From: [redacted]
To: SOUTHERN_SCOTLAND
Subject: Proposed Woodland Creation - Whitslaid, Nr Roberton
Date: 03 August 2023 14:52:28
Attachments: Shiels Wood Woodland Creation Scoping Map.pdf
Invite to scoping letter Sheils Wood proposed Woodland Creation.pdf

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[redacted]

I am writing to invite you to participate in the scoping for a proposed Woodland Creation project at Whitslaid Farm near Roberton, South Scotland. Please find attached a scoping letter and Scoping Map.

We will be consulting with all parties who may be affected by the proposed woodland creation which will give them the opportunity to be involved at the initial planning stage and voice any comments or suggestions which will be considered when preparing the final design.

If you could respond with any comments either to myself or [redacted] kronospan.co.uk by 30th August 2023.

Kind regards, [redacted]

Shiels Wood

Proposed Woodland Creation

- Legal Bdy
- Public Road
- Powerline
- Watercourses
- Archaeology
- AOAI
- Medieval Tracks

ARCHAEOLOGY
Several archaeological features have been identified within the property including medieval roads, rig and furrow and stock enclosures, Any works would be in adherance to current Forest and Historic Environment Guidelines.

WATERCOURSES
Several watercourses pass through the property. The main watercourse, Ale Water cuts through the property with its tributaries, Bleakhill Burn, Gowdie Sike, Boglie Sike, Harehope Sike and Esdale Sike flowing from within. Ale Water has been identified as forming part of the River Tweed SAC. Any works will be in line with current Forest and Water/Soil Guidelines and associated General Binding Rules (GBR's) and Controlled Activity Regulations (CAR).

A powerline to Langhope Rig windfarm passes through the east of the property.

NT 42890 17947

A public road passes through the eastern side of the property.

PROPOSED SPECIES
The species composition will mainly be commercial conifers of Sitka spruce with smaller areas of species such as Norway spruce, Scots pine and Douglas fir. The design will also incorporate areas of native broadleaves and open ground.

LANDSCAPE
The proposed woodland creation is within an area of upland farm landscape. There are existing areas of shelterbelts and woodland, mainly to the east. The existing shelterbelts will be incorporated into the design of the woodland. Planting of mixed conifers, broadleaves, open space and following natural landforms as boundaries will enhance the landscape in accordance with UKWAS Standard.

WOODLAND CREATION
The proposed creation of approximately 730ha of commercial forest within an area of upland farmland within the Scottish Borders.

ACCESS
Access is via the undesignated county road onto the B711 near Roberton.

Roberton

OS sheets:
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Scale 1:21,500

03/08/2023

eskdalemuir Forestry

Sheils Wood Proposed Woodland Creation Scoping

I am writing to invite you to participate in the scoping for a Woodland Creation project proposed at Whitslaid Farm near Roberton, South Scotland.

We will be consulting with all parties who may be affected by the proposed woodland creation which will give them the opportunity to be involved at the initial planning stage and voice any comments or suggestions which will be considered when preparing the design. This will ensure the design and of the proposed woodland creation meets the standards set out in the UK Forest Standard.

The land is currently used for rearing cattle and sheep with small pockets of existing woodland/shelterbelts throughout. There are several commercial forests/woodlands within the wider landscape.

Attached is a map illustrating some of the opportunities and constraints identified.

Management Objectives

Eskdalemuir Forestry Ltd's objectives of management can be summarised as follows:

i. To maximise the financial return from the sustainable production of timber whilst adhering to the UK Forestry and UKWAS standards of woodland management.
ii. To consider the full impacts of commercial forestry on the environment by managing the forest in accordance with good environmental practice as laid down in the UK Forestry Standard and the UK Woodland Assurance Standard.

This will involve:

i. Identifying and matching species to ground conditions to achieve optimal production.
ii. Increasing species and habitat diversity by identifying key wildlife habitats and protecting and managing these for wildlife conservation.
iii. The objective will be to achieve a forest structure that comprises:
    - 75% Sitka spruce
    - 10% Other conifers
    - 10% Open space
    - 5% Native broadleaves
iv. Forest design to be more sympathetic with the local landscape to maximise crop stability.

Constraints and Opportunities

Water – Ale Water and its tributaries flow through the site, Ale Water forming part of the River Tweed SAC. Opportunity to develop riparian zones with areas of mixed native broadleaves and open ground which will also provide long term buffers. Any drainage will incorporate appropriate buffers in relation to watercourse width. Soil surveys have been undertaken to identify any areas of deep peat (>30cm) and if identified will be avoided. All works will adhere to current Forestry and Water guidelines and relevant General Binding Rules (GBRs).

Flora – An NVC survey of the site is underway which will inform the final design of the project. Any notable species or habitats will be taken into account and mitigated for.

Fauna – Breeding Bird Surveys were conducted within the 2023 season, the results of which will inform the final project design. From initial results, Skylark have been the most prevalent. Roe deer are present within the wider area; a deer management plan will be put in place to control deer to prevent significant damage to planting. A protected species survey has been conducted during 2023 to identify any species such as Otters, Red squirrel and Badger.

Roads – Access to the property is from the B711 near Roberton via an unnamed road. There is currently a good network of farm tracks within the property therefore there are no plans for further road construction.

Historical & Cultural Interest – There are no ancient monuments recorded within the property, however there are a number of features comprising of sheepfolds, enclosures, rig and furrow and medieval roads which have been identified. An archaeological survey has been conducted to identify the extent of any features and provide recommendations for their preservation. Any features identified on the ground will be incorporated into managed open ground. All works will adhere to current Forestry and Historic Environment Guidelines.

Landscape – There are no formal landscape designations affecting the property. In the wider landscape, the property is mainly visible from the south-west at Wester Alemoor and from the northeast. A Landscape and Visual Impact Assessment (LVIA) will be carried out to give a full informed assessment of the proposals. Secondary conifer species such as Norway spruce, Scots pine and Douglas fir and areas of native broadleaves along the more visible edges will help to soften the visual impact.

Public Access – There are no known formal recreational provisions within the property, however there is a waymarker indicating a route to Whitslaid Faulds, a bothy situated to the west. It is proposed that a circular walking route is incorporated into the final design. Public access is permissive as per The Land Reform (Scotland) Act 2003.

Please contact me at [redacted]@kronospan.co.uk before 30th August 2023 if you have any comments regarding the above proposals.

From: [redacted]
To: [redacted]
Subject: Roberton Woodland Creation
Date: 21 August 2023 13:10:00
Attachments: Shiels Wood Woodland Creation Scoping Map.pdf

[redacted]

I remember you previously stressed the value of riparian grasslands in the Roberton area and the potential threat raised by forestry. I have been allocated a scoping report for a potentially large forestry proposal between Easter Alemoor and Blind Moss SSSI (map attached). From the limited records that we have, *Carex appropinquata* is present along the Ale Water, with mention of a small fen, and I note that *Blysmus compressus* is listed on the BSBI database. I would be interested to know if the proposal area coincided with the more sensitive habitats that you recall. Happy to discuss by phone if that is easier.

Are you planning another plant walk in August/early September? I'd be keen to come along.

Cheers

[redacted]

[redacted] **| Area Officer**

NatureScot | Anderson's Chambers | Market Street | Galashiels, TD1 3AF | [redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

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Scale 1:21,500

03/08/2023

eskdalemuir Forestry

From: [redacted]
To: [redacted]
Subject: Re: Roberton Woodland Creation
Date: 23 August 2023 18:48:24

Caution! This message was sent from outside NatureScot.

[redacted]

Thanks for asking.

Ive checked the records and I cant see that anything scarce or rare has been recorded on the site. There are records of Blysmus compressus, Carex aproppinquata and Juncus alpinoarticulatus from nearbye areas but not on the site.

I know the farm and most of it has been spread with copious amounts of the outputs of the sewage farm and this has stripped it of semi natural vegetation. This has had bad consequences for Shielswood Loch, which was an excellent marl loch. [redacted].

[redacted]

Cheers

[redacted]

On Monday, 21 August 2023 at 13:11:32 BST, [redacted]@nature.scot> wrote:

[redacted]

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[redacted]

Cheers

[redacted]

[redacted] | **Area Officer**

NatureScot | Anderson's Chambers | Market Street | Galashiels, TD1 3AF [redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

From: [redacted]
To: [redacted]
Subject: RE: Proposed Woodland Creation - Whitslaid, Nr Roberton - NatureScot comment
Date: 29 August 2023 10:37:00

[redacted]

Thank you for consulting NatureScot on the proposed forestry at Whitslaid. I have the following comments to make.

River Tweed SAC

The Ale Water forms part of the River Tweed SAC and flows through the proposal site and along its southern boundary. Substantial buffers are expected along this water course. The UKFS states a minimum width for buffers (20m) but also states that wider buffers may be required where there are sensitivities such as salmonid spawning beds. That is the case along the Ale Water and suitably large buffers are therefore required.

UKFS also states that it is important 'for landscape and water environment reasons to avoid parallel-sided corridors and design the [buffer] margins in response to landform'. There are areas of mire habitat along the Ale Water (mainly at the western end of the Ale Water) which should be designed into the buffer area. There are also records of *Carex appropiquata* (fibrous tussock sedge) in the area. This species has a very restricted distribution and should be protected from the effects of forestry. It would be extremely beneficial if some form of grazing management could be sustained in the mire habitats.

Blind Moss SSSI

This SSSI is 180 m east of the proposal area, with a water course flowing from the proposal site into the SSSI. Forestry should be designed to protect water quality and water flow along this water course, in order to maintain the current condition of the SSSI.

Black Grouse Leks

Black grouse populations have seen a massive decline over the last 20 years and the species is a significant concern for NatureScot. Black grouse leks have been recorded [redacted] and [redacted], within the boundary. A lek has also been recorded [redacted], which is within 1[redacted]. It would be extremely beneficial if features such as native woodland, open ground and low density shrubs could be arranged in these areas to sustain these breeding grounds. Forestry fences should be suitably marked to reduce the possibility of bird strike.

Rights of Way

A number of rights of way extend through the proposal site and along its perimeter. A diversity of edge treatment should be designed into these areas to help maintain the landscape quality and experience for walkers and cyclists.

Regards

[redacted]

[redacted] **Area Officer**

NatureScot | Anderson's Chambers | Market Street | Galashiels, TD1 3AF | [redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency* | *Buidheann Nàdair na h-Alba*

From: [redacted]kronospan.co.uk>
Sent: 03 August 2023 14:52
To: SOUTHERN_SCOTLAND <SOUTHERN_SCOTLAND@nature.scot>
Subject: Proposed Woodland Creation - Whitslaid, Nr Roberton

[redacted]

I am writing to invite you to participate in the scoping for a proposed Woodland Creation project at Whitslaid Farm near Roberton, South Scotland. Please find attached a scoping letter and Scoping Map.

We will be consulting with all parties who may be affected by the proposed woodland creation which will give them the opportunity to be involved at the initial planning stage and voice any comments or suggestions which will be considered when preparing the final design.

If you could respond with any comments either to myself or [redacted]@kronospan.co.uk by 30th August 2023.

Kind regards, [redacted]

'Providing honest, sound ecological advice and excellent service'

SAP Ecology & Environmental Ltd.

enquiries@sapecology.co.uk

www.sapecology.co.uk

Breeding Bird Survey Report

Whitslaid Afforestation, Scottish Borders



Produced for Eskdalemuir Forestry Ltd.

S.A.P Ecology and Environmental Ltd

Registered in England & Wales: 9766763

Registered address: 9 Market Place, Hedon, East Yorkshire. HU12 8JA

Office address: 2 Dunloe Terrace, Eaglesfield, DG11 3PD

Quality Assurance

Report Reference	Revision Number	Date of issue	Author	Checker	Approver
EFL200/002	001	31ST May 2024	[redacted]		

Disclaimer

This report has been produced by S.A.P Ecology & Environmental Ltd on behalf of our contracted client for the purpose outlined in section 1.1. No part of this report can be modified or replicated without the express written consent of S.A.P Ecology & Environmental Ltd. Should this document or any part of it be used outside of its intended purpose S.A.P Ecology & Environmental Ltd accept no liability.

The information, results and observations recorded within this document were accurate at the time of survey. We accept no liability for any errors or activities and changes to the survey area which may have occurred post survey.

S.A.P Ecology & Environmental Ltd will submit any records of protected species to the appropriate biological records centre on an annual basis.

Contents

1. Introduction

1.1 Project background

S.A.P Ecology & Environmental Ltd were contacted by Eskdalemuir Forestry Ltd, who propose to afforest an area of land at Whitslaid Farm, Scottish Borders (Figure 1). The proposed plans will see the creation of a plantation woodland and associated infrastructure on 730ha of land previously used for agriculture. The land proposed for this development will be referred to as 'the site' in the remainder of this document.

The site is located at central grid reference NT42493 17826, approximately 4.6km north-north-east and 4.3km south-west of the villages of Roberton and Ashkirk respectively. The site is situated within a landscape primarily used for livestock farming interspersed with coniferous shelterbelts and commercial forestry plantations within the wider landscape. Ale Water bisects the site with several of its tributaries including Bleakhill Burn, Boglie Sike, Gowdie Sike, Esdale Sike and Harehope Sike either flowing through or from the site.

An ecological assessment was carried out by S.A.P Ecology and Environmental Ltd during the 2023 survey season (Ecology Report Ref: EFL200/001001), which provided a detailed assessment of the site, its habitats and surveyed for the presence/likely absence of protected species. This report should be read in conjunction with the Ecology Report for the site.

1.2 Project brief

S.A.P Ecology & Environmental Ltd were commissioned to carry out a breeding bird survey of the site. The brief was to:

- Conduct a full suite of breeding bird survey of the site highlighted for afforestation, consisting of four visits between 20th March – 10th July.
- Complete three site visits between 5th April – 16th June, to survey an additional 1km buffer to identify the presence of breeding waders, as detailed in the current FC guidance;
- Produce a detailed report of the breeding bird survey findings, supported by appropriate digitised mapping;

1.2 Limitations

The survey was carried out at the correct time of year for a breeding bird assessment.

The desk study data is derived from information submitted by members of the public and therefore should not be taken as a definitive list of the species present in the local area.

2. Relevant Legislation

Birds

The protection of bird species within the European Union falls under the Bern (79/409/EEC) and Bonn Conventions and under the EU Directive 2009/147/EC 'The Birds Directive' (the codified version of Council Directive 79/409/EEC). Implementation of the provisions of the Birds Directive in Scotland fall under the Wildlife & Countryside Act 1981 (as amended), the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2011.

All bird species including their nests and eggs are protected in Scotland under Part 1, Section 1 of the Wildlife and Country Act 1981 (as amended).

For any wild bird species, it is an offence to intentionally or recklessly:

- kill, injure or take a bird
- take, damage, destroy or interfere with a nest of any bird while it is in use or being built
- obstruct or prevent any bird from using its nest
- take or destroy an egg of any bird

For any wild bird species listed on Schedule 1, it's an offence to disturb:

- any bird while it is building a nest
- any bird while is in, on, or near a nest containing eggs or young
- any bird while lekking
- the dependent young of any bird

In addition to the above legislation, an assessment of the conservation status of UK bird species was undertaken by the UK's leading bird conservation organizations assigning each species a level of concern. These levels comprise:

- Red list criteria – Over 50% breeding population decline over 25 years or longer.
- Amber list criteria – 25-49% breeding population decline over 25 years or longer.
- Green list criteria – not currently considered of conservation concern.

The above legislation and conservation status criteria are used to assign the appropriate conservation status to all bird species recorded during surveys presented in the results of this report. Species referred to collectively as 'Birds of Conservation Concern' (BoCC) fall into one or more of the categories described above with the exception of 'Green listed' species alone.

