



THE
ENVIRONMENT
PARTNERSHIP

**Haweswater Aqueduct Resilience Programme -
Proposed Marl Hill Section
Environmental Statement Volume 5 Part II:
Off-Site Highways Works – Ecology Assessment TR4**

Appendix 1 - Citations

June 2021



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.

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name:	North Pennine Dales Meadows
Unitary Authority/County:	Cumbria, Durham, Lancashire, North Yorkshire, Northumberland
SAC status:	Designated on 1 April 2005
Grid reference:	NY931256
SAC EU code:	UK0014775
Area (ha):	497.09
Component SSSI:	See list below

Site description:

This site contains a series of isolated fields within several north Pennine and Cumbrian valleys, and encompasses the range of variation exhibited by mountain hay meadows in the UK. The grasslands included within the site exhibit very limited effects of agricultural improvement and show good conservation of structure and function. A wide range of rare and local meadow species are contained within the meadows, including globeflower *Trollius europaeus*, the lady's-mantles *Alchemilla acutiloba*, *A. monticola* and *A. subcrenata*, and spignel *Meum athamanticum*.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). (purple moor-grass meadows)
- Mountain hay meadows

List of component SSSIs:

Arkle Beck Meadows, Whaw SSSI
Ashes Pasture and Meadows SSSI
Askrigg Bottoms SSSI
Aules Hill Meadows SSSI
Barrowburn Meadows SSSI
Bell Sykes Meadows SSSI
Borrow Beck Meadows SSSI
Bowber Head and Piper Hole Meadows SSSI
Bowlees and Friar House Meadows SSSI
Bretherdale Meadows SSSI
Catton Lea Meadow SSSI
Cautley Thwaite Meadows and Ecker Secker Beck SSSI
Cliff Beck Meadow, Buttertubs SSSI
Cornriggs Meadows SSSI
Deepdale Meadows SSSI (*Cumbria*)
Deepdale Meadows SSSI (*North Yorkshire, known as "Deepdale Meadows, Langstrothdale"*)
Durtrees Burn Grassland SSSI
Far High House Meadows SSSI
Fothering Holme SSSI

Gingerfields SSSI
Gowk Bank SSSI
Grains O' th' Beck Meadows SSSI
Grassington Hospital Grounds SSSI
Greenhaugh Meadow SSSI
Hannah's Meadows SSSI
Harker's House Meadows, Keld SSSI
Heatheryburn Bank SSSI
High Knock Shield Meadow SSSI
Knarsdale Meadows SSSI
Langcliff Cross Meadow SSSI
Low Redford Meadows SSSI
Mere Beck Meadows SSSI
Middle Crossthwaite SSSI
Middle Side and Stonygill Meadows SSSI
Mill Holme Meadows, Thwaite SSSI
Muker Meadows SSSI
Myttons Meadows SSSI
New Close, Calvert Houses SSSI
New House Meadows, Malham SSSI
Oughtershaw and Beckermonds SSSI
Peckriding Meadows SSSI
Pry and Bottom Meadows, Mid-Mosssdale SSSI
Raisbeck Meadows SSSI
Richmond Meadows SSSI
Rigg Farm and Stake Hill Meadows SSSI
Sandybeck Meadow SSSI
Scar Closes, Kisdonside SSSI
Stephen Ings, Crackpot SSSI
Swindale Meadows SSSI
Thorneyburn Meadow SSSI
Town End Meadows, Little Asby SSSI
Walden Meadows SSSI
West Newlandside Meadows SSSI
West Park Meadows SSSI
Wet Sleddale Meadows SSSI
White Ridge Meadow SSSI
Wilson Place Meadows
Yockenthwaite Meadows SSSI

This citation relates to a site entered in the Register of European Sites for Great Britain.

Register reference number: UK0014775

Date of registration: 14 June 2005

Signed: *Trevor Salmon*

On behalf of the Secretary of State for Environment,
Food and Rural Affairs

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.

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.

Date Notified: 29 January 1987

File ref: (L) SD 74/2

County: Lancashire **Site Name:** Clitheroe Knoll Reefs

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 778435 **Area:** 115.3 (ha) 284.9 (ac)

Ordnance Survey Sheet 1:50,000: 103 **1:10,000:** SD 74 NE

Date Notified (Under 1949 Act): 1959 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1987 **Date of Last Revision:** 1987

Other Information:

The site boundary has been modified by a major deletion and three small extensions at this revision.

Description and Reasons for Notification:

This geological site near Clitheroe is comprised of a roadcutting and a series of small hills running east-west between the villages of Worston and Downham.

The hills are important examples of early Carboniferous “knoll-reefs”. In conjunction with other well-exposed Clitheroe sites this site shows the best examples of such reefs which developed during the Chadian Stage in the Craven Basin. The nature and origins of the reefs have always been matters of controversy. This locality provides a unique opportunity to examine such carbonate build-ups, here expressed as actual knolls in the topography of the present day.

To the north of the knolls a cutting on the A59 road has exposed a seventy metre thick section of the Carboniferous Limestone, represented by the Horrocksford Beds and overlying Bankfield Beds. This important section includes the proposed boundary stratotype for the Chadian Stage, which is placed on the junction of these two rock units. The site has been sampled for foraminifera, which have been used as stratigraphic indicators, including the genus *Eoparastafella* which makes its appearance a few metres above the boundary. This is a key locality for stratigraphic studies in the Lower Carboniferous.

File ref: SD 74/3

County: Lancashire **Site Name:** Coplow Quarry

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 751432 **Area:** 4.9 (ha) 12.2 (ac)

Ordnance Survey Sheet 1:50,000: 103 **1:10,000:** SD 74 SW, SE

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

Date Notified (Under 1981 Act): 1983 **Date of Last Revision:** –

Other Information:

Boundary revised 1983 by a minor correction.

Reasons for Notification:

Coplow Quarry is a disused limestone quarry situated just north of Clitheroe. The geological interest of the site, in technical terms, may be defined as follows:

This site shows exposures of the Coplow Knoll, of Chadian age, and its associated sediments. These are the best exposures of their kind in the Lower Coplow Knoll “Series”, a sequence of rocks famous for their echinoderm fauna. This is one of the richest sites in the whole of the British Dinantian for such fossil material and it has yielded many type specimens. Coplow is a significant site in studies of carbonate facies relationships (between bank, inter-bank and flank deposits), and the controversial subject of the origins of the knolls in the Bowland Trough. A key Clitheroe Limestone site of outstanding interest for its faunas and carbonate sedimentology.

In layman’s terms, the interest of this site may be expressed more simply, and such a statement is provided below. This should not be taken as definitive and further information as to details of the interest can be obtained from the Nature Conservancy Council.

The faces of Coplow Quarry provide the best known exposures of a series of limestone layers, known as the Lower Coplow Knoll Series, originally formed in the Lower Carboniferous period of geological history, about 340 million years ago. The limestones formed on the bed of a warm, shallow sea which covered this area at that time and which contained a great variety of marine life. The rocks at Coplow Quarry are particularly noted for the rich and varied fossil remains they contain, some of which were first recognised here. An important feature of the Carboniferous limestones of this area is the occurrence of mound-like structures, generally referred to as “reef-knolls”, which formed during deposition of the sediments, partly as a result of the growth, on the sea-bed, of large colonies of marine animals. The precise origin of these features has been debated for many years and Coplow Quarry is important in this context also, as it provides valuable evidence of the form and nature of these structures.

