



THE
ENVIRONMENT
PARTNERSHIP

Haweswater Aqueduct Resilience Programme

Chapter 9A - Appendix 9A.1

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United Utilities

Environmental Statement



Water for the North West



Haweswater Aqueduct Resilience Programme

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1. Desk-Based Assessment

1.1 Introduction

- 1) TEP was appointed by United Utilities to complete an Ecological Impact Assessment (EclA) for the Haweswater Aqueduct Resilience Programme - Proposed Marl Hill Section. The EclA is required to inform an Environmental Impact Assessment (EIA) and support production of the Environmental Statement (ES)
- 2) A series of ecological surveys was undertaken to complete the EclA. This Appendix is one of a series of Ecological Technical Reports (ETRs) produced to support the EclA. This ETR documents the methods and findings of the ecological desk-based assessment (DBA).

1.2 Methods

- 3) A data gathering exercise was initially completed by United Utilities in August 2018, updated by Jacobs in August 2019, comprising a combination of searches using web-based sources and local biological records centres. TEP completed an updated review of all data sources and findings in May and June 2020. Compiled data sources are described below.
- 4) Lancashire Environment Record Network (LERN) provided the following data:
 - Non-statutory designated wildlife sites within 2 km of the Proposed Marl Hill Section
 - Protected and notable species records within 2 km of the Proposed Marl Hill Section
- 5) Multi-Agency Geographic Information for the Countryside (MAGIC), accessed May to June 2020 via www.magic.gov.uk, identified the following:
 - Statutory nature conservation sites of international and national importance within 5 km of the Proposed Marl Hill Section
 - Statutory nature conservation sites of less than national importance within 2 km of the Proposed Marl Hill Section
 - Natural England's Impact Risk Zones (IRZ) overlapping the Proposed Marl Hill Section
 - Natural England's Priority Habitat Inventory (PHI), Ancient Woodland Inventory (AWI) and European protected species licences (EPSL) within 1 km of the Proposed Marl Hill Section
- 6) Google maps (<https://www.google.co.uk/maps>), accessed May to June 2020 displayed aerial photographs for the Proposed Marl Hill Section and DBA search areas, assisting identification and assessment of potential habitats or species which may be present.

2. Statutory Wildlife Sites

2.1 Summary

- 7) No statutorily designated site is located within or adjacent to the Site.
- 8) Natura 2000 (N2k) sites, of international importance for wildlife, including Special Areas of Conservation (SAC), Special Protection Areas (SPAs) or Ramsar sites, and nationally or regionally important wildlife designations within 5km of the Proposed Marl Hill Section are summarised in Table 1.

Table 1: Statutorily Designated Wildlife Sites

Status	Name	Nearest point	Summary features
SAC	North Pennine Dales Meadows	3.6 km north east from the Bonstone Compound access road	The site is designated for supporting Molinia meadows on calcareous, peaty or clayey-silt-laden soils and for its mountain hay meadows which contain a wide range of rare and local meadow species. The grasslands included show very limited effects of agricultural improvement and have good conservation of structure and function.
SSSI	Langcliff Cross Meadow	3.6 km north east from the Bonstone Compound access road	An area of northern hay meadow containing 19 grass species. Forms part of the North Pennine Dales Meadows SAC.
SSSI	Bell Sykes Meadows	3.67 km north east from the Bonstone Compound	One of three of the SSSI underlying the North Pennine Dales Meadows SAC. Six fields of unimproved, enclosed, herb-rich grassland supporting a rich floral community. Forms part of the North Pennine Dales Meadows SAC.
SSSI	Myttons Meadows	3.9 km north from the Bonstone Compound	One of the SSSI underlying the North Pennine Dales Meadows SAC. Three fields below Myttons Farm and part of a fourth field to the south representing the largest traditionally managed, species-rich hay meadows in Lancashire. The site forms part of the North Pennine Dales Meadows SAC.
SPA	Bowland Fells	4.05 km north west from the Bonstone Compound	The Bowland Fells SPA encompasses the main upland block within the area of Lancashire known as the Forest of Bowland. It is an area of upland fells supporting Lancashire's largest expanse of blanket bog and heather moorland. The site provides habitat suitable for a diverse upland breeding bird community including Annex I upland breeding birds, hen harrier and merlin, and an internationally important breeding population of lesser black-backed gull.
SSSI	Bowland Fells	4.05 km north west from the Bonstone Compound	The SSSI Unit closest to the Proposed Marl Hill Section comprises unit 1011820, which was last reported to be in 'favourable' condition. The main habitat present is upland bogs.

SSSI	Field head meadows	4.15 km north east from the Bonstone Compound access road	One of the SSSIs forming part of the North Pennine Dales Meadows SAC. Field Head Meadows consists of a single field of enclosed, moderately herb-rich hay meadow, typical of its type in northern England. Field Head Meadow is one of the few remaining herb-rich grasslands present in this part of Lancashire. The SSSI Unit (1022962) was last reported to be in 'favourable' condition.
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- 9) Data forms for N2k sites located within 5km of the Proposed Marl Hill Section are presented at Appendix A.
- 10) Citations for SSSIs located within 5km of the Proposed Marl Hill are presented at Appendix B.

2.2 Impact Risk Zones

- 11) Natural England Impact Risk Zones (IRZ) define zones around statutorily designated sites which reflect the particular sensitivities of the features for which those site are notified and indicate the types of development proposal which could potentially have adverse impacts. The Proposed Marl Hill Section lies within four IRZs, the relevant planning categories and risk thresholds for which are summarised in Table 2.
- 12) The Bonstone Compound overlaps two IRZs which appear to relate primarily to the N2k site Bowland Fells SPA and SSSI and the North Pennine Dales Meadows SAC and respective collection of SSSIs (Myttons Meadows, Bell Sykes Meadows and Langcliff meadows).

Table 2. Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/ SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?	2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
All Planning Applications	n/a
Infrastructure	Airports, helipads and other aviation proposals.
Wind & Solar Energy	n/a
Minerals, Oil & Gas	n/a
Rural Non Residential	n/a
Residential	n/a
Rural Residential	n/a
Air Pollution	Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m ² , slurry lagoons > 750m ² & manure stores > 3500t).
Combustion	General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
Waste	n/a

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?	2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
Composting	n/a
Discharges	n/a
Water Supply	n/a

3. Non-Statutory Wildlife Sites

- 13) Non-statutory wildlife sites including Biological Heritage Sites (BHS), Special Roadside Verges and Important Bird Areas located within 2 km of the Proposed Marl Hill Section are identified in Table 3. Citations for BHS are presented at Appendix C.

Table 3. Identification of non-statutory wildlife sites within 2 km of the Proposed Marl Hill Section

Site Name	Designation	Location relevant to Proposed Marl Hill Section
Gibb's Wood and Bonstone Wood BHS	BHS	93 m south west from the Bonstone Compound
Bonstone Brook Pastures	BHS	0.16 km south from the Bonstone Compound
Feazer Wood	BHS	0.3 km east from the Braddup Compound access road
Hospital Wood	BHS	0.36 km east from the Braddup Compound access road
Waddington Fell and Browsholme Moor	BHS	0.45 km south east from the Bonstone Compound access road
Bradford Fell, Easington Fell and Harrop Fell	BHS	0.46 km south east from the Bonstone Compound access road
Ashnott Wood	BHS	0.51 km south west from the Bonstone Compound
River Hodder From Confluence with River Ribble Upstream to Cross of Greet Bridge/ Bowland Fells SSSI Boundary	BHS	0.52 km north east from the Bonstone Compound
Braddup Wood North	BHS	0.54 km north west from the Braddup Compound
Cross Lane Roadside Verges	BHS	0.63 km south west from the Braddup Compound
Crag House Roadside Verges	BHS	0.7 km south west from the Bonstone Compound
Braddup Wood South	BHS	0.84 km south west from the Braddup Compound
Ashnott Meadow	BHS	0.86 km south west from the Bonstone Compound
Waddington Fell Road, Roadside Verges	BHS	0.88 km north east from the Bonstone Compound
Moor Piece	BHS	1.05 km west from the Braddup Compound
Drakehouse Wood	BHS	1.4km east of the Braddup Compound
Birkett Fell, Hodder Bank Fell and Mossthwaite Fell	BHS	1.56 km west from the Bonstone Compound
Newton North Roadside Verges	BHS	1.6km north of the Bonstone Compound
Great Dunnaw Wood	BHS	1.7km north east of the Bonstone Compound
Clerk Laithe	BHS	1.8km north of the Bonstone Compound
Great Dunnaw Hill	BHS	1.8km north east of the Bonstone Compound

Site Name	Designation	Location relevant to Proposed Marl Hill Section
Waddington Brickworks Old Working	BHS	1.8km south east of the Braddup compound
Rabbit Lane Meadow	BHS	1.97 km west from the Braddup Compound
Bowland Fells	IBA	Extensive coverage which lies contiguous with the Forest of Bowland AONB. The Proposed Marl Hill Section is entirely situated within the IBA

4. Ancient Woodland and Habitats of Principal Importance

- 14) There are no ancient semi-natural woodlands (ASNW) or Habitats of Principal Importance (HPI) identified on Natural England's Inventory of Ancient Woodland or Priority Habitat Inventories within the Proposed Marl Hill Section.
- 15) HPI and ASNW identified within 2 km of the Proposed Marl Hill Section include:
- Blanket bog
 - Deciduous woodland
 - Good quality semi-improved grassland
 - Lowland fens
 - Ancient woodlands:
 - ancient woodland including Braddup Wood North, Braddup Wood South, Feazer Wood, Hospital Wood and Ashnott Wood.
 - Traditional orchards
 - No main habitat but additional habitats present – including the following HPI at less than 50 % cover:
 - lowland dry acid grassland
 - purple moor grass and rush pastures
 - upland flushes, fens and swamps
 - upland heath
 - Grass moorland (Non Priority) including some areas present with more than 50 % upland heathland
 - Good quality semi-improved grassland (Non Priority) including some areas present with more or less than 50 % fens, upland flushes, fens and swamps, upland hay meadows, lowland meadows and pastures,
- 16) Areas of HPI identified within 2 km of the Proposed Marl Hill Section by LERN are illustrated at Appendix D.

5. Species Records

- 17) Full details of the records for notable species (including protected species, SPI, nationally notable, scarce and/or red list species, local biodiversity priority species) provided by LERN are presented at Appendix E. A summary is provided below and further assessment is presented, where relevant, in the appropriate ETR accompanying the ES.