3. Methodology

3.1 Desk Study

Biological records were sourced from The Wildlife Information Centre (TWIC) as part of the desk study for the Preliminary Ecological Appraisal conducted by S.A.P Ecology and Environmental (2023). This information been utilised within this report to advise the breeding bird survey.

3.2 Field Survey

Four surveys were undertaken following the methodology outlined in the Common Bird Census (CBC) wherein a pre-determined transect was walked within a specified time. This transect was representative both of the application boundary and the habitats immediately surrounding which may be impacted by the proposed development the within the ownership boundary (see Appendix 2 Figure 2). Surveys were undertaken in the peak breeding months of April, May and June 2023. Transects were walked by one surveyor at a steady pace and all birds seen or heard were recorded on field maps. Pertinent information such as the species, number of individuals, sex, flight lines, and behaviour were additionally recorded.

Bird species were recorded using standard British Trust for Ornithology (BTO) species and behaviour codes (Marchant, 1983).

3.3 Surveyors

Table 1: Timetable of survey visits and surveyors

Visit	Date	Survey	Surveyor
A	04/04/2023	Transect	[redacted]
B	09/05/2023 10/05/2023	Transect	
C	07/06/2023 08/06/2023	Transect	
D	26/06/2023 27/06/2023	Transect	

4. Results

4.1 Desk Study

This section provides a summary of the information gathered from TWIC, the S.A.P Ecology & Environmental protected species database for protected species, data collected by the public and from MAGIC Map and Site link for protected sites.

International & National Designated Sites

One nationally designated site was recorded within 2km of the site, the Ale Water. The Ale Water is designated as part of the River Tweed Special Area of Conservation (SAC) and flows through the site. The River Tweed SAC is of national importance for its populations of Brook (*Lampetra planeri*), River (*L. fluviatilis*) and Sea Lamprey (*Petromyzon marinus*), Atlantic salmon (*Salmo salar*) and Otter (*Lutra lutra*).

Locally Designated Sites

No locally designated sites were recorded within 2km of the site.

Protected and notable species

The data search recorded protected species and species of conservation concern within 1km of the survey area inclusive of 92 bird species, as seen in table 2.

Table 2: Bird species within 2km

Common Name	Scientific Name	Count	Status
Barn Owl	*Tyto alba*	1	Red
Black Grouse	*Lyrurus tetrix*	2	Red
Black-headed Gull	*Chroicocephalus ridibundus*	18	Amber
Blue Tit	*Cyanistes caeruleus*	13	Green
Brambling	*Fringilla montifringilla*	9	Green
Bullfinch	*Pyrrhula pyrrhula*	6	Amber
Buzzard	*Buteo buteo*	57	Green
Canada Goose	*Branta canadensis*	4	Introduced
Coal Tit	*Periparus ater*	19	Green
Common Gull	*Larus canus*	2	Amber
Common Redpoll	*Acanthis flammea*	5	Red
Common Sandpiper	*Actitis hypoleucos*	7	Amber
Coot	*Fulica atra*	54	Green
Cormorant	*Phalacrocorax carbo*	26	Green
Crossbill	*Loxia curvirostra*	7	Green
Cuckoo	*Cuculus canorus*	6	Red
Curlew	*Numenius arquata*	15	Red
Dipper	*Cinclus cinclus*	2	Amber
Dunnock	*Prunella modularis*	9	Amber
Fieldfare	*Turdus pilaris*	9	Red
Goldcrest	*Regulus regulus*	11	Green
Golden Plover	*Pluvialis apricaria*	6	Green

Goldeneye	*Bucephala clangula*	29	Red
Goldfinch	*Carduelis carduelis*	17	Green
Goosander	*Mergus merganser*	5	Green
Goshawk	*Accipiter gentilis*	1	Green
Grasshopper Warbler	*Locustella naevia*	2	Red
Great Crested Grebe	*Podiceps cristatus*	20	Green
Great Spotted Woodpecker	*Dendrocopos major*	16	Green
Great Tit	*Parus major*	10	Green
Greenfinch	*Chloris chloris*	2	Green
Grey Heron	*Ardea cinerea*	27	Green
Grey Wagtail	*Motacilla cinerea*	9	Amber
Greylag Goose	*Anser anser*	12	Amber
House Martin	*Delichon urbicum*	14	Red
House Sparrow	*Passer domesticus*	9	Red
Kestrel	*Falco tinnunculus*	12	Amber
Kingfisher	*Alcedo atthis*	1	Green
Lapwing	*Vanellus vanellus*	13	Red
Lesser Black-backed Gull	*Larus fuscus*	6	Amber
Lesser Redpoll	*Acanthis cabaret*	6	Red
Linnet	*Linaria cannabina*	13	Red
Little Grebe	*Tachybaptus ruficollis*	28	Red
Mallard	*Anas platyrhynchos*	77	Amber
Meadow Pipit	*Anthus pratensis*	36	Amber
Mistle Thrush	*Turdus viscivorus*	27	Red
Moorhen	*Gallinula chloropus*	20	Amber
Mute Swan	*Cygnus olor*	70	Green
Nuthatch	*Sitta europaea*	16	Green
Osprey	*Pandion haliaetus*	8	Amber
Oystercatcher	*Haematopus ostralegus*	12	Amber
Peregrine	*Falco peregrinus*	2	Green
Pied Wagtail	*Motacilla alba*	24	Green
Pochard	*Aythya farina*	1	Red
Raven	*Corvus corax*	24	Green
Red-necked Grebe	*Podiceps grisegena*	1	Red
Redshank	*Tringa tetanus*	5	Amber
Redstart	*Phoenicurus phoenicurus*	11	Amber
Redwing	*Turdus iliacus*	2	Amber
Reed Bunting	*Emberiza schoeniclus*	14	Amber
Robin	*Erithacus rubecula*	25	Green
Rook	*Corvus frugilegus*	14	Amber
Sand Martin	*Riparia riparia*	6	Green
Sedge Warbler	*Acrocephalus schoenobaenus*	13	Amber
Siskin	*Spinus spinus*	7	Green

Skylark	*Alauda arvensis*	38	Red
Slavonian Grebe	*Podiceps auritus*	1	Red
Snipe	*Gallinago gallinago*	15	Amber
Song Thrush	*Turdus philomelos*	24	Amber
Sparrowhawk	*Accipiter nisus*	13	Amber
Spotted Flycatcher	*Muscicapa striata*	11	Red
Starling	*Sturnus vulgaris*	16	Red
Stock Dove	*Columba oenas*	1	Amber
Stonechat	*Saxicola rubicola*	3	Green
Swallow	*Hirundo rustica*	27	Green
Swift	*Apus apus*	8	Red
Tawny Owl	*Strix aluco*	4	Amber
Teal	*Anas crecca*	19	Amber
Tree Pipit	*Anthus trivialis*	1	Red
Tree Sparrow	*Passer montanus*	2	Red
Treecreeper	*Certhia familiaris*	5	Green
Tufted Duck	*Aythya fuligula*	23	Green
Water Rail	*Rallus aquaticus*	7	Green
Wheatear	*Oenanthe oenanthe*	13	Amber
Whinchat	*Saxicola rubetra*	9	Red
Whooper Swan	*Cygnus cygnus*	19	Amber
Wigeon	*Mareca penelope*	28	Green
Willow Warbler	*Phylloscopus trochilus*	34	Amber
Woodcock	*Scolopax rusticola*	15	Red
Woodpigeon	*Columba palumbus*	31	Amber
Wren	*Troglodytes troglodytes*	31	Amber
Yellowhammer	*Emberiza citrinella*	6	Red

4.2 Field survey

Bird Habitat Notes

As part of the Ecological assessment a phase 1 habitat assessment was undertaken by S.A.P Ecology and Environmental Ltd in June 2023. The assessment highlighted a diversity of habitats on site, dominated by acid, neutral and marshy grassland with areas of blanket bog, modified bog, flushes and springs, mire, standing water (oligotrophic & mesotrophic) and running water (oligotrophic & dystrophic). The variety of these habitats provides nesting opportunities for a range of upland and farmland breeding bird, along with the woodland and scrub specialists.

Breeding Bird Surveys

Bird species were recorded over the entire site with an additional 1km buffer which recorded wading species only. Results are listed in table 3 and includes the numbers of individuals encountered that displayed possible, probable, and/or confirmed breeding behaviour. In total there were 59 species on site including 12 red-listed, 19 amber-listed, and 26 green-listed species. Table 3 also includes incidental numbers of birds which are utilising the site in

a non-breeding capacity such as the Fieldfare. Maps detailing the field survey results can be seen in Figures 1a – 4b.

Table 3: Summary of recorded bird species

Species	BTO Code	Status	Visit A	Visit B	Visit C	Visit D	Estimated Pairs
Blackbird	B.	Green	2	3	1	4	4
Blackcap	BC	Green	0	0	0	1	1
Black-headed Gull	BH	Amber, SBL	2	0	0	0	1
Blue Tit	BT	Green	0	0	0	1	1
Bullfinch	BF	Amber, SBL	0	0	0	1	1
Buzzard	BZ	Green	2	0	2	2	1
Carrion Crow	C.	Green	7	7	12	17	9
Chiffchaff	CC	Green	1	0	2	0	2
Canada Goose	CG	Introduced	1	4	1	1	2
Chaffinch	CH	Green	7	11	6	16	16
Coal Tit	CT	Green	0	3	0	1	3
Common Sandpiper	CS	Amber	0	1	0	0	1
Curlew	CU	Red, SBL	12	1	5	9	6
Dunnock	D.	Amber, SBL	0	1	0	0	1
Fieldfare	FF	Sch.1, Red	110	0	2	62	0
Goldcrest	GC	Green	0	0	4	1	4
Grey Heron	H.	Green	1	0	0	1	1
Great Black-backed Gull	GB	Green	1	0	0	0	1
Great Tit	GT	Green	0	0	0	2	2
Greenfinch	GR	Green	0	0	1	0	1
Goldcrest	GC	Green	0	1	2	0	2
Goldfinch	GO	Green	0	0	0	3	2
Great Spotted Woodpecker	GS	Green	0	0	0	1	1
House Martin	HM	Red	0	0	0	8	4
Kestrel	K.	Amber, SBL	1	0	0	0	1
Lapwing	L.	Red, SBL	0	0	2	0	1
Lesser Black-backed Gull	LB	Amber	0	0	2	1	1
Lesser Redpoll	LR	Red	0	2	6	6	3
Linnet	LI	Red, SBL	0	0	3	0	2
Little Grebe	LG	Red	0	0	0	1	1
Mistle Thrush	M.	Red	1	0	0	0	1
Magpie	MG	Green	0	0	2	0	1
Mallard	MA	Amber	4	1	0	2	2
Meadow Pipit	MP	Amber	76	57	67	112	67
Merlin	ML	Sch.1, Ann.1, Red, SBL	0	1	0	0	1
Mute Swan	MS	Green	1	1	0	1	1

Oystercatcher	OC	Amber	3	5	1	1	3
Pied Wagtail	PW	Green	4	1	4	1	4
Robin	R.	Green	1	3	4	1	4
Red Grouse	RG	Green, SBL	0	3	1	0	2
Reed Bunting	RB	Amber, SBL	0	4	1	7	7
Raven	RN	Green	1	1	2	5	5
Rook	RO	Amber	0	0	80	0	40
Sand Martin	SM	Green	0	0	0	1	1
Sedge Warbler	SW	Amber	0	6	5	4	6
Skylark	S.	Red, SBL	98	116	89	95	116
Siskin	SK	Green	0	0	0	2	1
Snipe	SN	Amber	0	6	3	9	9
Song Thrush	ST	Amber, SBL	3	2	2	1	1
Stonechat	SC	Green	0	1	0	6	6
Swallow	SL	Green	0	3	1	3	2
Swift	SI	Red, SBL	0	0	0	4	2
Wheatear	W.	Amber	1	3	3	6	6
Whinchat	WC	Red	2	6	2	4	6
Whitethroat	WH	Amber	0	1	1	2	2
Woodpigeon	WP	Amber	3	4	4	2	2
Wren	WR	Amber	11	17	11	22	19
Willow Warbler	WW	Amber	1	13	13	12	13
TOTALS			**358**	**289**	**342**	**442**	**407**
SPECIES			**28**	**32**	**35**	**43**	**58**
Schedule 1 (individuals)			**110**	**1**	**2**	**62**	**1**
Schedule 1 (species)			**1**	**1**	**1**	**1**	**1**
Annex 1 (species)			**0**	**1**	**0**	**0**	**1**
Annex 1 (individuals)			**0**	**1**	**0**	**0**	**1**
Red-List (individuals)			**224**	**126**	**104**	**189**	**143**
Red-List (species)			**6**	**5**	**7**	**8**	**11**
Amber-List (individuals)			**105**	**121**	**193**	**182**	**183**
Amber-List (species)			**10**	**14**	**13**	**14**	**19**
Green-List (individuals)			**9**	**38**	**44**	**132**	**78**
Green-List (species)			**10**	**12**	**14**	**19**	**26**
Introduced (species)			**1**	**4**	**1**	**1**	**2**
Introduced (individuals)			**1**	**1**	**1**	**1**	**1**

Red	Birds of Conservation Concern 5 - Red list species
Amber	Birds of Conservation Concern 5 - Amber list species
Green	Birds of Conservation Concern 5 - Green list species
Introduced	Non-native Introduced Species
Sch.1	Listed on Schedule 1 of the Wildlife and Countryside Act
Ann.1	Listed on Annex 1 of the EC Birds Directive
SBL	Scottish Biodiversity List species

5. Discussion & recommendations

5.1 Introduction

Woodland creation on upland sites has been shown to in some circumstances to increase overall density of the avifauna, including increases in the species count and populations of birds of conservation concern (Graham, et al. 2015). However, it is important to consider those species present prior to the woodland creation, their conservation status, and the impact on their population, particularly at a local level. A total of 81 species have been found breeding or feeding on land managed by gamekeepers, with some birds that are in decline elsewhere apparently making a comeback on heather moorland (The Moorland Association, 2021).

5.2 Schedule 1 species

Two schedule 1 species, Fieldfare and Merlin were recorded on site with the numbers of Merlin indicative of one breeding pair. Merlin was recorded twice during the same survey visit (Visit B), once flying into the site from the east and a second within the northern boundary. Fieldfare were recorded along Bleakhill Burn to the northwest of Whitslaid Faulds and to the northeast and northwest of Whitslaid Farm on the lower slopes of Whitslaid Hill. The fieldfare consisted of birds in flocks and were not part of the breeding birds assemblage at the site.

5.3 General Breeding Bird Distribution and Abundance

Breeding birds were distributed across the entire site with no major noticeable trend. However, the breeding bird density was slightly higher in the west of the site than in the east. Skylarks and meadow pipits were particularly involved in this high density in the west of the site. The bird density appeared to be higher in the areas where the habitat comprised of a mosaic of heathland/mire and grassland, than in those areas where grassland was more dominant.

The bird species present consisted of species typically associated with the habitats present on site with no noticeable species missing from the species assemblage that would be expected given they habitats at the site and the sites geographical location.

5.4 BoCC-listed species

Distribution of Red-listed species

A total of twelve red-list species were recorded on site including Curlew (12), Fieldfare (110), House martin (8), Lapwing (2), Lesser redpoll (6), Linnet (3), Little Grebe (1), Merlin (2), Mistle thrush (1), Skylark (116), Swift (4) and Whinchat (6).

