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# South Field, Edmundbyers New Native Woodland Creation

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## Environmental Statement



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## 1. Declaration of Competence

It is a requirement of the Environmental Statement that it should be prepared by a competent person(s). The applicant, Max Adams and his counsel declare themselves to be persons of competence, with the following relevant experience and expertise:

### Max Adams:



Max is the owner-manager of a 9-year-old Forestry Commission funded native woodland in the local area, the subject of his own ongoing research into ecological effects of native woodland afforestation on a landscape of former improved pasture.

He is a Visiting Fellow at the University of Newcastle: he has more than twenty peer reviewed publications, many of which include Environmental Impact Assessment reports. He taught both undergraduate and graduate modules on Environmental Impact Assessments at the University of Durham 1994-1998.

He has written four books on woodland ecology, landscape and establishment and teaches woodland history and ecology as part of the Explore Lifelong learning Programme.

He is Co-Director of research with the Bernician Studies Group, whose projects include the study of ancient woodlands in Northumberland, with a focus on Ancient Woodland flora indicators. He is a member of the Land of Oak and Iron Research and Mapping group, with special responsibility for woodland.

Max is a member of the Small Woods Association and of Confor, the trade body which acts as Secretariat to the All-Party Parliamentary Group on tree planting and woodlands. He is Consultancy Director for Woods for the Trees CIC.

### Luke Hemmings:



Luke is an Associate Director & Senior Woodland Consultant at Savills, based in Newcastle-upon-Tyne. He manages clients' portfolios and projects on behalf of the Northern Forestry team, supported by a wider network of experienced and well-rounded professionals. He specialises in woodland creation, planning, Environmental Impact Assessment and forest management; having worked previously as a Beat Manager, Woodland Officer and Local Partnerships Advisor in the Yorkshire & North East Area Team.

As a Woodland Officer, Luke oversaw the delivery of Government forestry policy through the effective use of advice, incentives and regulations. The role involves engaging with woodland owners, agents and stakeholders to provide appropriate advice and the enforcement of forestry and tree health regulations, including advising on and processing multiple EWC applications across the area, and working on many difficult and constrained proposals regarding peat, breeding waders and wider ecological site factors.

## 2. Non-Technical Summary

A scoping meeting was held on Monday 9<sup>th</sup> May 2022 online to set out the most significant positive and negative likely effects of a proposed native woodland creation scheme at Edmundbyers, County Durham. This scoping meeting was attended by the following key stakeholders as agreed with the Forestry Commission:

- Janet Fairclough and Elisabeth Charman, RSPB;
- Bob Cussen, Natural England;
- Sarah Tooze, North Pennines AONB;
- Max Adams, applicant;
- Luke Hemmings, Savills;
- Richard Pow, Forestry Commission.

The scheme had previously been the subject of a Woodland Creation Planning Grant application (WCPG) Stage 1 Approval (August 2021) but had subsequently been rejected for an English Woodland Creation Grant (EWCO) (Nov 2021) after consultation with Natural England due to the presence of ground nesting birds in the local area, in particular in the nearby Special Protected Area (SPA). A revised scheme is now proposed by the applicant, to reduce the impact on breeding wading birds after taking into account woodland design advice following the original application and being directed that an Environmental Statement would be required before a revised EWCO application would be considered.

The scoping meeting narrowed the potentially significant effects of the proposal down to the issue of direct and indirect impacts on breeding wading birds – specifically curlew, lapwing and snipe. Predators that would likely be attracted by woodland planting were identified as foxes, badgers, crows and weasels/stoats. The applicant has undertaken to commit to active predator control on the site for so long as that should be deemed necessary and it is understood that any consent to move forward with the project could impose such a requirement as a condition of the EIA consent being granted. The woodland area of the application has been reduced by approximately one third of the original, from 5.9ha to 4.3ha (gross). In addition, the applicant has undertaken to conduct a vegetation survey on the site to assess its potential for having developed into species-rich grassland since having been left ungrazed two years ago while the planting scheme proposals have been ongoing.

Some positive impacts of the proposed scheme were noted: expansion of native woodland species-rich habitat; long-term carbon storage; provision of new water features; provision of riparian woodland and public benefits in education, recreation and access to nature and landscape benefits. No evidence was brought forward as to the long-term impact that this proposed new native woodland is likely to have on the breeding success rates, or predation of ground nesting birds in their vicinity. However, there is evidence from the literature that increasing woodland area can increase the population of opportunistic predators, and may impact the local population of breeding waders. This is particularly so where there is no predator control as there are many examples of waders breeding successfully on moorland close to woodland edges where adequate predator control is taking place.

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One could argue that the potential risks to breeding birds on the adjacent SSSI<sup>1</sup> and Muggleswick Common & Blanchland moors SPA / SAC<sup>2</sup> are more than balanced by the aforementioned positive effects. In addition it is worth noting that this proposal will increase the area of woodland cover in the 1Km wide buffer zone around the SPA by approximately 0.5%. Common sense suggests that this is too small an increase to have a significant effect on the impact of predators of breeding waders.