5.1 Flora

- 18) Notable plant species historically reported within 2 km of the Proposed Marl Hill Section include:

- Tawny Sedge *Carex hostiana*
- Long-stalked Yellow-sedge *Carex viridula subsp. brachyrrhyncha*
- Melancholy Thistle *Cirsium heterophyllum*
- Common Spotted-orchid *Dactylorhiza fuchsii*
- Heath Spotted-orchid *Dactylorhiza maculata*
- Broad-leaved Helleborine *Epipactis helleborine*
- Marsh Helleborine *Epipactis palustris*
- Snowdrop *Galanthus nivalis*
- Autumn Gentian *Gentianella amarella*
- **Bluebell *Hyacinthoides non-scripta***
- Toothwort *Lathraea squamaria*
- Welsh Poppy *Meconopsis cambrica*
- Bogbean *Menyanthes trifoliata*
- Blueish Veilwort *Metzgeria violacea*
- Reflexed Saltmarsh-Grass *Puccinellia distans*
- Globeflower *Trollius europaeus*
- Cowberry *Vaccinium vitis-idaea*
- Early-purple Orchid *Orchis mascula*
- Soft Shield-fern *Polystichum setiferum*
- Tutsan *Hypericum androsaemum*
- Petty Spurge *Euphorbia peplus*
- Columbine *Aquilegia vulgaris*
- Mountain Currant *Ribes alpinum*
- Herb-paris *Paris quadrifolia*
- Southern Marsh-orchid *Dactylorhiza praetermissa*

5.2 Birds

- 19) Notable birds species historically reported within 2 km of the Proposed Marl Hill Section include:

- Curlew *Numenius arquata*
- Lapwing *Vanellus vanellus*
- Kingfisher *Alcedo atthis*

- Tawny Owl *Strix aluco*
- Barn Owl *Tyto alba*

5.3 Mammals

20) Notable mammal species historically reported within 2 km of the Proposed Marl Hill Section include:

- Roe deer *Capreolus capreolus*
- West European hedgehog *Erinaceus europaeus*
- European water vole *Arvicola amphibius*
- Brown hare *Lepus europaeus*
- Stoat *Mustela erminea*
- Weasel *Mustela nivalis*
- Eurasian Badger *Meles meles*
- Eurasian common shrew *Sorex araneus*

21) Bats (protected species and, for certain species, SPI) historically reported within 2 km of the Proposed Marl Hill Section include:

- Daubenton's Bat *Myotis daubentonii*
- Soprano Pipistrelle *Pipistrellus pygmaeus*
- Natterer's Bat *Myotis nattereri*
- Pipistrelle Bat species *Pipistrellus sp.*
- Common pipistrelle *Pipistrellus pipistrellus*
- Myotis Bat Species *Myotis sp.*

5.4 Amphibians and Reptiles

22) Notable amphibian or reptile species historically reported within 2 km of the Proposed Marl Hill Section include:

- Common frog *Rana temporaria*
- Common toad *Bufo bufo*

5.5 Invertebrates

23) Notable invertebrates species historically reported within 2 km of the Proposed Marl Hill Section include:

- Ringlet *Aphantopus hyperantus*
- Dark Green Fritillary *Argynnis aglaja*
- Green Hairstreak *Callophrys rubi*
- Broom Moth *Ceramica pisi*
- Small Heath *Coenonympha pamphilus*
- Speckled Wood *Pararge aegeria*
- White Ermine *Spilosoma lubricipeda*
- Small Square-spot *Diarsia rubi*
- Beautiful Snout *Hypena crassalis*
- Devon Carpet *Lampropteryx otregiata*

- Brown Rustic *Rusina ferruginea*
- Buff Ermine *Spilosoma lutea*
- Small Phoenix *Ecliptopera silaceata*
- Red-necked Footman *Atolmis rubricollis*
- Dusky Brocade *Apamea remissa*
- Dark Marbled Carpet *Dysstroma citrata*
- Autumnal Rustic *Eugnorisma glareosa*
- Neglected Rustic *Xestia castanea*
- Comma *Polygonia c-album*
- Chimney Sweeper *Odezia atrata*

5.6 Granted European Protected Species Licences

24) Three European Protected Species (EPS) are identified as having been granted within 2km of the Proposed Marl Hill Section. The first being granted 2016-2016, for the damage and destruction of a resting and breeding place for common pipistrelle and soprano pipistrelle (licence ref: 2016-26538-EPS-BDX). The second being granted 2017-2017, damage of a resting place and damage and destruction of a breeding and resting place for great crested newts (licence ref: 2016-27253-EPS-MIT). The third being granted 2017-2024, damage of a resting place and damage and destruction of a breeding and resting place for great crested newts (licence ref: 2016-27253-EPS-MIT-1).

5.7 Invasive Species

25) No invasive species (listed on Schedule 9 of the Wildlife and Countryside Act 1981 as amended) were historically reported within 2 km of the Proposed Marl Hill Section.

Appendix A. N2k Data Forms

EC Directive 2009/147/EC on the Conservation of Wild Birds Special Protection Area (SPA)

Name: Bowland Fells

Unitary Authority/County: Lancaster, Ribble Valley, Wyre, Lancashire.

Consultation proposal: Bowland Fells is classified as a Special Protection Area because of its importance for the Annex I upland breeding birds hen harrier and merlin. It also supports an internationally important population of breeding lesser black-backed gulls which is proposed as an additional feature of the site. The SPA boundary is coincident with the boundary of Bowland Fells SSSI. For details of the SPA boundary see map.

Site description: The Bowland Fells SPA encompasses the main upland block within the area of Lancashire known as the Forest of Bowland. This is an outlier of the Pennine Range situated in the north of the county and to the east of the M6 motorway.

Most of this land, stretching from Clougha and Whitray Fell in the north to Parlick in the south, is over 250 m OD and rises sharply to a stream dissected plateau with the highest point being Ward's Stone at 561 m. The underlying rock is Millstone Grit beneath which lies Carboniferous Limestone. These extensive upland fells support the largest expanse of blanket bog and heather moorland in Lancashire and provide suitable habitat for a diverse upland breeding bird community which includes the Annex I species hen harrier and merlin for which the SPA is classified. The site also qualifies as it supports more than 1% of the biogeographic population of breeding lesser black-backed gull.

The most extensive plant communities within the site are dry heather dominated heathland, generally found on the steeper slopes, and heather *Calluna vulgaris* and cotton grass *Eriophorum vaginatum* dominated blanket bog which covers the tops of the ridges and shallow slopes.

Size of SPA: 16,002.3 ha

Qualifying species: The site qualifies under **article 4.1** of the Directive (2009/147/EC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

Species	Count (period)	% of population	Interest type
Hen harrier <i>Circus cyaneus</i>	12 pairs 1986-1990	2.4% (GB population)	Annex I
Merlin <i>Falco columbarius</i>	21 pairs 1986-1990	3.2% (GB population)	Annex I

Proposed new interest: The site qualifies under **article 4.2** of the Directive (2009/147/EC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:

Species	Count (period)	% of population	Interest type
Lesser black-backed gull <i>Larus fuscus graellsii</i>	4575 pairs 2009-2012 ¹	2.5% (biogeographic population) ²	Migratory

¹Data from: i) Sowter, D. J., 2009-2011. Tarnbrook Fell gullery reports, unpublished, and ii) Coyle, S. P., 2012. The Tarnbrook Fell gullery report 2012 and Langden Head gullery report 2012, unpublished.

²Biogeographic reference population cited in Mundkur T., & Nagy S. eds 2012. Waterbird Population Estimates - Fifth edition. Wetlands International. Wageningen, The Netherlands.

NATURA 2000 – STANDARD DATA FORM

Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance and designated SACs).

Each Natura 2000 site in the United Kingdom has its own Standard Data Form containing site-specific information. The data form for this site has been generated from the Natura 2000 Database submitted to the European Commission on the following date:

22/12/2015

The information provided here, follows the officially agreed site information format for Natura 2000 sites, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

The Standard Data Forms are generated automatically for all of the UK's Natura 2000 sites using the European Environment Agency's Natura 2000 software. The structure and format of these forms is exactly as produced by the EEA's Natura 2000 software (except for the addition of this coversheet and the end notes). The content matches exactly the data submitted to the European Commission.

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

Further technical documentation may be found here
http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal

As part of the December 2015 submission, several sections of the UK's previously published Standard Data Forms have been updated. For details of the approach taken by the UK in this submission please refer to the following document:
http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

More general information on Special Areas of Conservation (SACs) in the United Kingdom is available from the [SAC home page on the JNCC website](#). This webpage also provides links to Standard Data Forms for all SACs in the UK.

Date form generated by the Joint Nature Conservation Committee
25 January 2016.



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0014775
SITENAME North Pennine Dales Meadows

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- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0014775	Back to top
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1.3 Site name

North Pennine Dales Meadows

1.4 First Compilation date 1995-06	1.5 Update date 2015-12
----------------------------------------------	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY
Email:

Date site proposed as SCI: 1995-06
Date site confirmed as SCI: 2004-12
Date site designated as SAC: 2005-04

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

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2.1 Site-centre location [decimal degrees]:

Longitude

-2.106666667

Latitude

54.62527778

2.2 Area [ha]:

481.64

2.3 Marine area [%]

0.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKE2	North Yorkshire
UKC1	Tees Valley and Durham
UKD4	Lancashire
UKD1	Cumbria
UKC2	Northumberland and Tyne and Wear

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

3.1 Habitat types present on the site and assessment for them

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Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
6210			4.05		G	D			
6410			7.37		G	B	C	B	C
6520			393.02		G	A	A	B	A
7230			1.49		G	D			
8240	X					D			

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.

- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

4. SITE DESCRIPTION

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4.1 General site character

Habitat class	% Cover
N09	1.0
N10	99.0
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: limestone,acidic,alluvium,basic,clay,neutral,peat,metamorphic,sedimentary 2 Terrestrial: Geomorphology and landscape: valley,floodplain,hilly,upland,slope

4.2 Quality and importance

Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) for which the area is considered to support a significant presence. Mountain hay meadows for which this is one of only two known outstanding localities in the United Kingdom. which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	A08		B
H	A02		I
H	H04		B
H	A03		I

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
H	D05		I
H	A02		I
H	B06		I
H	B02		I
H	A03		I
H	D05		I
H	A04		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

Conservation Objectives - the Natural England links below provide access to the Conservation Objectives (and other site-related information) for its terrestrial and inshore Natura 2000 sites, including conservation advice packages and supporting documents for European Marine Sites within English waters and for cross-border sites. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

<http://publications.naturalengland.org.uk/category/3212324>

<http://publications.naturalengland.org.uk/category/6490068894089216>

5. SITE PROTECTION STATUS (optional)

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5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	100.0	UK01	3.0		

6. SITE MANAGEMENT

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6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No, but in preparation
<input checked="" type="checkbox"/>	No

6.3 Conservation measures (optional)

For available information, including on Conservation Objectives, see Section 4.5.

EXPLANATION OF CODES USED IN THE NATURA 2000 STANDARD DATA FORMS

The codes in the table below are also explained in the [official European Union guidelines for the Standard Data Form](#). The relevant page is shown in the table below.

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	Designated Special Protection Area	53
B	SAC (includes candidates Special Areas of Conservation, Sites of Community Importance and designated SAC)	53
C	SAC area the same as SPA. Note in the UK Natura 2000 submission this is only used for Gibraltar	53

3.1 Habitat representativity

CODE	DESCRIPTION	PAGE NO
A	Excellent	57
B	Good	57
C	Significant	57
D	Non-significant presence	57

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophila rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, screes and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	15%-100%	58
B	2%-15%	58
C	< 2%	58

3.1 Conservation status habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global grade habitat

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	15%-100%	62
B	2%-15%	62
C	< 2%	62
D	Non-significant population	62

3.2 Conservation status species (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' Or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Assemblages types

CODE	DESCRIPTION	PAGE NO
WATR	Non breeding waterfowl assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code
BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc.), trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK02	Marine Nature Reserve	67
UK04	Site of Special Scientific Interest (UK)	67

Appendix B. SSSI Citations

County: Lancashire **Site Name:** Langcliff Cross Meadow

District: Ribble Valley

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981.

Local Planning Authority: Ribble Valley Borough Council

National Grid Reference: SD 726517 **Area:** 5.3 (ha) 13.1 (ac)

Ordnance Survey Sheet 1:50 000 103 **1:10 000** SD 75 SW

Date Notified (Under 1949 Act): – **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1989 **Date of Last Revision:** –

Other Information:

1. This is a new site.
2. The site lies within the Forest of Bowland AONB

Description and Reasons for Notification:

Langcliff Cross Meadow lies approximately 1g km to the east of the village of Slaidburn and at an altitude of 190 m OD. It represents one of the best examples of the few remaining species-rich meadow grasslands in the county. This nationally scarce and vulnerable habitat has, in Lancashire, been almost completely destroyed by agricultural intensification so that a site displaying such a high diversity of grass and herb species and containing many plants representative of unimproved meadows, is regarded as being of very great importance in the county context.