Consistent records of calling males and breeding behaviour were sourced from similar locations during each survey visit indicating the presence of 143 breeding territories. Mistle thrush may be breeding within the site boundary, however, singing males were only recorded during the site visit in May. Curlew were focused on the far southeast and southwest areas of the site where the habitat consisted of acid grassland. Fieldfares are winter visitors to the UK and rarely breeding in the country. Those that do breeding in the UK tend to be in the far north. Lapwings were recorded in the open upland grassland in the southeast of the site. Lapwing numbers were low with an estimated breeding population for the site of just one pair. House martins were using the site for foraging only. Three pairs of lesser redpolls were recorded in the existing woodland blocks at the site. Despite the grassland habitat at the site just three pairs of linnets were recorded. This is likely a result of the site being an upland site where linnets tend to be in lower numbers that they are on lowland grassland sites. A single pair of little grebes was recorded nesting on the pond in the fare east of the site.

A single mistle thrush was recorded on the first visit. Whilst this is not enough data to confirm breeding it is likely that the mistle thrush breeding population consisted of a single pair. A single merlin was seen in the far east of the site on the second visit. It is likely that this pair was nesting on moorland to the east of the site and the site contributed to their hunting territory rather than hosting the nest site. Skylarks were abundant and distributed across the site where the habitat was suitable for them (i.e. grassland and heathland habitats). As is typically with upland, grass-dominated sites in the north of the British Isles, skylarks were the most abundant species present. Swifts were not nesting on the site but a peak of two pairs was recorded using the site for foraging. An estimated six pairs of whinchat were recorded. These were located in the heath-acid grassland mosaics and were distributed across the site in suitable habitat.

Distribution of Amber-listed species

A total of twenty amber-list species were recorded on the site. This included black-headed gull, bullfinch, common sandpiper, dunnock. Kestrel, lapwing, lesser black-backed gull, mallard, meadow pipit, oystercatcher, reed bunting, rook, sedge warbler, snipe, song thrush, wheatear, whitethroat, woodpigeon, wren and willow warbler. In total there were an estimated 83 territories of amber-listed species, or 45% of the overall breeding birds assemblage for the site. The amber-list consisted of a wide variety of species with diverse ecologies. Consequently they were distributed across the site with no noticeable general trend.

Distribution of Green-listed species

A total of 26 green-list species were recorded on site. The most abundant species generally comprised the typical assemblage of woodland birds including Carrion crow (peak count of 17), Chaffinch (peak count of 16) and Raven (peak count of 15). Consistent records of calling males and breeding behaviour were sourced from similar locations during each survey visit indicating the presence of 78 breeding territories.

Distribution of Introduced species

One introduced species, Canada goose, was recorded on site with numbers indicative of two breeding pairs.

5.5 Scottish Biodiversity List Species

A total of fourteen species listed on the Scottish Biodiversity List were recorded at the site. These were curlew (6 pairs), lapwing (1 pair), skylark (116 pairs), swift (0 pairs), linnet (2 pairs), reed bunting (7 pairs), merlin (1 pair – nest off site), kestrel (1 pair), red grouse (2 pairs), black-headed gull (1 pair), dunnock (1 pair), bullfinch (1 pair) and song thrush (1 pair).

5.6 Impact Assessment

There was no part of the site which had no breeding bird species present. In general the western half of the site had a higher density of birds, both in terms of numbers and species present. On a landscape level the surrounding habitat is dominated by upland acid grassland with patches of Calluna vulgaris dry heath. Pockets of conifer plantations are also present in the wider area. The most likely impacts of the woodland creation on breeding birds are (a) loss of suitable nesting habitat for open ground nesting species, and (b) the new woodland acting as a barrier between open habitats to the south of the site and the open habitats to the north of the site. Whilst it is inevitable that the woodland creation will lead to a loss of breeding territories within its land take, the connectivity between the open habitats to the south and north of the site can be maintained by appropriate woodland creation design, for example by incorporating wide south-north rides of open grassland and heathland vegetation which will allow open ground bird species to move between the open ground to the south and north of the site.

Impacts on Schedule 1-list species

The only breeding Schedule 1 species recorded on site was merlin with a single individual recorded on the second visit. Whilst merlin were not recorded nesting on the site there is suitable nesting habitat on site for this species, and the habitat is highly suitable for hunting by this species. Merlin will nest on woodland edges, particularly in young plantations, and will hunt small passerine bird species over new woodland whilst the trees are young and resemble scrub. However, once the trees begin to mature and the canopy closes over merlin would be expected to be lost from the site.

Impacts on Red and Amber-list species

The red and amber species which are most likely to be impacted are those that are open-habitat nesters. These species at the site include common sandpiper, curlew, linnet, merlin, skylark, and whinchat. As mentioned above, there was no evidence that merlin were nesting on the site. If this species was nesting it would be expected to have been seen on multiple occasions per survey visit, rather than just a single observation over all of the surveys combined. Woodland creation at the site is likely to impact on six curlew territories. These territories are located in the far southwest and far southeast of the site where the site borders habitat which consists of open heathland and upland grassland habitats. It may therefore be possible to plan the woodland creation in such a way as to avoid impacting on curlews by not planting these areas. However, this would require firm decisions regarding the future management of land adjacent to the site to avoid the open habitat left on the site from becoming 'boxed in' by future woodland creation schemes.

Woodland creation is likely to lead to a significant loss of skylarks. The current density of skylarks on the site is approximately 16 territories km^2. Research shows a typical density for skylarks of 2.46 territories per km^2 (Browne, et al. 2000); giving the Whitlaid site a skylark territory density of 6.5 times the typical nesting density in the UK. However, it must be noted that the skylark population statistics for the UK are very skewed as a result of intensive agriculture, particularly in the east of England. Consequently, skylark numbers on upland Scottish sites are almost always well in excess of the national average.

Impacts on Scottish Biodiversity List species

Of the Scottish Biodiversity List species present on site. The species likely to be impacted by woodland creation are curlew, lapwing, skylark, linnet, reed bunting and red grouse. All of which are likely to see significant declines in their populations at the site, or disappear from the site completely.

Edge effects

The proposed afforestation site covers a total area of 730.52 ha with an external boundary of 19.5 km. 0.43 km of the site boundary consisted of mature conifer crop with the remaining boundary being open habitats. Afforestation has been shown to impact not only the species within the planting area, but also has a displacement effect on breeding territories around the periphery of the planted area. The scale of this displacement effect varies from species to species (Arjun, *et al.*, 2011). Planting shrubs in the transition zone between the conifer crop and surrounding open moorland has been shown to significantly increase both the number of bird species and the number of individuals present within the transition zone (Callandine, *et al*., 2013). Patches of mature heather and conifers on the edges of plantations have been shown to be preferred for nesting by twite over open habitats (Wilkinson & Wilson, 2010). Consequently the planting scheme is likely to have a positive impact on some species and also attract additional species to site, such as twite.

The impact of forest edge exposure on nesting waders is a topic still in the infancy of investigation and there are as yet few published studies on this topic. Whilst the study by Amur, *et al*. (2011) provides a useful analysis of the

causes of decline in upland waders (including afforestation) it does not provide a reliable quantitative assessment of the forest edge displacement effect on waders.

5.7 Recommendations

Should the afforestation of this site proceed, mitigation measures should be undertaken to compensate for loss of open habitat. The afforestation scheme should be planned so that connectivity of open habitat between the north and south of the site, and east and west of the site is maintained. This can be done by routing fire breaks through the site such that they provide low-sward habitat similar to the habitat in the surrounding area. The fire brakes will then provide habitat corridors maintaining connectivity through the site.

Native shrub species of local provenance should be planted on the forest edges and along firebreaks. This should include berry-baring species such as holly *Ilex aquifolium* and rowan *Sorbus aucuparia*.

6. Conclusion

The site hosted an avifauna that was typical of an upland moorland/farmland site. Overall the diversity of the avifauna was low with a total of 58 species recorded during the surveys. The species recorded were typical of those found on upland moorland and farmland. Skylarks were noticeably abundant at an estimated 16 territories per km^2. Research shows a typical density for upland nesting skylarks of 2.46 territories per km2 (Browne, et al., 2000) giving Whitslaid a skylark density 6.50 times greater than is typically recorded. Given that the site is surrounded by similar habitats it would be reasonable to assume that the skylark population in the surrounding area is of a comparable density as recorded on the site. If this is the case the magnitude of the impact on skylarks would be lower than the high density suggests, although this would depend on future land use in the surrounding area

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Ecology Report

Whitslaid Afforestation

Produced for Eskdalemuir Forestry Ltd.

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Disclaimer

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The information, results and observations recorded within this document were accurate at the time of survey. We accept no liability for any errors or activities and changes to the survey area which may have occurred post survey.

S.A.P Ecology & Environmental Ltd will submit any records of protected species to the appropriate biological records centre on an annual basis.

Contents

1. Introduction

1.1 Project background

S.A.P Ecology & Environmental Ltd were contacted by Eskdalemuir Forestry Ltd who propose a woodland creation scheme on an area of land at Whitslaid Farm, Scottish Borders (Figure 1). The proposed plans will see the creation of a plantation woodland and associated infrastructure on 730ha of land previously used for agriculture. Any ecological constraints identified by this report are due to be incorporated within the afforestation plan and avoided wherever possible to minimise the impact on the surrounding ecology. The land proposed for this development will be referred to as 'the site' in the remainder of this document.

The site is located at central grid reference NT42493 17826, approximately 4.6km north-north-east and 4.3km south-west of the villages of Roberton and Ashkirk respectively. The site is situated within a landscape primarily used for livestock farming interspersed with coniferous shelterbelts and commercial forestry plantations within the wider landscape. Ale Water bisects the site with several of its tributaries including Bleakhill Burn, Boglie Sike, Gowdie Sike, Esdale Sike and Harehope Sike either flowing through or from the site.

1.2 Project brief

S.A.P Ecology & Environmental Ltd were commissioned to carry out a suite of surveys of the site. The brief was to:

- Undertake a preliminary ecological appraisal (PEA) and protected species walkover of the area proposed for afforestation at Whitslaid, inclusive of a 30m buffer to account for badgers (where applicable);
- Record and map all habitats present on site and make an onsite assessment of each habitat and their potential to support protected species and species of conservation concern;
- Record target notes of any habitats or points of interest too small to map;
- Undertake a National Vegetation Classification (NVC) assessment of the site;
- Record all habitats of importance, inclusive of any flushes which could identify Ground Water Dependant Terrestrial Ecosystems (GWDTE);
- Complete a desk study using information from the S.A.P Ecology & Environmental Ltd protected species database and from the local records centre for available records of species of conservation concern within 5km of the site;
- The production of a detailed ecology report of the PEA, protected species walkover and NVC survey;
- This report details all methodologies used, results, and any appropriate recommendations or advice for further survey, if required;
- The report is supported by appropriate digitised mapping.

1.3 Limitations

All surveys were completed at the appropriate time of year in optimal conditions. Significant windblow was recorded in the shelter belts on site, therefore a thorough search of the woodlands could not be safely completed.

2. Methodology

2.1 Desk Study

Biological records were obtained from the Wildlife Information Centre (TWIC) which included the site and a 5km buffer. Records were to include any protected or notable species within the search area. Notable species include those on the Scottish Biodiversity List, UK or Local Biodiversity Action Plan, IUCN or UK red list, and those that are scarce or threatened. MAGIC Maps and Site link were also consulted for any records of statutory and non-statutory designated sites within 2km of the survey area.

2.2 Field Survey

This section discusses the protected species and habitats surveyed during the 2023 season. It does not include the results of the breeding bird surveys which are discussed in a separate report (SAP Ref: EFL200/002/001).

Preliminary Ecological Appraisal and Protected Species Walkover

A preliminary ecological appraisal comprising of a Phase 1 Habitat Survey (JNCC, 2010) was carried out on all land on site and with an additional 30m buffer in suitable areas of badger habitat.

The survey was completed following the standard methods as detailed in the Guide for Preliminary Ecological Appraisal (CIEEM, 2013) and in line with the JNCC guidelines for Phase 1 habitat survey. Phase 1 habitat survey is a standard technique for rapidly assessing large areas for specific habitats and providing baseline data.

Details of all habitats present within the survey area, including their species composition was recorded.

In addition, a protected species walkover survey was undertaken in which all land within the site was systematically walked, looking for evidence of protected species and species of conservation concern. Species to note include amphibians, badger, bats, birds, otter, reptiles, and water vole. All areas of habitat, with the potential to host protected species, evidence of protected species, or visual sightings, were recorded, and GPS coordinates taken.

GCN – Habitat Suitability Index (HSI) Survey

Ponds 1-9 were subject to a HSI survey to assess their suitability to support Great Crested Newt. Each pond was assessed based on ARGUK advice note 5 using ten criteria ranging from poor to excellent (see table 1 below).

Table 1: HSI Scoring criteria.

< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

GCN – eDNA sampling

At the time of the PEA assessment, all ponds were highlighted to have a level of potential to accommodate breeding GCN (Ponds 1-9). As a result, it was elected to conduct eDNA sampling to determine the presence/absence of GCN. eDNA sampling determines the presence/likely absence of GCN within a waterbody through the detection of traces of DNA that have been shed into the aquatic environment. This method does not provide any evidence of population size.

Twenty samples were taken around margins of all suitable ponds where the water was more than 10cm deep. The sampling focuses on areas of suitable habitat including areas of vegetation where egg-laying may occur and open areas where displaying may occur. A ladle was used to collect samples of the pond water, which were then mixed within a sterile whirl pack before being decanted into six sample tubes. Samples were refrigerated before being sent to the analysing laboratory via courier.

NVC Survey

The survey was carried out in July/August 2023 during dry conditions when the majority of species were in full flower. The NVC communities within the survey boundary were mapped by eye and classified according to Rodwell (1998a, 1998b, 2003). Where required, five 2 x 2m quadrats were set up for each habitat type where detailed floristic samples were recorded to allow the habitat to be categorised later into the appropriate NVC classification. Small areas of interest and general descriptions of features were made using target notes as per Phase 1 survey methodology (JNCC, 2010). The NVC survey area was mapped in the field then digitised using GIS to produce a detailed map of dominant and sub-dominant community composition.

NVC communities were identified by running the field data through dedicated NVC data analysis software: Modular Analysis of Vegetation Information System (MAVIS) (CEH, 2021). The raw data, and software analysis results, were compared to the community descriptions in the relevant volumes of British Plant Communities (Rodwell, 1998 - 2000). Areas supporting communities which were potentially dependent on groundwater sources were also classified according to guidance issued by SEPA (2017). In order to classify mosaics accurately, each polygon was assigned a score for their groundwater dependency potential. The scoring system used is the one detailed in the SEPA guidance (2017). See Table 1 for the scoring system used to provide guidance on groundwater potential for each community.

Table 2: Scoring system for potential GWDTE.

Potential GWDTE Score 5 = Highest 0 = Lowest	**Habitat attributes** (adapted from Table 2 of SEPA Land Use Planning System SEPA Guidance Note 31, 2017)
5	All NVC communities present (regardless of number) are listed as being of HIGH potential dependence on groundwater.
4	NVC community/mosaic with dominant community listed as of HIGH potential dependence on groundwater with one or more communities of lesser dependence.
3	NVC community/mosaic with a sub-dominant community listed as of HIGH potential dependence on groundwater with the dominant community listed as lesser dependence.
2	NVC community/mosaic with dominant community listed as of MODERATE potential dependence on groundwater with other communities present of lesser dependence.
1	NVC community/mosaic with sub dominant community listed as MODERATE and dominant community not listed as potentially dependent on groundwater.
0	NVC community/mosaic supports no communities with potential dependence on groundwater.