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.

Date Notified: 21 October 1986

File ref: (L) SD 74/5

County: Lancashire **Site Name:** Hodder River Section

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 701400 **Area:** 7.4 (ha) 18.3 (ac)

Ordnance Survey Sheet 1:50,000L: 103 **1:10,000:** SD 74 SE, SD 73 NW, SD 64 SE, SD 63 NE

Date Notified (Under 1949 Act): 1959 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1986 **Date of Last Revision:** –

Other Information:

Site boundary unchanged at renotification.

Description and Reasons for Notification:

This site is situated 4 km south west of Clitheroe where the River Hodder has cut down through the rock strata. The geological interest of the site may be defined as follows:

This locality is important for its exposures of marine Lower Carboniferous rocks. Here are exposed a sequence of turbiditic, ancient sediments of Holkerian to Asbian age, including the *Bollandoceras hodderense* beds. As well as being the type locality for these beds and the fossil which gives them their name, it is the type locality for a number of other fossil taxa. The rich invertebrate fauna includes trilobites, bivalves, brachiopods, bryozoans, echinoids and cephalopods. Much potential exists for research on the faunas, sedimentology and stratigraphy of this key Dinantian locality.

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:	Little Mearley Clough
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 783412	Area:	6.0 (ha) 14.8 (ac)
Ordnance Survey Sheet 1:50 000	103	1:10 000	SD 74 SE
Date Notified (Under 1949 Act):	1959	Date of Last Revision:	1979
Date Notified (Under 1981 Act):	1986	Date of Last Revision:	1986

Other Information:

1. This site falls within the Forest of Bowland AONB.
2. The site boundary has been modified by extension and partial deletion at this revision.

Description and Reasons for Notification:

Little Mearley Clough lies on the steeply-sloping western side of Pendle Hill, approximately 3 km east of Clitheroe. The stream draining the clough has cut down through the rock strata to reveal features of considerable geological interest. In technical terms the interest of this site may be defined as follows:

Little Mearley Clough displays the lowest part of the Namurian, lying conformably on rocks of the Lower Carboniferous. The sequence seen covers the whole of the basal Namurian stage, named after Pendle Hill on which the section occurs, including the *Cravenoceras leion* goniatite horizon. The site is of premier stratigraphic significance for its recognition as the reference section for the Pendleian Stage.

In layman's terms, the interest of this site may be expressed more simply, and such a statement is provided below. This should not be taken as definitive and further information as to details of the interest can be obtained from the Nature Conservancy Council.

Little Mearley Clough provides excellent exposure of rock layers originally laid down during the Namurian period of geological history about 320 million years ago. The sequence spans the entire duration of the oldest subdivision of the Namurian, named the Pendleian Stage after Pendle Hill on which this section occurs. In recognition of the importance of this section, Little Mearley Clough has

been proposed as the standard for this interval of geological time. It is thus a site of national geological importance.

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.

County: Lancashire **Site Name:** Salthill and Bellmanpark Quarries

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 758427 **Area:** 18.0 (ha) 44.5 (ac)

Ordnance Survey Sheet 1:50 000 103 **1:10 000** SD 74 SE

Date Notified (Under 1949 Act): 1970 **Date of Last Revision:** 1979

Date Notified (Under 1981 Act): 1987 **Date of Last Revision:** 1987

Other Information:

The site boundary has been modified by a deletion and a small extension at this revision.

This site was formerly named Salthill, Bellmanpark and Peach Quarries.

Description and Reasons for Notification:

This geological site straddles the A671 road immediately to the north-east of Clitheroe and is comprised of three adjacent disused quarries.

The famous Carboniferous Limestone site is the type locality for the fossiliferous Salthill Bank Beds (Chadian) and the Salthill Cap Beds (Arundian) of the Clitheroe Limestone Complex. It provides the best sections through the Chadian and the Knoll Reefs of the Craven Basin, and some of the finest such sections in the English Lower Carboniferous. It shows three-dimensional relationships of reefs associated sediments and rich marine, especially echinoderm, faunas and is a key site for studies of fauna, carbonate sedimentology diagenesis and palaeoecology in the Lower Carboniferous.

County: Lancashire **Site Name:** Standridge Farm
Pasture

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 733534 **Area:** 4.46 (ha) 11.02 (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): 14 May 1998 **Date of Last Revision:** –

Other Information:

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

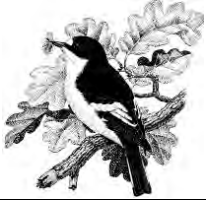
Description and Reasons for Notification:

Standridge Farm Pasture lies at an altitude of between 225–250 m OD, approximately 2.5 km north-east of the village of Slaidburn. The site consists of an unimproved enclosed herb-rich flushed pasture on a north-facing slope. The underlying Bowland Shales give rise to base-rich conditions and impeded drainage, which results in much spring-fed flushing of the slope with ground water. Standridge Farm Pasture is one of the few remaining unimproved herb-rich pastures 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 site supports a mosaic of flushed mire and neutral grassland communities. The flushed mire community is characterised by purple moor-grass *Molinia caerulea*, quaking grass *Briza media*, common sedge *Carex nigra*, carnation sedge *C. panicea*, glaucous sedge *C. flacca* and jointed-rush *Juncus articulatus*, with bird's-eye primrose *Primula farinosa*, globeflower *Trollius europaeus*, marsh valerian *Valeriana dioica*, grass-of-Parnassus *Parnassia palustris*, devil's-bit scabious *Succisa pratensis* and sneezewort *Achillea ptarmica*. Round-leaved sundew *Drosera rotundifolia* is occasionally present in more acidic flushes.

The grassland communities are characterised by sweet vernal-grass *Anthoxanthum odoratum*, red fescue *Festuca rubra*, crested dog's-tail *Cynosurus cristatus* and Yorkshire fog *Holcus lanatus*, with greater burnet *Sanguisorba officinalis*, early-purple orchid *Orchis mascula*, saw-wort

Serratula tinctoria, common knapweed *Centaurea nigra*, tormentil *Potentilla erecta*, dyer's greenweed *Genista tinctoria*, meadow buttercup *Ranunculus acris* and selfheal *Prunella vulgaris*.



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Site Name: A59 Road Cutting, Worston to Chatburn

Site Ref: 74SE10

Approved: 08 September 1993

Area (ha): 6.76

Date written/last updated:

Grid Ref: SD771437

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Chatburn, Downham, Worston

Description:

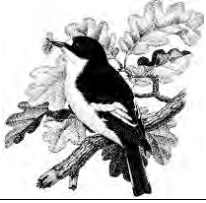
To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Flowering Plants and Ferns (Ff4b)

Other Information/Comments:



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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

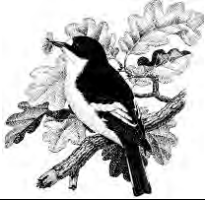
Description:

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: Bean Hill Wood and Grassland

Site Ref: 74SE12

Approved: 01 January 2005

Area (ha): 1.08

Date written/last updated: 01 October 2005

Grid Ref: SD765447

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Chatburn

Description:

The site comprises a north and northeast facing bluff slope to the south of the River Ribble between Ribble Lane and Chatburn Brook. The habitats on the site comprise two blocks of deciduous woodland separated by field slope of species-rich grassland.