It was accepted that in a 'do nothing' scenario the land would eventually revert to scrub and then to woodland with uncontrolled predator increase above current low levels (see below Section 5).



Figure 1 - view of South Field from the North

<sup>1</sup> Site of Special Scientific Interest

<sup>2</sup> Special Protection Area; Special Area of Conservation

## 3. Site Description

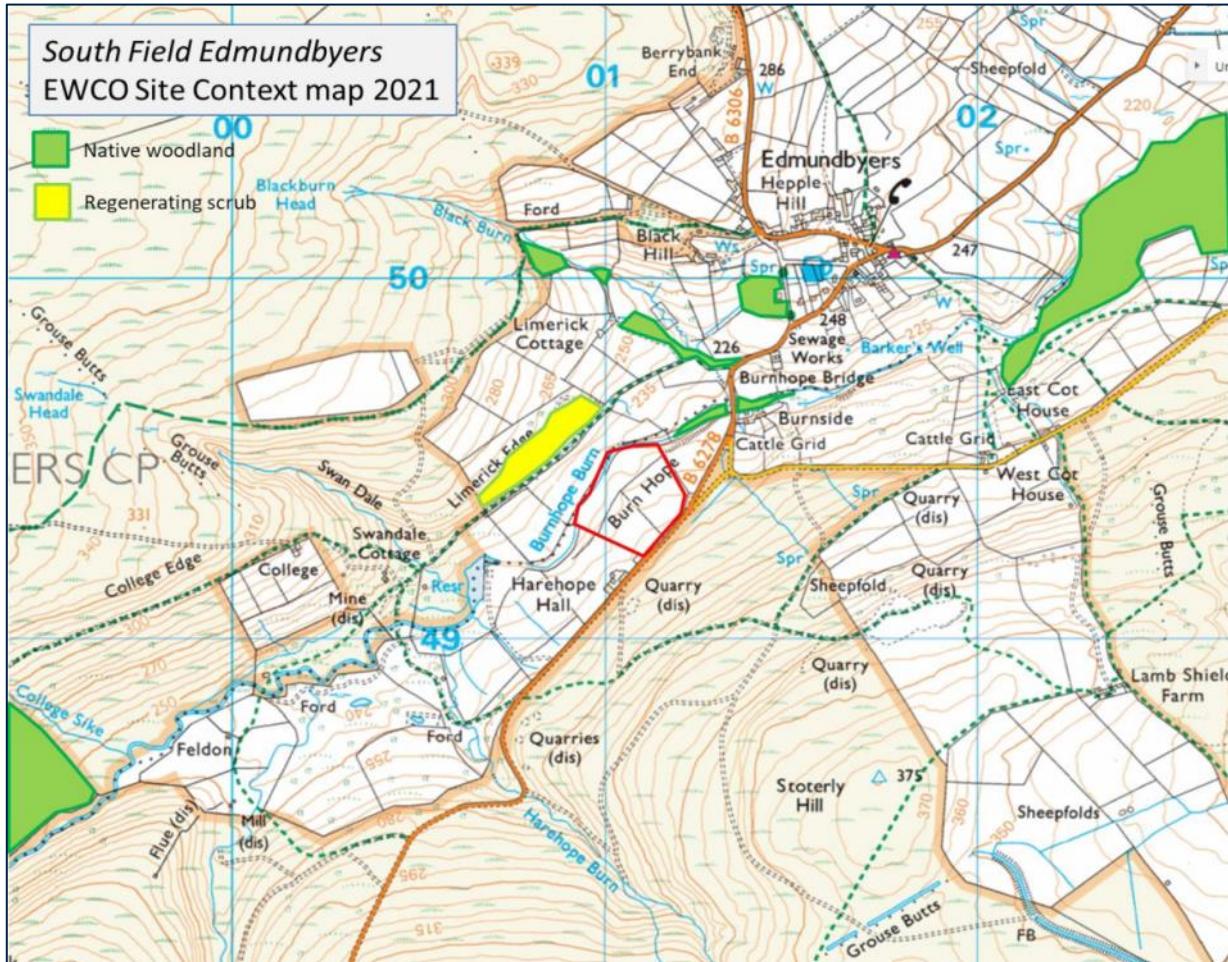


Figure 2 - South Field Site Context Map

Three fields of semi-improved pasture just SW of Edmundbyers in the North Pennines AONB were acquired in Sept 2020 as 'South Field', with an acreage of 14.61 (5.91ha). Immediately before the purchase, the land was used for sheep grazing. The overall plot is squarish, NW facing and of open aspect, exposed to strong seasonal winds. Drystone perimeter walls, in a moderate state of repair, front the B6278 (at 245m OD) and lead down towards the Burnhope Burn (225m OD); they are joined to stock fencing below the edge of a scarp of natural scalloped form leading down to a burnside heugh.