The community is a variant of the ‘northern haymeadow’ type and contains a total of 19 grass species, co-dominated by sweet vernal-grass *Anthoxanthum odoratum* and red fescue *Festuca rubra*, with crested dog’s-tail *Cynosurus cristatus*, Yorkshire fog *Holcus lanatus*, common bent *Agrostis capillaris* and downy oat-grass *Avenula pubescens* frequent within the sward. The local occurrence of quaking grass *Briza media* and yellow oat-grass *Trisetum flavescens* along with spring-sedge *Carex caryophyllea* indicate pockets of more base-rich conditions.

The grassland is herb-rich throughout and includes many species characteristic of old meadows such as pignut *Conopodium majus*, great burnet *Sanguisorba officinalis*, smooth lady’s-mantle *Alchemilla glabra*, yellow rattle *Rhinanthus minor* and meadowsweet *Filipendula ulmaria*.

The diversity of species found within the site is increased by the presence of a wet area at the eastern end of the field which supports marsh marigold *Caltha palustris*, marsh arrowgrass *Triglochin palustris* and floating sweet-grass *Glyceria fluitans*.

COUNTY: LANCASHIRE

SITE NAME: BELL SYKES MEADOWS

DISTRICT: RIBBLE VALLEY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authority: Ribble Valley Borough Council

National Grid Reference: SD 718526

Area: 13.68 (ha.) 33.80 (ac.)

Ordnance Survey Sheet 1:50,000: 103

1:10,000: SD 75 SW

Date Notified (Under 1981 Act): 26 May 1999

Other Information:

1. This is a new site.
2. The site lies within the Forest of Bowland AONB.

Description and Reasons for Notification:

Bell Sykes Meadows lies at an altitude of between 140--150m OD, approximately 0.5km north-east of the village of Slaidburn. The site consists of six fields of unimproved, enclosed, herb-rich grassland. The river alluvium of the flatter ground close to the River Hodder supports three fields of herb-rich flood meadow. The field on the higher ground to the east supports herb-rich northern hay meadow, whilst the leached soils overlying carboniferous limestone on the west facing slope supports two fields of herb-rich seasonally grazed pasture. Bell Sykes Meadows is one of the few remaining unimproved herb-rich grasslands present in this part of Lancashire. This vulnerable habitat has become increasingly scarce nationally and has been largely destroyed in Lancashire due to agricultural intensification.

The seasonally-flooded meadows support a herb-rich, neutral grassland community, typical of its type in northern England. This community is characterised by meadow foxtail *Alopecurus pratensis*, Yorkshire fog *Holcus lanatus*, sweet vernal-grass *Anthoxanthum odoratum*, red fescue *Festuca rubra*, soft brome *Bromus hordeaceus* and crested dog's-tail *Cynosurus cristatus* with greater burnet *Sanguisorba officinalis*, meadowsweet *Filipendula ulmaria*, yellow rattle *Rhinanthus minor*, lady's mantle *Alchemilla glabra*, meadow vetchling *Lathyrus pratensis*, eyebright *Euphrasia* agg, smooth hawk's-beard *Crepis capillaris* and pignut *Conopodium majus*. Other species present also include abundant ribwort plantain *Plantago lanceolata*, red clover *Trifolium pratense*, meadow buttercup *Ranunculus acris*, daisy *Bellis perennis* and common sorrel *Rumex acetosa*. The diversity of these meadows is further enhanced by the presence of meadow cranesbill *Geranium pratense* and melancholy thistle *Cirsium heterophyllum* along the field edges.

The west facing, sloping ground supports herb-rich meadow and, on the steeper ground, herb-rich pasture. These are characterised by common bent *Agrostis capillaris*, sweet vernal-grass, red fescue, crested dog's-tail and field woodrush *Luzula campestris* with greater burnet, lady's mantle, eyebright, yellow rattle, pignut, common cat's-ear *Hypochoeris radicata*, common bird's-foot trefoil *Lotus corniculatus* and selfheal *Prunella vulgaris*. The pasture on the steeper ground, which supports a mosaic of neutral and acidic grassland, is also characterised by sheep's fescue *Festuca ovina*, tormentil *Potentilla erecta*, heath bedstraw *Galium saxatile* and bitter vetch *Lathyrus montanus*.

A small amount of woodland and scrub is also present on the site.

County: Lancashire **Site Name:** Myttons Meadows

District: Ribble Valley

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981.

Local Planning Authority: Ribble Valley Borough Council

National Grid Reference: SD 703531 **Area:** 10.0 (ha) 24.7 (ac)

Ordnance Survey Sheet 1:50 000 103 **1:10 000** SD 65 SE
SD 75 SW

Date Notified (Under 1949 Act): – **Date of Last Revision:** –

Date Notified (Under 1981 Act): 1985 **Date of Last Revision:** –

Other Information:

1. This is a new site.
2. The site lies within the Forest of Bowland AONB.

Reasons for Notification:

Myttons Meadows are situated on the south-eastern edge of the Forest of Bowland at an altitude of between 155 m and 180 m OD, approximately 1 km north-west of Slaidburn. The site comprises a series of three fields below Myttons Farm and part of another field to the south, which together represent the largest and best surviving example of traditionally managed, species-rich meadow grassland identified in Lancashire. This nationally scarce and highly vulnerable habitat has, in Lancashire, been almost completely destroyed by agricultural intensification so that, in the county context, this site is regarded as being of outstanding importance.

The soils are derived from glacial drift containing fragments of the underlying Carboniferous Limestone and tend to be neutral to calcareous in nature. The variations in depth of drift, soil moisture content and base status are reflected in slight floristic differences evident within the site, while management practices have had a significant effect upon the species composition of the vegetation within the individual fields.

The eastern field adjacent to Croasdale Brook is managed as a traditional hay meadow and supports a uniformly rich and diverse grassland flora with over 95 species having been recorded. The community is of the 'northern hay meadow' type, containing a range of grass species co-dominated by sweet vernal-grass and red fescue with soft brome, hairy oat-grass, Yorkshire fog and common bent occurring frequently within the sward. The uncommon hybrid fescue is also found here along with perennial rye-grass, meadow foxtail and rough meadow-grass. The field is herb-rich throughout

and supports many species characteristic of old meadows, notably wood anemone, common bistort, two species of lady's mantle *Alchemilla glabra* and *A. xanthochlora*, pignut, great burnet, yellow rattle and meadowsweet. In addition are certain old meadow species indicative of base-rich conditions such as rough hawkbit, meadow crane's-bill and cross-wort. A range of sedges occur within the community including spring *Carex caryophyllea*, carnation *C. panicea*, hairy *C. hirta*, glaucous *C. flacca*, flea *C. pulicaris* and pale sedge *C. pallescens*, while occasional wetter areas are dominated by lesser pond-sedge *C. acutiformis* in association with brown sedge *C. disticha*, water avens, marsh marigold and marsh hawk's-beard. Most notable amongst the low-frequency associates of the main community are melancholy thistle (occurring mainly along the edges but also within the main sward), globeflower, common spotted orchid and common twayblade which occur between the Eller Beck and a wall which forms the southern boundary of the field.

The adjacent field to the south contains a small knoll which, presumably because of its shape, has escaped agricultural improvement. The community is akin to that described above but, in addition to melancholy thistle, common spotted orchid and twayblade, includes such notable species as fragrant orchid and the locally scarce adder's-tongue fern.

To the west is a small field formerly part of the larger hay-field above it but fenced off because of steeply sloping ground and waterlogged conditions at the foot of the slope. The management of this field differs from those on either side of it as it is grazed rather than mown, and this is reflected in the patchiness and uneven height of the vegetation. The lower part of the field is wet and the vegetation is dominated by lesser pond-sedge with Yorkshire fog, red fescue, tall fescue and rough meadow-grass and abundant meadowsweet, marsh marigold, creeping buttercup and water avens. Along the eastern boundary the banks of a small stream support globeflower, marsh valerian, marsh hawk's-beard, bitter vetch and great hairy willow-herb with abundant glaucous sweet-grass in the shallow water. The middle section of the field is occupied by a steep bank supporting the same species-rich, northern hay-meadow community as the adjacent fields. Species indicative of base-rich conditions occur, such as hairy oat-grass, quaking grass, glaucous sedge, spring-sedge and rough hawkbit, but in contrast other areas on the upper slopes support species typical of more acid conditions such as mat-grass, common bent, oval sedge, many-headed wood-rush and tormentil.

To the north-west is the largest of the three fields which is also under traditional hay-meadow management with aftermath grazing. The higher frequency of soft brome and perennial rye-grass in this field plus the apparent absence of sedges, is indicative of more intensive agricultural management practices in the past which have altered the species composition to some extent. However, the sward is uniformly rich throughout in grasses and herbs and is typically co-dominated by sweet vernal grass, crested dog's-tail, soft-brome and red fescue, with an abundance of great burnet, yellow rattle and pignut, frequent oxeye daisy, rough hawkbit, meadow buttercup, red clover and lady's mantle *Alchemilla glabra* and *A. xanthochlora* and occasional wood anemone, tufted vetch and burnet saxifrage.

Date Notified: 28th March 1988

File ref: (L) SD 65/2

County: Lancashire **Site Name:** Bowland Fells

District: Lancaster, Ribble Valley, Wyre

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: Lancaster City Council, Ribble Valley Borough Council, Wyre Borough Council

National Grid Reference: SD 620570 **Area:** 15,759.0 (ha) 38,940.5 (ac)

Ordnance Survey Sheet 1:50,000: 97, 98, 102, 103 **1:10,000:** SD 54 NE, NW, SE
SD 55 NE, NW, SE, SW
SD 56 SE, SW
SD 64 NW, SW
SD 65 NE, NW, SE, SW
SD 66 SE, SW
SD 75 NW

Date Notified (Under 1949 Act): 1951 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1988 **Date of Last Revision:** 1988

Other Information:

1. The site includes the former West Bowland Fells and Mallowdale and Bottom Head Fells SSSI.
2. The boundary has been amended by minor deletions and a large extension at this revision.
3. The site is situated within the Forest of Bowland AONB.

Description and Reasons for Notification:

This site encompasses the main upland block within the area of Lancashire known as the Forest of Bowland, an outlier of the Pennine Range situated in the north of the county and to the east of the M6 motorway. Most of this land, stretching from Clougha and Whitray Fell in the north to Parlick in the south, is over 250 m OD and rises sharply to a stream – dissected plateau with the highest point being Ward’s Stone at 561 m. The underlying rock is Millstone Grit beneath which lies Carboniferous Limestone.

These extensive upland fells support the largest expanse of blanket bog and heather moorland in Lancashire and provide suitable habitat for a diverse upland breeding bird community which includes three species (hen harrier, merlin and peregrine), which are afforded special protection under the Wildlife and Countryside Act 1981 by virtue of their rarity or vulnerability. Additional interest is provided by the existence of one of the largest lesser black-backed gull colonies in Great Britain, the presence of a number of nationally or locally uncommon plant species and a variety of upland habitats and their associated avifauna.

The most extensive plant communities within the site are dry heather-dominated heathland, generally found on the steeper slopes, and heather *Calluna vulgaris* and cottongrass *Eriophorum vaginatum*-dominated blanket bog which covers the tops of the ridges and shallow slopes.

Within the blanket bog communities bog mosses *Sphagnum* spp. are sparse, due to the effects of past burning practices, although bog rosemary *Andromeda polifolia*, a nationally scarce species, cranberry *Vaccinium oxycoccus*, crowberry *Empetrum nigrum*, and cloudberry *Rubus chamaemorus* are all widely distributed. Some areas of bog have been more heavily burnt and this, perhaps coupled with greater numbers of grazing sheep, has resulted in the loss of heather to give bilberry *Vaccinium myrtillus* and cottongrass bog. In some areas dwarf shrub component has been reduced still further to produce a cottongrass dominated degraded blanket bog community. In places within the site there is active and extensive peat erosion leaving large mounds and hags surrounded by shallow peat and a stony mineral soil.

