Improve the Environment/ Biodiversity 2020: A strategy for England's wildlife and ecosystem services/ National Ecosystem Assessment
- The United Kingdom Forestry Standard (UKFS)
- Bonn Challenge – UN Decade on Ecosystem Restoration

Opportunities & Constraints

Whilst the plans are outlined in the EIA and wider site benefits documents (2023), the development of the site, opportunities for management and constraints will be evidence led wherever possible, this will be across a range of key drivers including tree survival, landscape, people, ongoing research, changes to herbivore threats, changes to presence of species, particularly priority species (birds and mammals). Until the tree establishment is completed (predominantly 2025) and a period of establishment (eg minimum 5 years) and research completed, it will be very difficult to make any assumptions as to the various factors influencing woodland opportunity/ constraints. Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.

Factors Causing Change

- Herbivore impacts, especially deer hares and rabbits.
- Herbivore impacts, periodic population peaks of voles.
- Sheep ingress from neighbouring properties
- Predation on ground nesting birds
- Invasive species, either through natural processes or through the movement of vehicles and people.
- Changing presence of species - particularly priority species
- Research data and modelling influencing management direction

Long term Objective (50 years+)
The woodland areas will be a structurally diverse native, predominantly wet woodland, providing exemplary ecological connectivity and transitions between wider habitats (from farmed valley, riparian and aquatic habitats through zones of native woodland, peatland and upland blanket bog, limestone pavement) and within habitats, (eg through woodland densities, and wider habitat restoration), and will be part of wider ecological landscape scale change. Priority breeding woodland bird species will have significantly benefitted from woodland creation including common cuckoo and black grouse, tree pipit, crossbill, pied flycatcher, spotted flycatcher, redstart, wood warbler, nuthatch, siskin, goldcrest. Also possibly specially protected WL&C Act Sch.1 raptor species, such as hobby, goshawk and red kite. Tall vegetation or low scrub, providing cover and nesting sites for increased populations of black grouse, using the opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland. There will be a significant expansion in woodland habitat and food availability for red squirrels (WL&C Act Sch.5 and Yorkshire Dales BAP species) in the valley, increasing the population, and with increased landscape scale protection from grey squirrel incursions. Reintroduced montane and submontane woodland will be established throughout the woodland matrix, providing diversity but also a source of material for new woodland projects. The woodland will make significant inroads into the integration of the predominantly single species coniferous plantation woodlands to the west and north, creating a much more unified, connected, balanced woodland, within the whole valley, in proportion to the scale of the existing dominant u-shaped glacial landform. The majority of identified historic features remaining in an undisturbed state, through sensitive woodland design and low intensity grazing/ agricultural activity. The valley used as a case study and demonstration site for habitat improvement and connectivity.
Short term management Objectives for the plan period (5 years)
Undertake 3 phases of woodland creation between March 2023 and March 2025, planting 700k trees (allowing for losses creating a final density at about 5% of this number) including boundary fencing, compartment fencing and fencing out areas to be grazed or protected including limestone pavement and upland peatbog Undertake montane and sub-montane species planting between winter 2024/25 and 2025/26 Maintain active herbivore control at a local level - deer, hares and rabbits across the whole site through contractor. From 1 March to 31 July hares should only be killed if they are actually causing serious tree damage within planted enclosures (as opposed to them being a potential source of risk, or outside fenced enclosures) In order to protect the establishing trees, deer within any of the fenced areas will be subject to lethal control, during the deer seasons. Outside the fenced areas, site wide deer management is necessary - given the extent of the planted areas. there is no way of preventing them access to the planted areas, Annual herbivore impact assessments undertaken and repeated thermal monitoring at years 1,3,5 Work with adjacent landowners to manage deer / herbivores to best practice, collaborating where possible Work with adjacent landowner and the YDNPA to deliver landscape scale management of grey squirrels along key incursion corridors to protect existing red squirrel populations Maintain fences enclosures as rabbit/ hare proof, undertake the use of deterrents for voles/ deer on high risk areas - particularly edges of existing plantations Where evidence indicates, active control at a local level - mammals/ corvids, to protect ground nesting birds, across the whole site through contractor. Monitoring of other/ notable/priority species sightings through repeated annual formal surveys (bird transects/ audio monitoring) and notable sightings informally through iredcord app.

4.3 f10 Carbon

Description
No-thin Project 309ha of new native woodland is in Woodland Carbon Code commitment under a mixed management regime. The precise areas under commitment is shown on the UK Land Carbon Registry, and the Carbon data layer in GIS.
Significance
The Woodland Carbon Code (WCC) is the quality assurance standard for woodland creation projects in the UK, and generates high integrity, independently verified carbon units, backed by the Government. High quality carbon projects drive the Woodland Trust to achieve its 'create' goal via creating woodlands that benefit nature, climate and people into the future.
Opportunities & Constraints
Monitoring will be limited to a general review every 5 years whereby any major issues with growth are flagged to the carbon team. The carbon team remain responsible for and to undertake all formal monitoring and verification processes of the carbon project The key feature will also be useful where carbon projects have been set up as no-thin, but factors on site mean that thinning will be beneficial. The key feature will trigger a discussion with the carbon team as to the likely implications of the specific thinning operation on the volume of carbon units, and enable this change to be pro-actively managed with the Woodland Carbon Code.
Factors Causing Change
Anything that impacts the growth of, or removal of trees, including: Herbivore impacts, especially deer hares and rabbits. Herbivore impacts, periodic population peaks of voles. Sheep ingress from neighbouring properties
Long term Objective (50 years+)
To ensure, at minimum, the woodland delivers the quantity of carbon units as specified for the project in the UK Land Carbon Registry. This will be monitored at year 5, and every subsequent 10years, via independent verifications undertaken by the carbon team.
Short term management Objectives for the plan period (5 years)
To ensure the net planted area as shown in the UK Land Carbon Registry is maintained. To ensure no significant changes (<10%) to species composition as set out in the UK Land Carbon Registry

4.4 f2 Semi Natural Open Ground Habitat

Description

To the south of Grove Head, sitting above the upland peat bog, at approximately 570- 580m is some 29ha of limestone pavement. This is referred to as the 'main' limestone. To the north west of Grove Head is a second plateau of limestone, sitting between 530 and 545m, this is a lower bed of limestone - the 'four fathom band, sitting over the Yoredales series (repeating bands of limestone, argillaceous (clay) rocks and subordinate sandstones) The whole Snaizeholme valley has a complex geology with frequent shake holes, deep water filled wells and underground springs The pavement forms the river catchment boundaries - South into the Wharfe catchment, south west the Ribble, the remainder flowing into the SUNO catchment. The Pennine Bridleway long distance footpath runs across the area east west from Cold Keld Gate to Gavel Gap (linking to the Ribble Way, Pennine Way and Dales Way just outside WT ownership)

The limestone pavements include post-medieval industrial remains including sheepfolds, field boundaries, 3x lime kilns and limestone quarries (making use of the exposed edges of the pavement), bell pits and lead mining, with potential Romano-British remains linear earthwork of banks and ditches measuring approximately c.100m in width, no further features were visible within the enclosure that were suggestive of hut circles or a settlement. Given the extensive agricultural and industrial use of the site for many centuries, the loose and available limestone pavement (clints) have been predominantly removed - walls, lime production and building, which has left just the solid exposed bedrock, generally now well covered in a mixture of grasses and mosses with much less exposed stone, but still clearly visible the pattern of soil filled grikes (erosion cracks between blocks). predominantly calciferous grasslands, with montane communities such as the large populations of mountain pansy.

Generally an important area for ground nesting birds, including golden plover, 2 areas of limestone pavements have been fenced off and will be managed through conservation grazing, the area of pavement furthest west and north sparsely planted with scrub and montane plants creating an important edge habitat closest to the current populations of black grouse

Significance

The limestone pavement forms part of a landscape scale connectivity, with new native woodland, peatland and upland blanket bog, limestone pavement, farmed valley and riparian and aquatic habitats, linking with each other and providing the opportunity to link beyond the site boundaries. Limestone pavement is a rare habitat in Britain (c.2,000ha and the majority can be found in the western parts of North Yorkshire as well as south and east Cumbria. With the Yorkshire Dales National Park containing approximately half of all Britain's limestone pavement. especially important for ground nesting birds at Snaizeholme and part of a distinctive open hill top landscape, repeated across neighboring valleys.

Opportunities & Constraints

Whilst the plans are outlined in the wider site benefits documents (2023), and the land will be fenced out during 2024, the management of the pavement will be evidence led wherever possible, this will be across a range of key drivers including change following the removal of sheep and the re-introduction of low density cattle grazing, , ongoing research, changes to herbivore threats, changes to presence of species, particularly priority species (birds and

mammals). Until a period of monitoring change is completed (3-5 years) , it will be very difficult to make any assumptions as to the various factors influencing peatland opportunity/ constraints. Future maintenance to ensure 'good grassland condition' could be part of the Landscape Recovery Project 'Ure Dales' . Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change
Herbivore impacts, especially deer hares and rabbits, periodic population peaks of voles. Sheep ingress from neighbouring properties Low density conservation grazing with cattle Predation on ground nesting birds Invasive species, either through natural processes or through the movement of vehicles and people. Changing presence of species - particularly priority species Research data and modelling influencing management direction
Long term Objective (50 years+)
The woodland areas on the limestone pavement will be part of a structurally diverse native, predominantly wet woodland, providing exemplary ecological connectivity and transitions between wider habitats (from farmed valley, riparian and aquatic habitats through zones of native woodland, peatland, limestone pavement and upland blanket bog) and within habitats, (eg through woodland densities, and wider habitat restoration), and will be part of wider ecological landscape scale change. The shelter of , tall vegetation or low scrub, providing cover and nesting sites for black grouse, with opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland, with every expectation that black grouse will be breeding on site and the population within the YDNPA increasing -habitat management needing to involve whole integrated landscapes (as in the Snaizeholme valley) rather than single fragmented or isolated habitats. The open areas of limestone pavement will have a greater variety of grassland species and structure, increased priority species and increased productivity. The pavement grazed seasonally adding to agricultural productivity and opportunity for local graziers, likely as part of a wider conservation grazed unit on site/ outside site. The valley used as a case study and demonstration site for habitat improvement and connectivity.
Short term management Objectives for the plan period (5 years)
Complete boundary and compartment fencing during summer 2024 Low density conservation grazing with cattle Maintain active herbivore control at a local level - deer hares and rabbits across the whole site through contractor. Annual herbivore impact assessments undertaken and repeated thermal monitoring at years 1,3,5 Work with adjacent landowners to manage deer / herbivores to best practice, collaborating where possible Maintain fences enclosures as rabbit/ hare proof. Where research indicates, active control at a local level - mammals/ corvids, to protect ground nesting birds, across the whole site through contractor. Monitoring of species sightings through repeated annual formal surveys (bird transects/ audio monitoring) and notable sightings informally through irecord app.