The heugh field is also stock-fenced along the edge of the Burnhope burn. Two farm gates, one in either large field, provide flat, solid vehicle access from the public road B6278. Concerns expressed by Durham Council about the safety of vehicle entry and exit to and from the site have been met by the creation of a 10m arc, offset entrance providing the necessary visibility envelope.

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The topography is gently sloping more or less as far as the end of the internal NE-SW wall (which was in a state of almost total disrepair and has since been used as a quarry for walling elsewhere on the site). To the NW of the wall a grassy scarp of variable steepness breaks onto a flat heugh. The burn is currently fringed with willow, gorse, wild cherry and ash. One mature but fallen crack or grey willow grows on the scarp. A small, semi-permanent spring rises at the base of the scarp and runs into the burn. A fringe of wetland plants here includes marsh marigold and brooklime; otherwise the grass is now (May 2022) overgrown and matted, with dense tussocks of moorland rush (see Section 5.3: Botanical survey)



*Figure 3 - Aerial image showing scarp, walls and current vegetation*

Since Spring 2021 an ongoing programme of wall restoration has been carried out by the Northumberland Drystone Wallers Association (see Figure 4). A stone and timber forestry barn has been built under Schedule E permissive development approval from Durham Council.



*Figure 4 - Section of wall being rebuilt*

There are three distinct topographic zones: flattish fields, scalloped slope and heugh, each presenting opportunities for habitat regeneration, environmental management and tree planting. The heugh rarely floods in winter; and then only for a day or so – the soils here are well-drained alluvial silts. The land has been de-stoned, cultivated and land-drained from the early 19th century. It existed as a single parcel of extra parochial township land by the time of the Greenwood Survey of about 1828. Two substantial native woodlands exist along the Burnhope Burn, at Pedam's Oak (upstream), near East Cot house and Burnhope Burn Wood Ancient Semi-Natural Woodland (ANSW, downstream); while other small areas of woodland and scrub lie close by (see site location map above). South Field is equidistant from them and would create an important linking woodland habitat: a 'stepping stone' corridor habitat, in the words of Sir John Lawton's *Making Space for Nature* (2010). Part of the facing slope on the opposite side of the burn is unmanaged regenerating scrub/woodland.

Currently, the local landscape is in a state of deforestation, having been cleared for farming and shooting many years ago. The small remaining fragments of ANSW in the landscape are isolated and lack resilience for the plants and species which live within them to migrate and exhibit natural behaviours.

The site is classified under National Character Area (NCA) profile 10 (North Pennines NE428) and Statement of Environmental Opportunity (SEO) 4: (managing streams for landscape and biodiversity); Additional Opportunity (1): 'expand the area of existing woodland to enhance landscape and biodiversity, provide timber and wood fuel, and manage water quality and water flow' is particularly relevant.

## 4. Project Proposal

### 4.1. Outline

The owners, Max Adams and Sarah Annesley (who also own and manage Thistle Wood, an 8-acre native wood created in 2013 near Medomsley, County Durham), propose to establish medium-density, naturalistic native woodland on the land at Edmundbyers under the English Woodland Creation Offer. Their vision is to generate a diverse range of habitats, including generous rides and open spaces, and sympathetically manage the heugh as a wetland and riparian woodland habitat. They note opportunities for community engagement and destination tourism, provided by the nearby village of Edmundbyers (which has a youth hostel, mobile home holiday park and B&B) and the proximity of the Derwent Reservoir and its amenities, along with the local Land of Oak and Iron heritage landscape partnership further down the Derwent Valley.

They intend to grant public permissive access to, and strongly encourage local involvement with, the land (see Appendix 4). They see the varied topographies and burnside location as valuable landscape and wildlife assets, to be enhanced by careful, medium-density tree and shrub planting alongside natural regeneration. The environmental, social and cultural components of the scheme are designed to enhance the ecological and cultural value of the Burnhope Burn and Edmundbyers landscape and contribute to the diversity of the AONB.

There is a substantial opportunity here to engage with the local community and with seasonal visitors to the area: in landscape and wildlife management, forest schools and other training, education and amenity enjoyment. The applicant is well-networked within the local heritage, woodland and wildlife community. The window of opportunity with a young native plantation to share trees' 'growing-up' with children is exploited in the applicant's other wood and is here explicitly noted as a positive impact of the scheme.

### 4.2. Planting Design

On the planting side, it is evident there are issues with prevailing wind exposure on the southwestern edge; but the soil is a rich clay loam, ideal for tree establishment and development. The presence of a thriving rabbit population on the scarp is also noted and requires all trees to be protected for the first few years after planting.

In response to concerns to create a buffer between planting and the adjacent SSSI, the proposed planting scheme has been reduced and amended from the original EWCO application (see Appendix 5) as follows: the two larger, flatter fields (compartments 1 & 2, i.e. the land to the SE of the scarp edge) present a straightforward opportunity to plant a new woodland of about 2.4ha, with ample rides managed for access, habitat and amenity.