2.3 Surveyors

Table 3: Survey and Surveyor details

Survey	Dates	Surveyor(s)
PEA & NVC	3rd July – 11th August 2023	[redacted]
eDNA	15th May 2023	
EPS Walkover	12th June 2023	
Riparian Mammals	14th June 2023	

3. Results

3.1 Desk Study

This section provides a summary of the information gathered from TWIC, the S.A.P Ecology & Environmental protected species database for protected species, data collected by the public and from MAGIC Map and Site link for protected sites.

International & National Designated Sites

One nationally designated site was recorded within 2km of the site, the Ale Water. The Ale Water is designated as part of the River Tweed Special Area of Conservation (SAC) and flows through the site. The River Tweed SAC is of national importance for its populations of Brook (*Lampetra planeri*), River (*L. fluviatilis*) and Sea Lamprey (*Petromyzon marinus*), Atlantic salmon (*Salmo salar*) and Otter (*Lutra lutra*).

Locally Designated Sites

No locally designated sites were recorded within 2km of the site.

Protected and notable species

The data search recorded protected species and species of conservation concern within 1km of the survey area. A summary of species can be seen in table 4.

Table 4: Summary of data search 1km

Common Name	Scientific Name	Designation						Number of records if known
		WCA Sch	Hab R	UKBAP	SBAP	LBAP	IUCN	
Mammals								
Common Pipistrelle	*Pipistrellus pipistrellus*	✓		✓	✓	✓	LC	13
Soprano Pipistrelle	*Pipistrellus pygmaeus*	✓				✓	LC	10
Daubenton's Bat	*Myotis daubentonii*	✓				✓	LC	1
Myotis Bat species	*Myotis*	✓		✓		✓	LC	7
Noctule Bat	*Nyctalus noctula*	✓		✓		✓	LC	2
Eurasian Badger	*Meles meles*					✓	LC	3
Eurasian Otter	*Lutra lutra*	✓		✓	✓	✓	NT	9
Eurasian Red Squirrel	*Sciurus vulgaris*	✓	✓	✓	✓	✓	T	2
Brown Hare	*Lepus europaeus*					✓	LC	1
West European Hedgehog	*Erinaceus europaeus*			✓	✓		VU	1
Insects								
Agabus unguicularis	*Agabus unguicularis*					✓		6
Anacaena limbata	*Anacaena limbata*				✓	✓		4
Brooklime Gall Weevil	*Gymnetron veronicae*					✓		1

Ctenicera pectinicornis	*Ctenicera pectinicornis*					✓		1
Enochrus ochropterus	*Enochrus ochropterus*					✓		1
Helophorus arvernicus	*Helophorus arvernicus*					✓		1
Helophorus flavipes	*Helophorus flavipes*					✓		12
Hydrocyphon deflexicollis	*Hydrocyphon deflexicollis*					✓		2
Hydroporus elongatulus	*Hydroporus elongatulus*					✓		1
Laccobius minutus	*Laccobius minutus*					✓		1
Stenus niveus	*Stenus niveus*					✓		1
Northern Brown Argus	*Aricia artaxerxes*			✓	✓	✓	LC	1
Orange-tip	*Anthocharis cardamines*				✓			2
Latticed Heath	*Chiasmia clathrata*				✓			1

**WCA Sch –Wildlife & Countryside Act 1981*
** Hab R - The Habitats Regulations 1994*
**UKBAP – UK Biodiversity Action Plan 1994*
**SBAP – Scottish Biodiversity Action Plan*
**LBAP – Renfrewshire Biodiversity Action Plan 2018*
**IUCN – International Union for Conservation of Nature threat level*

Other Notable Species

Two species of fish; European eel (*Anguilla Anguilla*) and Brown/Sea trout (*Salmo trutta*) were recorded within the search area; however, these records are from Lochs to the northwest of the site. All bird records are detailed in the breeding bird report.

Invasive Species

There are no records of invasive species within 1km of the site.

3.2 Preliminary Ecological Appraisal

The PEA was completed in conjunction with the NVC between the 3rd July – 11th August 2023. The site has historically been used for the hill farming of cattle and sheep, several shelterbelts of coniferous tree species and an area of broadleaf planting are also present within the site boundary which are directly linked to the historic land use.

Phase 1 Habitats

Twenty-nine Phase 1 habitats were recorded during the field survey and are mapped in Figure 2A & 2B. Table 5 illustrates the breakdown of habitats within the site boundary, their estimated area and percentage cover.

Semi-improved acid grassland is the dominant habitat within the site boundary with dry heath/acid grassland also covering a significant area and collectively they cover over half of the site. Acid grassland is also associated with bracken, dense stands of which were recorded most notably surrounding Whitslaid Farm with patches on Hummel Side and Lamb Knowe to the west. Small patches of bracken were also recorded on and around Cringle Law to the east of the site. The area of continuous bracken make up over 10% of the surveyed area.

Table 5: Breakdown of Phase 1 Habitats by area and cover within site boundary.

Phase 1 Habitats	Area (ha)	Cover (%)
A1.1.1 Broadleaved woodland – semi natural	1.97	0.3
A1.2.2 Coniferous woodland – plantation	12.49	1.7
A1.3.1 Mixed woodland – semi-natural	1.05	0.1
A2.1 Scrub – dense/continuous	10.34	1.4
A2.2 Scattered scrub	14.92	2.0
A3.1 Scattered trees	0.42	0.1
B1.2 Acid grassland – semi improved	212.36	29.0
B2.2 Neutral grassland- semi-improved	19.66	2.7
B4 Improved grassland	32.27	4.4
B5 Marsh/marshy grassland	52.52	7.2
C1.1 Bracken – continuous	84.04	11.5
C1.2 Bracken – scattered	19.22	2.6
C3.1 Other tall herb and fern – ruderal	0.11	0.0
D1.1 Dry dwarf shrub heath – acid	41.28	5.6
D1.2 Dry dwarf shrub heath – basic	0.02	0.0
D5 Dry heath/acid grassland	169.60	23.1
D6	23.75	3.2
E1.6.1 Blanket sphagnum bog	6.48	0.9
E1.7 Wet modified bog	16.09	2.2
E2.1 Flush and spring – acid/neutral flush	0.81	0.1
E2.2 Flush and spring – basic flush	7.74	1.1
E3.1 Fen – valley mire	1.30	0.2
E3.3 Fen – flood plain mire	0.91	0.1
F1 Swamp	1.38	0.2
F2.1 Marginal and inundation – marginal vegetation	0.14	0.0
G1.2 Standing water – mesotrophic	0.68	0.1
G1.3 Standing water – oligotrophic	0.03	0.0
I2.1 Quarry	0.25	0.0
J3.6 Buildings	0.01	0.0
J4 Bare ground	0.70	0.1
Linear Habitats		
G2.3 – Running water – oligotrophic		
G2.4 – Running water – dystrophic		
J2.1.2 – Intact hedge – species poor		
J2.4 – Fence		
J2.5 – Wall		
J2.7 – Boundary removed		

3.3 National Vegetation Classification (NVC) Results

This section provides the results of the National Vegetation Classification survey. Each plant community recorded as being present is described in its own paragraph. The groundwater dependent terrestrial ecosystem status of each community is presented in the coloured box presented under each community heading. GWDTE status boxes are colour coded as Red: High ground-water dependence, Amber: Moderate ground-water dependence and Green: Not ground-water dependent. Annex 1 habitats are identified in the GWDTE status bar for each habitat. The communities are presented in the order in which they appear in Rodwell, volumes 1, 2, 3 and 5. The distribution of NVC communities at the site are shown in Figure 4A and 4B.

NVC Communities Recorded on Site

The paragraphs below describe each of the plant communities recorded at the site in accordance to the community descriptions provided by Rodwell, volumes 1, 2, 3 and 5 (Rodwell, 1998[1]; Rodwell, 1998[2]).

W3: Salix pentandra - Carex rostrata woodland (A2.1: Dense Scrub)

GWDTE status: Potential for moderate ground-water dependence. **Annex 1:** 91D0

Small patches of W3 scrub were distributed along the watercourses, particularly the Ale Water and the Bleak Hill Burn in the west of the site. In the east of the site W3 woodland was present along the Ale Water. The plant community present was a poor match to W3 but this was the closest-matching NVC community. The plant community along the Ale Water was dominated by *Salix aurita* with a range of other plant species present including (amongst others) *Calluna vulgaris, Potentilla erecta, Stalleria graminae, Galium saxatile*. The ground flora was that of acid grassland of the U4 *Festuca ovina – Agrostis capillaris – Galium saxatile* community.

W4: Betula pubescens - Molinia caerulea woodland (A1.1.1: Semi-Natural Broadleaved Woodland)

GWDTE status: Potential for high ground-water dependence. **Annex 1**: 91D0

There were a small number of patches of W4 woodland in the west of the site, particularly along the Ale Water where the habitat consisted of riparian woodland. In the east of the site W4 was present along the Ale Water and the Eskdale Sike. The dominant tree species were *Betula pubescens, Sorbus aucuparia* and *Salix aurita*. The ground flora comprised of mire habitat most closely resembling that of M25c (*Molinia caerulea – Potentilla erecta* Mire, *Angelica sylvestris* sub-community).

W6: Alnus glutinosa - Urtica dioica woodland (A1.1.1: Semi-Natural Broadleaved Woodland)

GWDTE status: Potential for moderate ground-water dependence. **Annex 1**: 91D0

W6 woodland was present on the upper reaches of the Poglie Sike in the west of the site. The habitat was surrounded by U5 acid grassland and U20 *Pteridium aquilinium – Galium saxatile* community. The woodland comprised of *Salix pentandra, Salix caprea, Salix aurita,Sorbus aucuparia and Alnus glutinosa* with a ground flora consisting of MG6 neutral grassland comprising of *Dactylus glomerata, Ranunulus acris, Holcus lanatus* and *Filipendula ulmaria* amongst others. The woodland best matched that of the W6a typical subcommunity.

W7: Alnus glutinosa - Fraxinus excelsior - Lysimachia nemorum woodland (A1.1.1: Semi-Natural Broadleaved Woodland)

GWDTE status: Potential for high ground-water dependence. **Annex 1: 91E0**

W7 comprised of a single woodland block in the southeast of the site surrounded by U2 acid grassland and M6/M15 mire. The habitat consisted of a canopy of *Alnus glutinosa, Fraxinus excelsior, Betula pubescens, Salix pentandra* and *Ulmus* sp. The field layer was diverse and consisted of a wide range of flowering plants and grasses including *Filipendula ulmaria, Cerastium* sp., *Veronia montana, Urtica dioica, Deschampsia cespitosa, Holcus lanatus, Cirsium palustre, Stalleria graminae,* and *Juncus conglomeratus* amongst others.

W21: Crataegus monogyna – Hedera helix scrub (A2.1: Dense Scrub)

GWDTE status: Not ground-water dependent. **Annex 1: N/A**

The W21 community comprised of a very small patch (too small to map) at NT4319 1801, surrounded by MG7 grassland, M27 mire and W3 woodland. The ground flora comprised of MG6 mesotrophic grassland and the plant community was very localised having developed as a result of being fenced off. The scrub comprised of *Cratargus monogyna, Prunus spinosa, Malus sylvestris amd Sambucus nigra* with a diverse ground flora of grasses and forbs.

W23: Ulex europaeus - Rubus fruticosus scrub (A2.1: Dense Scrub)

GWDTE status: Not ground-water dependent. **Annex 1: N/A**

An area of W23 *Ulex europeaus* scrub was present in the northeast of the site surrounded by U20 *Pteridium aquilinum – Galium saxatile* community. The scrub was dominated by *U. europeaus* with other scrub species present being *Salix aurita,* and the dward shrub *Calluna vulgaris*. The ground flora comprised of *Pteridium aquilinum, Campanula routundifolia, Rumex acetosa, Thymus praecox, Achillea millifolium, Holcus lanatus, Potentilla erecta, Galium saxatile, Trifolium repens, Agrostis stolonifera, Achillea ptarmica, Plantago lancerolota* and *Succisa pratensis*.

M6: Carex echinata - Sphagnum recurva/auriculatum Mire

GWDTE status: Potential for high ground-water dependence. **Annex 1: N/A**

The M6 community was restricted to the northeast corner of the site and was surrounded by H10/U2 dry heath – acid grass mosaic, and in the southeast of the site surrounded by U2 acid grassland and W7 woodland. The M6 community was located in natural hollows which had resulted in a localised wetland area. The plant community comprised of wetland indicator species including cotton grasses, rushes, sedges. The plant community comprised of *Eriophorum vaginatum, Junus bulnosus, Carex panicea, Carex rostrata,* Juncus subnodulosus, Juncus inflexus, Molinia caerulea, *Calluna vulgaris, Carex nigra, Carex echinate, Juncus squarrosus, Cirsium palustre, Potentilla erecta, Erica tetralix and Achillea ptarmica.* There was some invading scrub comprising of *Betula pubescens*.

M15: Scirpus cespitosus - Erica tetralix Wet Heath

GWDTE status: Potential for moderate ground-water dependence. **Annex 1:** 4010

M15 wet heath covered a sizable area within the northwest of the site in association with other mire communities M17 and M19. The M15 was of the *d Vaccinium myrtillus* subcommunity. Plant species within the M15 wet heath comprised of *Sphagnum fallax, Sphagnum subnitens, Eriophorum vaginatum, Erica tetralix Calluna vulgaris, Scirpus cepitosus, Molinia caerulea. Deschampsia flexuosa, Juncus conglomeratus, Pedicularis palutustris, Nardus structa, Vaccinium myrtillus, Carex nigra* and *Cirsium palustre* amongst others. The M15 was of the *d Vaccinium myrtillus* subcommunity.

M17: Scirpus cespitosus - Eriophorum vaginatum Blanket Mire

GWDTE status: Not ground-water dependent. **Annex 1:** 7130

M17 blanket mire was the dominant plant community along the western boundary of the site. The community comprised of the *b Cladonia* spp. community. Species present consisted of *Eriophorum vaginatum, Erica tetralix, Calluna vulgaris, Vaccinium myrtullis, Tricophorum cespitosa, Huperzia selago, Carex flacca, Molinia caerulea* and Narthecium ossifragum amongst other species.

M18: Erica tetralix – Sphagnum papillosum Blanket Mire

GWDTE status: Potential for high ground-water dependence. **Annex 1:** 7110, 7130

A single small patch of M18 was located in the west of the site between patches of H12 heath and H12/U5 dry heath acid grassland mosaic. The M18 community comprised of *Eriophorum vaginatum, Calluna vulgaris, Narthecium ossifragum, Sphagnum recurvum, Carex rostrata, Vaccinium oxycoccos, Erica tetralix, Vaccinium myrtillus*. The groundflora comprised of *Sphagnum recurvum, Drosera rotundifolia* and *Molinia caerulea* amongst others.

M19: Calluna vulgaris - Eriophorum vaginatum Blanket Mire

GWDTE status: Not ground-water dependent. **Annex 1:** 7110, 7130

The M19 community was present in small patches amongst the M17 blanket mire in the west of the site. The M19 community comprised of *Erica tetralix, Calluna vulgaris, Eriophorum vaginatum, Polytricum* sp., *Sphagnum fallax* and *Molinia caerluea* amongst others.

M23: Juncus effusus/acutiflorus - Galium palustre Rush Pasture

GWDTE status: Potential for high ground-water dependence. **Annex 1:** N/A

M23 comprised of mire habitat that was in general terms drier than the other mire habitats present on site, possibly due to the presence of historic agricultural drainage and was best represented by the M23b sub-community which is less botanically rich. The M23 mire was located in relatively small patches in the centre and east of the site. The M23 mire comprised of rushes of the species *Juncus effusus, Juncus conglomeratus* and *Juncus*

inflexus as well as other wet ground plant species such as *Carex rostrata, Filipendula ulmaria, Equisetum palustre, Carex panicea, Myosotis scorpioides* and *Glyceria maxima*.