The western block of woodland includes Ash, Sycamore, Wych Elm and Field Maple as canopy trees with Hawthorn, Elder and Holly in the shrub-layer. The ground flora is diverse with Dog's Mercury, Lesser Celandine, Wood Anemone, Goldilocks Buttercup, Wood Avens, Barren Strawberry, Wood Dock, Bugle, Pignut, Common Enchanter's-nightshade, Wood Speedwell, Crosswort, Ramsons, Lord-and-ladies, Tufted Hair-grass, False Brome and Wood-sedge. Wetter, or slightly flushed areas, support Alternate-leaved Golden-saxifrage, Opposite-leaved Golden-saxifrage, Water Avens and Meadowsweet. Sweet Cicely occurs along the foot of the woodland together with species such as Nettle, which is associated with nutrient enrichment. The woodland to the east near Chatburn Brook is similar and has in part developed upon a former landslip. This block of woodland includes Oak, Common Dog-violet, Sanicle, Primrose and Greater Burnet-saxifrage.

The section of species-rich grassland, in its composition, shows affinity to the adjacent woodland habitats and includes Meadow Foxtail, Sweet Vernal-grass, Quaking-grass, Crested Dog's-tail, Cock's-foot, Tufted Hair-grass, Downy Oat-grass, Common Knapweed, Greater Burnet-saxifrage, Lesser Celandine, Barren Strawberry, Water Avens, Primrose, Pignut, Common Sorrel, Red Clover, Ribwort Plantain, Cuckooflower, Meadow Vetchling, Common Bird's-foot-trefoil, Greater Bird's-foot-trefoil, Meadowsweet, Yellow-green Lady's-mantle, Bugle, Rough Hawkbit, Field Wood-rush, Glaucous Sedge, Soft-rush and Hard rush.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:

Lowland Mixed Deciduous Woodland and Lowland Meadow are UK BAP Priority Habitats and are listed in Section 74 (2) of the CRoW Act (2000)

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English Nature

Site Name: BELLMAN PARK QUARRY, CLITHEROE

District: RIBBLE VALLEY

Map Sheet(s): SD74SE

Ref: BHS 74 SE 04

Area (ha.):

Grid Ref: SD761427

Date last revised:
FEBRUARY 1995

Site Description:

Bellman Park Quarry is cut into one of a series of limestone hills, and is a link in a chain of calcareous habitats and features between Clitheroe and Downham. To the west are Clitheroe Castle knoll and Salthill and to the east Crow hill, Worsaw Hill and the A59(T) road cutting. It forms part of the Salthill and Bellmanpark geological SSSI.

The quarry floor comprises variously sized hummocks and mounds as well as areas of flat ground, with a the vegetation ranging from open calcareous to grass dominated swards, together with areas of ash and hawthorn scrub. Species include wild thyme, wild marjoram, mouse-ear-hawkweed, common bird's-foot-trefoil, eyebright, harebell and formerly bee orchid. A depression with standing water supports a stand of bulrush (Typha), common spike-rush, lesser and greater spearwort, water mint and stonewort; a deep quarry pond occurs in the SE corner.

Much of the main quarry face and the base of the cliffs have been colonized by ash and hawthorn with locally dog-rose and holly, with a ground flora of herb-robert, wild strawberry, lords-and- ladies, wood and water avens, false brome and hart's-tongue.

Of particular note are the quarry ledges and rim in the SW corner where the vegetation includes quaking-grass, heath-grass, crested hair-grass, lady's bedstraw, small scabious, burnet-saxifrage, wild thyme and carline thistle. Adjacent but outside the quarry fence is a area of agriculturally managed calcareous grassland, which represents a surviving relict sward of the former limestone hill. It supports a similar flora to the quarry ledges.

Common frog, palmate newt and brown hare have been observed on the site.

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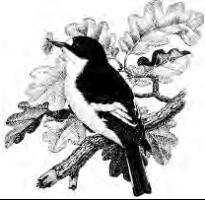
Guideline(s) for Selection: Artificial Habitats (Ar1)
Grassland (Gr3)

Owner/Occupier: Private

Conservation Status:

Planning Context:

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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English Nature

Site Name: BOY BANK, CLITHEROE

District: Ribble Valley

Map Sheet(s): SD74SW

Ref: BHS 74SW08

Area (ha.):

Grid Ref: SD 735424

Date last revised: February 1997

Site Description:

The site comprises a small semi-natural woodland known as Boy Bank Wood and a contiguous area of species-rich grassland situated on a bluff line above the south bank of the River Ribble adjacent to the weir at Waddow.

Much of Boy Bank Wood is steeply sloping and dominated by ash with some oak and localised Scots pine and larch. Dead wych elm is also present. The understorey consists of hawthorn, hazel and holly with a little blackthorn. The ground flora includes dog's mercury, lesser celandine, common dog-violet, wood avens, Lords-and-Ladies, red campion and herb-Robert. Near the bottom of the slope calcareous flushes give rise to wet alder woodland with some ash and bird cherry. Here the ground flora includes common nettle, meadowsweet, marsh marigold, opposite-leaved golden-saxifrage, large bitter-cress, lesser pond-sedge and green figwort, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*.

To the west the wood is more shrubby and merges into species-rich, semi-natural grassland on the steep slope between the river and improved pasture above. The grass sward includes fairy flax, mouse-ear hawkweed, cat's-ear, Autumn hawkbit, common bird's-foot trefoil, sneezewort, lady's mantle, bulbous buttercup, betony, quaking grass and glaucous sedge.

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Guideline(s) for Selection:

Woodland and Shrub (Wd2); Grassland (Gr3); [Flowering Plants and Ferns (Ff4)]

Owner/Occupier:

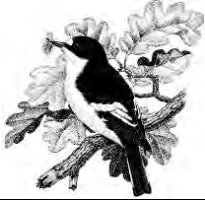
Private

Conservation Status:

None

Planning Context:

Other Information/Comments:



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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: BRADFORD FELL, EASINGTON FELL AND HARROP FELL, NEWTON/WADDINGTON/WEST BRADFORD

District: Ribble Valley

Grid ref: SD 725490

Area (ha): 517.2

Ref: BHS 74NW04

Date of Form: 11/99

Date(s) Form Revised:

Site Approved: 09/93

Site 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.

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Guideline(s) for Selection: Heathland (He1), Swamp and Fen (Fe2), Flowering Plants and Ferns (Ff4a), (Ff4b), Mosses and Liverworts (Br2)

Owner/Occupier: Private

Conservation/Planning Status: The site is in the Forest of Bowland Area of Outstanding Natural Beauty

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: 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.

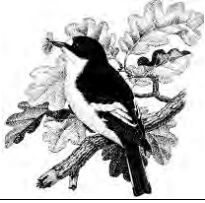
Thinner soils are in evidence on mounds to the north of the spring, and here the plant communities appear more calcareous with frequent rough hawkbit, eyebright, harebell and lady's mantle, and occasional mouse-ear hawkweed and salad burnet.

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: Clitheroe Castle Knoll

Site Ref: 74SW05

Approved: 08 September 1993

Area (ha): 1.04

Date written/last updated: 16 September 2013

Grid Ref: SD742417

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

The site consists of several rock outcrops and steep sloping areas of limestone grassland, scrub and developing woodland below Clitheroe Castle.

Plants on the outcrops include Wild Thyme, Harebell, Salad Burnet, Burnet-Saxifrage, Wild Strawberry, Pellitory-Of-The-Wall, Wall Lettuce, Maidenhair Spleenwort, Wall-Rue, Herb-Robert, Ivy, Hawkweed species and French Sorrel.