Rides are unimproved access tracks with short- or medium-cut natural grasses, wildflowers and small shrubs. Their ecological benefits when sufficiently broad, curving and edge-managed (sloped up from bushes and shrubs towards larger trees) are well-known: they are high in habitat diversity for flora, birds, invertebrates and insects, as well as a positive visual amenity (see Forestry Commission EWGS Ops Note 11 – Managing Open Space for Wildlife).

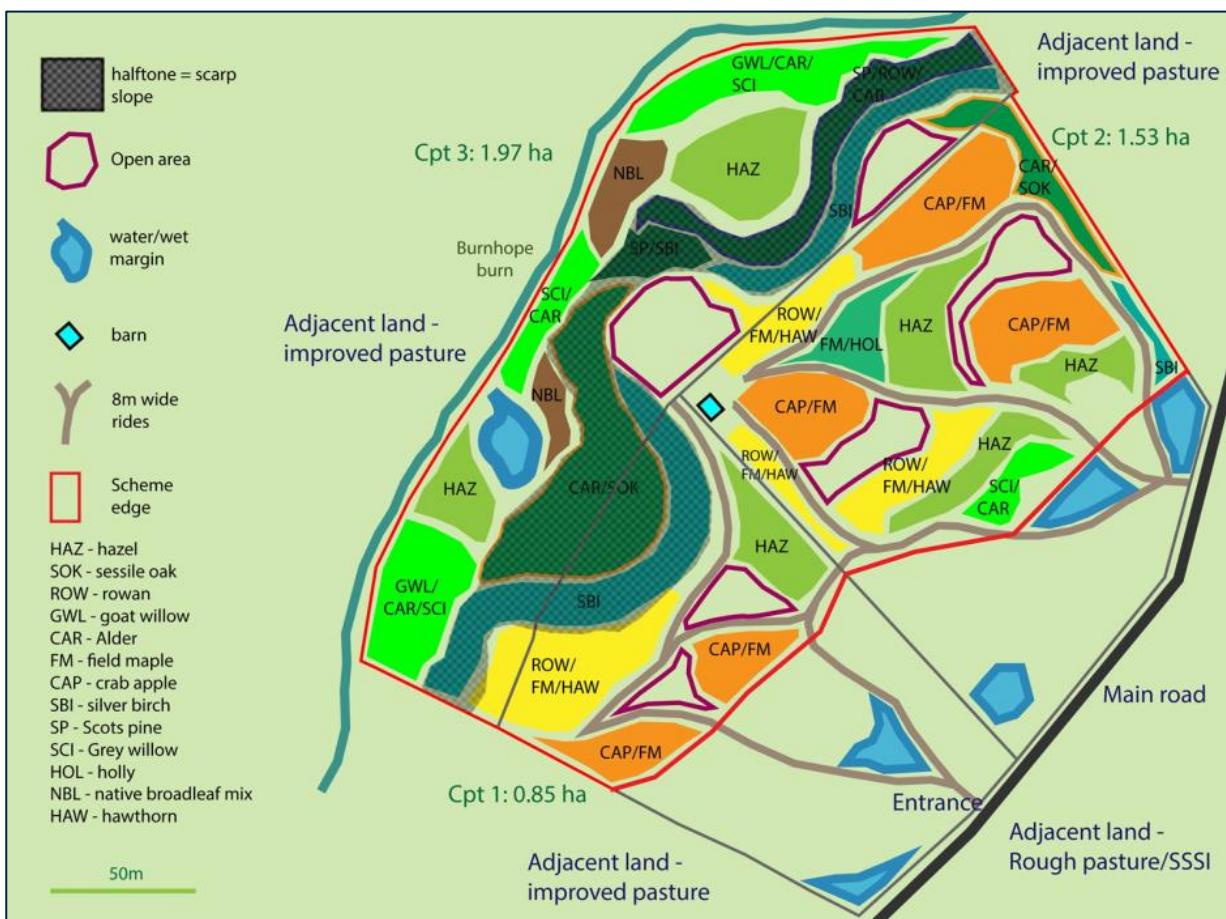


Figure 5 - Woodland Design Concept Plan

Fast growing species – silver birch, Scots pine, alder, rowan and field maple – will provide rapid wind protection along the SW boundary and immediately NE of the dividing cross wall (which is in a state of disrepair but is being reconstructed, with small access gaps, by the DSWA). Further planting, providing clearings and more densely stocked areas, would consist of predominantly hazel, rowan, field maple, crab apple and native shrubs such as guelder rose and hawthorn. The slope down to the heugh (extending to about 1 ha) would have a more naturalistic feel, with lower densities of rowan, alder and willow following the natural profile of slope and spur, thinning towards the heugh. The heugh itself is accepted as suitable for riparian woodland: predominantly hazel, willow spp., mixed native broadleaves and common alder. The new scheme, therefore, consists of planting to a total of 4.3ha, compared to the original 5.9ha; to include a minimum of 20% designed open ground and 30% small trees and shrubs in line with the EWCO "High Biodiversity Value" Additional Contribution guidance.