M27: Filipendula ulmaria - Angelica sylvestris Mire

GWDTE status: Potential for moderate ground-water dependence. **Annex 1:** N/A

The M27 community comprised of small patches of mire in the northeast of the site dominated by *Filipendula ulmaria* and the rush species *Juncus conglomeratus, Juncus effusus, Juncus inflexus* and *Juncus bulbosus*. A number of sedge species were also present including *Carex panicea, Carex nigra, Carex rostrata, Carex lasiocarpa, and Carex vesicria* along with *Potentila palustrus, Myosotis scorpioides, Crepis paludosa* and *Succisa pratensis*.

H10: Calluna vulgaris - Erica cinerea Heath

GWDTE status: Not ground-water dependent. **Annex 1:** 4030, 4060

H10 heath was located in the northeast of the site and comprised of two sizable patches on the slopes of Whitslaid Hill. This habitat was present in a mosaic with U2 *Deschampsia flexuosa* acid grassland and was therefore not a prime example of the Annex 1 habitats. In addition, the habitat had been subject to historic drainage and is likely a significant reason for its poor condition. The H10 consisted of dwarf shrub layer of *Calluna vulgaris*. Whilst there was a noticeable lack of *Erica cinerea* within the dwarf shrub layer, the field layer (*Molinia caerulea, Nardus stricta, Potentilla erecta, and Galium saxatile*) was that of H10 rather than that of H9 *Calluna vulgaris – Deschampsia flexuosa* heath.

H12: Calluna vulgaris - Vaccinium myrtillus Heath

GWDTE status: Not ground-water dependent. **Annex 1:** 4030, 4060

The H12 dry heath community at the site consisted of scattered patches. In the west of the site H12 was in a mosaic with U5 *Nardus stricta – Galium saxatile* acid grassland. Whilst in the east of the site the H12 community was located in a mosaic with U5 in one area on Esdale Law, and surrounded by U2 acid grassland on eastern slope of Cringle Law. The H12 community comprised of a dwarf shrub layer of *Calluna vulgaris* and *Vaccinium myrtullis* with a field layer of U2 acid grassland comprising of *Deschampsia flexuosa, Nardus stricta, Juncus squarrosus, Potentilla erecta, Gallium saxatile, Molinia caerulea* and *Deschampsia flexuosa*.

U2: Deschampsia flexuosa Acid Grassland

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

The U2 grassland community was present in mosaics with the H10 and H12 heaths in the west of the site, the southeast and the northeast of the site. The U2 community was overwhelmingly dominated by *Deschampsia flexuosa* with other species present in lesser abundance being *Erio[horum vaginatum, Nardus stricta, Molinia caerulea, Juncus conglomeratus, Carx nigra, and Sohagnum capillifolium*.

U5: Nardus stricta - Galium saxatile Acid Grassland

GWDTE status: Not ground-water dependent. **Annex 1**: N/A

In the west of the site U5 acid grassland was in a mosaic with the H12 dry heath; as well as the being significant patches of U5 acid grassland on its own in the west of the site. Whilst in the east of the site the U5 community consisted of a single large block. The U5 community was represented by the U5a subcommunity. The dominant plant species within the U5 were *Nardus stricta, Potentilla erecta, Holcus lanatus, Juncus conglomeratus, Anthoxanthum odoratum, Molinia caerulea, Agristis capillaris, Galium saxatile, Polytrichum* sp., *Festuca rubra,* and *Agrostis gigantea*.

U6: Juncus effusus – Festuca ovina Acid Grassland

GWDTE status: Potential for moderate ground-water dependence. **Annex 1:** N/A

A small patch of U6 acid grassland was present on the eastern bank of the Boglie Sike in the west of the site, to the west of the two existing small conifer plantations. The plant species within the U6 community consisted of *Potentilla erecta, Juncus conglomeratus, Anthoxanthum odoratum, Juncus squarrosus, Molinia caerulea, Agrostis capillaris, Hy;locomium splendens, Carex nigra, Festuca ovina* and *Luzula multifolia*.

U20: Pteridium aquilinum - Galium saxatile Community

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

The U20 community was distributed across the site within the dry heaths and acid grasslands where grazing pressure has allowed *Pteridium aquilinium* to invade. The community was species poor consisting of *Pteriduim aquilinium, Nardus stricta, Anthoxanthum odoratum* and other species typically associated with this plant community.

MG5: Cynosurus cristatus – Centaurea nigra Neutral Grassland

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

MG5 comprised of a very small patch located within the MG9 mesotrophic grassland in the southeast of the site. The plant community consisted of *Lathyrus pratensis, Achillea millefolium, Ranunculus acris, Agristis stolonifera, Holcus lanatus, Lolium perenne, Lotus corniculatus, Trifolium repens, Trifolium pratense, Stellaria graminae* and *Filipendula ulmaria* amongst other species.

MG6: Lolium perenne - Cynosurus cristatus Neutral Grassland

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

MG6 comprised of a single field in the east of the site. As is typical with this plant community the species richness was poor and was dominated by *Lolium perenne* and *Cynosurus cristatus*.

MG7: Lolium perenne Neutral Grassland

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

MG7 comprised of a small number of fields in the east of the site. As is typical with this plant community the species richness was poor and was dominated by *Lolium perenne*.

MG9: Holcus lanatus - Deschampsia cespitosa Neutral Grassland

GWDTE status: Potential for moderate ground-water dependence. **Annex 1:** N/A

The MG9 community consisted of a single field in the east of the site at Cadgers Hole located on the eastern bank of the Esdale Sike. The plant community was relatively poor and was represented by the *'a' Poa trivialis* subcommunity. Plant species present included *Deschampsia cespitosa, Holcus lanatus, Trifolium repens, Dactylus glomorata* and *Urtica diocia* (amongst others). This habitat has been heavily modified with historic drainage running through the centre.

MG10: Holcus lanatus - Juncus effusus Rush-Pasture

GWDTE status: Potential for moderate ground-water dependence. **Annex 1**: N/A

MG10 was restricted to small patches in the southwestern corner of the site, along the Ale Water on the southern boundary in the west of the site, and in the far eastern end of the site. The community comprised of the typical *a* subcommunity. The sward was species-poor comprising predominantly of *Juncus effusus, Holcus lanatus, Agrostis stolonifera* and *Ranunculus repens*.

OV25: Urtica diocia - Cirsium arvense Community

GWDTE status: Not ground-water dependent. **Annex 1:** N/A

The OV25 community comprised of a single small patch in a mosaic with S11 swamp and M27 mire. The OV25 community was species poor consisting of *Urtica diocia, Cirsium arvense* and *Holcus lanatus*. This is a pioneer community found on disturbed ground. It is often found in areas which have been previously stripped of vegetation and then left to grow wild.

S11: Carex vesicaria Swamp

GWDTE status: Potential for high ground-water dependence. **Annex 1:** N/A

S11 swamp consisted of two small patches located in natural hollows along the Ale Water in the east of the site. Constant species within the S11 swamp consisted of *Mentha aquatica, Phalaris arundinacea* and *Myosotis scorpioides*. Other species present consisted of *Stellaria graminae, Stachys paliustris, Holcus lanatus, Cirsium arvense* and *Filipendula ulmaria* amongst other species.

S14: Sparganium erectum Swamp

WDTE status: Not ground-water dependent. **Annex 1**: N/A

A small patch of S14 swamp was located in southeast of the site surrounding the upper reaches of the Harehope Sike. The plant community consisted of *Potomogeton* sp., *Callitriche palustris, Carex rostrata, Filipedula ulmaria*, and *Juncus conglomeratus* amongst other species.

3.4 Protected Species

The protected species walkover took place on the 12th June 2023 with the specific riparian mammal focus being conducted on the 14th June 2023. In addition, opportunistic recordings were taken during the other surveys conducted on the site and when on site for progress meetings.

Badger

Badgers have been confirmed as present [redacted].

Bats

Three structures were surveyed as part of the EPS walkover, which were considered to have features suitable to support roosting bats, [redacted]

Great Crested Newt

Nine ponds were recorded within the site boundary during the survey and varied from well vegetated along the edges to devoid of vegetation either as a result of livestock or waterfowl. These ponds were subject to a Habitat Suitability Index (HSI) survey to calculate the suitability each pond has to support Great Crested Newt (GCN). Eight of the nine ponds recorded a 'Poor' suitability with the remaining pond recording a 'Below average' suitability. The ponds were also subject to eDNA testing to help confirm the presence or absence of GCN. The tests all recorded a negative result for the presence of GCN.

Otter

No otters were recorded during the survey however several spraints were identified [redacted]. Due to the particularly warm weather during the survey, all but one of the spraints were desiccated and difficult to age

however it was estimated that these were recent (4-14 days) with a single fresh specimen recorded on the day of survey. The bridge to Whitslaid Farm and a second to the northeast, just outside the survey boundary were thoroughly inspected for signs of otter habitation with no evidence recorded.

Water vole

No evidence of water vole was recorded during the survey. The main watercourse, Ale Water was fast flowing with steep banks, undercut in places due to bank erosion and therefore not considered optimal habitat.

Red Squirrel

The majority of the woodland within the survey area is not considered optimal habitat for Red Squirrel due to the isolated locations in relation to other woodland, lack of species diversity (predominantly Sitka spruce) and exposure. Several of the coniferous blocks of woodland had suffered from significant windblow at the time of survey. No Squirrel dreys or evidence of feeding was recorded during the survey, however it should be noted that the areas of woodland suffering from windblow could not be safely accessed which did limit the survey.

Reptiles

Due to the current land use, exposed condition and the practicality of survey, a full refugia deployment and reptile survey was not completed on the site. All reptile sightings were opportunistic and recorded throughout the reptile season. Eleven Common lizard (*Zootoca vivipara*) were recorded at five locations across the northeastern extent of the site. These comprised of both adults and juveniles and were recorded under corrugated iron sheets, basking on a log pile and drystone walls and within an area of bracken. Additionally, two common lizard skins were identified within an area of bracken and within marshy grassland. An Adder (*Vipera berus*) skin was recorded on an area of bare ground in the vicinity of the old bothy building at Whitslaid Faulds. Potential refugia for reptiles was identified in the form of stone walls located around the bothy area, along the southwestern boundary of the site and sections on the lower reaches of Whitslaid Hill towards the north of the site. The stone walls to the east of the bothy form a rough grid pattern which offer multiple aspects for both shelter and basking opportunities.

3.5 Target Notes

Target notes were taken for features/evidence of protected species, and habitats too small to classify, or features of note which could influence the design of the project:

- **TN1 – TN6 – Drystone wall enclosures/sheepfold** (Plates 1 & 2).
  Structures provide good opportunities for nesting birds, basking/hibernating habitat for reptiles.

Plate 1: Sheep enclosure.

Plate 2: Sheep enclosure.

- **TN7 - Pond** to the eastern edge of site (Plate 3).
  Grid reference: NT4508718506. Variety of aquatic insects including dragonfly, damselfly and moth species.

Plate 3: Pond (E. extent).

- **TN8 - Mature Ash** with potential roost features (PRFs) for bats [redacted]

Plate 4: Mature Ash (TN8).

Plate 5: Knot hole.

Plate 6: Stem fissure.

4. Discussion, Impacts & recommendations

4.1 Habitats

Habitat

The proposal seeks to afforest an area currently dominated by acid grasslands and shrub heath vegetation. Following detailed survey the site hosted 27 NVC plant communities. These were W3: Salix pentandra - Carex rostrata woodland (A2.1: Dense Scrub) (moderate ground water dependent Annex 1), W4: Betula pubescens - Molinia caerulea woodland (A1.1.1: Semi-Natural Broadleaved Woodland) (high ground water dependent, Annex 1), W6: Alnus glutinosa - Urtica dioica woodland (A1.1.1: Semi-Natural Broadleaved Woodland) (moderate ground water dependent, Annex 1), W7: Alnus glutinosa - Fraxinus excelsior - Lysimachia nemorum woodland (A1.1.1: Semi-Natural Broadleaved Woodland) (high potential for ground water dependent, Annex 1), W21: Crataegus monogyna – Hedera helix scrub (A2.1: Dense Scrub), (not ground water dependent), W23: Ulex europaeus - Rubus fruticosus scrub (A2.1: Dense Scrub) (not ground water dependent), M6: Carex echinata - Sphagnum recurva/auriculatum Mire (high potential for ground water dependent), M15: *Scirpus cespitosus - Erica tetralix* Wet Heath (moderate potential for ground water dependent), M17: Scirpus cespitosus - Eriophorum vaginatum Blanket Mire *(not ground water dependent, Annex 1),* M18: Erica tetralix – Sphagnum papillosum Blanket Mire *(high potential for ground water dependent, Annex 1),* M19: Calluna vulgaris - Eriophorum vaginatum Blanket Mire *(not ground water dependent, Annex 1),* M23: Juncus effusus/acutiflorus - Galium palustre Rush Pasture *(high potential for ground water dependent),* M27: Filipendula ulmaria - Angelica sylvestris Mire *(moderate potential for ground water dependent),* H10: Calluna vulgaris - Erica cinerea Heath *(not ground water dependent, Annex 1),* H12: Calluna vulgaris - Vaccinium myrtillus Heath *(not ground water dependent, Annex 1),* U2: Deschampsia flexuosa Acid Grassland *(not ground water dependent),* U5: Nardus stricta - Galium saxatile Acid Grassland *(not ground water dependent),* U6: Juncus effusus – Festuca ovina Acid Grassland *(moderate potential for ground water dependent),* U20: Pteridium aquilinum - Galium saxatile Community *(not ground water dependent),* MG5: Cynosurus cristatus – Centaurea nigra Neutral Grassland *(not ground water dependent),* MG6: Lolium perenne - Cynosurus cristatus Neutral Grassland *(not ground water dependent),* MG7: Lolium perenne Neutral Grassland *(not ground water dependent),* MG9: Holcus lanatus - Deschampsia cespitosa Neutral Grassland *(moderate potential for ground water dependent),* MG10: Holcus lanatus - Juncus effusus Rush-Pasture *(moderate potential for ground water dependent),* OV25: Urtica diocia - Cirsium arvense Community *(not ground water dependent),* S11: Carex vesicaria Swamp *(high potential for ground water dependent),* S14: Sparganium erectum Swamp *(not ground water dependent).*

A number of Annex 1 habitats were recorded as a result of the NVC, however it should be noted that some of these are not in optimum condition, especially those in the North East section of the site which have been subject to drainage. The site on a whole has been heavily impacted throughout history due to animal husbandry, drainage and heather management. The forest design is expected to mainly impact the areas of acid grassland, scrub and bracken while avoiding the sensitive GWDTE.