The extensive areas of *Calluna* heath are generally managed by small patch burning to encourage red grouse. On recently burnt areas, bilberry is quick to recover and is at first dominant over the regenerating heather but the bilberry later becomes less conspicuous as the heather eventually reasserts its dominance. Heavy burning and high levels of sheep grazing have in some areas resulted in the loss of heather and its replacement by a bilberry/wavy hair-grass *Deschampsia flexuosa* community. In other places cowberry *Vaccinium vitis-idaea* has become co-dominant with bilberry, as on the summit plateau of Ward's Stone where these species are associated with a variety of lichens. Where grazing has been heavier still, the dwarf shrubs are replaced by species-poor acid grassland dominated by mat-grass *Nardus stricta* or, to a lesser extent, heath rush *Juncus squarrosus*, or purple moor-grass *Molinia caerulea*. Despite such modifications, the site is of particular value for the extent of heather moorland still remaining, and represents a good example of a habitat type which has been significantly reduced across upland Britain.

On the lower ground, bracken forms extensive stands in some areas. Dense growth of bracken suppresses the ground flora but where it is less dense bilberry community grows beneath, along with other plant species more usually associated with woodland, such as wood sorrel *Oxalis acetosella* and climbing corydalis *Corydalis claviculata*. Chickweed wintergreen *Trientalis europaea* has also been recorded on the site growing beneath bracken and here is nearly at its southern limit and in its only Lancashire location.

A number of interesting plants grow on the Millstone Grit crags, where they are protected from grazing and burning. These include fir clubmoss *Huperzia selago* and also Scottish filmy-fern *Hymenophyllum wilsonii* and hayscented buckler-fern *Dryopteris aemula* in their only Lancashire sites.

Flushes and springs are not common but provide a habitat for the Lancashire rarities lesser twayblade *Listera cordata*, broad-leaved cottongrass *Eriophorum latifolium* and pale forget-me-not *Myosotis stolonifera* – a nationally scarce species. Tree cover in the form of oak *Quercus petraea* scrub is fragmented and occurs on the steep slopes and in the cloughs, adding to the diversity of habitats within the site. Many of the trees are of great age, supporting a variety of lichens, and the shelter they provide allows the growth of carpets of tall ferns.

The maintenance of heather moorland over much of the site has provided an excellent habitat not only for red grouse for which the moors have primarily been managed, but for other moorland birds requiring the presence of heather for nesting cover and as a source of prey. Of these the hen harrier is the most notable: the Bowland Fells represent the only regularly-used

breeding locality in England and thus supports a very important breeding nucleus for this species which is in decline and increasingly experiencing a reduced success in breeding performance. Other nesting predatory birds (raptors) include merlin (another species suffering a continued decline in numbers), peregrine, short-eared owl, sparrowhawk and kestrel. The open moorland and blanket bog communities support other upland birds such as golden plover, ring ouzel, meadow pipit, skylark, whinchat and wheatear while the damp, rushy lower slopes provide ideal habitat for waders such as redshank, curlew, lapwing, snipe and oystercatcher. The fast-flowing upland streams are the typical habitat for common sandpiper, dipper and grey wagtail while the presence of tree cover adjacent to open moorland is ideal for woodcock, redstart and spotted flycatcher.

Mallowdale and Tarnbrook Fells also support one of the five largest breeding colonies of lesser black-backed gulls in Great Britain which probably contains over 10% of the British and 1% of the European populations.

COUNTY: LANCASHIRE

SITE NAME: FIELD HEAD MEADOW

DISTRICT: RIBBLE VALLEY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authority: Ribble Valley Borough Council

National Grid Reference: SD 725524

Area: 3.29 (ha.) 8.13 (ac.)

Ordnance Survey Sheet 1:50,000: 103

1:10,000: SD 75 SW

Date Notified (Under 1981 Act): 25 May 1999

Other Information:

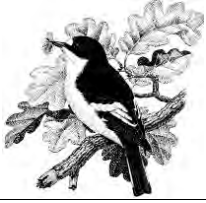
1. This is a new site.
2. The site lies within the Forest of Rowland AONB.

Description and Reasons for Notification:

Field Head Meadow lies at an altitude of 210m OD, approximately 1.3km east of the village of Slaidburn. The site consists of a single field of enclosed, moderately herb-rich hay meadow, typical of its type in northern England. Field Head Meadow is one of the few remaining herb-rich grasslands present in this part of Lancashire. This vulnerable habitat has become increasingly scarce nationally and has been largely destroyed in Lancashire due to agricultural intensification.

The meadow is a variant of the 'northern hay meadow' type. It is characterised by sweet vernal-grass *Anthoxanthum odoratum*, red fescue *Festuca rubra*, Yorkshire fog *Holcus lanatus*, crested dog's-tail *Cynosurus cristatus*, rough meadow-grass *Poa trivialis* and field woodrush *Luzula campestris* with greater burnet *Sanguisorba officinalis*, yellow rattle *Rhinanthus minor*, lady's mantle *Alchemilla glabra*, eyebright *Euphrasia* agg and pignut *Conopodium majus*. Other species present also include abundant ribwort plantain *Plantago lanceolata*, red clover *Trifolium pratense*, meadow buttercup *Ranunculus acris*, daisy *Bellis perennis* and common sorrel *Rumex acetosa*. Yellow oat-grass *Trisetium flavescens*, common knapweed *Centaurea nigra*, autumn hawkbit *Leontodon autumnalis*, common bird's-foot trefoil *Lotus corniculatus*, smooth hawk's-beard *Crepis capillaris* and meadow vetchling *Lathyrus pratensis* are also occasionally present in the sward.

Appendix C. Local Wildlife Citations (LERN)



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Site Name: Gibb's Wood and Bonstone Wood

Site Ref: 64NE11

Approved:

Area (ha): 4.15

Date written/last updated:

Grid Ref: SD692487

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises woodland which is ancient semi-natural in character.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd2)

Other Information/Comments:



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Site Name: Bonstone Brook Pastures

Site Ref: 74NW06

Approved: 01 January 2004

Area (ha): 14.77

Date written/last updated: 01 March 2004

Grid Ref: SD700483

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises two pastures supporting species-rich semi-natural grassland situated approximately 2 km south of the village of Newton. The pastures lie on sloping ground along either side of Bonstone Brook.

The southern pasture, known as Scotch Close, is damp with frequent rushes (hard rush, soft-rush and jointed rush) and supports a mosaic of neutral and acidic grassland. Common bent and crested dog's-tail are abundant. Other grasses include quaking grass, sweet vernal-grass, tufted hair-grass and Yorkshire fog. The sward is uniformly rich and includes frequent common knapweed, fairy flax, selfheal, marsh valerian, ribwort plantain and carnation sedge. Occasional species include sneezewort, lady's-mantle, marsh marigold, meadowsweet, water avens. Cat's-ear, meadow vetchling, rough hawkbit, common and greater bird's-foot-trefoil, lesser spearwort, great burnet, devil's-bit scabious, marsh arrowgrass, star sedge and field wood-rush. Acidic areas support mat-grass, purple moor-grass and heath bedstraw. Heather, bilberry and hair-moss occur rarely.

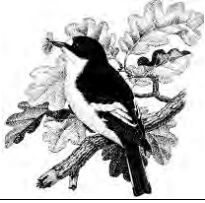
The northern pasture comprises a mosaic of wet and dry neutral and acidic grassland. Much of it lies on sheltered south-west facing banks and provides valuable habitat for butterflies and other invertebrates. As well as all the grasses and rushes listed above, the pasture supports common bird's-foot-trefoil, cat's-ear, eyebright, selfheal, meadow vetchling, mouse-ear hawkweed, fairy flax, rough hawkbit, common knapweed, lesser stitchwort, lady's mantle, great burnet, meadowsweet, marsh valerian, water avens, sneezewort, devil's-bit scabious, primrose, angelica, water mint and fen bedstraw. Alder is frequent at the western end of the field together with occasional ash and holly. There are also two pheasant enclosures, one of which is planted with young trees.

The site also includes a small area of adjoining damp semi-natural pasture situated on a steep bank at SD 704481 next to a conifer plantation. Plants found here include common bird's-foot-trefoil, cat's-ear, devil's-bit scabious, common knapweed, meadow vetchling, mouse-ear hawkweed, lady's mantle, water avens, marsh violet and primrose.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:



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Site Name: Feazer Wood

Site Ref: 74NW03

Approved: 01 September 1993

Area (ha): 4.89

Date written/last updated: 01 September 2005

Grid Ref: SD726454

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Waddington

Description:

The site comprises a semi-natural clough woodland situated approximately 1.5 km north of Waddington. Most of the wood is included in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

The woodland lies on steep banks along both sides of Waddington Brook. The canopy is dominated by Ash with frequent Wych Elm, Oak, Rowan, Sycamore and Beech, and occasional Alder, Birch, Spruce and Larch. There is an understorey of Hazel, Hawthorn, Holly and Elder, with occasional Bird Cherry and Rhododendron together with regenerating Ash, Rowan and Wych Elm.

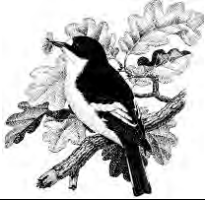
The ground flora has frequent Tufted Hair-grass, Yorkshire-fog, Bramble, Wood Speedwell, Wood-sorrel and Male and Broad-buckler ferns. Other species present include Bluebell, Dog's Mercury, Enchanter's-nightshade, Yellow Pimpernel, Honeysuckle, Ivy, Herb-robert, Red Campion, Foxglove, Wood Avens, Greater Stitchwort, Bracken, Wood Sedge, Hairy Wood-rush, False Brome, Rough Meadow-grass and Creeping Soft-grass with Opposite-leaved Golden-saxifrage, Bugle, Meadowsweet, Brooklime, Creeping Buttercup and Common Nettle in damp areas.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

The site adjoins Hospital Wood Biological Heritage Site (74SW02).



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Site Name: Hospital Wood

Site Ref: 74SW02

Approved: 01 September 1993

Area (ha): 8.46

Date written/last updated: 01 July 2001

Grid Ref: SD727446

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Waddington

Description:

The site comprises a semi-natural clough woodland to the north of Waddington. It is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

The canopy is dominated by wych elm, sycamore and oak, with some ash, alder and beech. There are also a few small stands of conifers. The understorey is of hazel, hawthorn, holly and rowan with some bird cherry, blackthorn, elder, gorse and rhododendron as well as regenerating canopy species.

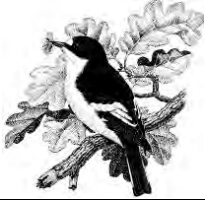
The ground flora has frequent dog's-mercury, enchanter's-nightshade, wood-sorrel, ramsons, bramble, false brome, tufted hair-grass, creeping soft-grass and Lady, male and broad-buckler ferns. Bluebell, woodruff, greater stitchwort, honeysuckle, herb-robert, Lords-and-Ladies, wood sage, red campion, common figwort, foxglove, raspberry, hart's-tongue fern, maidenhair spleenwort, hairy wood-rush, wood horsetail, wood-sedge and wood melick are also present with frequent opposite-leaved golden-saxifrage in the wetter areas.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

The site adjoins Feazer Wood Biological Heritage Site (74NW03).



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Site Name: Waddington Fell and Browsholme Moor

Site Ref: 74NW02

Approved: 01 September 1993

Area (ha): 268.03

Date written/last updated: 01 March 2004

Grid Ref: SD708476

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Bashall Eaves, Bowland Forest High, Newton, Waddington

Description:

The site comprises an extensive area of moorland with upland heath, blanket bog, acid grassland and mires lying along the western side of Fell Road (B6478), between Waddington and Newton. It includes Newton Fells, Waddington Fell, Browsholme Moor, Duckpit Hill, Cabin Hill and Stony Hill and ranges in altitude from around 230m in Smelt Mill Clough to 395m at the triangulation pillar on the summit of Waddington Fell. Approximately half of the site is Common Land (Newton Fell).