All proposed species are ecologically suitable for the site according to present and future climate scenarios of the Forestry Commission's Ecological Site Classification system. Trees will be protected from initial wind damage and from rabbits with staked medium-height tubes and weed suppression will be achieved through biodegradable mulch mats. No drainage is planned for the site. No chemical vegetation suppressants will be used. Apart from potential pond digging to provide habitat improvements for wading birds, no earth moving machinery will be used. The land is classed as grade 4-5: poor; the soil designation is 17 - slowly permeable seasonally wet acid loamy and clayey soils; but it was historically ploughed and there is a good loam content, well-drained on the upper, more gently sloping parts of the site.

### 4.3. Alternative Land Uses

Three alternative schemes present themselves. The 'do nothing' option is defined as the applicant 'closing the gate and walking away.' In this scenario, it is agreed, native shrub and tree species will eventually arrive adventitiously and the land will 'tumble down' to woodland. Initially, it is anticipated that gorse, willow (locally present upwind of the site) would colonise, followed by aspen (by suckering) and the 'fleshy seed' trees such as rowan, blackthorn and hawthorn. The site might be expected to be completely tree covered in 20-30 years (Broughton et al. 2021). No predator control would be implemented (see Section 5); there would be no public access and all educational aspects of the scheme would be unsustainable due to the lack of funding.

A second alternative involves reverting the field to sheep pasture or selling it. This is the alternative anticipated by Natural England at the scoping meeting. In this scenario, the Schedule E forestry barn would lose its approval and would be expected to be demolished. It should be noted that the applicant is not considering this option, which would involve an unsustainable loss of investment.

A third alternative is for the applicant to test the legal limits and scope of planting options, including forest gardening, osier willow planting (osier is considered an arable crop, not a tree) and dividing the plot into three components under different ownership and planting trees on each below the threshold of EIA consent requirement (currently 0.5ha per 5 years). In this scenario, woodland would regenerate over the site more rapidly than in the 'do nothing' option but there would also be no predator control or public access.

## 5. Impacts

### 5.1. Landscape

It is anticipated that any planting scheme will have a positive visual impact on the local landscape (see site location map and feedback in Appendix 4). It will link existing areas of native trees on the edge of Edmundbyers village and enhance the burnside visual environment. Half a dozen dwellings lie within obvious visual line of the proposed planting; the owners, insofar as they have offered an opinion, have no issues with the proposed scheme (verbal communication and see Appendix 4).

Although the Burnhope Burn is peripheral to the proposed planting site, its immediate context allows for enhancement of the burn's biodiversity and for the control of potentially invasive species such as gorse. The planting scheme will reduce flood risk downstream and enhance water quality by preventing soil erosion runoff. The burn currently has 'moderate' status for pollution. The aim is to enhance the riparian environment with appropriate planting.

The lowest part of the site has a flood risk attached; local testimony is that flooding of the heugh is rare, brief and quickly drains and observations of winters 2020-1 and 2021-2 confirm that it has not flooded. An upstream reservoir controls the burn's flow. Predominantly wet-adapted species would be planted on the heugh; and its possible flooding is seen as an ecological opportunity for the establishment of more permanent wet areas around an existing natural spring, employing leaky dams.

There are no known abstraction issues and no other water issues were raised during the property search. No new survey work is anticipated.

No scheduled monuments, listed buildings or other known heritage assets lie on or immediately within the vicinity of the proposed planting area (see Appendix 5). number of protected buildings lie in the village of Edmundbyers but the scheme will have no impact on them. LiDAR, and aerial photography, combined with the earliest available mapping (of about 1828) show that the site was enclosed as a detached portion of the township before that date. It is bounded on three sides by drystone rubble walls; on the fourth by stock fencing next to the burn. The Historic Land Classification is Enclosed Agriculture (pre-modern form) - see map included in Appendix 5.

There are no public rights of way on the land. It lies adjacent to Open Access land (moorland). It contains no common land. Exterior drystone walls will be retained, repaired and kept in good order.

Advice from Durham County Council (Ged Lawson, Principal Landscape Officer) April 29, 2022, reads:

"Priorities for new planting in the North Pennines include:

Planting in areas where new woodland would strengthen landscape character and enhance biodiversity, and particularly where they would extend or link existing semi-natural woods.

As existing semi-natural woods tend to survive as linear fragments in gills and along watercourses, planting new native woodlands in gills, ravines and river corridors offers the greatest potential for consolidating and linking the woodland habitat network, as well as creating new woods that are characteristic of the local landscape. Extending woodland planting into moorland gills may also be of benefit to certain species, such as black grouse, as may the planting of open woodland or wood pasture in the moorland fringes.

Care needs to be taken on all sites in this sensitive landscape not to plant on areas of existing ecological or archaeological value. Advice should be taken from Natural England and/or the County Ecologist on sites close to designations.

**Planting Design:** New woodlands should generally have a strong relationship with the underlying topography, following natural gills, steep slopes, river terraces and ravines. In the more ordered landscapes of the lower and middle dale where field patterns are strong, new woodlands should respect and interlock with the field pattern. In the less structured landscapes of gills, dale side bluffs and moorland fringes, naturalistic planting design with areas of open space and varied planting densities will be more appropriate. Fencing should be visually light (post and wire) where possible and avoid skylines.