4.5 f3 Open Ground Habitat

Description

Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at approximately 310-370m is some 90ha of open grassland. Sitting over the Yoredales series of rocks, with repeating bands of limestone (Harddraw, Simonstone and Middle limestone bands), argillaceous (clay) rocks and outcropping of sandstones, many of which are very visible in the stream beds and more eroded or active river channels. These are overlaid by glacial till, 'superficial' sedimentary layers some 20+m thick, deposited during the last ice age (ending 11,000 years ago) which are unstructured and unsorted, with a mixture of rock types and sizes, easily eroded by the streams and tributaries. Some areas - especially the south and west, hollows and the complex underlying geology have allowed the formation of pockets of deep peat (up to 1m thick in places) with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. More important and suitable for priority ground nesting birds - especially waders including lapwing, curlew, snipe and along the stream sides oystercatcher and sandpiper. Whilst farm from ideal, the land at Snaizeholme is now a sanctuary away from intensive sheep grazing and ever more damaging agricultural practices (eg silage cutting, muck spreading etc) in the lower valleys. Sheep predation being likely one of the main reasons for the almost zero productivity in the valley bottom in previous years by any of the wader species in particular. The lower valley also includes 4x stone field barns, a single storey barn suited to storage or occasional shelter, with 3 larger 2 storey barns being restored during 2024, one as a welfare refuge, another as storage and workshop and one as a traditional agricultural barn (although all 3 will retain their old appearance from the outside and appear as traditional field barns. Accessed by a narrow humpback bridge (rebuilt in 2023) from the north (via Stonegill Foot Farm) the original access track follows the course of Snaizeholme Beck (regularly flooded) and links with a newer track system accessing the 3 barns via a bridge leading out to Snaizeholme Plantation built during 2023/24. This being the main access for agricultural vehicles and also for future site management on the eastern slopes of the valley. An unclassified unsurfaced road (UUR) runs along the western side of the valley, part stoned and then unidentifiable as a route, it gives access to the head of the valley by ATV. Scattered tree planting will link with the lower wooded slopes, utilising the deeper gullies and stream banks, ensuring that there is little interference with the potential sight lines for ground nesting waders. Approximately 10ha of woodland planting will be undertaken - shrubs, montane and sub-montane species along with the use of direct seeding and willow setts, likely fenced out initially from grazing cattle.

Significance

The open ground habitat forms part of a landscape scale connectivity, with new native woodland, peatland and upland blanket bog, limestone pavement, farmed valley and riparian and aquatic habitats, linking with each other and providing the opportunity to link beyond the site boundaries. Open ground built into the site landscape design, retaining open habitat currently used for priority ground nesting birds - particularly curlew and lapwing. UK is the third most important country in the world for breeding curlews, hosting nearly 25% of the global population, the northern Pennines accounts for 4.9% of the area of England and Wales, yet hosts 49% of these nations' breeding population. Nationally important numbers of breeding lapwing are found in the Yorkshire Dales. The open grassland in the valley bottom, over time will become more sheltered, less windy and warmer, with increased habitat adjacent and availability of food throughout the year - a key location for overwintering species and migrant visitors. The open valley is a suitable size to be a worthwhile farming unit, suitable for seasonal - or year round low intensity grazing, and with barns, excellent access, cattle handling facilities, and retaining an element of farming within this predominantly wooded landscape.

Peatland restoration at Snaizeholme hits key targets for local, regional, national and international strategy and environmental commitments including:

Bonn Challenge – UN Decade on Ecosystem Restoration

Natural England Action Plan 2022-2023

Yorkshire and Humber Regional Biodiversity Strategy 2009 England Peat Action Plan 2021 Yorkshire Dales National Park Management Plan 2019-2024 updated November 2021
Opportunities & Constraints
Whilst the plans are outlined in the wider site benefits documents (2023), and the land will be fenced out during 2024, the management of the valley bottom open ground will be evidence led wherever possible, this will be across a range of key drivers including change following the removal of sheep and the re-introduction of low density cattle grazing, , ongoing research, changes to herbivore threats, changes to presence of species, particularly priority species (birds and mammals) and the finances of grazing . Until a period of monitoring change is completed (3-5 years) , it will be very difficult to make any assumptions as to the various factors influencing grazing/ habitat opportunity/ constraints. Future maintenance to ensure 'good grassland condition' could be part of the Landscape Recovery Project 'Ure Dales' . Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change
Herbivore impacts, especially deer hares and rabbits, periodic population peaks of voles. Sheep ingress from neighbouring properties Low density conservation grazing with cattle Predation on ground nesting birds Invasive species, either through natural processes or through the movement of vehicles and people. Changing presence of species - particularly priority species Erosion of peat and soils by water large blocks of soils and developing peat eroded by the river channel Research data and modelling influencing management direction
Long term Objective (50 years+)
Cells of deep peat on the lower slopes will be actively sequestering carbon and peat volumes increasing, with an established upland peatbog vegetation. Water flow from these small peatbogs will be slow and consistent, with little or reduced erosion within the feeder gullies into the main stream. These improvements will contribute to increased blanket bog key species (eg sphagnum). There will be a much improved upland bird habitat - wet habitats (open pools and un-drained bog), a mixture of short and long grasses, scattered scrub, will have a much greater assemblage of priority species including both resident and migratory species (both summer breeding and winter visitors . The shelter of , tall vegetation or low scrub, providing cover and nesting sites for black grouse, with opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland, with every expectation that black grouse will be breeding on site, and across the species range productivity will have increased. The low ground valley bottom being a permanent fixture within a local farming business. The valley used as a case study and demonstration site for habitat improvement and connectivity.
Short term management Objectives for the plan period (5 years)
Undertake 1 phase of woodland creation between September 2024 and March 2025, along streamsides and gullies in the valley bottom Complete boundary and compartment fencing during summer 2024

Undertake the re-introduction of montane and sub-montane species as part of the woodland design between winter 2024/25 and 2025/26

Maintain active herbivore control at a local level - deer hares and rabbits across the whole site through contractor.

Annual herbivore impact assessments undertaken and repeated thermal monitoring at years 1,3,5

Work with adjacent landowners to manage deer / herbivores to best practice, collaborating where possible

Maintain fences enclosures as rabbit/ hare proof.

Where research indicates, active control at a local level - mammals/ corvids, to protect ground nesting birds, across the whole site through contractor.

Monitoring of species sightings through repeated annual formal surveys (bird transects/ audio monitoring) and notable sightings informally through irecord app.

Monitoring the financial viability of grazing the area

4.6 f4 Watercourses

Description

The Snaizeholme peatland and the limestone pavement above forms the catchment boundary - South into the Wharfe catchment, south west the Ribble, From limestone pavement in the north west, water drops into the adjoining Widdale Valley (pronounced 'Widdle') , joining Snaizeholme Beck a mile or two downstream, joining and becoming the Ure below Appersett. Part of the large SUNO catchment (Swale Ure Nidd and Ouse) the rivers joining, flowing through York (c 3-4 days & 60+ miles downstream) and exit to the north sea via the Humber estuary. The Woodland ownership being responsible for 92 % of that part of the catchment, with only a small proportion coming of Dodd Fell to the east.

Sitting above rocks of the Yoredales series - with repeating bands of limestone (Hardraw, Simonstone and Middle limestone bands) , argillaceous (clay) rocks and outcropping of sandstones, many of which are very visible in the stream beds, with frequent small waterfalls, eroded pools, creating very interesting and lively, well aerated watercourses with a wide range of habitats. These bedrocks are overlaid by glacial till, 'superficial' sedimentary layers some 20+m thick, deposited during the last ice age (ending 11,000 years ago) which are unstructured and unsorted, with a mixture of rock types and sizes, easily eroded by the streams and tributaries - especially visible on the steepest gills (3 parallel gills including green syke east side of the valley) and the head of the valley draining from the peatland, with 5 large deeply incised tributaries Lady Fold Gill, Deep Gill, Grove Syke, with North Scar Gill and Long Syke also having larger waterfalls over the '5 yard' and 'middle' limestones. The whole valley has a complex geology with frequent shake holes, deep water filled wells and underground springs audible. The complex geology has also allowed the formation of pockets of deep peat (up to 1m thick in places) with larger areas of permanently wet ground, with important hydrological linkages between areas of peat and the associated dependent vegetation.