The higher ground is mainly vegetated by dry dwarf shrub heath dominated by heather with frequent bilberry, crowberry and wavy hair-grass. Cowberry, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*, occurs occasionally on Waddington Fell. Elsewhere, the heathland forms a mosaic with unimproved acidic grassland dominated by mat-grass and heath rush with frequent sheep's-fescue, wavy hair-grass and heath bedstraw.

The site also supports extensive areas of blanket bog. Here the vegetation is dominated by hare's-tail and common cottongrass with bog mosses (*Sphagnum spp.*), hair-moss (*Polytrichum sp.*), heather, bilberry, wavy hair-grass, sheep's-fescue and heath rush. Of particular note is the frequent occurrence of cranberry together with occasional round-leaved sundew, cross-leaved heath and crowberry.

The value of the moorland is enhanced by the presence of several species-rich flushes and valley mires. Species in these areas include round-leaved sundew, bog asphodel, bogbean, marsh pennywort, marsh violet, marsh bedstraw, white sedge, star sedge, long-stalked yellow-sedge, carnation sedge, oval sedge and common sedge. Greater tussock-sedge is also present on the site.

The moorland provides valuable habitat for upland birds such as red grouse.

Common lizard occurs on the site.

Guideline(s) for Site Selection:

Swamp and Fen (Fe2)

Bog (Bo4)

Heathland (He1)

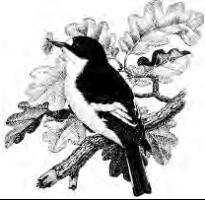
Other Information/Comments:

Blanket Bog, Upland Heathland and Upland Flushes, Fens and Swamps are Priority Habitats in the UK Biodiversity Action Plan.

The site adjoins Bradford Fell, Easington Fell and Harrop Fell Biological Heritage Site (74NW04).

The site is in the Forest of Bowland Area of Outstanding Natural Beauty.

Approximately half of the site is Common Land (Newton Fell CL No 176W).



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Site Name: Bradford Fell, Easington Fell and Harrop Fell

Site Ref: 74NW04

Approved: 01 September 1993

Area (ha): 517.97

Date written/last updated: 01 November 1999

Grid Ref: SD725490

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Grindleton, Newton, Waddington, West Bradford

Description:

The site comprises an extensive area of upland heath and mire situated on Bradford, Easington and Harrop Fells immediately east of the B6478 between Newton and Waddington. It rises to 396m on the summit of Easington Fell.

Much of Bradford Fell is ungrazed by stock and dominated by mature heather with some bilberry and large stands of bracken in places. Easington Fell and Harrop Fell are common land and have been considerably modified by sheep grazing. Here, most of the vegetation comprises a mosaic of dry dwarf shrub heath, acid grassland, marshy grassland, blanket bog and bracken.

Dry heath areas support varying proportions of heather and bilberry. In many places the heathland occurs as a mosaic with unimproved acid grassland generally dominated by mat grass and heath rush with frequent wavy hair-grass, sheep's-fescue and some *Polytrichum commune*. Wetter areas of marshy grassland are dominated by purple-moor grass and soft-rush in varying proportions. Blanket bog supports species such as hare's-tail and common cottongrass, cross-leaved heath, *Sphagnum* and *Polytrichum* with occasional bilberry and heather.

The presence of a number of mires and flushes provides additional interest to the site. For example, there are several large acidic flushes on Easington Fell in the Skelshaw Brook valley. One flush at SD 727495 is a species-rich example. It is dominated by common cottongrass and *Sphagnum spp.* with soft-rush at the edges. Round-leaved sundew is abundant throughout. Other species include cranberry, marsh pennywort, common sedge, star sedge and notably, bog pimpernel, a species listed in the *Provisional Lancashire Red Data List of Vascular Plants*. Also on Easington Fell (SD 733495) is a deep pool surrounded by a *Sphagnum* dominated basin mire. Plants found here include cranberry and white sedge. On West Bradford Fell (SD 730470) is a small mire with abundant *Sphagnum spp.* and hare's-tail cottongrass. Other species present here include heather, bilberry, crowberry, cross-leaved heath, cranberry and common cottongrass together with bog rosemary and cowberry both of which are included in the *Provisional Lancashire Red Data List of Vascular Plants*.

Also of interest is the occurrence of a nationally scarce liverwort, *Cephalozia catenulata*, which has been recorded on a shaded sandstone boulder on Grindleton Fell. This is the only known location for this species in Lancashire.

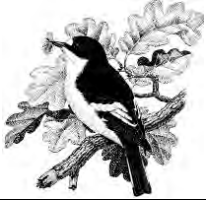
The site provides valuable habitat for upland birds such as red grouse.

Guideline(s) for Site Selection:

Swamp and Fen	(Fe2)
Heathland	(He1)
Flowering Plants and Ferns	(Ff4b)
Flowering Plants and Ferns	(Ff4a)
Bryophytes	(Br2)

Other Information/Comments:

- 1.The site includes the following commons: Old Quarries (56W), Old Quarries (57W), Harrop Fell (65W-part only), Easington Fell (66W-part only), Millstone Hill (156W), Newton Fell (176W-part only), Newton Fell (248W) and Part of Newton Fell (408W).
- 2.The site adjoins Waddington Fell and Browsholme Moor Biological Heritage Site (BHS 74NW02) with which it is ecologically continuous.



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Site Name: Ashnott Wood

Site Ref: 64NE12

Approved:

Area (ha): 2.55

Date written/last updated:

Grid Ref: SD693483

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises semi-natural woodland which is identified within Natural England's Inventory of Ancient Woodland and.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:



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Site Name: River Hodder From Confluence with River Ribble Upstream to Cross of Greet Bridge/ Bowland Fells SSSI Boundary

Site Ref: LSRHO

Approved: 08 September 1993

Area (ha): 94.9

Date written/last updated: 01 September 2001

Grid Ref: SD710381 to SD702589

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Aughton, Bailey and Chaigley, Bashall Eaves, Bowland Forest High, Bowland Forest Low
Bowland-with-Leagram, Easington, Great Mitton, Newton, Slaidburn

Description:

The site comprises almost the entire length of the River Hodder, from the Cross of Greet Bridge in the north downstream to its confluence with the River Ribble in the south. The river passes through farmland and a number of small settlements. The site begins on the edge of the Bowland Fells (see Other Information below) and the river flows south to Stocks Reservoir (BHS 75NW07), formed when the river was damned in 1922. South of the reservoir the river continues on through Slaidburn and Newton before turning west to Dunsop Bridge and then south again to Whitewell, before finally meeting the River Ribble near Great Mitton.

The river is important for otter, a species that is listed in Annex II of the Habitats Directive and in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Otter is a UK Biodiversity Action Plan (BAP) priority species. The Hodder is a Class 1 river (good/excellent water quality) and supports salmon, brown trout, sea trout, bullhead, dace and stone loach. Sandpipers and oystercatchers are associated with areas of shingle.

Three species included in the *Provisional Lancashire Red Data List of Vascular Plants* are present along the riverside, namely yellow star-of-Bethlehem, green figwort and melancholy thistle.

Many of the river banks are lined by woodland or individual trees and shrubs. Trees present include alder, ash, hazel, holly and hawthorn. Ground flora species include bluebell, dog's mercury, wood-sorrel, sanicle, wood anemone, moschatel and ramsons. Marsh hawk's-beard, water avens, opposite-leaved golden-saxifrage, alternate-leaved golden-saxifrage, marsh violet and marsh marigold are present on wetter ground. Elsewhere grassy banks support species such as crested dog's-tail, common bird's-foot-trefoil, autumn hawkbit and meadow saxifrage.

Guideline(s) for Site Selection:

Rivers and Streams	(Ri1)
Flowering Plants and Ferns	(Ff4)?
Flowering Plants and Ferns	(Ff3)
Mammals	(Ma1a)
	?
Fish	(Fi1)

Other Information/Comments:

The river arises outside of the BHS, to the north-west of the Cross of Greet Bridge. This stretch of the river lies within the Bowland Fells Site of Special Scientific Interest (SSSI). The site lies partly within the Forest of Bowland Area of Outstanding Natural Beauty (AONB).



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Site Name: Braddup Wood North

Site Ref: 64SE25

Approved: 01 September 1993

Area (ha): 17.92

Date written/last updated: 01 April 2003

Grid Ref: SD698449

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Bashall Eaves

Description:

The site comprises a large, semi-natural woodland occupying the steep sides of Bashall Brook and its tributary along Braddup Clough, to the north-west. The site is included in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994). Wild daffodil, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*, is present.

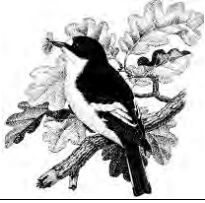
The canopy is dominated by ash and sycamore in the south, with birch becoming dominant to the north. Oak, rowan and wych elm are occasional. Alder is abundant along the banks of the brook. Felling has occurred in the past. There is a sparse understorey of hazel and hawthorn. The ground flora on the drier slopes of the wood is dominated by dog's mercury and bluebell, with abundant tufted hair-grass and hairy brome. Species occurring on wetter ground include large bitter-cress, yellow pimpernel and opposite-leaved golden-saxifrage. Along the brook butterbur and ramsons are found. The following plants are locally abundant: woodruff, wood avens and early purple-orchid.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

The site adjoins Moor Piece Biological Heritage Site (BHS 64SE24).



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Site Name: Cross Lane Roadside Verges

Site Ref: 74SW01

Approved: 08 September 1993

Area (ha): 0.37

Date written/last updated: 12 September 2013

Grid Ref: SD704442

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Bashall Eaves

Description:

The site consists of species-rich roadside verges and an associated ditch along Cross Lane. The site is notable for the presence of Green Figwort which is listed as Sensitive in the *Provisional Lancashire Red Data List of Vascular Plants*.

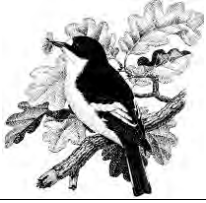
In addition to Green Figwort the flora of the verges includes Greater Burnet-saxifrage, Water Avens, Crosswort, Bugle, Wild Strawberry, Common Knapweed, Lesser Stitchwort, Common Bird's-Foot-Trefoil, Betony, Square-stalked St John's-wort, Marsh Woundwort, Marsh Thistle, Selfheal, Yellow Pimpernel, Bluebell, Slender St. John's-Wort, Germander Speedwell, Hard Fern, Hairy Brome, Alternate-Leaved Golden-Saxifrage and Opposite-Leaved Golden-Saxifrage.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Flowering Plants and Ferns [(Ff4)]

Other Information/Comments:



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Site Name: Crag House Roadside Verges

Site Ref: 64NE09

Approved: 08 September 1993

Area (ha): 0.75

Date written/last updated:

Grid Ref: SD687481

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

Description:

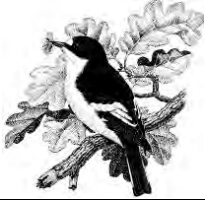
To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Flowering Plants and Ferns [(Ff4)]

Other Information/Comments:



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Site Name: Braddup Wood South

Site Ref: 64SE26

Approved: 01 September 1993

Area (ha): 6.29

Date written/last updated: 01 April 2002

Grid Ref: SD699440

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Bashall Eaves

Description:

The site comprises predominantly broadleaved woodland situated on steep banks adjoining Bashall Brook, approximately 0.5 km north-east of Bashall Eaves. The wood is listed in the *Lancashire Inventory of Ancient woodland (Provisional)*, (English Nature, 1994).