*I would consider the proposals to be generally consistent with that advice.*

The site lies in the Burnhope Broad Character Area which belongs to the Middle Dale Broad Landscape Type. The Landscape Guidelines for that Landscape Type include the following for Trees, Woodlands and Forestry:

Plant new native oak-birch, ash and alder woodlands in gills and ravines, along river banks and stream sides, around dale floor reservoirs and on steep dale-side bluffs.

*Again I would consider the proposals to be generally consistent with that advice. They would entail planting predominantly native species along the burn and the steep bluffs beside it. To the south and west the planting would spread onto more moderately sloping fields – but respecting the field boundaries and having a less structured ‘naturalistic’ design on its southern edge. That in time would probably have a similar relationship to the field pattern as Pedams oak Wood does a little further up the valley. There is a lot of Field Maple in there which is a lowland species not strongly identified with the North Pennines in its natural distribution: that’s not a big issue as it looks as if it is being planted specifically for coppicing.*

The site lies in an area identified as ‘Sensitive’ in the Woodlands and Forestry Strategy that forms part of the adopted County Durham Landscape Strategy (2008). Sensitive Areas are described as follows.

Sensitive Areas are those where the landscape has many valued characteristics but depends in part for its character on the presence of woodlands. New woodlands of an appropriate scale, type and location may strengthen landscape character and bring wider environmental benefits. The strategy for these areas should be to increase woodland cover where it can make a positive contribution to landscape character and biodiversity, and particularly in Priority Areas.

The north-western part of the site – the corridor of the Burnhope Burn and the steep bluffs beside it – lies in a Riparian Woodland Priority Area. These are defined as follows.

Riparian Woodland Priority Areas are areas close to rivers and streams (<100m from major watercourses, <50m from minor watercourses) where new planting may control erosion and improve the quality of the river and river corridor habitat.

*I would consider the proposals to be generally consistent with the adopted Landscape Strategy. On balance they would be likely to make a positive contribution to landscape character and would lie partly within a priority area for new woodland. The landscape impact would not in itself be significant enough to warrant an EIA.*

## 5.2. Ground Nesting Waders & Breeding Birds

The 2021 breeding bird survey (Appendix 1) identified four species of concern present on both the proposed planting site and on the adjacent SSSI: curlew, snipe, lapwing and oyster catcher. Of these, three lapwing nests were identified; no hatchlings were reported – perhaps because of a cold, dry spring. On the adjacent SSSI numbers of these birds were observed in relatively high concentrations. The presence of these species are one of the features for which the SSSI & SPA / SAC are designated. The most direct impacts concern curlew and lapwing nesting sites and feeding areas, and through the scheme redesign these areas have been removed from the proposed planting areas; although in the ‘do nothing’ option these would also be lost.

Indirect effects are considered to consist of likely or possible predation on eggs and young during the months of April to June in the area up to 1km from the proposed scheme. The indirect effects are linked with foxes, crows, mustelids (stoats, weasels) and badgers. Each of these is likely to become increasingly common with the establishment of deciduous woodland cover, albeit more slowly in the case of the 'do nothing' option. Precise estimates of predator range are very difficult, if not impossible, to predict. Current observed numbers of these predator species on the proposed site are as follows:

Fox – none observed  
Badger, mink, magpie – ditto  
Stoat – 4-6 estimated  
Weasel – 2-4 estimate  
Carrion crow – 1 pair, not 'resident'

It is very difficult to estimate, with any degree of confidence, how the population of these predators will change as a result of the creation of the proposed 4.3ha of native woodland. However, the fact that this proposal will only add 0.5% to the area of woodland in the 1Km wide buffer zone surrounding the SPA suggests that the change will have a minimal impact on the population of waders in the 147,000ha SPA. Furthermore, there is evidence that where breeding wader populations are good (as they are in the SPA) the mobbing behaviour toward predators is more likely to be effective meaning that the breeding wader population is likely to be resilient even if there is a small increase in predator populations.

Additional information supplied by Lisa Kerslake (FC Area Ecologist) suggests that predation impact on the eggs of ground-nesting birds by sheep should not be underestimated: <https://www.ibtimes.com/killer-sheep-discovered-wolfing-down-bird-chicks-2685744>. This information nuances ideas of the 'do nothing' option, through which sheep grazing has already been eliminated as a potential source of negative impacts on breeding bird populations.

The important activity relating to active predator control regimes takes place on the Muggleswick Estate; a noted grouse moor which coincides with the adjacent SSSI. Predator management is regarded by all local correspondents as intense, and the managing Agent has confirmed its continuation, although as of this time no precise cull records are available. Verbal evidence from local residents and land-owning neighbours is that because of the very valuable and intensely managed nature of the Muggleswick Estate, one of England's most productive grouse moors, predator control is very active, a fact that is likely to enhance the chances of success of the applicant's own predator control actions.