The vast majority of the watercourses and their tributaries (est 40+km) do not have any tree cover - the only trees being in the Green Syke area and Long Syke, limited to a handful of ash, rowan, willow and thorn, with a couple of mature larch. They are subject to very rapid increases in flow during rainfall, linked to the extensive peat drainage, contour surface drainage created during the 1970's (as part of land improvement grants from MAFF), compacted soils / short vegetation from decades of sheep grazing and farm vehicle rutting. Sumer flows are equally dramatic with long sections of the beck and tributaries reducing to isolated pools and flow retreating underground in association with the limestone bands. The valley is home to one of the best UK populations of white clawed crayfish (at risk from signal crayfish in the Ure), other fish present including bullhead, trout, stone loach. Otters have been recorded and the streams are frequented by a host of birds including dipper (breeding on site), kingfisher, grey and pied wagtail, with breeding oystercatcher and sandpiper on the exposed shingle banks. A private water supply (Stonegill Foot) takes water directly from site via a holding tank and supply pipe, and a number of properties within Mirk Pot woodlands have supplies taking water from streams which start on Woodland Trust land. These do have periods of very low flow and are

not guaranteed supplies.
Significance
The watercourses are an integral part of the landscape scale connectivity, with new native woodland, peatland and upland blanket bog, limestone pavement, farmed valley and riparian and aquatic habitats, linking with each other and providing the opportunity to link beyond the site boundaries. The watercourses at Snaizeholme contain significant populations of native white clawed crayfish, under serious threat of extinction from crayfish plague, and provide significant potential for habitat - eg shingle banks for ground nesting waders, and increased habitat for fish/ invertebrates, and feeding potential for obligate species like dipper, as the water quality improves as the water flows stabilise and as tree, shrub and vegetation cover along the banks increase. The streams are also the only existing water supplies for a number of properties.
Opportunities & Constraints
Whilst the plans are outlined in the wider site benefits documents (2023), and the land will be fenced out during 2024, the management of the habitats associated with the watercourses will be evidence led wherever possible, this will be across a range of key drivers including change following the removal of sheep and the re-introduction of low density cattle grazing, , ongoing research, changes to presence of species, particularly priority species (birds, fish and mammals) and requirements for private water supplies . Until a period of monitoring change is completed (3-5 years) , it will be very difficult to make any assumptions as to the various factors influencing habitat opportunity/ constraints that directly or indirectly impact on the watercourses. Future maintenance to maintain good water quality could be part of the Landscape Recovery Project 'Ure Dales' and could also feature in ecosystem services certification. Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change
Rapid fluctuations in water level impacting breeding wader productivity, fish eggs/redds, water quality - sediments Lack of shade (habitat/ temperature/ protection from erosion) Low summer water levels, temperature, flow and algae build ups Low density conservation grazing with cattle - pollution or erosion Invasive species, either through natural processes (eg signal crayfish/ plague in the River Ure) or through the movement of vehicles and people. Research data and modelling influencing management direction (Future NFM interventions through stone dams/ woody debris dams, peatland restoration, creation of wetland pools and scrapes, raised stream bed levels allowing flooding/ riffles creation/ pool formation etc) Continuity of private water supplies taking water directly from site (Stonegill Foot) and properties within Mirk Pot woodlands whose supply comes from streams which start on Woodland Trust land
Long term Objective (50 years+)
Water flow will be slow and consistent, with reduced erosion within the feeder gullies into the main stream and improved water quality (across a range of metrics, from sediment temperature, flow etc) due to a combination of peatland restoration, woodland and vegetation development, NFM interventions, the creation of wetland pools and scrapes and changes to farm practices through low intensity grazing. These improvements will contribute to increased

riparian habitat - wet habitats (open pools and un-drained bog), a mixture of short and long grasses, scattered scrub, will have a much greater opportunity for priority species, mammals such as otter, birds including both resident and migratory species (both summer breeding and winter visitors). Shade, pools, riffles and improved flow consistency will increase the fish and aquatic species, although it is likely that white clawed crayfish populations will be much reduced, pushed to the highest areas beyond waterfalls and obstructions due to signal crayfish & plague. During floods, the river banks will be overtopped creating shingle banks, oxbows and short lived pools. The valley used as a case study and demonstration site for habitat improvement and connectivity.

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

Develop and implement woody debris and stone leaky dams before March 2025
 Peatland restoration undertaken during summer 2024, with a period of monitoring throughout the current plan period
 Monitoring of species sightings informally through iRecord app.
 Monitoring the financial viability of grazing the area
 React to research results, including work with EA on monitoring the progression of crayfish plague
 Work with household and ensure sustainable consistent water supplies

4.7 f5 Semi Natural Open Ground Habitat

Description

At Grove Head (pronounced 'Groove'), sitting at approximately 500-580m is some 98ha of upland peat bog, comprising blanket bog/ raised mire, acid grassland and acid flushes. Many of the vegetation types showing the influence of many decades of intensive sheep overgrazing with cotton grasses and mat grass commonplace and degraded levels of sphagnum - the key building block required for a fully functioning blanket bog. The peat varies in depths up to a maximum of 2.8m, intensively drained in the past through a series of deeper grips and herringbone drains, and all of the upland area is classed as modified, comprising 0.07 Ha of actively eroding hagg gully, 0.48ha actively eroding flat bare peat, 63.93 Ha of drained hags and gullies, 19.89ha artificially drained and 12.18ha classed as non peatland (rock/ no deep peat etc).

The peatland and the limestone pavement above forms the catchment boundaries - South into the Wharfe catchment, south west the Ribble, 5 large deeply incised tributaries Lady Fold Gill, Deep Gill, Grove Syke, North Scar Gill and Long Syke feeding Snaizholme Beck and the SUNO catchment. Sitting above rocks of the Yoredales series - limestone, argillaceous (clay) rocks and subordinate sandstones, the upland area - as the whole valley has a complex geology with frequent shake holes, deep water filled wells and underground springs

The whole designated upland peat bog was fenced in summer 2023 and grazing removed. Extensive peatland restoration planned for summer 2024 (Yorkshire Peat Partnership) undertaking Grip/gully/hag reprofiling Surface bunding Grip/gully and dendritic blocking with stone and timber dams, bunds and sediment traps, with lime, fertiliser and seed application, Sphagnum spp introductions and cotton grass planting. Once a period of re-establishment, recovery and monitoring of the restoration has been undertaken and the area considered more secure, then options for management and grazing will be reviewed.

Access onto the peat for restoration and management will also allow the establishment of a series of 'firebreaks' - more accurately routes that can be occasionally maintained (eg by cutting) as defined routes through (eg on ATV or safely on foot)), should management access be required.

Within the lower valley there is approximately 10 ha of valley deep peat, concentrated to the south west, this all falls within the area being retained as open valley, and will come under a programme of conservation grazing. There is also 5 ha upland peat above cpt1 and bounded to 3 sides by productive Sitka Spruce plantations (planted 2014, 2019 and 1980.

With evidence of drainage and archaeology, this land will be fenced and then left to develop naturally.
Significance Blanket bog is an internationally & nationally important upland habitat which when degraded can rapidly erode away to the bare mineral soils or rocks beneath the peat. The United Kingdom is in the top 20 of countries that contain 92% of the world's peatland soils. The blanket bog that covers the majority of this peatland in the uplands of the UK is internationally important with 85% (2,208,000ha) of the European Union (EU25) blanket bog resource, 14% being in England (355,294ha). The majority of upland peatlands in England occur in the hills of the Pennine Chain stretching from the Peak District in the south to the Scottish border the north. The vast majority of this resource is degraded due to a range of causes including: changing climate, historic atmospheric pollution, drainage, over-grazing, excessive managed burning, wildfire and recreational erosion. The Yorkshire Peat Partnership (YPP) is one of the largest conservation projects in the UK whose aim is to restore all of Yorkshire's 70,000 ha of degraded blanket bog. Over the last ten years, YPP has brought into conservation management over 30,000 ha of peatland, blocking ditches, re-profiling gullies and hags and re-vegetating bare peat. Peatland restoration at Snaizeholme hits key targets for local, regional, national and international strategy and environmental commitments including: England Peat Action Plan 2021 Net Zero Strategy– Land Use: Policies for a Net Zero UK 2020 (peat restoration) Climate Change Act (2008), as amended in 2019 Yorkshire and Humber Climate Action Plan 2021 Yorkshire Dales National Park Management Plan 2019-2024 updated November 2021 Yorkshire Dales National Park declared a climate emergency, September 2020
Opportunities & Constraints Whilst the plans are outlined in the wider site benefits documents (2023), and there is significant restoration work planned during 2024. The management of the peat will be evidence led wherever possible, this will be across a range of key drivers including success of restoration, ongoing research, changes to herbivore threats, changes to presence of species, particularly priority species (birds and mammals). Until the restoration is completed (predominantly 2025) and a period of establishment (eg minimum 5 years) and research completed, it will be very difficult to make any assumptions as to the various factors influencing peatland opportunity/ constraints. Future maintenance to ensure 'good peatland condition' could be part of the Landscape Recovery Project 'Ure Dales' . Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change Sheep ingress from neighbouring properties Herbivore impacts, likely deer, hares and rabbits, population peaks of voles Invasive species, either through natural processes or through the movement of vehicles and people. Changing presence of species - particularly priority species Research data and modelling influencing management direction

Erosion of peat - wind blown and by water erosion (especially in the valley bottom - large blocks of developing peat eroded by the river channel)
Long term Objective (50 years+)
Bare and eroding peat will have stabilised through restoration intervention and changes to grazing. Upland peat bogs and cells of deep peat on the lower slopes will be actively sequestering carbon and peat volumes increasing, with an established upland peatbog vegetation. Water flow from the peatbogs will be slow and consistent, with little or reduced erosion within the feeder gullies into the valley. These improvements will contribute to increased blanket bog key species (eg sphagnum, cloudberry). Breeding birds on peatlands, especially blanket bogs, include a very high proportion of species that are covered by conservation designations, the much improved upland breeding bird habitat will have a much greater assemblage of priority species including obligate species such as red grouse and dunlin - using other habitats as well as the moorland environment: The wettest habitats (open pools and un-drained bog) utilised by wildfowl, vital for dunlin and golden plover. A mosaic of tall heather and grasses providing cover and nesting sites for black grouse, red grouse, curlew, dunlin, hen harrier, merlin and skylark, whilst golden plover, dunlin and redshank preferentially selecting shorter vegetation. improved habitat availability within the landscape The shelter of tall heather, tall vegetation or low scrub, providing cover and nesting sites for black grouse, with opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland, with every expectation that black grouse will be breeding on site and the population within the YDNPA increasing -habitat management needing to involve whole integrated landscapes (as in the Snaizholme valley) rather than single fragmented or isolated habitats
Short term management Objectives for the plan period (5 years)
Undertake boundary fencing between April 2023 and April 2024 fencing out areas to be grazed or protected, separating peatbog and limestone pavement from treed areas Peatland restoration undertaken during summer 2024, with a period of monitoring (eg restoration feature success, species, vegetation, water table depths) throughout the current plan period Maintain active herbivore control at a local level - deer hares and rabbits across the whole site through contractor. Annual herbivore impact assessments undertaken and repeated thermal monitoring at years 1,3,5 Work with adjacent landowners to restrict sheep ingress and also manage deer / herbivores to best practice, collaborating where possible Maintain fences enclosures as rabbit/ hare proof Monitoring of species sightings through repeated annual formal surveys (bird transects/ audio monitoring) and notable sightings informally through irecord app.