Whilst parts of the wood have been modified by past management, most of it still retains a semi-natural character. The canopy is dominated by sycamore, with frequent alder and occasional oak, ash, wych elm, Scots pine, rowan and birch. There is a small spruce plantation on the western side of the brook and a group of Portugal laurel on the east bank. The understorey comprises holly, hazel and hawthorn together with locally abundant rhododendron.

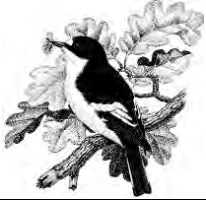
The ground layer is variable. Some areas are dominated by bracken with creeping soft-grass, bramble, bluebell, and wood-sorrel. Elsewhere, especially alongside the brook, the flora is much richer. Species present include dog's mercury, ramsons, wood sage, sanicle, bugle, primrose, lesser celandine, opposite-leaved golden-saxifrage, Lords-and-Ladies, herb-Robert, red campion, wood speedwell, ivy, wood-sedge, hard fern, hart's-tongue, male-fern and lady fern.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:

This wood is called 'Marsdens Wood' in the <|>Lancashire Inventory of Ancient woodland</|>.



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Site Name: Waddington Fell Road, Roadside Verges

Site Ref: 74NW01

Approved: 08 September 1993

Area (ha): 0.22

Date written/last updated:

Grid Ref: SD702499

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

Description:

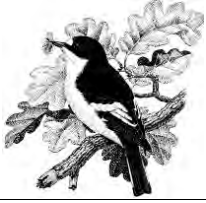
To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Other Information/Comments:

Lowland Meadows is a Priority Habitat in the UK Biodiversity Action Plan.



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Site Name: Moor Piece

Site Ref: 64SE24

Approved:

Area (ha): 16.19

Date written/last updated:

Grid Ref: SD694447

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Bashall Eaves

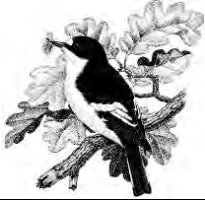
Description:

To be completed.

Guideline(s) for Site Selection:

Woodland and Scrub	(Wd5)
Bog	(Bo3a)
Fungi	(Fu2)
Butterflies and Moths	[(Le4)]

Other Information/Comments:



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Site Name: Drakehouse Wood

Site Ref: 74NW05

Approved: 01 September 1993

Area (ha): 19.18

Date written/last updated: 01 May 2006

Grid Ref: SD739453

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

West Bradford

Description:

The site comprises ancient, semi-natural woodland occupying the steep valley sides adjoining Drakehouse and Brocklehurst Brooks, approximately 3km north of Clitheroe. The wood is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

The canopy is dominated by Ash with frequent Oak, Sycamore and Beech and occasional Wych Elm, Birch, Larch and Alder. Scot's Pine is locally frequent. The understorey is made up of frequent Holly with occasional Hawthorn, Hazel, Elder, Rowan, Rose and Rhododendron as well as regenerating canopy species.

Ramsons are locally dominant over large areas of the wood with locally abundant Lesser Celandine and Opposite-leaved Golden Saxifrage. Elsewhere Bluebell, Wood Anemone, Wood-sorrel and Tufted Hair-grass are frequent. Occasional species include Dog's Mercury, Enchanter's Nightshade, Primrose, Hedge Woundwort, Herb-Robert, Lords-and-Ladies, Red Campion, Wood Avens, Meadowsweet, Brooklime, Creeping Buttercup, Common Nettle, Ivy, Honeysuckle, Bramble, Soft-rush and Creeping Soft-grass. Ferns include Broad Buckler-fern, Male-fern, Lady-fern, Bracken, Hart's-tongue and Hard Fern. Other species present include Woodruff, Moschatel, Common Dog-violet, Bittersweet and Wood Sedge.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:



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Site Name: Birkett Fell, Hodder Bank Fell and Mossthwaite Fell

Site Ref: 64NE07

Approved: 08 September 1993

Area (ha): 231.14

Date written/last updated: 01 August 2006

Grid Ref: SD671485

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Bowland Forest Low, Newton

Description:

The site comprises a large area of upland heath and blanket bog with scattered flushes, situated south of the river Hodder between Whitewell, Dunsop Bridge, Newton and Cow Ark. It includes Burholme Moor and Kitcham Hill as well as Birkett Fell, Hodder Bank Fell and Mossthwaite Fell and rises to an altitude of 283m on the summit of Kitcham Hill.

Much of the site is dominated by Heather with Purple Moor-grass in varying proportions. Other frequently occurring species include Bilberry, Hare's-tail Cottongrass, Heath Rush and Soft-rush. In some places, especially on Hodder Bank Fell, Burholme Moor and the lower eastern slopes of Birkett Fell, Heather is less frequent and the vegetation comprises marshy grassland with Purple Moor-grass dominant. There are also small areas of acid grassland dominated by Mat-grass. Reduced grazing pressures in recent years are resulting in an increase in Heather cover in parts. Bog mosses (*Sphagnum* spp.) occur frequently throughout the site with occasional Cross-leaved Heath and Cranberry.

Additional interest is provided by scattered, species-rich flushes, several of which support Bog Rosemary, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*. Other flush species include Round-leaved Sundew, Cross-leaved Heath and Cranberry.

Cowberry, another Lancashire Red Data Book species, is present on Birkett Fell.

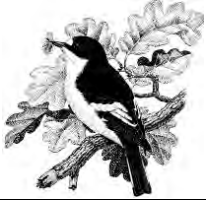
A few mature Scot's Pine, Larch and Beech trees are all that remains of Kitcham Wood.

Guideline(s) for Site Selection:

Swamp and Fen (Fe2)
Heathland (He1)
Flowering Plants and Ferns [(Ff4b)]
Flowering Plants and Ferns [(Ff4a)]

Other Information/Comments:

The site is in the Forest of Bowland Area of Outstanding Natural Beauty.



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Site Name: Newton North Roadside Verges

Site Ref: 65SE06

Approved: 08 September 1993

Area (ha): 0.28

Date written/last updated:

Grid Ref: SD698508

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

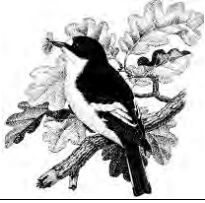
Description:

To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Other Information/Comments:



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Site Name: Great Dunnov Wood

Site Ref: 75SW02

Approved: 01 September 1993

Area (ha): 7.84

Date written/last updated: 01 December 2003

Grid Ref: SD704510

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises a semi-natural woodland situated on limestone along the north west bank of the river Hodder, approximately 0.75 km north east of Newton. It is shown in the *Lancashire Inventory of Ancient Woodland, (Provisional)*, (English Nature, 1994) as ancient replanted woodland. There are some precipitous limestone cliffs, ledges, rock outcrops and scree within the site and these areas support valuable limestone grassland/herb communities as well as ancient semi-natural woodland. The occurrence of lily-of-the-valley, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*, is notable.

Much of the woodland lies on limestone cliffs, outcrops and scree. In these areas the canopy comprises mainly of ash with frequent wych elm and sycamore and occasional oak over a scattered understorey of hawthorn, blackthorn, hazel, rowan, elder and frequent regenerating ash. There is a good ground flora with abundant dog's mercury and ramsons and frequent bluebell. Other woodland species include enchanter's nightshade, sanicle, wood sage, lesser celandine, Lords-and-Ladies, red campion, primrose, common dog-violet, ivy and bramble. Harebell, giant bellflower, shining crane's-bill, wild basil, hart's-tongue, wall lettuce, wall-rue and maidenhair spleenwort occur on limestone in more open areas. A large colony of pignut is present on the scree.

Above the cliffs where the ground is flatter and on less steep slopes the woodland has been planted. In these areas much of the canopy is dominated by larch, beech and Scot's pine and occasional horse chestnut although ash, wych elm and sycamore are present throughout.

Mezereon, a nationally scarce shrub, has been recorded here in the past.

Guideline(s) for Site Selection:

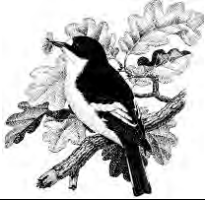
Woodland and Scrub (Wd1)

Rock (Ro1)

Flowering Plants and Ferns (Ff4a)

Other Information/Comments:

The site adjoins Great Dunnov Hill (75SW01) and the River Hodder (LS RHO) Biological Heritage Sites. The site was extended in 12/03.



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Site Name: Clerk Laithe

Site Ref: 65SE10

Approved: 01 February 2002

Area (ha): 1.06

Date written/last updated: 01 August 2002

Grid Ref: SD698510

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises areas of species-rich pastoral grassland along the banks and slopes of the initial 180 metres of a headwater stream. It lies some 0.5 kilometres north of Newton at an altitude of approximately 170 metres.

The most species-rich grassland within the site occurs on the south-easterly facing slope with abundant burnet-saxifrage, meadow vetchling, cat's-ear, great burnet, betony, Yorkshire-fog and cock's-foot. Frequently occurring species include selfheal, eyebright and quaking grass with occasional dyer's greenweed and glaucous sedge. Flushed areas along the slope add further to the diversity with tufted hair-grass, water avens, meadowsweet and sharp-flowered rush.

The north-westerly facing slope supports occasional to frequent common knapweed, heath bedstraw, cat's-ear, burnet-saxifrage, tormentil and selfheal.

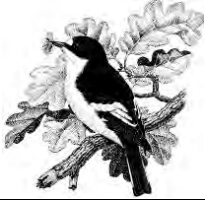
Thinner soils are in evidence on mounds to the north of the spring, and here the plant communities appear more calcareous with frequent rough hawkbit, eyebright, harebell and lady's mantle, and occasional mouse-ear hawkweed and salad burnet.

The vegetation of the stream and streamsides is also diverse with abundant meadowsweet and zigzag clover, and frequent silverweed, water mint and water avens.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:



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Site Name: Great Dunnow Hill

Site Ref: 75SW01

Approved: 01 September 1993

Area (ha): 14.54

Date written/last updated: 03 December 2010

Grid Ref: SD702511

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Slaidburn

Description:

The site comprises a large limestone reef knoll rising to 212 m situated in the Hodder Valley 0.75 km north east of Newton. The hill supports areas of species-rich calcareous grassland. The species-rich grassland occurs on steep slopes and shallow soils throughout the site. It is also found around the small disused quarry and the lime kiln. Less steep areas with deeper soils support more improved grassland.

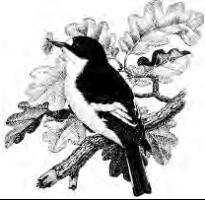
The species-rich areas support a variety plants including common bird's-foot-trefoil, harebell, eyebright, lady's bedstraw, mouse-ear hawkweed, bitter-vetch, fairy flax, burnet saxifrage, selfheal, bulbous buttercup, salad burnet, betony, wild thyme, heath speedwell and field wood-rush. Grasses and sedges present include common bent, sweet vernal-grass, crested dog's-tail, sheep's-fescue, meadow oat-grass, quaking grass, heath-grass, spring sedge, flea sedge and glaucous sedge.

Guideline(s) for Site Selection:

Grassland (Gr1)

Other Information/Comments:

Lowland Calcareous Grassland is a Priority Habitat in the UK Biodiversity Action Plan.
The site adjoins Great Dunnow Wood Biological Heritage Site (BHS 75SW02).



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Site Name: Waddington Brickworks Old Working

Site Ref: 74SW04

Approved: 08 September 1993

Area (ha): 2.7

Date written/last updated: 16 September 2013

Grid Ref: SD738439

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Waddington

Description:

The site comprises of old workings colonised by species-rich, semi-natural neutral grassland and used as pasture. The topography is undulating with dry grassy mounds and a low lying, damp, central basin area.