The grassland flora on the steep slopes includes Hoary Plantain, Rough Hawkbit, Lady's Bedstraw, Common Bird's-Foot-Trefoil, Common Knapweed, Yellow Oat-Grass, Selfheal, Mouse-Ear-Hawkweed, Great Burnet, Greater Burnet-saxifrage and Bulbous Buttercup. The associated scrub comprises of Hawthorn, Blackthorn, Bramble, Grey Willow, Rose and Spindle with a ground flora of Dog's Mercury, Hairy Brome, Lords-And-Ladies, Ivy and Herb Bennet.

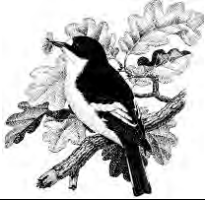
A number of exotic shrubs are established including Butterfly-bush and several Cotoneaster species.

Guideline(s) for Site Selection:

Rock

(Ro2)

Other Information/Comments:



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Site Name: Clough Hole Pasture

Site Ref: 74NE14

Approved: 01 January 2005

Area (ha): 4.59

Date written/last updated: 01 March 2005

Grid Ref: SD755472

Owner/Occupier: Private

Districts: Ribble Valley
Parishes: Grindleton

Description:

The site comprises an area of semi-natural grassland situated on steep valley slopes adjoining Black Brook, approximately 1.5 km north of the village of Grindleton. Small areas of semi-natural woodland, together with scattered trees and occasional scrub are also present and provide additional habitat diversity.

The grassland is managed as pasture and supports a rich assemblage of plants. Abundant and frequently occurring grasses include Sweet Vernal-grass, Crested Dog's-tail, Cock's-foot, Yorkshire-fog, Tufted Hair-grass, Red Fescue, Common Bent and Meadow Foxtail. Frequent and occasional herbs include Common Knapweed, Pignut, Meadowsweet, Slender St John's-wort, Cat's-ear, Meadow Vetchling, Common Bird's-foot-trefoil, Mouse-ear Hawkweed, Selfheal, Great Burnet, Betony, Lesser Stitchwort, Devil's-bit Scabious, Yarrow, Common Mouse-ear, Marsh Thistle, Ribwort Plantain, Primrose, Meadow Buttercup, Creeping Buttercup, Common Sorrel, Greater Stitchwort, Red Clover and Germander Speedwell. Other species present include Bugle, Harebell, Eyebright, Wood Horsetail and Hard Rush.

A few areas are more acidic in character. Here the sward is dominated by Wavy Hair-grass with frequent Tormentil and Heath Bedstraw, and occasional Bilberry and Heath Speedwell.

Additional species are associated with damper ground alongside the brook. These include Lemon Scented-fern, Sharp-flowered Rush, Common Valerian, Marsh Violet, Ragged-robin and Marsh Hawk's-beard.

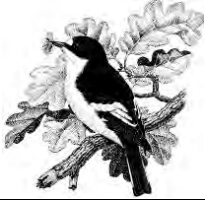
Alder is abundant alongside the brook and in more wooded areas on very steep slopes. Other trees and shrubs include Ash, Oak, Wych Elm, Hawthorn, Rowan, Holly, Hazel, Elder, Gorse and Bramble.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:

Lowland hay meadow, which includes species-rich neutral grassland, is a priority habitat in the UK Biodiversity Action Plan.



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Site Name: Coplow Quarry and Pimlico Road Grasslands

Site Ref: 74SE02

Approved: 01 September 2003

Area (ha): 6.25

Date written/last updated: 25 September 2013

Grid Ref: SD753432

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

The site comprises of areas of species-rich, semi-natural calcareous grassland and developing scrub at Coplow Quarry. The site includes Coplow Quarry geological SSSI.

The developing soils are thin and often give way to aggregate. Grasses include Crested Dog's-tail, Cocksfoot, Tufted Hair-grass, Yorkshire Fog, False Oat-grass and Quaking Grass. Other species include abundant Ox-eye Daisy and Selfheal, with locally frequent Spiked Sedge, Cowslip, Lady's Mantle, Bird's-foot Trefoil, Meadow Vetchling, Germander Speedwell, Common Knapweed, Creeping Cinquefoil and Fairy Flax, plus occasional Hairy St. John's-wort, Fragrant Orchid, Hoary Plantain, Marjoram, Wild Strawberry, Eyebright, Common Centaury, Common Spotted Orchid, Goat's-beard, Glaucous Sedge, Hairy Rock-Cress, Harebell, Burnet-Saxifrage, Small Scabious and Wild Thyme. Of particularly note is the presence of Bee Orchid.

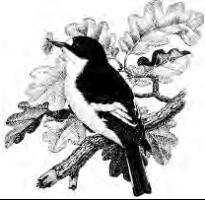
Areas of scrub with abundant Hawthorn, frequent Hazel, Ash, Goat Willow, Dog Rose and occasional Blackthorn have developed with a field layer of locally abundant Dog's Mercury, frequent Ivy, occasional Black Bryony, Ramsons, Hairy Brome, Harebell and scattered Zigzag Clover.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Other Information/Comments:

Site ungrazed with shrub invasion.



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Site Name: Coplow Quarry and Pimlico Road Grasslands

Site Ref: 74SE02

Approved: 01 September 2003

Area (ha): 6.25

Date written/last updated: 25 September 2013

Grid Ref: SD753432

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

The site comprises of areas of species-rich, semi-natural calcareous grassland and developing scrub at Coplow Quarry. The site includes Coplow Quarry geological SSSI.

The developing soils are thin and often give way to aggregate. Grasses include Crested Dog's-tail, Cocksfoot, Tufted Hair-grass, Yorkshire Fog, False Oat-grass and Quaking Grass. Other species include abundant Ox-eye Daisy and Selfheal, with locally frequent Spiked Sedge, Cowslip, Lady's Mantle, Bird's-foot Trefoil, Meadow Vetchling, Germander Speedwell, Common Knapweed, Creeping Cinquefoil and Fairy Flax, plus occasional Hairy St. John's-wort, Fragrant Orchid, Hoary Plantain, Marjoram, Wild Strawberry, Eyebright, Common Centaury, Common Spotted Orchid, Goat's-beard, Glaucous Sedge, Hairy Rock-Cress, Harebell, Burnet-Saxifrage, Small Scabious and Wild Thyme. Of particularly note is the presence of Bee Orchid.

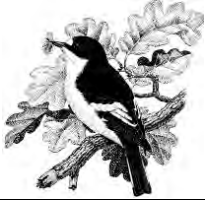
Areas of scrub with abundant Hawthorn, frequent Hazel, Ash, Goat Willow, Dog Rose and occasional Blackthorn have developed with a field layer of locally abundant Dog's Mercury, frequent Ivy, occasional Black Bryony, Ramsons, Hairy Brome, Harebell and scattered Zigzag Clover.

Guideline(s) for Site Selection:

Artificial Habitats (Ar1)

Other Information/Comments:

Site ungrazed with shrub invasion.