4.8 f6 Archaeological Feature

Description
A total of 89 features were identified and recorded during the archaeological walkover survey, and paints a picture of a predominantly agricultural landscape, interspersed with small-scale local industrial activity, with features throughout, often concentrated in pockets of activity - sheepfolds, sheep washes, shielings and holts, suggesting that the whole of the valley was utilised over time for the rearing and management of stock, and for the provision of shelter for both farm labourers and animals. The valley sides are quite exposed with very little shelter, and this is evidenced by the strategic placing of several sheepfolds high on the valley slopes. A higher concentration of agricultural shelters and buildings are present in the valley bottom, alongside various sikes and Snaizholme Beck, suggesting this was likely the key water

source for stock and labourers in the valley which took advantage of the sheltered conditions of the valley floor. All of the areas surveyed also contained industrial archaeological remains, ranging from lime kilns to quarries, lead mines and bell pits. The land has been well utilised for its natural resources, particularly on the higher valley sides with 4 lime kilns associated where limestone outcrops are prominent. Evidence for older remains have also been discovered throughout the survey - in particular contains a number of earthworks, a tumulus and stone remains which are suggestive of possible prehistoric settlement activity on the plateau there. Further prehistoric activity in the valley is evidenced by a cairn and a banked settlement enclosure and a possible mound down in the valley. Given that the High Cam Road running along the eastern border of the site is Romano-British, it is expected that the land within the valley has been utilised for thousands of years and that more remains could be present that are just not visible on the surface. It is possible that the mining activity on the limestone pavement to the south could have Romano-British origins and that the exposure of these materials was utilised into the medieval and post medieval periods. The remains discovered and recorded across the valley were predominantly in a poor and ruinous state, with some in a visibly unstable condition. The discovery of earthworks comprising linear banks and mounds is suggestive of below-ground remains within the site, highlighting that not all assets of archaeological value will have been discovered during a non-invasive walkover survey. The findings were seen to be in keeping with what could be expected from an upland rural site in the Yorkshire Dales. In terms of local and regional significance, the remains are typical of their setting and none of the sites were deemed as having a 'high importance'. However, it was agreed that the remains should be treated with respect and incorporated into the woodland creation planting scheme, in order to best preserve and retain the unique archaeological landscape that the Yorkshire Dales has to offer. Buffer zones around the sites of historical and archaeological value have been recommended to safeguard the future of assets during planting operations, given that above ground historic environment features are often part of larger sites with subsurface archaeological remains. 20m buffer zones and larger buffers grouping features together have been drawn around assets with a 'Medium' archaeological sensitivity such as lime kilns, shielings and sheepfolds, earthworks, prehistoric remains and significant mining activity. 20m buffer zones have also been drawn around assets with a 'Low' archaeological sensitivity, such as localised small quarries and pits. These buffer zones highlight areas where no or sensitive planting should take place.

Significance

89 new features were identified and recorded during the archaeological walkover survey, in addition to the handful of features previously recorded (some of the lime kilns and barns) creating a picture of an agricultural landscape, interspersed with small-scale local industrial activity from prehistoric through to post mediaeval farming and mining in-keeping and typical of their setting within an upland rural site in the Yorkshire Dales. Yet adding to the wider landscape of activity already recorded in the Dales, and ensuring that these heritage features are preserved

Historic England Future Strategy 2021

The United Kingdom Forestry Standard (UKFS)

Yorkshire Dales National Park Management Plan 2019-2024

Opportunities & Constraints

With buffers in place around features, the known visible features will be preserved. Periodic inspections (10 years) of features should guide management - eg regeneration developing in buffer areas or potential damage from grazing (unlikely given the very low density), with advice will be sought from the county archaeologist, but will be evidence led

wherever possible, using ongoing research to help guide the management approaches.
Factors Causing Change
Low density grazing with cattle potential to damage features Erosion of features by water - especially the main stream and tributary channels Research data and modelling influencing management direction
Long term Objective (50 years+)
The known visible features will be preserved, with buffers around features maintained unless otherwise agreed. The majority slowly continuing to continue their natural progression of decline (most being in a ruinous state) and being treated as if they were (eg lime kilns and internal walls and buildings) natural rock features/ habitats. The 4 field barns will be actively in use and preserved within the landscape, the boundary drystone walls maintained in a serviceable condition where they still perform a purpose (agricultural or landscape - eg along the Pennine Way)
Short term management Objectives for the plan period (5 years)
Undertake 3 phases of woodland creation between April 2023 and March 2025, ensuring planting retains the buffer around features (using avenza maps by contract team and SM periodic checking) Informal impact assessment of cattle activity in relation to archaeology undertaken during site visits, formal monitoring at year 10 (based on current level of risk with low intensity grazing) Informal impact assessment of the erosion of features by water - especially the main stream and tributary channels undertaken during site visits, formal monitoring at year 5 (but may be brought forward based on level of risk with changes to river channels and NFM) Research data and modelling influencing management direction - eg wider benefits on site from regeneration within buffers

4.9 f7 Informal Public Access

Description
Much of the land is designated as open access under the CROW act, only c.35ha of the valley bottom to the north adjoining Stonegill Foot has no public access (although the whole site as Woodland Trust does have full and free public access). To the east, is the Pennine Way, forming c.2km of the boundary, to the south the Pennine Bridleway long distance footpath runs across the area east-west from Cold Keld Gate to Gavel Gap, much of which is limestone pavement - which will remain unplanted, grazed and with long distance views out over Grove Head, the Three Peaks and Wharfedale, with views out to the Irish sea and the Lake District (Langdales). The Pennine bridleway linking to the Ribble Way to the west, and to the south east the Pennine Way and Dales Way - just outside WT ownership). Where fences have been installed across open access ground an agreed number of access points have been built in to allow access on foot if desired. In the valley bottom (outside WT ownership) is the public footpath the leads into Mirk Pot woodlands from Stonegill Foot, this links into a permissive route (Red squirrel Trail) traversing the Mirk Pot (Snaizeholme) squirrel reserve with feeding stations and viewpoints to watch red squirrels. This has limited vehicle access, requiring pre-booking for cars (2

spaces) and payment via the National Park Centre in Hawes. The reserve is also accessed via the Little White Bus service, via the National Park Centre in Hawes, during summer. Beyond Mirk Pot is a network of paths across to the hamlets of Low Houses and High houses.

From the southern end of the tarmac surfaced Snaizeholme Road, an Unclassified Unsurfaced Rad continues, starting off as gravel up to the end of Snaizeholme plantation, then turning to a very rough tractor accessible only route, and after 450m becoming indistinguishable from surrounding vegetation and generally unidentifiable as a route (across soft peaty ground), giving access to the head of the valley by tractor/ specialist ATV only, this is a dead-end route with no opportunity for further travel of turning by vehicles other than specialist ATV or on foot.

The future intention for Snaizeholme is to have minimal public access provision other than already present, signs denoting the ownership will be in place along with interpretation boards as part of the squirrel trail and on the Pennine way and bridleway, these interpreting the vision for the valley - the landscape scale connectivity, with new native woodland, peatland and upland blanket bog, limestone pavement, farmed valley and riparian and aquatic habitats, and the species associated with them.

As very much a site for nature recovery and habitat restoration it will be important for perhaps the first 5 -10 years for public access to be low key, and much of the access focused on the high level routes giving a birds eye view of the valley as it develops. Vehicle access and parking is extremely limited and visitor parking will be discouraged.

Significance

European Landscape Convention (treaty)

The United Kingdom Forestry Standard (UKFS)

'Key to the design has been the integration of the existing predominantly single species coniferous plantation woodlands to the west and north, that meet few of the landscape principles within UKFS. With single species, limited texture, unity or integration within the landscape, with stark geometric shapes, symmetry and parallel lines. The outcome will be a much more unified, connected, balanced woodland, within the valley, in proportion to the scale of the existing dominant u-shaped glacial landform'

Lawton Principles - 'Bigger, better, more, and joined (habitats)'

Natural England: State of the natural environment in Yorkshire and the Humber

Yorkshire Dales National Park Management Plan 2019-2024

'In the Yorkshire Dales National Park, the interaction of people with nature has produced a landscape of remarkable beauty and distinctive character that is cherished and enjoyed by the nation'

Dales Woodland Strategy 2020-2030

'A distinctive, living, working, cultural landscape that tells the ongoing story of generations of people interacting with their environment

Providing an outstanding range of benefits for the nation based on its natural resources, landscape and cultural heritage, which underpin a flourishing local economy'

Opportunities & Constraints

Whilst the plans are outlined in the wider site benefits documents (2023), and the land will be fenced out during 2024, the management of public access will be evidence led wherever possible, this will be across a range of key drivers including habitat change following woodland creation, restoration and introduction, the removal of sheep and the re-introduction of low density cattle grazing, , ongoing research, changes to presence of species - particularly priority species (birds and mammals). Until a period of monitoring change is completed (3-5 years) , it will be very difficult to make any assumptions as to the various factors influencing access opportunity/ constraints. Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change
Habitat change following woodland creation, restoration and introduction, conservation grazing with cattle Changing presence of species - particularly priority species Research data and modelling influencing management direction and so access opportunities or constraints Changes in ownership of the adjoining plantations - particularly the squirrel reserve and any associated changes in accessibility/ promotion etc
Long term Objective (50 years+)
Snaizeholme will have access maintained across the key existing routes - visible from the Pennine Way, with viewpoints looking out over the established valley habitats, along with the existing route through the site on the Pennine Bridleway. Extensions of permissive routes from the Red Squirrel Reserve will allow limited access into the valley - likely following the existing tracks and the UUR. No wider permissive routes are planned, retaining the valley as very much a location for biodiversity rather than recreation It will be a landscape that engages corporate partners and supporters in the delivery of native woodland, and ecological habitat restoration. Through their own corporate sustainability and responsibility, on site activity Outreach, 3rd party visits, demonstration and UK case study, social responsibility comms and on-site activity, delivering the key messages about biodiversity and climate change to a much wider new audience. A landscape that engages volunteers, local, regional and diverse communities, across a wide demographic, in the restoration and understanding of the importance of these habitats as a vital, fundamental part of the Dales landscape. A landscape that offers a significant, and long term volunteering opportunity for 3rd party groups and organisations across the wider Yorkshire Dales
Short term management Objectives for the plan period (5 years)
Deliver corporate and volunteer opportunities - direct and through 3rd party organisations (eg YDNPA) Create viewpoints and interpretation opportunities along the route to the Pennine Way and Pennine Bridleway Work with NYCC highways and adjacent landowners to develop sustainable permissive access routes that minimise the impact on the wider habitat development Resurfacing and access improvements along the existing designated route of the UUR