4.2 Protected species

Badger

Two badger setts, [redacted]

Bats

There were records of five species of bats within 1km of the survey site, four of which had been recorded within the site itself. The site offers a moderate level of foraging and commuting opportunities for bats, particularly along the watercourses and around the areas of woodland. The current management of the site and the number of flowering plants within the semi-improved grassland could provide good foraging opportunities with the potential for invertebrate diversity and presence. This however will fluctuate year on year depending upon management regime and seasonality. It is not considered that there will be a significant negative impact on food availability through the afforestation process. The mature Ash tree (TN8) which recorded PRF is situated in an isolated and exposed location of the site. If the tree is to be removed, further survey including aerial assessment and where necessary dusk emergence surveys will be required to confirm the presence/likely absence of bat roosts. Providing the tree is afforded a suitable buffer zone, it is unlikely that any bat roost present would be significantly impacted with woodland creation providing linear commuting/foraging habitat. The juvenile Ash which recorded PRF is located within the area of broadleaved woodland to the east of the site and is unlikely to be impacted by the proposals as the tree is situated approximately 25m from the woodland edge. At present no structural works are proposed on the building which was subject to a ground level assessment. Further survey would be required prior to any form of renovation of the building taking place. At this point in time with regard to afforestation **no further survey required.**

Birds

Although bird surveys are being reported within a separate document, Short-eared owl and Sand martin were recorded within the site during the protected species survey. Additionally, an active dipper nest was recorded under the bridge on the access road to Whitslaid Farm. As part of the forestry design an appropriate buffer will be given to all waterways and therefore there is not likely to be any impact on the sand martin or dippers recorded. The short-eared owl may be impacted by the proposed afforestation through loss of foraging habitat, namely loss of health land. They are known however to forage in young plantations. At present it is unknown how much of the health land habitat will be lost as part of the proposal.

Red Squirrel

There were two records of red squirrel (*Sciurus vulgaris*) within 1km of the site, with no records identified within the site boundary. There were several areas of coniferous woodland planation and broadleaved woodland recorded on site which could provide suitable habitat however no evidence of red squirrels was found. **No further survey is therefore required.**

Reptiles

Common lizard and of Adder were recorded as present within the survey area. The site is suitable for foraging, breeding and hibernating reptiles with suitable cover including drystone walls, old wall remnants, log piles and corrugated iron sheets offering suitability for both basking and sheltering. The forest design should look to tailor the design of the scheme to avoid the areas of prime reptile habitat. In the long term it is likely that the afforestation scheme will potentially increase the connectivity of the site for reptile by providing additional transitional zones such as woodland edges and rides.

Otter

There were nine records of Otter within 1km of the site. Although evidence for the presence of Otter was recorded in the form of spraints and feeding remains [redacted], no Otters, holts or couches were observed at the time of survey. An appropriate buffer should be applied the watercourses to retain Otter habitat

and maintain an open connective corridor with the upper reaches of [redacted] **No further survey is therefore required.**

Great Crested Newt

There were no records of Great Crested Newt (*Triturus cristatus*) within 1km of the site however GCN are under recorded within the Scottish Borders. The terrestrial habitat and presence of several ponds on the property provide good opportunities for foraging, commuting, hibernating and breeding, however the eDNA testing of all ponds present within the site all recorded negative results confirming the absence of GCN. **No further survey is therefore required.**

Water voles

There were no records of water voles within 1km of the site, however the running water habitats did provide some level of Water vole suitability. As part of the forest management and establishment plan, all waterbodies will be given an appropriate buffer zone (minimum of 10m) to ensure no disturbance or destruction of bank sides and flow. Measures will also be put in place to ensure no runoff occurs in relation to forest establishment. The site is expected to have a purpose-built drainage network established with offset silt traps to alleviate any additional soil dispersal. **Apply a buffer to all waterways to ensure no potential impact.**

Plants

There were twelve records of notable species of plants within 1km of the site. Of these, one species Alpine Rush (*Juncus alpinoarticulatus*) was identified along an old field drain to the west of the site. This species is listed on the Scottish Borders LBAP and is classed as nationally scarce. The location falls on the edge of an area of acid grassland and acid flush (NVC: U5 – *Nardus stricta-Galium saxatile* grassland/M19 – *Calluna vulgaris-Eriophorum vaginatum* blanket mire) and therefore within an area which will be excluded from afforestation and consequently will not be impacted. No additional protected/rare/scarce/notable plants were recorded during the walkover survey which was carried out during an optimal time for habitat assessment. **No further survey required.**

5. Relevant Legislation

Badgers

In Scotland Badgers receive legal protection under The Protection of Badgers Act 1992 (as amended). The act makes it an offense to deliberately or recklessly:

- Take, injure or kill a Badger;
- Subject a Badger to an act of cruelty;
- Interfere with a Badger sett (damage, destroy, obstruct, disturb, predation by dog);
- Sell or possess a live or dead Badger, or part of a Badger;
- Mark or ring a Badger.

For the purpose of the proposed development at the site, a Badger sett can be defined as "any structure or place which displays signs indicating current use by a Badger".

Bats

The habitats both on site and within the immediate surroundings are of moderate quality for bats.

All bat species in the UK are protected from killing, injury and roost disturbance by both national and international law, in the form of the Wildlife and Countryside act (1981). This legislation makes it an offence to:

- Intentionally or recklessly capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat which will likely:
  - Impair its ability to survive, breed, reproduce or rear its young;
  - Impair its ability to hibernate or migrate, or;
  - Affect the local distribution or abundance of the species.
- Damage or destroy a resting place or breeding site;
- Keep, transport, sell or exchange any live or dead bat or part of.

Birds

The protection of bird species within the European Union falls under the Bern (79/409/EEC) and Bonn Conventions and under the EU Directive 2009/147/EC 'The Birds Directive' (the codified version of Council Directive 79/409/EEC). Implementation of the provisions of the Birds Directive in Scotland fall under the Wildlife & Countryside Act 1981 (as amended) and the Wildlife and Natural Environment (Scotland) Act 2011.

All bird species including their nests and eggs are protected under Part 1, Section 1 of the Wildlife and Country Act 1981 (as amended).

For any wild bird species, it is an offence to intentionally or recklessly:

- Kill, injure or take a bird;
- Take, damage, destroy or interfere with a nest of any bird while it is in use or being built;
- Obstruct or prevent any bird from using its nest;
- Take or destroy an egg of any bird.

For any wild bird species listed within Schedule 1, it is an offence to disturb (intentionally or recklessly):

- Any bird while it is building a nest;
- Any bird while is in, on, or near a nest containing eggs or young;
- Any bird while lekking;

- The dependent young of any bird.

Red Squirrels

Red Squirrels and their dreys (resting places) receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a Red Squirrel;
- Damage, destroy or obstruct access to a drey or any other structure or place which a Red Squirrel uses for shelter or protection;
- Disturb a Red Squirrel when it is occupying a structure or place for shelter or protection.

This protection does not apply to areas where Red Squirrels only feed.

It is also an offence to possess or control, sell, or offer for sale, or possess or transport for the purpose of sale any living or dead Red Squirrel or any derivative of such an animal.

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

Reptiles

All species of reptile are protected under the Schedule 5 of the Wildlife and Countryside Act 1981.

It is an offence to intentionally or recklessly:

- Kill or injure a reptile;
- Trade, sale, barter, exchange, transport or advertise for sale or to buy.

Otter

The Otter is a European Protected Species, and is fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). It is an offence to deliberately or recklessly:

- Capture, injure or kill an Otter;
- Harass an Otter or group of Otters;
- Disturb an Otter in a holt or any other structure or place it uses for shelter or protection;
- Disturb an Otter while it is rearing or otherwise caring for its young;
- Obstruct access to a holt or other structure or place Otters use for shelter or protection, or otherwise deny the animal use of that place;
- Disturb an Otter in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- Disturb an Otter in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

It is also an offence to:

- Damage or destroy a breeding site or resting place of such an animal (whether deliberately or recklessly);
- Keep, transport, sell or exchange, or offer for sale or exchange any wild Otter (or any part or derivative of one) obtained after 10 June 1994.

Otter shelters are legally protected whether an Otter is present or not.

Water Vole

Water Voles are partially protected in Scotland under the Wildlife and Countryside Act 1981. This legislation makes it an offence to intentionally or recklessly:

- Damage, destroy or obstruct access to any structure or place that Water Voles use for shelter or protection;
- Disturb a Water Vole while it is using any such place of shelter or protection.

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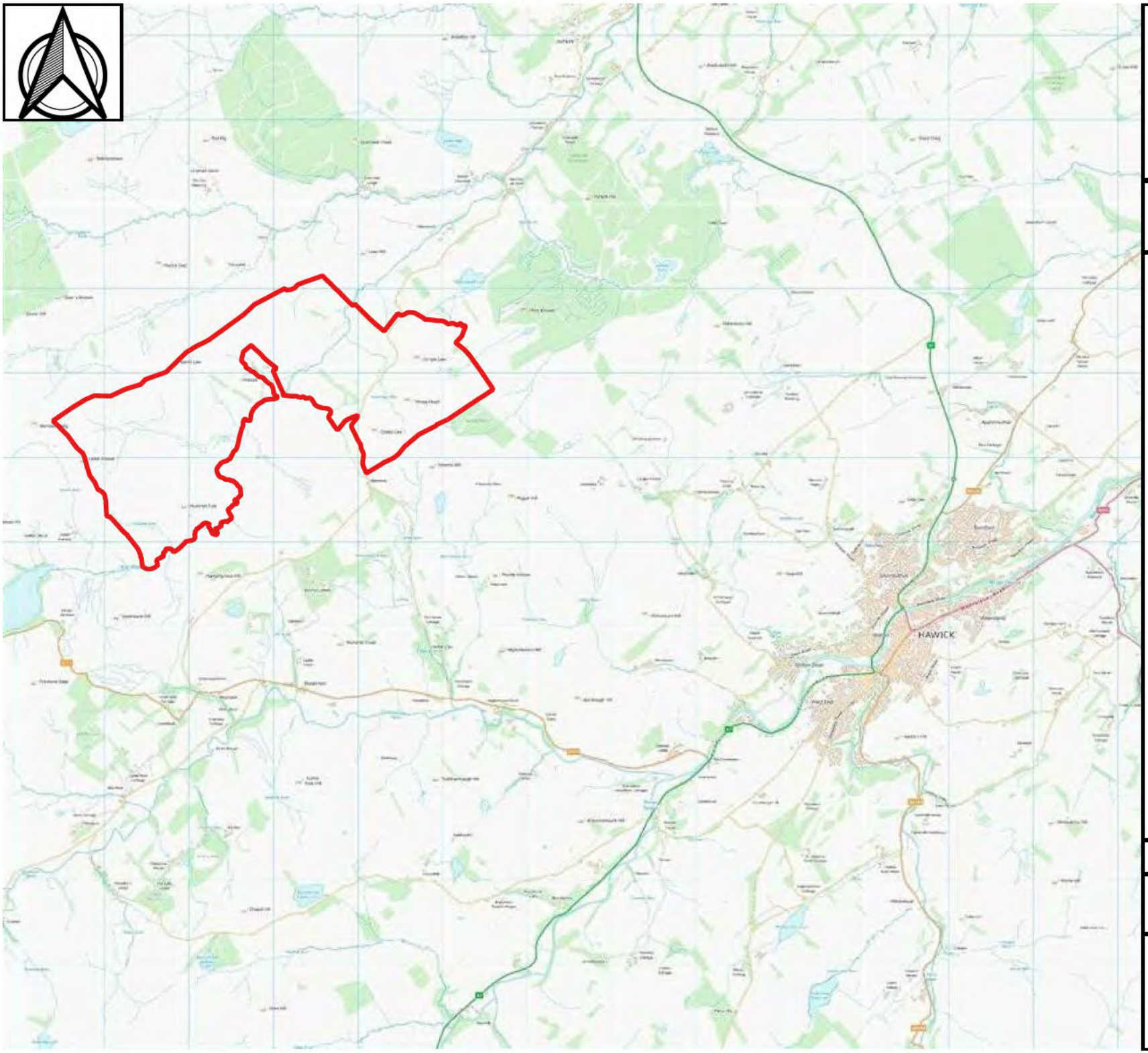


S.A.P Ecology & Environmental Ltd.

Figure 1: Whitslaid site location

Legend

Whitslaid Site Boundary

Date: 10/03/2024

Scale: 1:60,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 42766 17946

S.A.P Ecology & Environmental Ltd.

Figure 2A: Phase 1 Habitat Survey
(Western extent)

Legend

Whitslaid Proposed Planting Boundary

PEA Habitats

- A1.1.1 - Broadleaved woodland - semi-natural
- A1.2.2 - Coniferous woodland - plantation
- A1.3.1 - Mixed woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B1.2 - Acid grassland - semi-improved
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B5 - Marsh/marshy grassland
- C1.1 - Bracken - continuous
- C1.2 - Bracken - scattered
- C3.1 - Other tall herb and fern - ruderal
- D1.1 - Dry dwarf shrub heath - acid
- D1.2 - Dry dwarf shrub heath - basic
- D5 - Dry heath/acid grassland
- D6 - Wet heath/acid grassland
- E1.6.1 - Blanket sphagnum bog
- E1.7 - Wet modified bog
- E2.1 - Flush and spring - acid/neutral flush
- E2.2 - Flush and spring - basic flush
- E3.1 - Fen - valley mire
- E3.3 - Fen - flood plain mire
- F1 - Swamp
- F2.1 - Marginal and inundation - marginal vegetation
- G1.2 - Standing water - mesotrophic
- G1.3 - Standing water - oligotrophic
- I2.1 - Quarry
- J3.6 - Buildings
- J4 - Bare ground
- G2.3 - G2.3 - Running water - oligotrophic
- G2.4 - G2.4 - Running water - dystrophic
- J2.1.2 - J2.1.2 - Intact hedge - species-poor
- J2.4 - J2.4 - Fence
- J2.5 - J2.5 - Wall
- J2.7 - J2.7 - Boundary removed
- Target Notes
- Scattered bracken
- Scattered scrub

Date: 10/03/2024 | Scale: 1:10,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 44190 17970

0 250 500 m

S.A.P Ecology & Environmental Ltd.