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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:

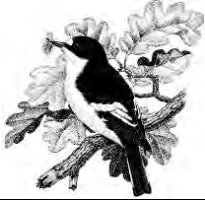
To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Flowering Plants and Ferns [(Ff4)]

Other Information/Comments:



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Site Name: Cross Hill Quarry

Site Ref: 74SW06

Approved: 08 September 1993

Area (ha): 10.29

Date written/last updated: 25 September 2013

Grid Ref: SD745433

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

The site comprises of the disused Cross Hill limestone quarries and the adjoining Brungerley Park and supports a mosaic of semi-natural habitats including limestone grassland, scrub and woodland. The site includes Cross Hill Quarry Local Nature Reserve.

The main quarry support a diversity flora. On the open ground and rocks Salad Burnet, Hairy Rock-Cress, Wild Strawberry, Thyme-Leaved Sandwort, Harebell, Wild Thyme, Small Scabious, Parsley Piert, and Majoram occur. Plants of the grassland areas include Field Scabious, Hoary Plantain, Adder's-Tongue, Early-Purple Orchid, Yellow-RattleAutumn Gentian, Burnet-Saxifrage, Bee Orchid, Greater Burnet-saxifrage, Yellow Oat-Grass, Spiked Sedge, Spring-sedge, Cowslip, Primrose, Fairy Flax, Mouse-ear Hawkweed, Lady's Bedstraw, Quaking Grass, Wild Basil, Meadow Crane's-Bill, Lady's-Mantle, Great Burnet, Agrimony, Hybrid Avens, Meadow Oat-Grass, Downy Oat-grass, Rough Hawkbit, Welled Thistle, Common Twayblade, Betony and Hairy Violet. On the damper soils Common Spotted-orchid, Hard Rush, Bugle, Glaucous Sedge, Water Avens and Lesser Pond-Sedge occur. Developing scrub comprises of abundant Ash and Hawthorn with Grey Willow and some Spindle with a herb layer that includes Rough Chervil and Upright Hedge-parsley.

The woodland to the west adjoining Brungerley Park and the River Ribble has a diverse ground flora that includes Giant Bellflower, Toothwort, Goldilocks Buttercup, Early Dog-Violet, Hard Shield-Fern, Bluebell, False-Brome, Hairy Wood-Rush, Ramsons, Pignut, Wood-Sorrel, Moschatel, Wood-Sedge, Wood Anemone, Sanicle, Three-Nerved Sandwort, Lesser Celandine, Greater Stitchwort, Wood Speedwell, Lords-And-Ladies, Dog's Mercury, Hart's-tongue, Giant Fescue, Bearded Couch, Giant Fescue and Wood-Sorrel. A series of flushes support Guelder-rose, Red Currant, Alternate-Leaved Golden-Saxifrage, Wood Stitchwort, Pendulous Sedge, Water Figwort, Yellow Iris, Hemlock Water-Dropwort, Marsh-marigold, Marsh Hawk's-Beard, Great Horsetail and Yellow Loosestrife. Wood Ragwort, Martagon Lily and White Butterbur are established.

Daubenton's Bat and 45 Khz Pipistrelle have been recorded.

Guideline(s) for Site Selection:

Grassland (Gr1)

Habitat Mosaics (Hm3)

Other Information/Comments:

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English Nature

Site Name: DOG HOUSE WOOD, WADDINGTON

District: Ribble Valley

Map Sheet(s): SD74SW

Ref: BHS 74SW09

Area (ha.):

Grid Ref: SD737427

Date last revised: February 1997

Site Description:

The site comprises a small semi-natural wood situated on a steep south facing river cliff above the River Ribble near Brungerley Bridge.

The wood is dominated by mature oak with some younger ash reaching high into an open canopy. Ivy grows profusely on the oak. Mature ash, sycamore and field maple also occur but are rare. There is an understorey of hawthorn, holly and dog-rose. The ground flora includes ivy, bramble, dog's mercury, primrose, lesser celandine, Lords-and-Ladies, bluebell, wood avens, germander speedwell, bugle, barren strawberry, hedge woundwort, common dog-violet, bearded couch, false brome, tufted hair-grass, wood-sedge and male-fern.

Ash, poplar and beech have been planted on flat ground alongside the river. Here the ground flora includes common nettle, cleavers, creeping buttercup, opposite-leaved golden-saxifrage, marsh thistle, hard rush, reed canary-grass and green figwort, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*.

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Guideline(s) for Selection:

Woodland and Scrub (Wd2). [Flowering Plants and Ferns (Ff4)]

Owner/Occupier:

Private

Conservation Status:

None

Planning Context:

Other Information/Comments:

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Site Name: DRAKEHOUSE WOOD, WEST BRADFORD

District: Ribble Valley

Grid ref: SD 739453

Area (ha): 19.2

Ref: BHS 74NW05

Date of Form: 07/99

Date(s) Form Revised:

Site Approved: 09/93

Site Description:

The site comprises ancient, semi-natural woodland occupying the steep sides of Drakehouse Brook and Brocklehurst Brook. The wood is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

The canopy is dominated by oak, ash, elm and sycamore, with some rowan and beech. Alder occurs on damper ground. Hazel is present in the understorey, as well as regenerating tree species. The ground flora includes ramsons, red campion, dog's mercury, bluebell, enchanter's-nightshade, herb-robert, wood-sorrel, bittersweet, greater stitchwort, violets, creeping soft-grass and tufted hair-grass. A range of ferns are present, including male-fern, lady-fern, broad buckler-fern, hart's-tongue fern and bracken.

There is a small plantation of larch and Scot's pine near the northern end of the wood.

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Guideline(s) for Selection: Woodland and Scrub (Wd1)

Owner/Occupier: Private

Conservation/Planning Status:

Other Information/Comments: The site is in the Forest of Bowland Area of Outstanding Natural Beauty (AONB).

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English Nature

Site Name: FAIRY HILLS, DOWNHAM

District: Ribble Valley

Grid ref: SD 789450

Area (ha): 8.1

Ref: BHS 74NE04

Date of form: 09/00

Date(s) form revised:

Site approved: 09/93

Site Description:

The site comprises a cluster of limestone outcrops and knolls supporting species-rich calcareous grassland in a field of otherwise improved neutral grassland situated 0.5km north of Downham. Limestone bedstraw, a species listed in the *Provisional Lancashire Red Data List of Vascular Plants*, occurs on the site.

Species present in the calcareous grassland on the thin limestone soils include sheep's-fescue, common bent, crested dog's-tail, sweet vernal-grass, glaucous sedge, spring sedge, pignut, limestone bedstraw, lady's bedstraw, autumn hawkbit, fairy flax, common bird's-foot trefoil, field woodrush, common knapweed, harebell, mouse-ear hawkweed, burnet saxifrage, hoary plantain, selfheal, bulbous buttercup, salad burnet, wild thyme and germander speedwell. Spring ephemerals on more open habitat include parsley-piert, hairy bitter-cress, common whitlowgrass, dove's-foot crane's-bill, rue-leaved saxifrage and wall speedwell. On exposed limestone rock lesser dandelion and biting stoncrop occur as well as both wall-rue and maidenhair spleenwort.

In places, the knolls support a woodland type flora including lesser celandine, barren strawberry, herb-Robert, common dog-violet and lords-and-ladies. In the main trees and shrubs are rare and comprise only occasional ash, hawthorn and elder. However, the largest knoll, which is topped with a small beech plantation, supports ivy, blackthorn and wild rose out of the reach of grazing stock.

The vertical rock exposure on the disjunct western knoll supports a colony of fairy foxglove, an introduced species from the mountains of south west Europe.