4.10 f8 Species or community

Description
Six species of breeding wader birds are currently present on site (curlew, lapwing, golden plover, oystercatcher, snipe and woodcock), a much smaller than expected range of species due to the lack of habitat suitability. Evidence across site of extremely low productivity, likely due to poor or sub-optimal habitat , historic farm activity, sheep damage and predation, corvid/ fox/ mustelid predation, damaged peatland, and a lack of suitable overall, connected habitats

amongst others, likely to also be impacting on productivity. Flooding and inconsistent flow impacting on breeding oystercatcher within the riparian zone (principally on large shingle banks) There is a black grouse lek (WL&C Act Sch.1 species and Yorkshire Dales BAP species), found near to site but no evidence of breeding on site, along with notable other raptor species utilising the habitat including Short eared, barn tawny and little owl, buzzards, peregrines, kestrel, sparrowhawk, red kite along with ravens. There is a healthy population of white clawed crayfish throughout the system, however signal crayfish are within a few km's on the river Ure downstream and likely to reach site in the next few years. red squirrels are found throughout the adjacent woodlands - Mirk Pot squirrel reserve, but also the spruce plantations and more distant Cam woodlands, however Wensleydale is a key route for the ingress of grey squirrel.
Significance The delivery of new native woodland and habitat restoration at Snaizeholme hits key targets for local projects, with local, regional, national and international strategy and environmental commitments including: Nature recovery projects 2024 (Ure Dales - Yorkshire Wildlife Trust/ Heart of the Dales - National Trust) Dales Woodland Strategy 2020-2030/ Yorkshire Dales National Park, 'Nature in the Dales: 2020 Vision'/ Yorkshire Dales National Park Management Plan 2019-2024 The Northern Forest Manifesto 2018/ Yorkshire and Humber Regional Biodiversity Strategy Environment Act 2021/ England Trees Action Plan 2021-2024/ Natural England Action Plan 2022-2023 A Green Future: Our 25 Year Plan to Improve the Environment/ Biodiversity 2020: A strategy for England's wildlife and ecosystem services/ National Ecosystem Assessment The United Kingdom Forestry Standard (UKFS) Bonn Challenge – UN Decade on Ecosystem Restoration
Opportunities & Constraints Whilst the plans are outlined in the EIA and wider site benefits documents (2023), the development of the site, opportunities for management and constraints will be evidence led wherever possible, this will be across a range of key drivers including tree survival, landscape, people, ongoing research, changes to herbivore threats, changes to presence of species, particularly priority species (birds and mammals). Until the tree establishment is completed (predominantly 2025) and a period of establishment (eg minimum 5 years) and research completed, it will be very difficult to make any assumptions as to the various factors influencing woodland opportunity/ constraints. Up to this point opportunities and constraints will be noted through the project team and factored into future decision making.
Factors Causing Change Herbivore impacts, especially deer, and sheep ingress from neighbouring properties potentially damaging or predating on ground nesting bird eggs Low density conservation grazing with cattle potentially damaging/ trampling ground nesting bird eggs Predation on ground nesting birds by fox, badger, other mustelids, corvids Invasive species, either through natural processes or through the movement of vehicles and people. Changing presence of other species - eg signal crayfish Erosion of peat and soils by water/ water quality/ flooding (natural or due to NFM) Research data and modelling influencing management direction
Long term Objective (50 years+)

Priority breeding woodland bird species will have significantly benefitted from woodland creation including common cuckoo and black grouse, tree pipit, crossbill, pied flycatcher, spotted flycatcher, redstart, wood warbler, nuthatch, siskin, goldcrest. Also possibly specially protected WL&C Act Sch.1 raptor species, such as hobby, goshawk and red kite. Breeding birds on peatlands, especially blanket bogs, include a very high proportion of species that are covered by conservation designations, the much improved upland breeding bird habitat will have a much greater assemblage of priority species including obligate species such as red grouse and dunlin - using other habitats as well as the moorland environment: The wettest habitats (open pools and un-drained bog) utilised by wildfowl, vital for dunlin and golden plover. A mosaic of tall heather and grasses providing cover and nesting sites for black grouse, red grouse, curlew, dunlin, hen harrier, merlin and skylark, whilst golden plover, dunlin and redshank preferentially selecting shorter vegetation. improved habitat availability within the landscape

Tall vegetation, tall heather, or low scrub, providing cover and nesting sites for increased populations of black grouse, using the opportunity for winter forage in shrubs or trees and warmer shelter lower down in the valley or in denser woodland.

There will be a significant expansion in woodland habitat and food availability for red squirrels (WL&C Act Sch.5 and Yorkshire Dales BAP species) in the valley, increasing the population, and with increased landscape scale protection from grey squirrel incursions.

Improved quality and diversity of vegetation and habitat creation (eg sensitive creation of ponds and scrapes, predominantly as additional wader habitat) within the 80ha valley bottom will provide opportunities for larger numbers of some existing species, including snipe, common sandpiper & oystercatcher. Golden plover flocks using the low ground as staging/ feeding prior to selecting breeding areas.

Reduced flood peaks and a consistent flow providing more productive nesting for oystercatcher on shingle banks. The number of priority wader species will increase, likely including redshank, woodcock & the potential for jack snipe, green sandpiper during winter, which are all present in the area.

Red squirrels will be present throughout the Snaizholme valley woodlands and grey squirrels will be actively controlled.

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

The overall management of the site, through woodland creation, habitat restoration, species reintroduction (montane), species control (grey squirrel) and low intensity grazing should allow the recovery of the species (other than white clawed crayfish) with monitoring of species, success and productivity of the key waders being high priority with annual monitoring through site observation, thermal imaging and trail cameras. Other control of species, changes to seasonal grazing etc will be undertaken when there is evidence of significant impacts, and the localised impacts of NFM versus increased habitat creation will be assessed to ensure the wider benefits are taken into account

Protection of red squirrels is also high priority. Whilst red squirrels on site at present are rarely seen, all grey squirrels will be controlled and landscape scale work undertaken in conjunction with other active groups including the Yorkshire Dales National Park, Red Squirrels North England and the UK Squirrel Accord to ensure grey squirrel control is ongoing.

4.11 f9 Educational Use

Description

Research delivery through conservation evidence team and external collaboration with the University of Leeds and University of York. There are two key objectives for the research activities; 1) inform site decision making by providing data on habitat creation and restoration activities, site hydrology, biodiversity, and soil function. 2) influence and share

knowledge within the sector of the impacts of upland restoration and woodland creation to deliver for nature recovery and climate mitigation and adaptation. As well as evidence for the site, this may also potentially influence future planting design and grant offers.

Research questions

1. What are the impacts of native woodland creation on hydrology and natural flood management (NFM)?
 - a. Flow monitoring of water courses using in-stream data loggers (9 on site)
 - b. Measuring over land flow/ surface roughness at 9 fixed monitoring locations
 - c. Measuring soil water release characteristics - Porosity, infiltration, hydraulic conductivity at 9 fixed monitoring locations
 - d. Ground-truthing model assessment of the impact of woodland creation design on peak flow rates (SD-TOPMODEL)
 - i. 1 in 10-year storm ? 7.1%
 - ii. 1 in 50-year storm ? 8.3%
2. What are the impacts of native woodland creation on upland soil function. In particular, carbon sequestration and storage of organo-mineral/carbon-rich soils?
 - a. How does planting intensity affect the stability and quality of soil organic matter?
 - b. Are soil fractions a sensitive indicator of change in SOM under woodland establishment?
 - i. Microbial community structure and activity
 - ii. Soil C,N,P quality/stability
 - iii. Soil horizons and fractionation particulate organic matter (POM), mineral-associated organic matter (MAOM)
 - iv. Water-extractable C,N,P quality (using UV-vis analysis)
 - v. pH and temp
3. What are the consequences of native woodland creation for biodiversity and nature recovery?
 - a. Vegetation surveys (18 sample plots)
 - b. Trees establishment and survival rates
 - i. six 25 x25m plots
 - ii. six transects covering all planting densities and elevation gradient
 - c. Links between above ground vegetation structure and diversity and below ground microbial and invertebrates diversity.
 - d. Microclimate data and microhabitat creation following woodland creation
 - i. Temperature
 - ii. Humidity
 - iii. Photosynthetically active radiation (PAR)
 - iv. Soil pH

Current research structures:

- Three weather stations installed and gathering weather and microclimate data. Managed by university of Leeds/York
- 50 soil loggers installed across 18 survey plots and 9 flow monitoring plots. Currently gathering data – 10yr battery and data storage capacity. Managed by university of Leeds/York
- 9 flow monitoring systems installed and gathering data. Managed by university of Leeds.
- >250 baseline soil samples taken and analysed for the 18 fixed survey plots

With (during 2024):