Figure 2B: Phase 1 Habitat Survey
(Eastern extent)

Legend

Whitslaid Proposed Planting Boundary

PEA Habitats

- A1.1.1 - Broadleaved woodland - semi-natural
- A1.2.2 - Coniferous woodland - plantation
- A1.3.1 - Mixed woodland - semi-natural
- A2.1 - Scrub - dense/continuous
- A2.2 - Scrub - scattered
- A3.1 - Broadleaved Parkland/scattered trees
- B1.2 - Acid grassland - semi-improved
- B2.2 - Neutral grassland - semi-improved
- B4 - Improved grassland
- B5 - Marsh/marshy grassland
- C1.1 - Bracken - continuous
- C1.2 - Bracken - scattered
- C3.1 - Other tall herb and fern - ruderal
- D1.1 - Dry dwarf shrub heath - acid
- D1.2 - Dry dwarf shrub heath - basic
- D5 - Dry heath/acid grassland
- D6 - Wet heath/acid grassland
- E1.6.1 - Blanket sphagnum bog
- E1.7 - Wet modified bog
- E2.1 - Flush and spring - acid/neutral flush
- E2.2 - Flush and spring - basic flush
- E3.1 - Fen - valley mire
- E3.3 - Fen - flood plain mire
- F1 - Swamp
- F2.1 - Marginal and inundation - marginal vegetation
- G1.2 - Standing water - mesotrophic
- G1.3 - Standing water - oligotrophic
- I2.1 - Quarry
- J3.6 - Buildings
- J4 - Bare ground
- G2.3 - Running water - oligotrophic
- G2.4 - Running water - dystrophic
- J2.1.2 - Intact hedge - species-poor
- J2.4 - Fence
- J2.5 - Wall
- J2.7 - Boundary removed
- Target Notes
- Scattered bracken
- Scattered scrub

Date: 10/03/2024 | Scale: 1:10,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 44190 17970

0 250 500 m

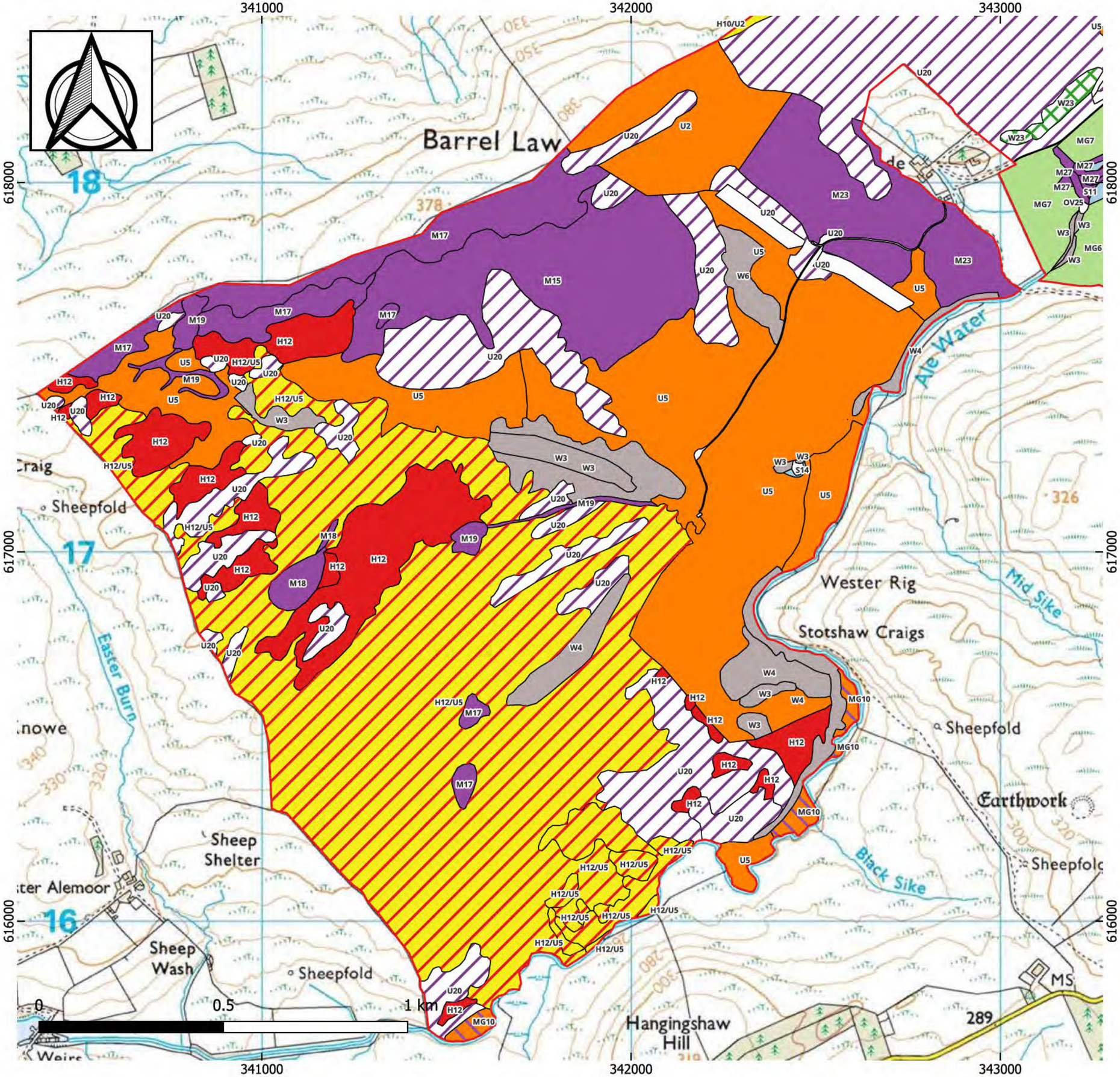


Figure 4A: NVC Habitat Results (West)

- Whitslaid Survey Area
- Broadleaf woodland
- Scrub
- Gorse scrub
- Mire
- Dry heath
- Dry heath/Acid grass mosaic
- Dry acid grassland/Dwarf shrub heath mosaic
- Acid grassland
- Bracken
- Mesotrophic grassland
- Marshy grassland
- Swamp
- Swamp/Tall ruderal mosaic
- Tall ruderal
- Non-NVC

NVC Communities

H10 - Calluna vulgaris-Erica cinerea Heath/U2 - Deschampsia flexuosa Acid Grassland mosaic
H12 - Calluna vulgaris-Vaccinium myrtillus heath
H12 - Calluna vulgaris-Vaccinium myrtillus heath/U2 - Deschampsia flexuosa Acid Grassland mosaic
H12 - Calluna vulgaris-Vaccinium myrtillus heath/U5 - Nardus stricta - Galium saxatile Acid Grassland mosaic
M15 - Scirpus cespitosus-Erica tetralix wet heath
M17 - Scirpus cespitosus - Eriophorum vaginatum Blanket Mire
M18 - Erica tetralix - Sphagnum papillosum Blanket Mire
M19 - Calluna vulgaris - Eriophorum vaginatum Blanket Mire
M23 - Juncus effusus/acutiflorus - Galium palustre Rush Pasture
M27 - Filipendula ulmaria - Angelica sylvestris Mire
M6 - Carex echinata - Sphagnum recurva/auriculatum Mire
M6 - Carex echinata - Sphagnum recurva/auriculatum Mire/M15 - Scirpus cespitosus-Erica tetralix wet heath mosaic
MG10 - Holcus lanatus - Juncus effusus Rush-Pasture
MG6 - Lolium perenne - Cynosurus cristatus Neutral Grassland
MG7 - Lolium perenne Neutral Grassland
MG9 - Holcus lanatus - Deschampsia cespitosa Neutral Grassland
OV25 - Urtica diocia - Cirsium arvense Community
S11 - Carex vesicaria Swamp
S11 - Carex vesicaria Swamp/OV25 - Urtica diocia - Cirsium arvense mosaic
S14 - Sparganium erectum Swamp
U2 - Deschampsia flexuosa Acid Grassland
U20 - Pteridium aquilinum - Galium saxatile Community
U5 - Nardus stricta - Galium saxatile Acid Grassland
W23 - Ulex europaeus - Rubus fruticosus scrub
W3 - Salix pentandra - Carex rostrata woodland
W4 - Betula pubescens - Molinia caerulea woodland
W6 - Alnus glutinosa - Urtica dioica woodland
W7 - Alnus glutinosa - Fraxinus excelsior - Lysimachia nemorum woodland

Date: 27/03/2024	Scale: 1:20,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 42638 17855

[redacted]

Figure 4B: NVC Habitat Results (East)

- Whitslaid Survey Area
- Broadleaf woodland
- Scrub
- Gorse scrub
- Mire
- Dry heath
- Dry heath/Acid grass mosaic
- Dry acid grassland/Dwarf shrub heath mosaic
- Acid grassland
- Bracken
- Mesotrophic grassland
- Marshy grassland
- Swamp
- Swamp/Tall ruderal mosaic
- Tall ruderal
- Non-NVC

NVC Communities

H10 - Calluna vulgaris-Erica cinerea Heath/U2 - Deschampsia flexuosa Acid Grassland mosaic
H12 - Calluna vulgaris-Vaccinium myrtillus heath
H12 - Calluna vulgaris-Vaccinium myrtillus heath/U2 - Deschampsia flexuosa Acid Grassland mosaic
H12 - Calluna vulgaris-Vaccinium myrtillus heath/U5 - Nardus stricta - Galium saxatile Acid Grassland mosaic
M15 - Scirpus cespitosus-Erica tetralix wet heath
M17 - Scirpus cespitosus - Eriophorum vaginatum Blanket Mire
M18 - Erica tetralix - Sphagnum papillosum Blanket Mire
M19 - Calluna vulgaris - Eriophorum vaginatum Blanket Mire
M23 - Juncus effusus/acutiflorus - Galium palustre Rush Pasture
M27 - Filipendula ulmaria - Angelica sylvestris Mire
M6 - Carex echinata - Sphagnum recurva/auriculatum Mire
M6 - Carex echinata - Sphagnum recurva/auriculatum Mire/M15 - Scirpus cespitosus-Erica tetralix wet heath mosaic
MG10 - Holcus lanatus - Juncus effusus Rush-Pasture
MG6 - Lolium perenne - Cynosurus cristatus Neutral Grassland
MG7 - Lolium perenne Neutral Grassland
MG9 - Holcus lanatus - Deschampsia cespitosa Neutral Grassland
OV25 - Urtica diocia - Cirsium arvense Community
S11 - Carex vesicaria Swamp
S11 - Carex vesicaria Swamp/OV25 - Urtica diocia - Cirsium arvense mosaic
S14 - Sparganium erectum Swamp
U2 - Deschampsia flexuosa Acid Grassland
U20 - Pteridium aquilinum - Galium saxatile Community
U5 - Nardus stricta - Galium saxatile Acid Grassland
W23 - Ulex europaeus - Rubus fruticosus scrub
W3 - Salix pentandra - Carex rostrata woodland
W4 - Betula pubescens - Molinia caerulea woodland
W6 - Alnus glutinosa - Urtica dioica woodland
W7 - Alnus glutinosa - Fraxinus excelsior - Lysimachia nemorum woodland

Date: 27/03/2024	Scale: 1:20,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 42638 17855

Figure 5: Ecologically Sensitive Habitats

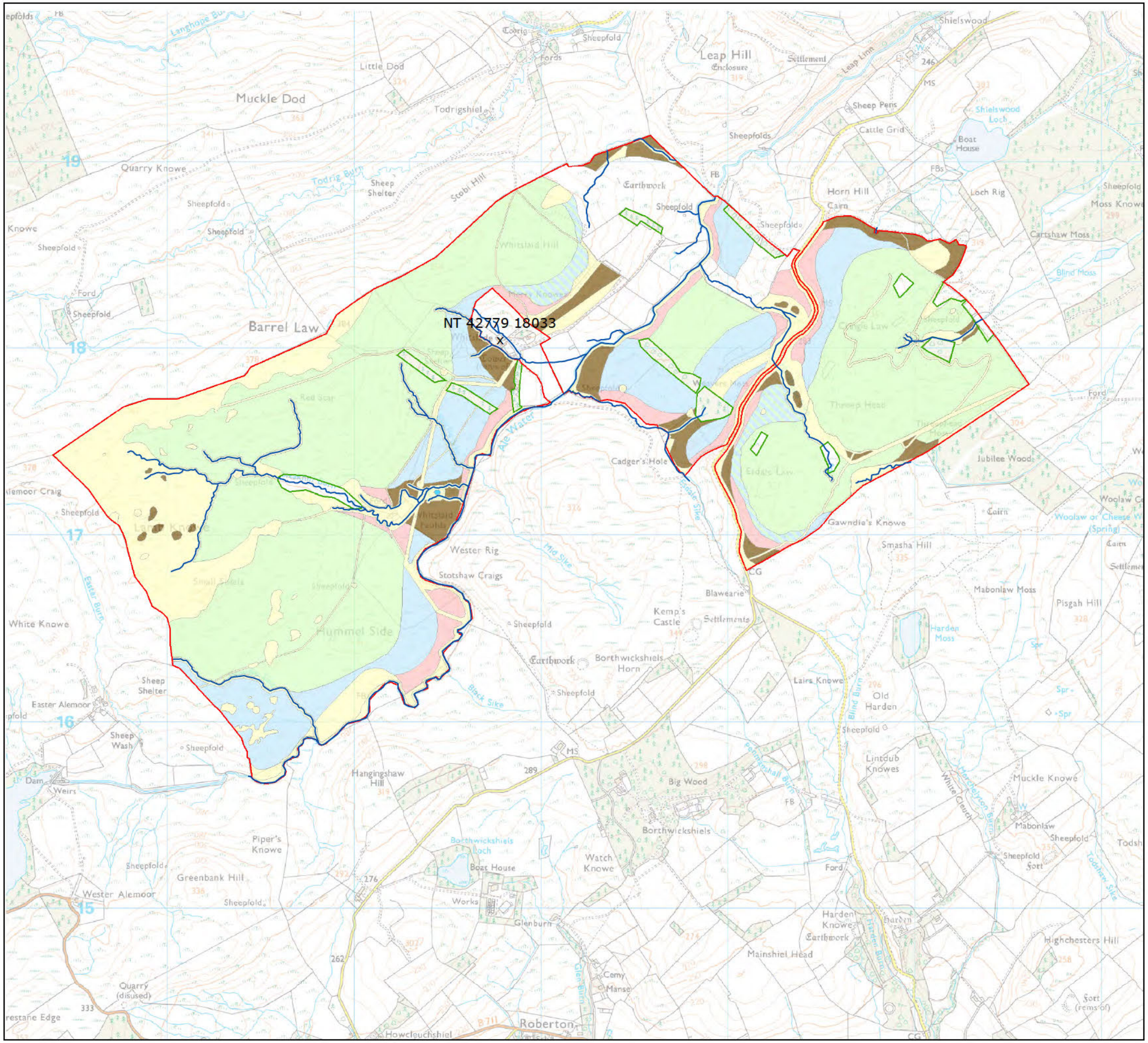
Legend

- Whitslaid Survey Area
- Ecologically Sensitive Habitat

Date: 27/03/2024	Scale: 1:20,000

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT 42638 17855



Whitslaid

WC Proposals

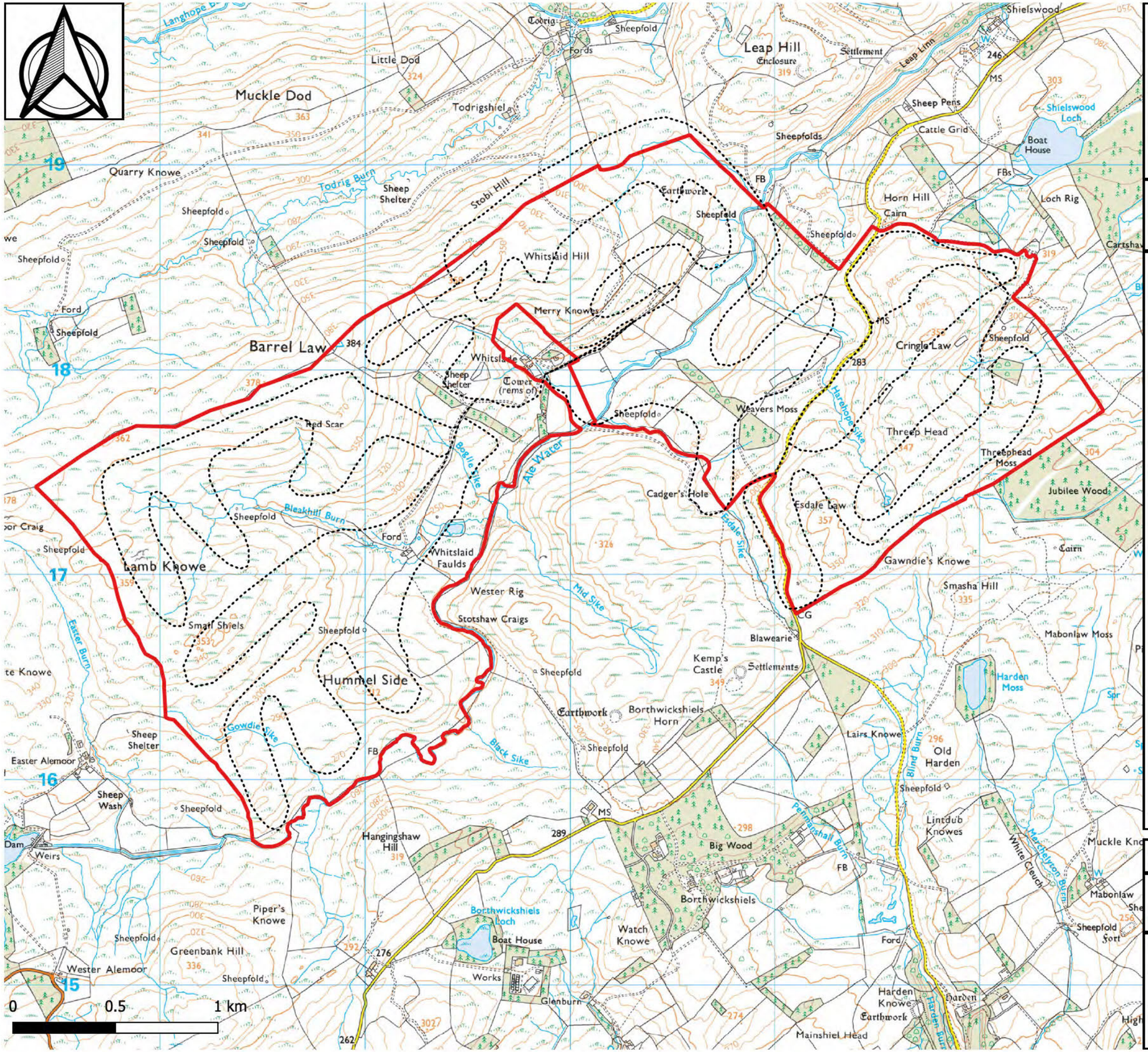
- Legal Bdy
- Sitka spruce
- Norway spruce
- Scots pine
- Norway/Sitka spruce
- Native Broadleaves
- Open Ground
- Existing Pond
- Watercourses

OS sheets: OS_1_25_000_raster

Scale 1:20,000

16/04/2025

eskdalemuir forestry



S.A.P Ecology & Environmental Ltd.