The hedgerows bordering the field alongside Green Lane and the access track to Downham Mill are species-rich and include woody species such as hawthorn, blackthorn, hazel, holly, ash and field maple. The hedgerow ground flora includes wood anemone, lesser celandine, moschatel, primrose, dog's-mercury, Jack-by-the-hedge, sweet violet, common dog-violet, wood avens, water avens and greater bellflower.

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Guideline(s) for site selection:

Grassland (Gr1), Flowering Plants and Ferns (Ff4b).

Owner/Occupier:

Private.

Conservation/Planning Status:

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

Other Information/Comments:

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Site Name: Feazer Wood, Waddington

District: Ribble Valley

Grid ref: SD726454

Area (ha): 4.9

Ref: BHS 74NW03

Date of form: 06/00

Date(s) form revised:

Site approved: 09/93

Site Description:

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

The canopy is dominated by planted beech and sycamore with oak, wych elm, ash and some alder along Waddington Brook. The understorey is of hazel, hawthorn, holly and elder with some bird cherry, rowan and rhododendron.

The ground flora has frequent rough meadow-grass, bramble, tufted hair-grass, wood speedwell, Yorkshire-fog, wood sorrel and male and broad-buckler ferns. Other species present include: dog's-mercury, enchanter's-nightshade, yellow pimpernel, bracken, honeysuckle, herb-robert, wood-sedge, wood avens, greater stitchwort and hairy wood-rush.

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Guideline(s) for site selection:

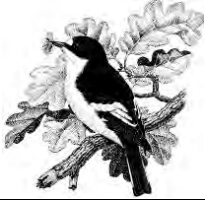
Woodland & Scrub (Wd1)

Owner/Occupier:

Private

Conservation/Planning Status:

Other Information/Comments:



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Site Name: Gamble Hole Farm Pasture

Site Ref: 65SE09

Approved: 26 February 2002

Area (ha): 2.52

Date written/last updated: 01 July 2003

Grid Ref: SD687504

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises an area of wet, semi-natural, neutral grassland with springs and flushes situated approximately 1 km west of the village of Newton. It lies on the lower slopes of a pasture adjoining Heaning Brook and supports a rich variety of plants characteristic of unimproved ancient grassland and flush systems. Four species in the *Provisional Lancashire Red Data List of Vascular Plants* occur here, namely bogbean, tawny sedge, yellow-sedge (*Carex viridula* ssp. *Brachyrrhyncha*) and few-flowered spike-rush.

The site supports a variety of grasses including sweet vernal grass, crested dog's-tail, Yorkshire fog, tufted hair-grass and purple moor-grass together with abundant meadowsweet, sharp-flowered rush, hard rush and soft-rush. Many other species are present including sneezewort, bugle, angelica, harebell, cuckooflower, common knapweed, common spotted-orchid, hemp-agrimony, cat's-ear, meadow vetchling, common anemone, greater bird's-foot-trefoil, ragged-robin, mouse-ear hawkweed, common marsh-bedstraw, selfheal, great burnet, devil's-bit scabious, rough hawkbit, lady's-mantle and quaking grass. Sedges present include common sedge, carnation sedge, star sedge, bottle sedge and brown sedge.

The springs and flushes support many additional plants. These include bogbean, fen bedstraw, marsh arrowgrass, marsh marigold, marsh hawk's-beard, marsh valerian, water mint, water avens, lesser spearwort, brooklime, tawny sedge, yellow sedge, long-stalked yellow-sedge, few-flowered spike-rush, hare's-tail cottongrass and great horsetail. Small beds of lesser pond-sedge and water-cress occur alongside Heaning Brook and a tributary stream.

The site provides habitat for wading birds such as snipe.

Guideline(s) for Site Selection:

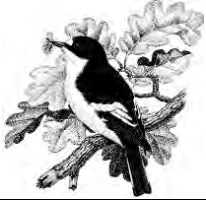
Grassland (Gr3)

Swamp and Fen (Fe2)

Flowering Plants and Ferns (Ff4b)

Other Information/Comments:

Lowland hay meadow (which includes species-rich neutral grassland) and swamp and fen are priority habitats in the UK Biodiversity Action Plan.



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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

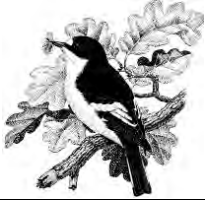
Description:

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: Great Dunnaw 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.

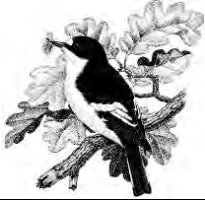
The species-rich areas support a variety plants including common bird's-foot-trefoil, harebell, eyebright, lady's bedstraw, mouse-ear hawkweed, bitter-vetch, fairy flax, burnet saxifrage, selfheal, bulbous buttercup, salad burnet, betony, wild thyme, heath speedwell and field wood-rush. Grasses and sedges 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 Dunnaw Wood Biological Heritage Site (BHS 75SW02).



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

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Biological Heritage Site

Biological Heritage Sites Partnership:

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Site Name: HOSPITAL WOOD, WADDINGTON

District: Ribble Valley

Grid ref: SD727446

Area (ha): 8.5

Ref: BHS 74SW02

Date of form: 06/00

Date(s) form revised:

Site approved: 09/93

Site 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 and beech. There are some small stands of conifers. The understorey is of hazel, hawthorn, holly with some bird cherry and rhododendron and regenerating canopy species.

The ground flora has frequent dog's-mercury, enchanter's-nightshade, wood sorrel, tufted hair-grass, creeping soft-grass, bramble and Lady, male and broad-buckler ferns. Bluebell, woodruff, honeysuckle, herb-robert, wood-sedge, wood melick, greater stitchwort are also present with opposite-leaved golden-saxifrage in the wetter areas.

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Guideline(s) for site selection:

Woodland & Scrub (Wd1)

Owner/Occupier:

Private

Conservation/Planning Status:

Other Information/Comments:



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Site Name: Little Dunnov Wood

Site Ref: 75SW03

Approved: 01 September 1993

Area (ha): 2.28

Date written/last updated: 01 April 2003

Grid Ref: SD707514

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Newton

Description:

The site comprises semi-natural woodland situated on the west side of the Hodder Valley, halfway between Newton and Slaidburn. It is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994).

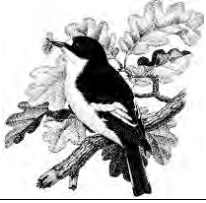
Most of the woodland lies on steeply sloping ground with sheer limestone cliffs and rock outcrops. In these areas the canopy, which is quite open in places, is dominated by ash and wych elm with frequent sycamore. There is a scattered understorey of hazel, hawthorn, rowan, holly and elder together with frequent ash and occasional beech regeneration. The ground flora includes abundant dog's mercury and ramsons with frequent bluebell and lesser celandine. Other species present include wood anemone, red campion, primrose, Lords-and-Ladies, enchanter's nightshade, herb-robert, wood avens, wood sage, wood speedwell, wild strawberry, harebell, ivy, hart's-tongue and wood melick.