- Spring vegetation survey and biomass harvest across the 18 fixed plots

- Install the final 50 buriable soil probes - Soil sampling for microbial community analysis - Complete mapping of all research activities
Significance
UK government research strategy 2022 to 2027 "clear ambition for the UK as a global science superpower and an innovation nation" ? specifically pledged to "to reach 2.4% Research & Development (R&D) intensity in the UK by 2027, catalysed by a substantial increase in public investment in R&D, rising to a record £20 billion by 2024 to 2025 and embedding R&D across government departments" and attracting "more than double that in private sector R&D investment" ? There is specific emphasis on strengthening regional research clusters and partnerships ("Priority 2.1: strengthen clusters and partnerships, locally, nationally and globally") to help achieve "Levelling up: delivering impact in all parts of the UK". ? A UK government strategic research theme is "building a green future: helping to improve the health of our environment and deliver net zero, securing prosperity across the whole of the UK" and "Building a sustainable, productive net-zero economy". Science and Innovation Strategy For Forestry in Great Britain "Great Britain will continue to be recognised as a world leader in sustainable forest management and woodland creation. The natural capital of our woodlands will be seen as providing long term sustainable benefits, which are integral to the health and wellbeing of businesses and society." ? Provide the evidence base for the delivery of healthy and resilient forest ecosystems to provide benefits for society ? Give society the knowledge to deliver woodland management and expansion, as a component of sustainable land-use change. ? Provide the evidence base to allow the forestry sector to deliver a wide range of sustainable benefits from trees and woodlands to support growth in the British economy. ? Will result in changes to policy and practice through implementation by informed and engaged stakeholders. The Northern Forest Manifesto 2018 "The Northern Forest is bringing a whole range of benefits – environmental and nature recovery, fighting climate change, economic prosperity, employment, and health and wellbeing...." ? The area is home to 13 million people, but it only has 7.6% woodland cover – much lower than the UK average of 13%. Our 50 million trees are transforming this landscape and creating a real asset for the communities that live nearby.
Opportunities & Constraints
Site plans are outlined in the wider site benefits documents (2023), and there is significant activity across multiple habitats on site during the capital works phase up to 2025. The research work will be a significant part of the 'evidence

led' processes determining our approach across farmland, planted woodland, open space and peatland, however, until the establishment, reintroduction and restoration is completed (predominantly 2025) and a period of establishment (eg minimum 5 years) and the research results start to develop, it will be very difficult to make any assumptions as to the various factors influencing future site management and maintenance. Up to this point opportunities and constraints across the site habitats will be noted through the project team and factored into future decision making.
Factors Causing Change
Sheep ingress from neighbouring properties Invasive species, either through natural processes or through the movement of vehicles and people. Research data and modelling opportunities for additional research
Long term Objective (50 years+)
The research will be a long term project on site, likely having expanded from the initial metrics, with collaborations across a wider range of academics and institutions. It will be directly influencing habitat restoration grants and design and be seen as one of the leading case studies in the UK, and one of the most researched woodland creation/ habitat restoration sites in the UK. Snaizeholme will have an individual FSC certification for water quality.
Short term management Objectives for the plan period (5 years)
During 2023 and 2024 there will be structures installed on site, with active collaboration agreements in place for the collection and evaluation of research data, managed by the Woodland Trust Conservation and Evidence team Current research structures: - Three weather stations installed and gathering weather and microclimate data. Managed by university of Leeds/York - 50 soil loggers installed across 18 survey plots and 9 flow monitoring plots. Currently gathering data – 10yr battery and data storage capacity. Managed by university of Leeds/York - 9 flow monitoring systems installed and gathering data. Managed by university of Leeds. - >250 baseline soil samples taken and analysed for the 18 fixed survey plots With (during 2024): - Spring vegetation survey and biomass harvest across the 18 fixed plots - Install the final 50 buriable soil probes - Soil sampling for microbial community analysis - Complete mapping of all research activities Woodland Trust FSC advisor will lead on the development of a FSC individual site certificate for water quality.

5. WORK PROGRAMME

Year	Type Of Work	Description	Due Date
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	September
2024	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	September
2024	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	September
2024	AW - Management Access Capital	Works associated with installing new or replacement management access infrastructure. Such as management access gates, vehicle bridges, fencing and surfacing works.	September
2024	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	September
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	September
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	October
2024	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	October
2024	Utilities - Electricity		October
2024	Building - Repairs & Maintenance		October
2024	Building - Repairs & Maintenance		October
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	October
2024	AW - Management Access Capital	Works associated with installing new or replacement management access infrastructure. Such as management access gates, vehicle bridges, fencing and surfacing works.	October
2024	WC – Delivery Costs		November
2024	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	November

Year	Type Of Work	Description	Due Date
2024	WC - Fencing	Works associated with fencing to protect planting areas	November
2024	WC - Fencing	Works associated with fencing to protect planting areas	November
2024	Ops Equipment Repairs & Maintenance		November
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	November
2024	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	December
2024	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	December
2022	WC - Fencing	Works associated with fencing to protect planting areas	December
2024	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	December
2024	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	December
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	December
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	December
2024	WMI - General Site Restoration Work	Works associated with initial or restoration phases to conservation and physical features within the sites such as boundary ditches, fences and walls, hedges, infield and boundary trees	December
2024	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	January
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	January
2025	WC - Tree / Seed Supply	The supply of trees/seeds for woodland creation sites	February

Year	Type Of Work	Description	Due Date
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	March
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	March
2025	Building - Repairs & Maintenance		March
2025	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	March
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	March
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	March
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	March
2024	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	March
2024	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2023	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	March
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	April
2024	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	April
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	April
2025	Building - Repairs & Maintenance		April
2025	Building - Repairs & Maintenance		April
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	May

Year	Type Of Work	Description	Due Date
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	May
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	May
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	May
2025	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	May
2025	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	May
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	May
2024	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	May
2025	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	June
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	June
2025	Livestock Farming Equipment		June
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	June
2025	PE - Events - General	Provision of materials needed to support a WT event / guided walk such as refreshments / shelters / mobile toilets	June
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	June
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	June
2025	LC - Routine Litter Picks	Planned/routine litter picks using contractors	July
2025	Livestock Farming Equipment		July

Year	Type Of Work	Description	Due Date
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	August
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	August
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	August
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	September
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	September
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	September
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	September
2025	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	September
2024	NWH - Initial Restoration Work	Works associated with the initial restoration or significant reinvestment works of existing non-woodland habitats to improve or protect their conservation value	September
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	October
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	October
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	October
2025	NWH - Grazing Work	Works associated with the maintenance of grazing of a non-woodland habitat to protect and enhance its conservation value – grazer costs, fence repairs, water supply costs etc	October
2025	Building - Repairs & Maintenance		October
2024	Utilities - Electricity		October

Year	Type Of Work	Description	Due Date
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	October
2024	NWH - Grazing Work	Works associated with the maintenance of grazing of a non-woodland habitat to protect and enhance its conservation value – grazier costs, fence repairs, water supply costs etc	October
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	October
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	November
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	November
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	November
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	November
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	November
2025	Building - Repairs & Maintenance		November
2025	WMI - General Site Restoration Work	Works associated with initial or restoration phases to conservation and physical features within the sites such as boundary ditches, fences and walls, hedges, infield and boundary trees	November
2025	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	November
2025	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	November
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	November
2025	Building - Repairs & Maintenance		November
2025	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	December
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	December

Year	Type Of Work	Description	Due Date
2025	Building - Repairs & Maintenance		December
2025	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	December
2025	Vehicle Repairs		December
2025	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	January
2026	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	January
2026	Building - Repairs & Maintenance		February
2025	Building - Repairs & Maintenance		February
2025	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	March
2025	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2025	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2025	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2026	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	March
2026	LC - Routine Litter Picks	Planned/routine litter picks using contractors	March
2026	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points,	April

Year	Type Of Work	Description	Due Date
		maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	
2026	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	May
2026	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2026	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	May
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May
2025	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	May
2026	Building Maintenance - Cleaning		May
2026	Building - Repairs & Maintenance		May
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May
2026	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	May
2026	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	May
2026	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	May
2026	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	May
2025	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	May
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May

Year	Type Of Work	Description	Due Date
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May
2026	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2026	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2026	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2026	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May
2025	Utilities - Electricity		May
2026	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	June
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	August
2026	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	August
2026	AW - Visitor Access Infrastructure	Works associated with the construction of a new or extension to existing car parking facilities.	August
2026	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	September
2026	WC - Fencing	Works associated with fencing to protect planting areas	September
2026	WMI - General Site Restoration Work	Works associated with initial or restoration phases to conservation and physical features within the sites such as boundary ditches, fences and walls, hedges, infield and boundary trees	September

Year	Type Of Work	Description	Due Date
2026	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	September
2026	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	September
2026	WC - Fencing	Works associated with fencing to protect planting areas	September
2026	WC - Fencing	Works associated with fencing to protect planting areas	September
2026	WC - Fencing	Works associated with fencing to protect planting areas	September
2026	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	October
2026	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	October
2026	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	October
2026	Utilities - Electricity		October
2026	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	November
2026	WMM - General Site Management	Works associated with maintaining conservation and physical features within the sites such as boundary ditches, fences and walls, hedges,	December
2026	Vehicle Repairs		December
2026	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	February
2026	NWH - Initial Restoration Work	Works associated with the initial restoration or significant reinvestment works of existing non-woodland habitats to improve or protect their conservation value	February
2027	NWH - Initial Creation Work	Works associated with the creation of new non-woodland habitats such as ponds , ground prep and seeding of grassland areas etc	February
2027	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	April

Year	Type Of Work	Description	Due Date
2027	PE - Interpretation & Signage	Works associated with the provision of visitor signage, waymarking, interpretation features and leaflets	May
2027	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	May
2026	PC - Other Pest / Animal Control	Works associated with wildlife control outside of deer / rabbits / squirrel	May
2027	PE - Volunteer on site activity	Support for activities at the site of visiting volunteer groups, such as corporate partners, local groups. Support could include tools, external trainers or materials for work parties	May
2027	CS - General Consultancy	Use of external consultant to support Woodland Trust site management	May
2027	Building Maintenance - Cleaning		May
2026	WC - Tree Planting / Seeding	Works associated with tree planting / tree seeding for woodland creation sites	May
2027	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	May
2027	Building - Repairs & Maintenance		May
2027	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	June
2027	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	June
2027	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	September
2027	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	September

Year	Type Of Work	Description	Due Date
2025	Building - Repairs & Maintenance		October
2027	CS - Ecological Survey & Assessment	Use of external consultants to support the provision of ecological surveys, assessment and biodiversity / species monitoring	October
2027	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	December
2027	Vehicle Repairs		December
2028	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2028	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	April
2028	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	June
2028	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	September
2028	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	September
2028	Vehicle Repairs		December
2028	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	December
2029	PC - Deer Control - Shooting	Works associated with deer management by shooting – such as stalker costs, high seats, signage, maintenance of tracks and open ground provided specifically for deer management etc	March
2029	AW - Management Access Maintenance	Works associated with the maintenance of management access infrastructure and tracks Such as repairs to vehicle entrance points, maintaining vehicle bridges and repairing / reinstating surfaced management access routes.	April

APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	34.5	Common alder	2023	Wood establishment	Management factors (eg grazing etc), Mostly wet ground/exposed site, No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site, Services & wayleaves, Site structure, location, natural features & vegetation, Very steep slope/cliff/quarry/mine shafts/sink holes etc	

Located in the northwest of the site, this compartment is surrounded on all 4 sides by conifer plantation. Snaizeholme Road passes through the compartment at the bottom of the hillside to the east. The compartment is an east facing slope which gradually gets steeper before plateauing out where the soils transition to deep peat. The compartment is ring fenced by a stock & rabbit netted fence. Some trees were planted outside of the fencing, unguarded, below (to the east) of Snaizeholme Road. There is a small square shaped coup of mature trees (predominantly Sycamore & Scots) within the compartment that is located in and around a steep sided gill, found fairly centrally in the compartment. There is a high seat installed on the northwestern corner of the coup. There is a lime kiln located just below Snaizeholme Road and a handful of other archaeological features concentrated in a couple of locations up the hillside.