Species on the dry mounds include frequent Quaking Grass, Field Wood-rush, Common Knapweed and Common Bird's-foot-trefoil together with occasional Meadowsweet, Primrose, Pignut, Meadow Vetchling, Self-heal, Water Avens Great Burnet, Rough Hawkbit, Common Spotted-orchid, Betony, Bugle, Lady's Mantle, Mouse-ear Hawkweed and Glaucous Sdge.

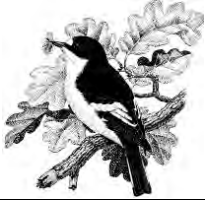
The low lying basin area is dominated by rushes with occasional Meadowsweet, Tufted Hair-grass, Common Spotted-orchid and Carnation Sedge. There is an area of shallow water colonised by Bulrush and Broad-leaved Pondweed.

In places a scrub comprising mainly of Hawthorn with occasional Alder has developed. There is a small plantation of Aspen at the north-eastern side of the site.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Other Information/Comments:



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Site Name: Rabbit Lane Meadow

Site Ref: 64SE18

Approved: 08 September 1993

Area (ha): 3.04

Date written/last updated: 01 April 2002

Grid Ref: SD687447

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Bashall Eaves

Description:

The site comprises a gently undulating field of semi-natural marshy and neutral grassland situated approximately 1.5 km north-west of the village of Bashall Eaves, at an altitude of 179 m. It is bordered on two sides by Bashall Moor Plantation. The grassland is species-rich and supports a wide variety of grasses, herbs and sedges.

The marshy areas are dominated by soft-rush and jointed rush with frequent bottle sedge. Other species of interest include glaucous sedge, common sedge, common yellow-sedge, ragged robin, betony, bugle, common spotted-orchid, meadowsweet, marsh valerian, marsh marigold and marsh cinquefoil.

Plants found in the drier areas include common knapweed, heath bedstraw, lousewort, yellow oat-grass, self-heal, lesser stitchwort, lady's-mantle, adder's-tongue, pignut, meadow vetchling and field woodrush.

A trench has recently been dug out across a low lying part of the field near the centre to create open water habitat and provides additional diversity to the site.

Guideline(s) for Site Selection:

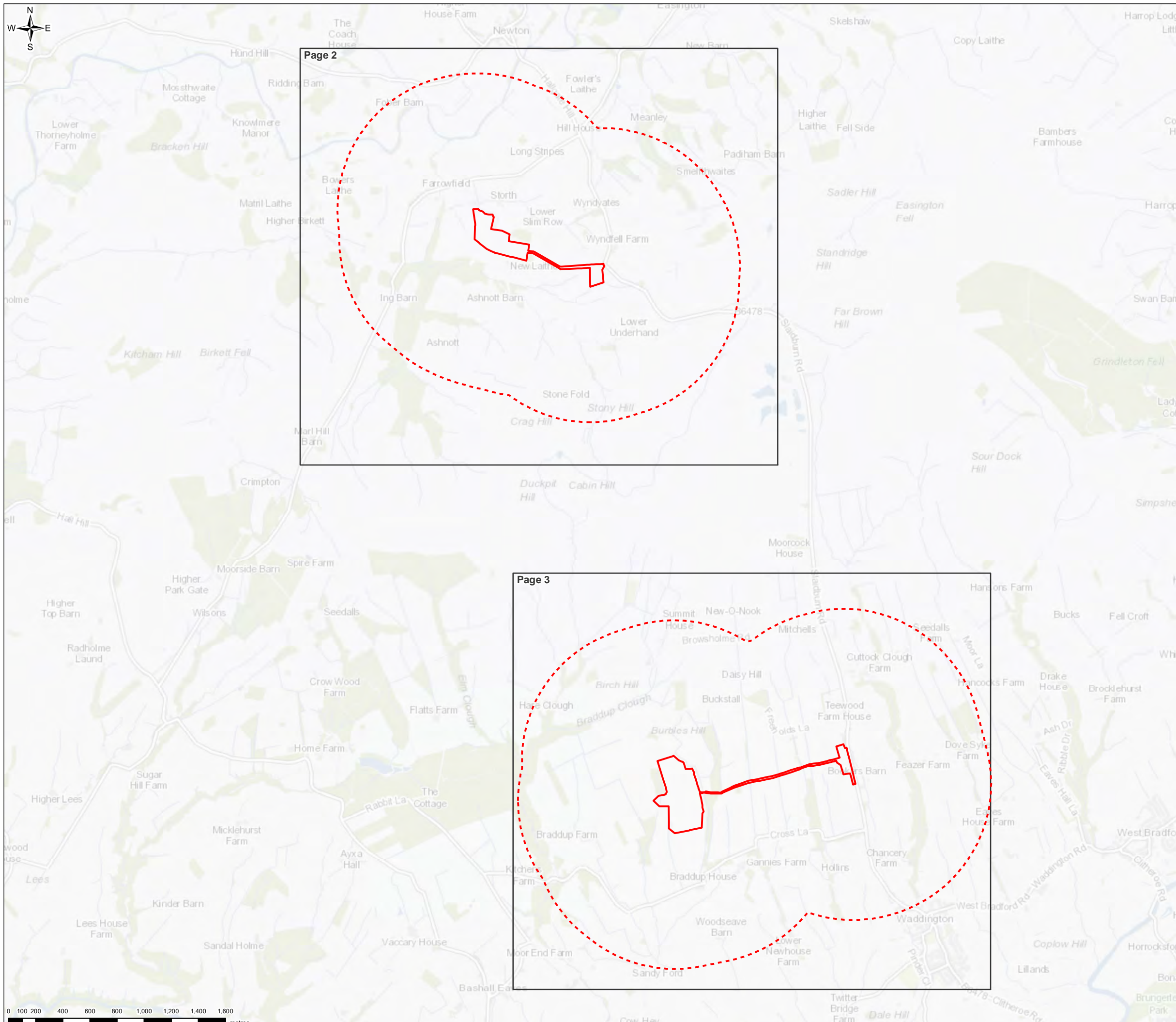
Swamp and Fen (Fe1)

Other Information/Comments:

The site adjoins Moor Piece Biological Heritage Site (64SE24).

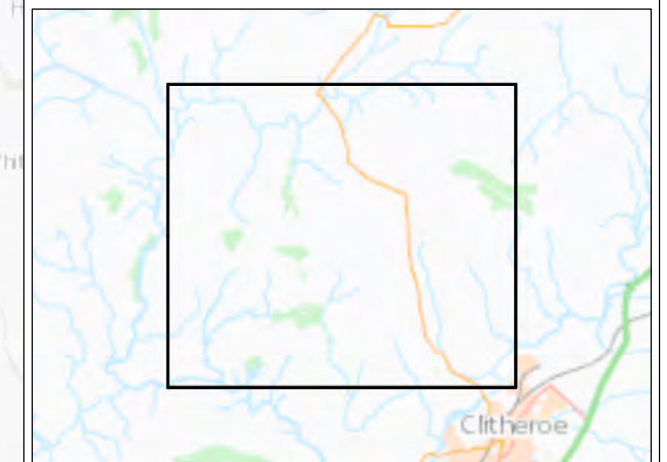
Appendix D. Priority Habitats (LERN)

FIGURE 9A.3



Legend

- Compound location
- Compound location - 1km bffer
- Page and page number



0	MK	MW	LS	Initial Issue	17/03/2021
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE

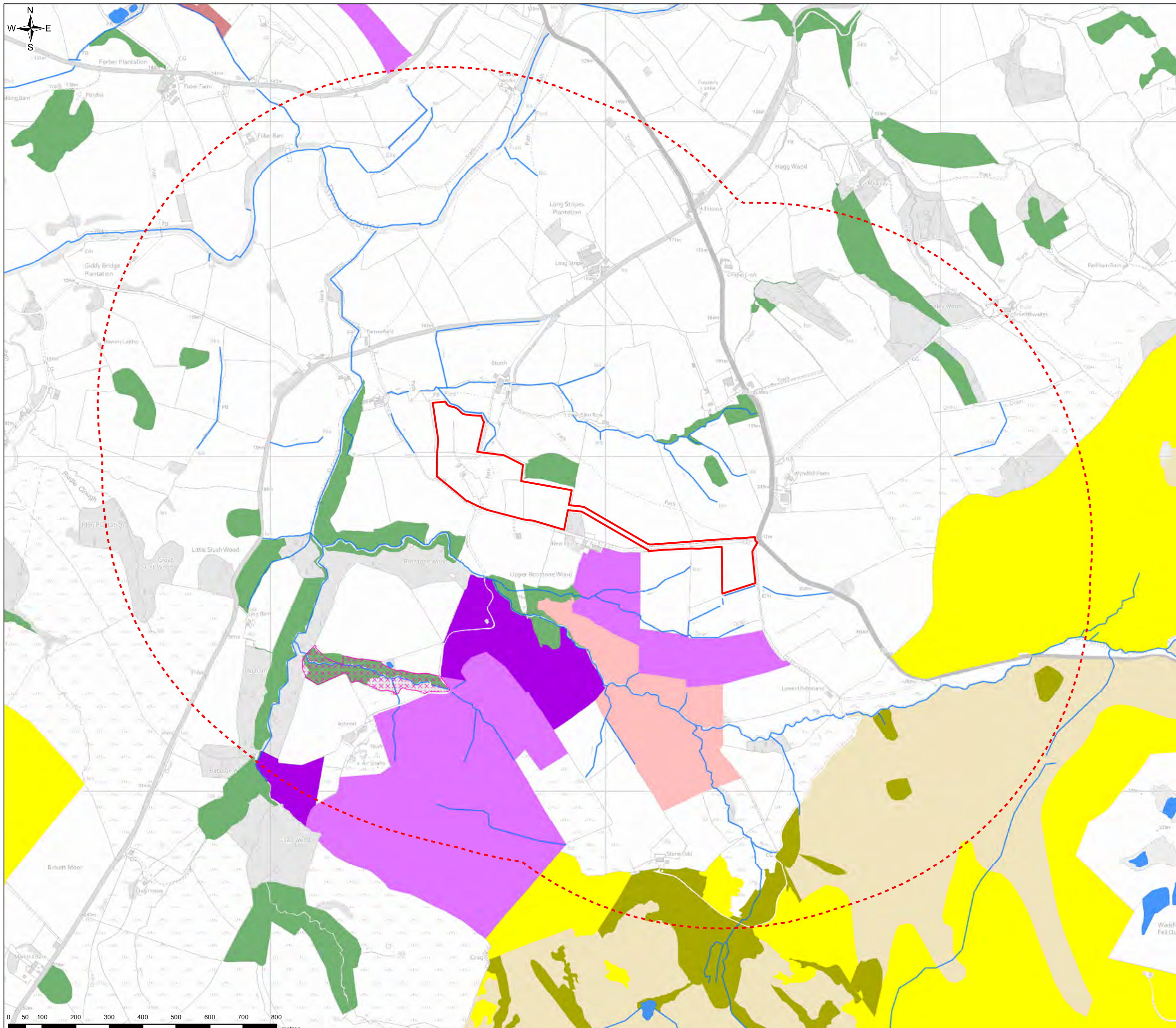


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 MARL HILL SECTION
 PAGE 1 of 3

SCALE 1:27,000	SHEET SIZE A3
DRAWING NUMBER RVBC-MH-FIG-009-01-03	REVISION 0

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FIGURE 9A.3



Legend

- Compound location
- Compound location - 1km bffer
- Priority Habitat**
- Blanket bog
- Deciduous woodland
- Good quality semi-improved grassland
- Lowland dry acid grassland
- Lowland fens
- Purple moor grass and rush pastures
- Upland flushes, fens and swamps
- Upland heathland
- Other Notable Habitats**
- Watercourse
- Surface water
- Ancient woodland