On flatter ground above the limestone cliffs the woodland has been planted and contains mature sycamore, beech, larch and Scot's pine along with ash and wych elm. The north eastern corner of the woodland has been felled relatively recently and comprises a mix of planted and regenerating broadleaves.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd1)

Other Information/Comments:



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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

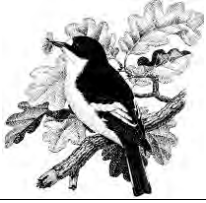
Description:

To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Other Information/Comments:



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Site Name: Newton West Roadside Verge

Site Ref: 65SE05

Approved: 08 September 1993

Area (ha): 0.22

Date written/last updated:

Grid Ref: SD692501

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Newton

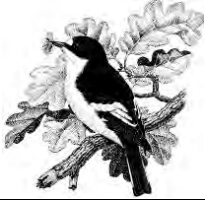
Description:

To be completed.

Guideline(s) for Site Selection:

Artificial Habitats (Ar2)

Other Information/Comments:



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Site Name: 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.

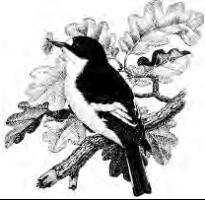
Many of the river banks are lined by woodland or individual trees and shrubs. Trees present include alder, ash, hazel, holly and hawthorn. Ground flora species include bluebell, dog's mercury, wood-sorrel, sanicle, wood anemone, moschatel and ramsons. Marsh hawk's-beard, water avens, opposite-leaved 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: Salthill Quarry

Site Ref: 74SE01

Approved: 01 September 1993

Area (ha): 8.31

Date written/last updated: 26 September 2013

Grid Ref: SD757426

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Clitheroe

Description:

The site comprises of a mosaic of habitats including limestone grassland, scrub and developing woodland surrounding a former limestone quarry which has been developed as an industrial estate. The main areas of interest are the exposed outcrops and stony ground which have been colonised by a diverse flora.

The outcrops support Small Scabious, Wild Thyme, Salad Burnet, Hairy St. John's-Wort, Wild Marjoram, Thyme-Leaved Sandwort, False-Brome, Eyebright, Harebell, Carline Thistle, Fairy Flax, Spring Sedge, Quaking-grass, Blue Fleabane, Wild Strawberry, Oxeye Daisy, Common Bird's-foot-trefoil, Pignut and Mouse-Ear-Hawkweed whilst on the shallow soils of crushed limestone Autumn Gentian, Hairy Rock-Cress, Hoary Plantain, Hairy Violet, Carline Thistle, Bee Orchid, Milkwort, Heath Speedwell and Glaucous Sedge occur. Buttercup, Great Burnet, Spiked Sedge, Lady's-Mantle, Meadow Crane's-bill, Rough Hawkbit, Yellow Oat-Grass, Betony, Lady's Bedstraw, Upright Hedge-parsley, Yellow-Rattle, Bloody Crane's-Bill, Downy Oat-Grass, Cowslip, Agrimony, Cowslips, Betony, Bloody Crane's-Bill, Bugle, Bulbous Buttercup and Common Knapweed. Common Rock-Rose was last recorded in 1988.

The scrub includes Sweet Briar and Spindle whilst beneath the wooded outcrops to the north of the site both Hard and Soft Shield-Fern occur. Established exotic shrubs include Wayfaring-Tree, Wrinkled Viburnum, *Sorbus mougeotii*, Butterfly-bush and Cotoneasters.

The site is also noteworthy for the presence of the Lancashire BAP bryophytes *Radula complanata*, *Cololejeunea minutissima*, *Aloina aloides*, *Campyliadelphus chrysophyllus*, *Didymodon acutus*, *Ditrichum flexicaule*, *Schistidium robustum*, *Syntrichia laevipila* and *Zygodon conoideus*.

A number of Lancashire BAP birds use the site such as Bullfinch, Lesser Redpoll, Lesser Whitethroat, Linnets, Spotted Flycatcher, Tree Sparrow and Willow Warbler. The Labyrinth Spider occurs here.

Guideline(s) for Site Selection:

Grassland (Gr1)

Artificial Habitats (Ar1)

Other Information/Comments:

The site is within the Salthill & Bellmanpark Quarries Geological SSSI and includes much of the Salthill Quarry Local Nature Reserve.

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English Nature

Site Name: SHERBURN WOOD, WADDINGTON

District: Ribble Valley

Map Sheet(s): SD 74SW

Ref: SD 74SW07

Area (ha.):

Grid Ref: SD730425

Date last revised: February 1997

Site Description:

The site comprises a long band of semi-natural woodland on a south facing river cliff above a sweeping curve of the River Ribble. Sedimentary rock outcrops below the weir at the eastern end of the wood, whilst further west conglomerate rock is exposed and gives rise to a tufa formation.

The canopy is dominated by oak and ash, scattered dead elm and localised sycamore and beech. Hawthorn, hazel, holly and dogwood are present in the understorey. The varied ground flora includes dog's mercury, bluebell, primrose, woodruff, wood avens, bramble, lesser celandine, barren strawberry, ivy, Lords-and-Ladies, red campion, moschatel, crosswort, herb-Robert, wood-sedge, bearded couch, false brome and tufted hair-grass. On steeper, open slopes giant bellflower and hairy St. John's-wort are present. Hard shield-fern and hart's-tongue fern also occur.

The river bank is lined by alder where the ground flora includes hemlock water-dropwort, butterbur, alternate-leaved golden-saxifrage and green figwort, a species included in the *Provisional Lancashire Red Data List of Vascular Plants*.

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Guideline(s) for Selection: Woodland and Scrub (Wd2)

[Flowering Plants and Ferns (Ff4)]

Owner/Occupier: Private

Conservation Status: None

Planning Context:

Other Information/Comments:

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Biological Heritage Site

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Site Name: SWANSIDE BECK AND SMITHIES BROOK VALLEY, SAWLEY

District: Ribble Valley

Grid ref: SD 785454

Area (ha): 27.6

Ref: BHS 74NE03

Date of form: 09/00

Date(s) form revised: 04/01

Site approved: 09/93

Site Description:

The site comprises a mosaic of semi-natural habitats along the valley of Swanside Beck and Smithies Brook. It extends for approximately 2.5 km upstream from the confluence of Smithies Brook with the river Ribble near Smithies Bridge, Chatburn. Within the site are a complex of habitats including woodland, scrub, grassland, flushes, marsh, riverbank and running water. The site is noted for the occurrence of the freshwater crayfish, a species listed in Schedule 5 of the *Wildlife and Countryside Act 1981*, and as a spawning ground for salmon and brown trout.

Most of the woodland is ancient semi-natural in character with a rich ground flora. Predominant species of the semi-natural woodlands include oak, ash, sycamore and alder with an understorey of hazel, hawthorn, holly and bird cherry. Wych elm was formerly frequent. The woodland ground flora includes wood anemone, lesser celandine, bluebell, primrose, lords-and-ladies, ramsons, dog's mercury, common dog-violet, moschatel, red campion, wood sedge, false-brome and hairy brome. Alder is particularly abundant along Swanside Beck and Smithies Brook.

Areas of both open and dense scrub also occur and principally comprise hawthorn with blackthorn, elder, wild rose and bramble. Other species include primrose, lords-and-ladies, barren strawberry and ground ivy.

Species-rich grassland is a feature of the valley with species including crested dog's-tail, common knapweed, pignut, cuckoo-flower, cat's-ear, meadow vetchling, bush vetch, fairy flax, common bird's-foot-trefoil, mouse-ear hawkweed, tormentil, selfheal, bulbous buttercup, betony, devil's-bit scabious, eyebright, lady's mantle, carnation sedge, spring sedge and quaking-grass. Flush and marsh habitats provide additional diversity with species such as large bittercress, soft and hard rush, green figwort, marsh marigold, meadowsweet, common valerian and hemp agrimony.