### 5.3. Mitigation

The amount of mitigation required is difficult to be confident about given that we do not know what the indirect impact on breeding waders will be. There is however more known about the direct impacts. These direct and negative impacts will be mitigated by reducing the proposed planting area by 1.3ha to 4.3ha, a reduction of almost 30%; leaving a broad unplanted buffer zone between the new woodland area and the edge of the SSSI / SPA In addition, open water and wet margin areas will improve feeding opportunities. Eight-metre wide, edge-managed rides and substantial open areas with mixed density planting in between, will enhance the speed and nature of new woodland and glade habitat development. It should be noted that because of the high degree of wind exposure on the site, low density planting risks poor growth and stand development.

Although public access will be encouraged on the planting site, dogs will be prohibited.

If the current observed predator populations are accepted as a minimum baseline presence, prevention of indirect impacts on neighbouring breeding populations may be achieved by a combination of close monitoring and selective culling. The most recent relevant case study is outlined in a 2010 paper (Fletcher et al. 2010), in which active predator management was seen to be successful in increasing breeding bird numbers.

Fox control methods approved by the Game and Wildlife Conservation Trust are contained in Appendix 2, and directly available at the following web address: <https://www.gwct.org.uk/media/651730/Snaring-QA.pdf>

These include legally approved snares and lamping. It is observed that the sheep pasture lying immediately to the SW of the proposed planting site employs llamas to deter foxes from preying on lambs.

For corvids, Larsen traps are considered effective and humane (Appendix 2) and see: <https://mailchi.mp/gwct.org.uk/larsen-traps>

Badgers may also be snared, but since they are a protected species, and since they are less likely than foxes to scale the surrounding drystone walls, they are considered less of a threat than foxes.

Stoats and weasels are also less likely to act over the medium range distances involved, but recent introduction of spring traps appears to be an effective means of control.

It will be necessary to monitor populations to ensure that no significant increase in predator numbers occurs. The applicant's own experience of a young native woodland plantation is that camera traps placed along known fox trails and at water features that they frequent for drinking, alongside counting of scats (foxes seem to prefer to defecate on close-mown rides, making their identification relatively straightforward), is an effective combination for monitoring baseline numbers. Given the small scale of the project and the likely intensive management of predators on surrounding moors and sheep pasture, it is argued that any presence of foxes on site can be successfully managed by shooting (see also Saidler 2004 for recent work on predator monitoring).

The applicant retains the services of a voluntary but professional gamekeeper – Geoff Donnison, who possesses all relevant licences – to control rabbits, deer, foxes and crows on the land.

It should be noted that the 'do nothing' option and alternative land uses under consideration by the owners will **not** include predator monitoring or control.

The essence of the predator management strategy will be to use camera traps across the site to monitor for any significant changes to predator numbers. If a significant increase is noted this will be dealt with by legal, lethal methods of control.

### 5.4. Botanical Survey

By Northumberland Natural History Society Botany Group

An initial reconnaissance on Thursday 12th May consisted of multiple transects across each of the three constituent compartments at South Field, from SE to NW downslope). In all three compartments grasses are dominant. Buttercups, Common Sorrel and Plantains are abundant; Lady's-smock, Pignut, and Thistles are scattered throughout. There are patches of Soft Rush, Common Nettle in each of the compartments; Ragwort is occasional and Wood Sorrel is found along the derelict cross wall. Crosswort, Lesser celandine and Wood anemone are found along the boundary by the Burnhope burn, while Marsh Marigold and Brooklime are locally abundant in the wet area of the heugh. The species thus counted do not indicate a species-rich meadow vegetation, although that might develop in the event of the 'do nothing' scenario. All areas had a build-up of dead vegetation as a consequence of lack of grazing.



Figure 6 - Photograph of current vegetation

The second survey on June 6th employed quadrat surveying (Appendix 3 Excel spreadsheet). The photograph in figure 6 was taken on June 6<sup>th</sup>, 2022.

#### Methodology

The three compartments were investigated by Transect, Walk Over and Quadrat survey.

12/05/2022 - Transects were taken from the B6278 road boundary wall to the fence by the Burnhope Burn in both the east and west fields to investigate what changes in the plant community, if any, were taking place along the gradient.

07/06/2022 - 1. A walk over survey was carried out in this compartment 1, followed by three random quadrat surveys to show representative species and their abundance in this sector.

2. The slope was recorded separately as was the wet area in compartment 2, where walk over surveys recorded species in both.

3. A walk over survey of the Heugh, compartment 3 was carried out.

4. A walk over survey and one quadrat in compartment 2 was carried out.

The species observed were recorded on the excel sheet (Appendix 3).

Quadrats were assessed using the DAFOR (Dominant, Abundant, Frequent, Occasional, Rare) scale, shown on the excel sheet, to record each species by relative abundance.

## Results

The transects showed a consistency of species across the compartments.

A difference was recorded along the steeply sloping drier areas, the wet area in the Haugh and the boundary to the stream consistent to their habitat. All areas had a build-up of dead vegetation as a consequence of lack of grazing.