0	MK	MW	LS	Initial Issue	17/03/2021
VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE

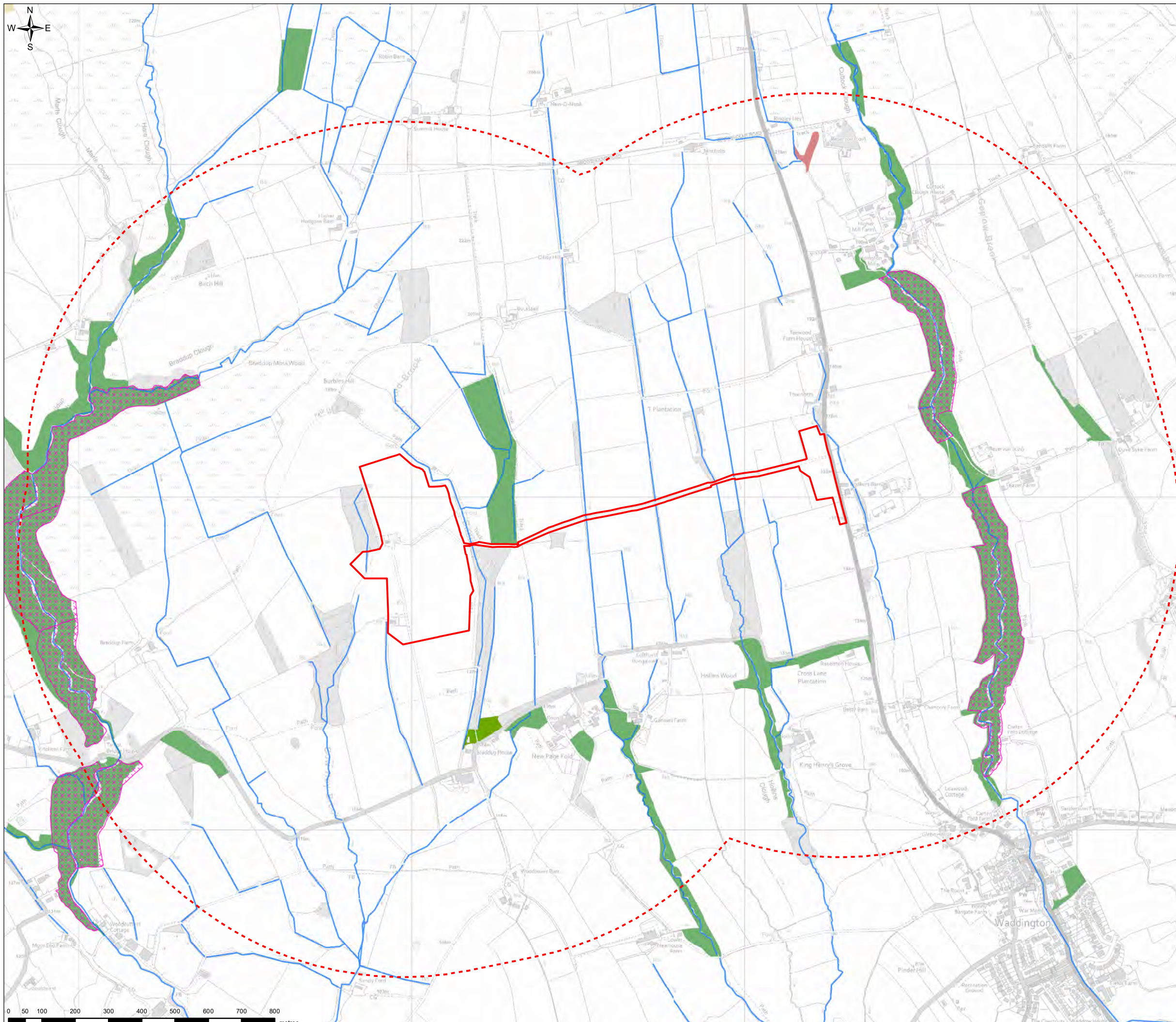


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FIGURE 9A.3



- Legend**
- Compound location
 - Compound location - 1km bffer
- Priority Habitat**
- Blanket bog
 - Deciduous woodland
 - Lowland fens
 - Traditional orchard
- Other Notable Habitats**
- Watercourse
 - Ancient woodland



0	MK	MW	LS	Initial Issue	17/03/2021
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Appendix E. Species Records Table (LERN)

TR4 North - Bird Desktop Records

Refer to drawing G7478.02.071.2 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Buzzard	1
	Curlew	1
2	Mallard	1
3	Lapwing	1
4	Mallard	1
5	Curlew	1

TR4 North - Insect Desktop Records

Refer to drawing G7478.02.071.3 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Ringlet	1
2	Dark Green Fritillary	1
	Ringlet	8
	Small Heath	17
3	Broom Moth	1
4	Green Hairstreak	3
	Speckled Wood	1

TR4 North - Mammal Desktop Records

Refer to drawing G7478.02.071.4 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Soprano Pipistrelle	400
2	Eurasian Common Shrew	1
3	West European Hedgehog	1
4	West European Hedgehog	1
5	Bats	33
6	European Water Vole	1
7	Bats	13
	Daubenton's Bat	14
8	Stoat	1
	West European Hedgehog	1
9	Brown Hare	3
	West European Hedgehog	1
10	Roe Deer	1
11	Brown Hare	1
	Roe Deer	2
12	Brown Hare	8
	Weasel	2
	West European Hedgehog	1

TR4 North - Plant Desktop Records

Refer to drawing G7478.02.071.5 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Tawny Sedge	6
2	Autumn Gentian	47
3	Autumn Gentian	1
	Reflexed Saltmarsh-Grass	1
4	Autumn Gentian	1
5	Autumn Gentian	40
6	Autumn Gentian	37
7	Autumn Gentian	2
8	Autumn Gentian	3
9	Autumn Gentian	5
10	Autumn Gentian	5
11	Autumn Gentian	2
12	Autumn Gentian	9
13	Autumn Gentian	1
14	Autumn Gentian	1
15	Common Spotted-orchid	1
16	Blueish Veilwort	2
17	Toothwort	2
18	Toothwort	2
19	Bogbean	2
	Long-stalked Yellow-sedge	1
	Marsh Helleborine	285
20	Bogbean	2
	Globeflower	1
	Long-stalked Yellow-sedge	4
	Marsh Helleborine	238
21	Snowdrop	1
22	Snowdrop	1
23	Melancholy Thistle	1
24	Broad-leaved Helleborine	1
25	Heath Spotted-orchid	3
26	Reflexed Saltmarsh-Grass	1
27	Bluebell	2
	Common Spotted-orchid	1
28	Welsh Poppy	1
29	Melancholy Thistle	1
	Welsh Poppy	1
30	Welsh Poppy	1

Species Records Identifier	Species Common Name	Count
31	Snowdrop	1
32	Snowdrop	1
33	Cowberry	1
34	Common Spotted-orchid	1
35	Bogbean	1
36	Long-stalked Yellow-sedge	1
	Reflexed Saltmarsh-Grass	1
37	Cowberry	1
38	Tawny Sedge	1

TR4 North - Reptile, Amphibian and Fish Desktop Records

Refer to drawing G7478.02.071.6 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Atlantic Salmon	11
	Brown/Sea Trout	1
	Bullhead	18
2	Atlantic Salmon	21
	Bullhead	62
3	Atlantic Salmon	5
	Bullhead	75
4	Atlantic Salmon	2
	Brown/Sea Trout	8
	Bullhead	12
5	Atlantic Salmon	7
	Bullhead	30
6	Common Frog	1
7	Atlantic Salmon	4
	Brown/Sea Trout	1
	Bullhead	59
8	Atlantic Salmon	2
	Brown/Sea Trout	2
	Bullhead	2
	European Eel	2
9	Atlantic Salmon	2
	Brown/Sea Trout	2
	Bullhead	2
	European Eel	2
10	Atlantic Salmon	2
	Brown/Sea Trout	2
	Bullhead	2
	European Eel	2
11	Bullhead	2

TR4 South - Bird Desktop Records

Refer to drawing G7478.02.071.7 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Coal Tit	1
2	Great Tit	1
3	Kingfisher	1
4	Barn Owl	2
5	Curlew	1
6	Coal Tit	1
7	Tawny Owl	1
8	Greenfinch	1
9	Curlew	1
10	Mallard	1

TR4 South - Insect Desktop Records

Refer to drawing G7478.02.071.8 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Ringlet	1
2	Beautiful Snout	1
3	Comma	1
4	Speckled Wood	1
5	Speckled Wood	1
6	Chimney Sweeper	1
7	Autumnal Rustic	3
	Beautiful Snout	5
	Broom Moth	2
	Brown Rustic	18
	Buff Ermine	2
	Dark Marbled Carpet	6
	Devon Carpet	5
	Dusky Brocade	1
	Neglected Rustic	2
	Red-necked Footman	6
	Small Phoenix	4
Small Square-spot	1	
White Ermine	3	
8	Ringlet	1
	Speckled Wood	1
9	Speckled Wood	1
10	Ringlet	2
11	Ringlet	2
12	Ringlet	9
	Small Heath	1
13	Ringlet	5
14	Ringlet	34
	Small Heath	137
	Speckled Wood	2
15	Green Hairstreak	1
	Small Heath	4
16	Green Hairstreak	3
	Speckled Wood	1

TR4 South - Mammal Desktop Records

Refer to drawing G7478.02.071.9 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Pipistrelle Bat species	20
2	Pipistrelle Bat species	18
3	Natterer's Bat	26
	Pipistrelle Bat species	8
4	Brown Hare	1
5	West European Hedgehog	1
6	Brown Hare	1
7	Eurasian Badger	1
8	Brown Hare	1
9	Common Pipistrelle	6
	Myotis Bat Species	1
	Soprano Pipistrelle	3
	Unidentified Bat	1
10	Brown Hare	1
11	Unidentified Bat	1
12	Brown Hare	1
13	Brown Hare	1
14	Brown Hare	1
15	Common Pipistrelle	783
16	West European Hedgehog	2
17	Brown Hare	4
	Pipistrelle	3
	Roe Deer	3
	Stoat	2
	Weasel	1
	West European Hedgehog	3
18	Brown Hare	2
	Roe Deer	1
19	Brown Hare	7
	Roe Deer	1
	West European Hedgehog	2
20	Brown Hare	5
	Roe Deer	4
	Stoat	2
	West European Hedgehog	3
21	Roe Deer	1

TR4 South - Plant Desktop Records

Refer to drawing G7478.02.071.10 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Welsh Poppy	1
2	Common Spotted-orchid	1
3	Southern Marsh-orchid	1
4	Tutsan	1
5	Snowdrop	1
6	Snowdrop	1
7	Bluebell	2
	Early-purple Orchid	2
	Soft Shield-fern	2
8	Snowdrop	1
9	Broad-leaved Helleborine	1
	Common Spotted-orchid	1
	Herb-paris	400
	Mountain Currant	1
	Snowdrop	1
10	Snowdrop	1
11	Snowdrop	1
12	Snowdrop	1
13	Columbine	1
	Petty Spurge	1
	Snowdrop	1
	Tutsan	1
	Welsh Poppy	1
14	Snowdrop	1
	Welsh Poppy	1
15	Snowdrop	1
16	Cowberry	1

TR4 South - Reptile, Amphibian and Fish Desktop Records

Refer to drawing G7478.02.071.11 for spatial location of species data

Species Records Identifier	Species Common Name	Count
1	Common Frog	1
2	Common Toad	1
3	Brown/Sea Trout	20
4	Brown/Sea Trout	15
	Bullhead	3
5	Brown/Sea Trout	8
	Bullhead	14
6	Brown/Sea Trout	19
	Bullhead	8
7	Bullhead	26
8	Bullhead	41
9	Bullhead	2
10	Common Frog	1
11	Brown/Sea Trout	24
	Bullhead	14
12	Brown/Sea Trout	2
	Bullhead	2
13	Bullhead	2
14	Brown/Sea Trout	2
	Bullhead	2