Figure 2.: Breeding Bird survey transects

Legend

- Site Boundary
- BBS Transect Line

Date: 23/10/2024	Scale: 1:17,500

Client: Eskdalemuir Forestry Ltd

Site Grid Reference: NT42750 18015

From: [redacted]
To:
Subject: RE: Whitslaid Woodland Creation Proposals
Date: 16 June 2025 17:03:22

Not a problem – just whenever. I just wanted to let you know in case you wondered why it was outstanding.

Thank you.

From: [redacted]@nature.scot>
Sent: 16 June 2025 16:11
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

Oh – I've probably done something wrong, I'll look at it, but it won't be until Thursday as I am out of the office tomorrow and Wednesday, and will let you know when I have done so.

[redacted]

[redacted] **| Operations Officer | South**
[redacted]

NatureScot | Scottish Public Pensions Agency Office | 7, Tweedside Park | Tweedbank | Galashiels | TD1 3TE| [redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency*

From: [redacted]@nature.scot>
Sent: 16 June 2025 14:32
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

PS – I don't seem to be able to close the case down in CMS. I don't have the usual options.

[redacted]

From: [redacted]@nature.scot>
Sent: 16 June 2025 13:58
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

[redacted]

Apologies for the delay in finalising this. I've now had a look at all the material you shared below, including the transect route map. My thoughts are summarised below. As ever with forestry applications, the survey work is poor compared to our standards.

- Only one year of survey data is provided. This seems to be standard but doesn't discount the possibility that the year surveyed was unusual in some way.
- The aim of surveys was to "Conduct a full suite of breeding bird survey…", but a single methodology was used which was restricted to that appropriate for common moorland birds. There was no black grouse or raptor survey, despite BK showing up in the desk study and the area being known for BK in previous years, and golden eagle, for example, increasing in the area. Therefore we would normally question the tacit assumption that many relevant species were not present.
- The transect route covered the site adequately, but no information was provided on the survey effort in the buffer zone (which was supposed to be a kilometre from the site) where waders were surveyed separately. Only three visits targeted the buffer zone, over a shortened survey season, which isn't explained, and dates are not given for visits. This area also isn't adequately illustrated on the result maps and the number of wader sightings seems low and concentrated close to the site. If no other waders were seen it would be good to express this explicitly. Results from the buffer zone should be presented separately given the differences in survey area and methodology.
- It is worrying that the report authors suggest there hasn't been much research on the impacts of afforestation on the wider countryside beyond the planted footprint. There has been a lot of research, and many papers published, in the 14 years since the Amar et al. paper referred to came out. This issue is glossed over in my view and not given sufficient weight.

I hope that helps but please get back to me if you need more.

Thanks,

[redacted]

From: [redacted]@nature.scot>
Sent: 12 June 2025 09:26
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

Hello!

No, you didn't miss anything, after another nudge finally had the transect maps yesterday.

Here's the link to it –

2025 06 11 - CPP180207 - Whitslaid - Appendix Figure 2 BBS Survey Transects - 11 June 2025

[redacted]

Can we discuss how long you are going to need for this?

Many thanks for your help

Kind Regards

[redacted]

[redacted]

NatureScot | Scottish Public Pensions Agency Office | 7, Tweedside Park | Tweedbank | Galashiels | TD1 3TE| t: [redacted]

nature.scot | @nature_scot | *Scotland's Nature Agency*

From: [redacted]@nature.scot>
Sent: 10 June 2025 09:14
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

[redacted]

Just wondering where we're at with this – have I missed something?! I'm juggling lots of cases at the moment so trying hard to keep to deadlines.

Thanks,

[redacted]

From: [redacted]nature.scot>
Sent: 22 May 2025 09:31
To: [redacted]@nature.scot>
Subject: FW: Whitslaid Woodland Creation Proposals

Hello!

Finally got a response from the applicant, and hopefully they will send out the requested transect map tomorrow or Monday, as they aren't in the office today. During our chat, he also said that the

RSPB had found a new black grouse lek site just to the north (I think?), but not exactly where, I will see if I can chase up with the RSPB, where this was found.

I also asked for an extension, which is OK, up to a month is OK, but preferably sooner (so before 23 June at the latest).

Kind Regards

[redacted] **Operations Officer | South**
[redacted]

NatureScot | Scottish Public Pensions Agency Office | 7, Tweedside Park | Tweedbank | Galashiels | TD1 3TE| [redacted]

nature.scot | **@nature_scot** | ***Scotland's Nature Agency***

From: [redacted]
Sent: 15 May 2025 09:17
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

Hello!

I've gone back through the documents that have been submitted, and we don't have it. I'll send an email to [redacted] SAP Ecology, who submitted the case and ask for it.

Thanks for seeing this. Don't worry about not seeing it on CMS all the documents are on Informed Decision, I'll try and get them added to CMS today.

Cheers
[redacted]

[redacted] **Operations Officer | South**
[redacted]

NatureScot | Scottish Public Pensions Agency Office | 7, Tweedside Park | Tweedbank | Galashiels | TD1 3TE| [redacted]

nature.scot | **@nature_scot** | ***Scotland's Nature Agency***

From: [redacted]@nature.scot>
Sent: 15 May 2025 08:53
To: [redacted]@nature.scot>
Subject: RE: Whitslaid Woodland Creation Proposals

[redacted]

I've started looking at this. The ornithology report refers to 'Appendix 2', which I think includes a 'Figure 2', which again I think shows the location of the transect they walked when doing surveys. I can't find this – do you have a copy please? (CMS isn't working for me so can't check there just now).

Thank you,

[redacted]

From: [redacted]nature.scot>
Sent: 14 May 2025 15:03
To: [redacted]nature.scot>
Subject: Whitslaid Woodland Creation Proposals

Hello!

[redacted] I now have another woodland creation proposal at preapplication stage immediately to the south of the Todrig case and spreading further east to almost join up with the existing Ashkirk Forest.

I was hoping I could have some more ornithological advice, especially as it is adjacent to Todrig Forestry Proposal.

Attached are the documents that have come in on informed decision, and below that I have copied and pasted the description the applicant wrote. When I have sent this, I'll send a request from CMS. The applicant wants a response by the 23 May, but if that date isn't possible, I'll approach them for an extension.

Kind Regards

[redacted]

[redacted]

Description from the applicant on Informed Decision – “Proposed woodland creation scheme located on land used for livestock grazing between Roberton and Ashkirk in the Scottish Borders. The proposal is for the creation of a commercial forest, the site is approximately 730ha with approximately 580ha proposed for planting inclusive of open ground. Additionally, approximately 65ha within the centre of the site is proposed to be [redacted] to be kept in agriculture for grazing livestock. The more visible areas of the site are proposed for secondary conifer species (Scots pine & Norway spruce), native broadleaves and designed open ground. The north-western extent is proposed to be retained in open ground with an area of native low-density broadleaves for “wildlife habitat, specifically ground nesting birds. A corridor of open ground is to be retained along the length of Ale Water which flows through the site.”

From: informed@planning.nature.scot
To: [redacted]@sapecology.co.uk
Cc: [redacted]
Subject: Proposed Woodland Creation Scheme at Whitslaid, Near Ashkirk, Scottish Borders
Date: 02 July 2025 14:57:27

[redacted]

Proposed Woodland Creation Scheme at Whitslaid, Near Ashkirk, Scottish Borders
River Tweed Special Area of Conservation (SAC)

Thank you for consulting NatureScot on the woodland creation at Whitslaid, near Ashkirk, Scottish Borders. From the details provided the plan is to create approximately 580ha of new woodland, mainly of productive conifers, inclusive of open ground, on a site of 730ha. The area includes the River Tweed Special Area of Conservation (SAC).

River Tweed SAC

The River Tweed SAC is designated for the qualifying interests of Atlantic salmon, river lamprey, sea lamprey, brook lamprey, European otter and as a watercourse typically supporting water crowfoot (*Ranunculus*) species. All these features can be considered to present in the Ale Water. Though the Ale Water mainly forms the southern boundary of the site, there are other watercourses within the consultation boundary that form part of the Ale Water catchment.

The two key issues that could affect the River Tweed SAC are river temperatures and siltation. Buffers are an essential piece of mitigation to protect the River Tweed SAC from both concerns. Because of climate change river temperatures are reaching dangerous levels, which are more prominent in the upper reaches of the catchment. The elevated temperatures are becoming a severe problem for cold water fish species such as Atlantic salmon, with fish dying through overheating. It is important that appropriate wooded riparian habitats are created to shade watercourses and prevent overheating.

A network of open ground is marked through the proposed forest area approximating to the watercourses. The aim of the design should be to ensure that these buffer areas sustain excellent water quality and maintain a strong and diverse ecological corridor for the watercourses. Riparian tree planting in some areas will add to the diversity but should not occur where it would compromise existing habitat encapsulated by the buffer, such as flushes, mire, and species rich grassland habitats.

The national guidance suggests that the buffers should be 20m wide, but a wider buffer is needed where there are particularly sensitive areas. NatureScot considers that the SAC is a sensitive habitat and so a wider buffer width is required. Protection against siltation is especially important during planting and harvesting, when climate change is likely to result

in increased rainfall and storm events. The minimum buffer width described in the UK Forest Standard is not likely to be sufficient to cope with future environmental conditions.

The responsibility for conserving the SAC extends beyond the SAC boundary to include watercourses that flow into the River Tweed SAC. An aim of the design should be to ensure all watercourses throughout the design area, and especially those that flow into the SAC, should have appropriate buffers of sufficient width to benefit the SAC. From the information supplied it is difficult to assess the whether the size of the buffers planed along the watercourses are adequate to protect the SAC and associated habitats. The plan should therefore define what the appropriate buffers will look like, so that benefits of the proposed buffers can be assessed. As the planting covers a significant area, it is important to ensure that buffers are adequately defined to get the correct level of protection both for the SAC and the associated species rich habitats.

Bird Surveys

NatureScot is concerned that the data produced by the bird surveys (*Breeding Bird Survey Report – Whitslaid Afforestation, Scottish Borders*) is not of an acceptable quality to make woodland creation design decisions on. There are the following serious concerns on the survey work carried out:-

1. Only one year of survey data is provided, with no justification added. One year of data is not enough to get a proper picture of the bird use of this site. A single year of data does not discount that the year surveyed is unusual in some way. A minimum of two years of data should be provided.

2. The aim of the surveys was to "Conduct a full suite of breeding bird surveys…." But only a single methodology was used, which was restricted to that appropriate for common moorland birds. There was no black grouse or raptor survey, despite black grouse showing up in the desk study and the area being known for black grouse in previous years, and golden eagle numbers increasing in the area. NatureScot therefore questions the tacit assumption that many relevant species were not present.

3. The transect route covered the site adequately, but no information was provided on the survey effort in the buffer zone (which is supposed to be a kilometre from the site) where waders were surveyed separately. Only three visits targeted the buffer zone, over a shortened survey season, which isn't explained, and the dates aren't given for the visits. This area is also not adequately illustrated on the result maps, and the number of waders sightings seems low and concentrated close to the site. If no other waders were seen this should be expressed explicitly. The results from the buffer zone should be presented separately given the differences in survey area and methodology.

4. It is worrying that the report suggests that there hasn't been much research on the afforestation on the wider countryside beyond the planted footprint. There has been a lot

of research and may papers published in the 14 years since the Amar et al. paper referred to came out. This issue is glossed over and not given sufficient weight.

Peatland

NatureScot notes that there was no systematic peat depth survey within the information submitted and that the areas of deep peat seem to have been identified through the habitat surveys, within the "*Ecology Report, Whitslaid Afforestation*". It is therefore difficult to conclude whether all the areas of deep peat have been identified as land with high sensitivity and omitted from planting. The possible presence of peat is further complicated by the nature of the rolling landscape, that means there can maybe small, localised areas of peat situated within the undulations of the landscape. We advise that a systematic peat depth survey is completed to inform the design of the woodland creation.

Currently we note several areas identified as open ground that seem to correspond to the areas identified as deep peat within the "*Ecology Report, Whitslaid Afforestation*". However, we note that the planting comes right up to the boundary of the sensitive habitats and would recommend a buffer of 100m around the sensitive area to protect the hydrological integrity of the site, protect the biodiversity value and prevent tree regeneration on the peat. As the forest design covers a significant area, it is important to ensure that buffers are adequately defined to get the correct level of protection for the sensitive habitats present.

Habitats

From the planting map we note that there seem to be several small, isolated sensitive areas that are marked as open ground within the planting plan, within the southwest area of the planting plan. It is harder to maintain the biodiversity of small areas, when they are isolated from other biodiversity rich areas. There may therefore be opportunities to increase the biodiversity value of all these areas, by linking the open areas together with appropriate native planting, outside of the appropriate defined buffer areas.

We note the use of mainly conifer in the planting mix and would encourage you to use more native species that suit the soil patterns found here, so that as well as producing a crop of timber, carbon capture and supporting economic activity, they should also function as a natural system. This includes woodland plants thriving in the understory and shrub layers, woodland specialist wildlife, natural woodland processes like regeneration, senescence, dead wood, and sufficient diversity to sustain these natural characteristics in the face of climate change and novel pests and pathogens. Recent research has also shown that more diverse woodlands can hold more soil carbon.

The "*Ecology Report, Whitslaid*" has identified several areas of native woodland within the plan area and we would advise that these areas present opportunities to increase the biodiversity value of the area by increasing their size and linking them together with

appropriate native species planting, rather than adding then isolating them within the planned conifer plantings.

There may also be potential opportunities to create large areas of linked biodiversity rich areas and native plantings, by working with neighbouring forestry owners to produce an integrated plan, with greater biodiversity gains.

I hope these comments are useful to you. Please do not hesitate to contact me should you wish to discuss our comments further.

Kind Regards

[redacted]

[redacted] **| Operations Officer | South**

[redacted]

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