The quadrats gave presentative samples of the population of each compartment using the DAFOR scale to record each species.

## NVC mapping

The MATCH programme was used to determine which NVC community and sub community best fitted the sample quadrats, counting species and their Domin figures. The attached tables for each Quadrat (in sequence) give a range of figures with coefficient of fit, with the best fit at the top of the table. Because few species occurred in each quadrat the matching is not as clear as it might have been with multiple quadrats per vegetation stand but the top NVC community for each quadrat seems to fit well with what was observed on the ground.

Quadrats 1 & 2 come out as MG7d a resown ley and Quadrat 2 as MG 10 rushy pasture. Quadrat 5 comes out as MG6 an improved version of MG5. Perhaps the second top field had been improved earlier than the first and had reverted further than the first field towards a more 'natural', grassland type.

Quadrat 4 on the heugh land comes out as U4b an upland acid grassland type, more quadrats there might have picked up more of the wet influences but the dry sand gravels of the matrix of this lower section will be quite dry for a lot of the year.

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### Sample 1 Matches against sub-communities.

Community code	co-efficient
MG 7D	41.1
MG 7C	40.8
MG10a	39.6
MG 9	37.2
MC12b	36.8
MG10	36.7
MG10b	36.6
MG 6a	35.6
MG 9b	34.6
MG 6	34.3

### Sample 2 Matches against sub-communities.

Community code	co-efficient
MG10a	50.8
MG10	48.0
MG10c	40.9
MG10b	39.1
M23b	32.6
MG 7D	32.3
MG 9	30.5
M23	30.4
MG 7C	30.1
MG 6a	29.2

Press C to continue or X to exit.

Press C to continue or X to exit.

### Sample 3 Matches against sub-communities.

Community code	co-efficient
MG 7D	46.2
MG 6b	45.6
MG 6a	43.2
MG 6	40.0
MG 7C	38.8
MG10a	33.9
MG 7B	33.5
MG 7A	32.9
MG 9	32.8
MG 6c	32.2

### Sample 4 Matches against sub-communities.

Community code	co-efficient
U 4b	53.9
MC 9e	53.9
MC 9c	52.7
MC 9a	50.4
MG 6b	48.5
MG 5c	47.8
MC 9	47.1
MG 5	46.1
MG 5a	45.4
MC 9d	45.4

Press C to continue or X to exit.

Press C to continue or X to exit.

### Sample 5 Matches against sub-communities.

Community code	co-efficient
MG 6b	52.2
MG 8	44.8
MG 6	44.0
MG 6a	43.0
MG10a	41.2
MG 3a	39.2
MG 5c	37.9
MG 3	37.5
MG 7D	37.1
MG 9	37.0

Press C to continue or X to exit.

Compiled by Dorothy Cowans MLitt

Surveyors: Dorothy Cowans, Kevin Charman, Janet Angel and Margaret Rogers

## 6. Public & Stakeholder Consultation

South Field adjoins three landholdings: Harehope Farm (sheep and cattle), a smallholding (sheep and cattle) that used to be Limerick Farm on the NW side of Burnhope Burn, and the Muggleswick estate (the SSSI). Both Harehope Farm and the smallholder landowners introduced themselves to the applicant in 2020 and were apprised of the native woodland plans. Neither had any objections to the proposal. It has not yet been possible to make direct contact with the Muggleswick Estate (primarily managed for grouse shooting). However, Richard Holden MP and Cllr Douglas Oliver have undertaken (as of Friday May 20th 2022) to make contact with the estate on the applicant's behalf.

A public meeting was held in Edmundbyers Village Hall on Wednesday May 25th 2022 to gather evidence for the Environmental Statement. The applicant outlined both the original proposal and the new proposal with enhanced mitigation strategies and invited participants to offer evidence of positive and negative effects on them, and their community. All responses, positive and negative, have been collated and are appended to this statement (Appendix 4).

Muggleswick parish council, in whose area the field lies, have indicated their approval of the proposed scheme. Durham Wildlife Trust has indicated its support (included as part of the WCPG Stage 1 paperwork).

Relevant stakeholders include: Natural England (proximity of SSSI, SAC and RPA); Environment Agency (Burnhope burn); AONB North Pennines; a single landowner/farmer, David Anderson, farms the majority of the land on all sides and occupies the closest house within the visual impact area of the proposed woodland. David Anderson knows of the applicant's plan to plant trees and has no objections. Other local residents have been consulted and raised no objections. Walkers along the public right of way that runs parallel to the burn on the NW side of the valley will get a very full view of the planting, which will be designed to be sensitive to ideas of more naturalistic evolution towards woodland, rather than involving any rigid straight-line row planting, which would be inappropriate in this landscape setting.

## 7. References and Bibliography

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# South Field, Edmundbyers

## Environmental Statement

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## **8. Appendices**

1. Breeding bird survey (PDF attachment)
2. Predator control methods
3. Botanical survey (Excel spreadsheet)
4. Local stakeholder feedback
5. Maps and images file (PDF)