The plateau contains 5 ha of upland peat.

Compartment was planted in April 2023 (Season 1). Total planting area of approx.13.57 ha. Approx. 27,600 trees planted in 2023 (see spreadsheet for species numbers).

Compartment has been planted to create 3 different wooded habitats:

- Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 1.22ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan)
- Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 5.1ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.)
- Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 7.25ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.)

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Introduction of Montane species: due in 2025/26 planting season.						
2a	2.53	Common alder	2023	Wood establishment		
Located just uphill from Stonegill Foot farmhouse, with 3rd party owned conifer plantation to the north and western boundaries with a private access track down to Stonegill Foot running down the southern boundary. The compartment is ring fenced by a stock & rabbit netted fence. A drystone wall runs along 3 of the boundaries. This compartment is one of the most gradually sloping tree'd compartments onsite, with only one slightly deep gill running up through the compartment. Compartment was planted in April 2023 (Season 1). Total planting area of approx.2.19 ha. Approx. 6,050 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 2.19ha of land within this compartment. Predominantly tree species within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.) Introduction of Montane species: due in 2025/26 planting season.						
3a	3.34	Common alder	2023	Wood establishment		
Gradually sloping bit of land, facing east. The compartment is broken in 2 be a largely redundant drystone wall. The compartment is ring fenced by a stock & rabbit netted fence. A private access track down to Stonegill Foot runs down the northern boundary. The boundary to the south butts up against cattle grazed pastures. Similar to Cpt. 2, this compartment is one of the most gradually sloping tree'd compartments onsite. Compartment was planted in April 2023 (Season 1). Total planting area of approx. 1.95 ha. Approx. 3,625 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 2 different wooded habitats: - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 1.35 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density.						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Covering approx. 0.6 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.) Introduction of Montane species: due in 2025/26 planting season.						
4a	33.2	Common alder	2023	Wood establishment		
Runs up the length of the valley slopes starting off as gradually sloping and ending in steep terrain at the skyline and up to "Dodd Fell". At the top of the compartment, the Pennine Way walking trail boundaries the compartment to the East. Conifer plantation boundaries the compartment to the north. There are some pockets of priority habitat found within the compartment, most of which is focus around a gill that was fenced off 10+ years ago and where some trees were planted, with mix success. The compartment is ring fenced by a stock & rabbit netted fence. Compartment was planted in April/May 2023 (Season 1). Total planting area of approx. 29.54 ha. Approx. 50,375 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 6.36 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 6.84 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 16.34 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower "Glades" begin to appear before transitioning into the lower "Open Wooded Habitat", then moving up into "Groves" before then back into the upper "Open Wooded Habitat", and then, at the top of the valley slopes transitioning back to upper "Glades" Some restocking due to take place in 2024/25 season. Introduction of Montane species: due in 2025/26 planting season.						
5a	72.3	Common alder	2023	Wood establishment		

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Runs up the length of the valley slopes starting off as gradually sloping and ending in steep terrain at the skyline and up to “Dodd Fell”. At the top of the compartment, the Pennine Way walking trail boundaries the compartment to the East. The western boundary, along the valley bottom, is shared with cattle grazed pastures. The compartment is ring fenced by a stock & rabbit netted fence. There are a series of deeply incised gills running all the way up this compartment, making for quite a dramatic landscape. One of these gills has existing tree cover in the form of Larch, Alder & Hawthorne and is a nice indicator of what the site could look like in time. One area of priority habitat can be found to the northern most point of the compartment, near the fence line shared with Cpt.4, which has been left unplanted with a suitable shrub buffer zone surrounding it. To the south of the compartment there is a series of dry stone walls running the length of the compartment, up to the skyline, these are largely redundant. There is a lime kiln located approx. halfway up the slope towards the centre of the compartment. Compartment was planted in September-October 2023 (Season 2). Total planting area of approx. 65.4 ha. Approx. 101,215 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 28.38 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 18.84 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 18.18 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower “Glades” begin to appear before transitioning into the lower “Open Wooded Habitat”, then moving up into “Groves” before then back into the upper “Open Wooded Habitat”, and then, at the top of the valley slopes transitioning back to upper “Glades”						
6a	30.9	Common alder	2023	Wood establishment		
Runs up the length of the valley slopes starting off as gradually sloping and ending in steep terrain at the skyline and up to “Dodd Fell”. At the top of the compartment, the Pennine Way walking trail boundaries the compartment to the East. The western boundary, along the valley bottom, is shared with cattle grazed pastures. The top third of the compartment (to the east) is covered by intermittent limestone scree, offering a different habitat to the vast majority of the site, with potential for species such as Ring Ousel to move into. In the southeast corner of the compartment the start of the limestone cliffs appears, before continuing on into Cpt. 7. The compartment is ring fenced by a stock & rabbit netted fence. Compartment was planted in November 2023 (Season 2). Total planting area of approx. 25.1 ha.						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Approx. 41,520 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 9.96 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 6.63 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 8.49 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower "Glades" begin to appear before transitioning into the lower "Open Wooded Habitat", then moving up into "Groves" before then back into the upper "Open Wooded Habitat", and then, at the top of the valley slopes transitioning back to upper "Glades"						
7a	34.1	Common alder	2023	Wood establishment		
Runs up the length of the valley slopes starting off as gradually sloping and ending in steep terrain at the skyline and up to "Dodd Fell". At the top of the compartment to the east, the Pennine Way walking trail boundaries the compartment. The western boundary, along the valley bottom, is shared with cattle grazed pastures. The majority of the southern boundary of the compartment is neighbouring land not owned or managed by the WT. This is open fell sheep grazed land. The top third of the compartment (to the east) is dominated by limestone cliffs that run for approx. 70m and are approx. 10m high. The compartment is ring fenced by a stock & rabbit netted fence. Compartment was planted in December 2023 (Season 2). Total planting area of approx. 32.09 ha. Approx. 49,995 trees planted in 2023 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 14.39 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 7.1 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 10.6 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.).						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower “Glades” begin to appear before transitioning into the lower “Open Wooded Habitat”, then moving up into “Groves” before then back into the upper “Open Wooded Habitat”, and then, at the top of the valley slopes transitioning back to upper “Glades” Some restocking due to take place in 2024/25 season. Introduction of Montane species: due in 2025/26 planting season.						
8a	66.2	Common alder	2024	Wood establishment		
Located at the head of the valley. The compartment starts of gradually sloping before getting steeper at the highest elevation. At the top of the compartment to the south, the approx. 70 ha of blanket bog boundaries the compartment. The norther boundary, along the valley bottom, is shared with cattle grazed pastures. The majority of the southern boundary of the compartment is neighbouring land not owned or managed by the WT and is managed as open fell sheep grazing. A series of deeply incised gills coming off the peatland and through the compartment. One of these gills is particularly iconic with the presence of a waterfall which still has some interesting ground flora clinging on, as they sit out of reach of the worst of the former sheep grazing. The compartment is ring fenced by a stock & rabbit netted fence. The stock ring fence incorporated the peatland, due to the similar requirement of removing grazing during the restoration. There are a few pockets of deep peat on the slopes that have not been subject to tree planting, as well as 2 gills towards the eastern end of the compartment where priority habitat was identified. Compartment was planted in January 2024 (Season 2). Total planting area of approx. 51.3 ha. Approx. 57,195 trees planted in this compartment in 2024 (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 425 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 30.2 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,200 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx. 11 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 2,900 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 10.1 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower “Glades” begin to appear before transitioning into the lower “Open Wooded Habitat”, then moving up into “Groves” before then back into the upper “Open Wooded Habitat”, and then, at the top of the valley slopes transitioning back to upper “Glades”						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
Some restocking may possible take place in 2024/25 season. Introduction of Montane species: due in 2025/26 planting season.						
9a	5.82	Common alder	2024	Wood establishment		
Located towards the base of the now eastern facing slope, as the valley bends back round after the head of the valley. This is a triangular shaped compartment which is sandwiched between two grazes areas of land, in the valley bottom to the east is WT owned cattle grazing pastures, to the valley slopes to the west is neighbouring land managed as open fellside with predominantly sheep grazing. The compartment is ring fenced by a stock & rabbit netted fence. There is a parallel barn wine fence line to the north of the compartment which is designed to contain cattle as they are moved up the slopes between the 2 grazed areas of land, shrub planting has still been planted in this area due to livestock only being moved on through. Compartment was planted in October-November 2024 (Season 3). Total planting area of approx. 4.74 ha. Approx. 10k trees planted in 2024 within the compartment (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 500 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 1.28 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,400 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx.2.91 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 3,100 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 1.67 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower “Glades” begin to appear before transitioning into the lower “Open Wooded Habitat”, then moving up into “Groves” before then back into the upper “Open Wooded Habitat”, and then, at the top of the valley slopes transitioning back to upper “Glades” Introduction of Montane species: due in 2025/26 planting sea						
10a	44.9	Common alder	2024	Wood establishment		
Runs up the length of the eastern facing valley slopes (west of the site) starting off as gradually sloping and getting gradually steeper towards the skyline and up to “Snaizeholme Fell”. This is arguably one of the more gradually						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
sloping aspects on site, however still quite the climb. The compartment boundary to the west ends before the break of slope, but beyond the boundary lies a plateau of limestone grassland (Cpt 12). The eastern boundary, along the valley bottom, is shared with cattle grazed pastures. The northern boundary to the compartment meets a restock Sitka plantation (p. 2016?). There is a small square shaped coup of mature trees (predominantly Sycamore & Scots) within the compartment that is located in and around a steep sided gill (very similar to that found in Cpt 1). Owl boxes and kestrel boxes have been installed in these trees, to provide habitat. A weather station, owned and installed by WT, is located within this compartment, towards the southern end about 2 thirds of the way up the slope. Tree planting has not taken place in some pockets, one area of deep peat and one are of priority habitat, as well as some individual archaeological features. This compartment is a little different in that all the water carrying gills only appear above ground about halfway up the valley slopes. Compartment was planted in November-December 2024 (Season 3). Total planting area of approx. 43.08 ha. Approx. 100k trees planted in 2024 within the compartment (see spreadsheet for species numbers). Compartment has been planted to create 3 different wooded habitats: - Glades: planted at an approx. average of 500 s/h, in an attempt to achieve between 25-400 s/h at final density. Covering 11.33 ha of land within this compartment. Predominantly shrub species planted within the planting mix in these areas (Hawthorn, Blackthorn, Willows, Rowan) - Open Wooded Habitat: planted at an approx. average of 1,400 s/h, in an attempt to achieve between 800-16,00 s/h at final density. Covering approx.13.91 ha of land within this compartment. Mix of tree and shrub species planted within the planting mix in these areas (Alder, Aspen, Rowan, Thorn, Willows etc.) - Groves: planted at approx. an average of 3,100 s/h, in an attempt to achieve between 800-1600 s/h at final density. Covering approx. 17.84 ha of land within this compartment. Predominantly tree species planted within the planting mix in these areas (Alder, Aspen, Scots Pine, Birches etc.). The planting design sees the progression up the valley slope of tree planting as follows: along the boundary with the valley bottom the lower “Glades” begin to appear before transitioning into the lower “Open Wooded Habitat”, then moving up into “Groves” before then back into the upper “Open Wooded Habitat”, and then, at the top of the valley slopes transitioning back to upper “Glades” Introduction of Montane species: due in 2025/26 planting sea						
11a	15.25	Hawthorn species	2025	Wood pasture		
Limestone grassland - North, Snaizholme Fell Grazing Unit 10 On the western fell (Snaizholme Fell) the land is a plateau of limestone grassland. Sitting between 530 and 545m, The pavement edge forms the river catchment boundary north into the SUNO catchment. The limestone pavements include post-medieval industrial remains including sheepfolds, field boundaries, 3x lime kilns and limestone						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
quarries), bell pits and lead mining, with potential Romano-British remains linear earthwork of banks and ditches including features suggestive of hut circles or a settlement. Loose and available limestone pavement (clints) have been predominantly removed - walls, lime production and building, which has left just the solid exposed bedrock, generally now well covered in a mixture of grasses and mosses with much less exposed stone, but still clearly visible the pattern of soil filled grikes (erosion cracks between blocks). predominantly calciferous grasslands, with montane communities such as the large populations of mountain pansy. Generally an important area for ground nesting birds, including golden plover. This particular compartment will see shrub creation in the form of sparsely/scattered shrub and montane plants creating an important edge habitat closest to the current populations of black grouse. This will be achieved by group and/or individually guarding shrubs with cactus guards or exclusion pens, allowing livestock to continue to graze the grassland, maintaining the habitat for the bird species and wildflowers.						
11b	16.33	Open ground	2025	Non-wood habitat		
Grazing Unit - 11 Limestone Grassland - South, Snaizeholme Fell To the north west of Grove Head is a second plateau of limestone, sitting between 530 and 545m, The pavement edge forms the river catchment boundary north into the SUNO catchment. The limestone pavements include post-medieval industrial remains including sheepfolds, field boundaries, 3x lime kilns and limestone quarries), bell pits and lead mining, with potential Romano-British remains linear earthwork of banks and ditches including features suggestive of hut circles or a settlement. Loose and available limestone pavement (clints) have been predominantly removed - walls, lime production and building, which has left just the solid exposed bedrock, generally now well covered in a mixture of grasses and mosses with much less exposed stone, but still clearly visible the pattern of soil filled grikes (erosion cracks between blocks). predominantly calciferous grasslands, with montane communities such as the large populations of mountain pansy. Generally an important area for ground nesting birds, including golden plover. Late seasonal grazing will be used to maintain the habitat for the bird species and wildflowers within this compartment.						
11c	31.34	Open ground	2025	Non-wood habitat		
Grazing Unit - 12 Limestone grassland / pavement at Grove Head. To the south of Grove Head, sitting above the upland peat bog, at approximately 570- 580m is a plateau of limestone pavement. The pavement edge forms the river catchment boundaries - South into the Wharfe catchment, south west the Ribble, the remainder flowing into the SUNO catchment. The Pennine Bridleway long distance footpath runs across the area east west from Cold Keld Gate to Gavel Gap. The limestone pavements include post-medieval						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
industrial remains including sheepfolds, field boundaries, 3x lime kilns and limestone quarries), bell pits and lead mining, with potential Romano-British remains linear earthwork of banks and ditches including features suggestive of hut circles or a settlement. Loose and available limestone pavement (clints) have been predominantly removed - walls, lime production and building, which has left just the solid exposed bedrock, generally now well covered in a mixture of grasses and mosses with much less exposed stone, but still clearly visible the pattern of soil filled grikes (erosion cracks between blocks). predominantly calciferous grasslands, with montane communities such as the large populations of mountain pansy. Generally an important area for ground nesting birds, including golden plover and black grouse.						
12a	90	Open ground	2025	Non-wood habitat		
Peatland at Grove Head Grove Head sitting at approximately 500-580m is some 90ha of upland peat bog, comprising blanket bog/ raised mire, acid grassland and acid flushes. Many of the vegetation types showing the influence of many decades of intensive sheep overgrazing with cotton grasses and mat grass commonplace and degraded levels of sphagnum. The peat varies in depths up to a maximum of 2.8m, intensively drained in the past through a series of deeper grips and herringbone drains, and all of the upland area is classed as modified, comprising 0.07 Ha of actively eroding hagg gully, 0.48ha actively eroding flat bare peat, 63.93 Ha of drained hagg and gullies, 19.89ha artificially drained and 12.18ha classed as non peatland (rock/ no deep peat etc). 5 large deeply incised tributaries Lady Fold Gill, Deep Gill, Grove Syke, North Scar Gill and Long Syke feeding Snaizeholme Beck. Sitting above rocks of the Yoredales series, the upland area has a complex geology with frequent shake holes, deep water filled wells and underground springs Restoration was completed in summer 2024 in partnership with Yorkshire Peat Partnership, via NFC funding. This saw Grip/gully/hag reprofiling Surface bunding Grip/gully and dendritic blocking with stone and timber dams, bunds and sediment traps, with lime, fertiliser and seed application, Sphagnum spp introductions and cotton grass planting.						
13a	4.67	Hawthorn species	2025	Wood pasture		
Grazing Unit - 1 Horse Pasture Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock. Scattered shrub planting will occur within this compartment, this will be established through a combination of exclusion pen fencing (group guarding) and cactus guards (individual guarding). This protection will mean that livestock can graze the compartment right away, managing the grassland in and around the trees, forming wood pasture.						
13b	12.42	Open ground	2025	Non-wood habitat		
Grazing Unit - 2 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock.						
13c	1.9	Hawthorn species	2025	Wood pasture		
Grazing Unit - 3 Cattle Pens Pasture Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form "thickets" of predominantly thorn which will help resist the over grazing from livestock. Scattered shrub planting will occur within this compartment, this will be established through a combination of exclusion pen fencing (group guarding) and cactus guards (individual guarding). This protection will mean that livestock can graze the compartment right away, managing the grassland in and around the trees, forming wood pasture. This pasture will also be treated as a sacrificial pasture should the rare occasion ever arise that livestock need emergency treatment while onsite - CATTLE will NOT be generally treated with routine treatment while onsite.						
13d	8.57	Open ground	2025	Non-wood habitat		
Grazing Unit - 4 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form "thickets" of predominantly thorn which will help resist the over grazing						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
rom livestock.						
13e	6.46	Open ground	2025	Non-wood habitat		
Grazing Unit - 5 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form "thickets" of predominantly thorn which will help resist the over grazing rom livestock.						
13f	9.6	Open ground	2025	Non-wood habitat		
Grazing Unit - 6 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock.						
13g	11.89	Open ground	2025	Non-wood habitat		
Grazing Unit - 7 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock.						
13h	13.97	Open ground	2025	Non-wood habitat		
Grazing Unit - 8 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be						

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock.						
13i	11.8	Open ground	2025	Non-wood habitat		
Grazing Unit - 9 Occupying the gentler slopes of the valley bottom, following the course of Snaizeholme Beck, at c. 310- 370m, including open grassland, pockets of deep peat with larger areas of permanently wet ground. Vegetation to the eastern slopes dominated by more acidic rush pasture and to the west - the warmer and sunnier valley side, dominated by limestone tolerant vegetation. Throughout there are significant areas of cotton grass, pockets of sphagnum, and remnant bilberry, heather and cranberry. An important area suitable for priority ground nesting birds. Valley contains 4x stone field barns, accessed by a narrow humpback bridge from the north via Stonegill Foot Farm and a newer track system via a bridge leading out to Snaizeholme Plantation. An unclassified unsurfaced road (UUR) runs along the western side of the valley bottom, part stoned and then unidentifiable as a route. All the compartments in the valley bottom will be managed through conservation led grazing, initially by a local herd of Hereford cattle. Infrastructure is in place to be able to rotate the livestock on a regular basis. Scattered shrub planting links with the lower wooded slopes in the main tree planting compartments, utilising the deeper gullies and stream banks, with 10ha of woodland planting -shrubs, montane and sub-montane species. These trees will be susceptible to some browsing by cattle however planted on the steeper more inaccessible banks and have been planted in dense clusters to hopefully form “thickets” of predominantly thorn which will help resist the over grazing from livestock.						

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.

Windblow/Windthrow

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

Registered Office:

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