In addition to freshwater crayfish and spawning salmonides, the watercourses support bullhead and a diversity of riparian invertebrates.

Breeding bird species include curlew, willow warbler, blackcap, spotted flycatcher, redstart, skylark and dipper.

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Guideline(s) for site selection:

Habitat Mosaic (Hm3), Woodland and Scrub (Wd2), Grassland (Gr3), Other Invertebrates (In1), Fish (Fi1), Rivers and Streams (Ri1).

Owner/Occupier:

Private.

Conservation/Planning Status:

Other Information/Comments:

The freshwater crayfish is afforded protection under the *Wildlife and Countryside Act 1981*. It may be an offence intentionally to disturb the animal.

The site adjoins the Ings Beck Valley (BHS 74NE10) and the River Ribble (LSRRI) Biological Heritage Sites with which it forms an integral part.

The site boundary was modified in 01/01 to exclude 4.1 ha of improved grassland.

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Biological Heritage Site

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Site Name: TOWN END CROFT WOOD, DOWNHAM

District: Ribble Valley

Grid ref: SD 784445

Area (ha): 2.3

Ref: BHS 74SE08

Date of form: 09//00

Date(s) form revised:

Site approved: 12/95

Site Description:

The site comprises a block of woodland situated near the junction of Chatburn Road and Green Lane on a ridge immediately to the north west of Downham. The woodland supports a diversity of species characteristic of semi-natural woodland. A Roman road runs through the site.

The woodland canopy comprises abundant sycamore with frequent oak and ash. Other species of occasional to rare occurrence comprise common lime, wych elm, beech and a sweet chestnut. The shrub layer includes holly, gooseberry, elder, hazel, bramble and raspberry.

The ground flora along the crest of the ridge is dominated by dog's-mercury, with other species such as herb-Robert, enchanter's-nightshade, wood dock, wood avens, lords-and-ladies and hedge woundwort. Elsewhere, wood anemone, lesser celandine, wood-sorrel, bluebell, wood speedwell, ground ivy, meadowsweet, lady-fern, broad buckler-fern, male-fern, broad-leaved willowherb, tufted hair-grass, false brome and hairy-brome occur. On the lower flank of the wood, alongside Green Lane, greater bellflower also occurs. Hart's-tongue fern is frequent in the south-west arm of the wood along a low rocky outcrop.

The boundary hedgerow along Green Lane comprises hazel, hawthorn, and wych elm with field maple also present.

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Guideline(s) for site selection:

Woodland and Scrub (Wd2).

Owner/Occupier:

Private.

Conservation/Planning Status:

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

Other Information/Comments:



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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.

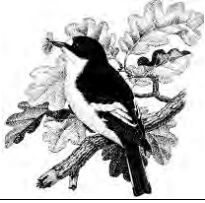
The low lying basin area is dominated by rushes with occasional Meadowsweet, Tufted Hair-grass, Common Spotted-orchid and Carnation Sedge. There is an area of shallow water colonised by Bulrush and Broad-leaved Pondweed.

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: 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)

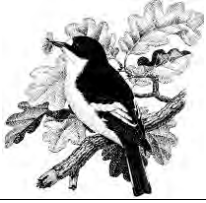
Other Information/Comments:

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: 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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Biological Heritage Site

Biological Heritage Sites Partnership:

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Site Name: WEST CLOUGH WOOD, WEST BRADFORD/GRINDLETON

District: Ribble Valley

Grid ref: SD 750458

Area (ha): 5.3

Ref: BHS 74NE01

Date of Form: 07/99

Date(s) Form Revised:

Site Approved: 09/93

Site Description:

The site comprises ancient, semi-natural woodland occupying the steep sides of West Clough Brook, located between the villages of West Bradford and Grindleton. The woodland is listed in the *Lancashire Inventory of Ancient Woodland (Provisional)*, (English Nature, 1994). West Clough Wood has been considerably modified by past planting, but still retains a ground flora that is characteristic of an ancient woodland.

The canopy comprises beech, sycamore, oak, ash, wych elm, birch and rowan. A small area of conifers has been planted. The understorey comprises hazel, hawthorn and holly. The ground flora supports many ferns, including male-fern, lady-fern and broad buckler-fern. Other species present include tufted hair-grass, false brome, wood melick, dog's mercury, wood-sorrel, ramsons, bluebell, wood anemone, enchanter's-nightshade, wood avens, sanicle, greater stitchwort, hedge woundwort, moschatel, bittersweet, herb-robert and opposite-leaved golden-saxifrage. In places the steep slopes are dominated by bare ground with only a sparse vegetation cover.

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Guideline(s) for Selection: Woodland and Scrub (Wd1)

Owner/Occupier: Private

Conservation/Planning Status:

Other Information/Comments: The site is in the Forest of Bowland Area of Outstanding Natural Beauty (AONB).

Lancashire County Heritage Sites

Biological Heritage Site

Biological Heritage Sites Partnership:

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English Nature

Site Name: WORSAW HILL, WARREN HILL, CROW HILL AND THE RIDGE, WORSTON

District: Ribble Valley

Grid ref: SD 774432

Area (ha): 50.2

Ref: BHS 74SE06

Date of form: 09/00

Date(s) form revised:

Site approved: 09/93

Site Description:

The site comprises a cluster of limestone knolls between Worston and Downham and includes Crow Hill, The Ridge, Warren Hill and Worsaw Hill. The cluster of limestone knolls is also notified as a Geological Site of Special Scientific Interest. The site is of particular importance for its species-rich limestone grassland. Worsaw Hill supports the largest single area of limestone grassland in the Forest of Bowland. It is also notable in supporting the only population in the Forest of Bowland of the nationally scarce blue moor-grass. Limestone bedstraw, a species listed in the *Provisional Lancashire Red Data List of Vascular Plants*, also occurs frequently. In addition, Worsaw Hill is important for the occurrence of two nationally scarce lichens, *Polyblastia cupularis* and *Rinodina bischoffii*.

As well as limestone grassland the site also includes areas of neutral and acidic grassland. These occur where glacial deposits overlie the limestone and mask its influence. Species occurring in these habitats include common bent, sweet vernal-grass, crested dog's-tail, cock's-foot, tufted hair-grass, wavy hair-grass, red fescue, yorkshire-fog, rough meadow-grass, mat-grass, ribwort plantain, meadow buttercup, creeping buttercup, common mouse-ear, common dog-violet, cat's-ear, selfheal, tormentil, heath bedstraw, harebell, field woodrush and bilberry.

The calcareous grassland comprises the National Vegetation Classification CG2 *Festuca ovina-Avenula pratensis* and the CG9 *Sesleria albicans-Galium sternerii* grasslands. The species diversity of these calcareous grasslands is far greater and includes blue moor-grass, quaking grass, downy oat-grass, crested hair-grass, limestone bedstraw, carline thistle, glaucous sedge, spring sedge, eyebright, lady's bedstraw, rough hawkbit, hoary plantain, fairy flax, common bird's-foot trefoil, small scabious, mouse-ear hawkweed, common milkwort, barren strawberry, bulbous buttercup, salad burnet and wild thyme. Spring ephemerals on exposed limestone include spring whitlow-grass, rue-leaved saxifrage, parsley-piert, wall speedwell and lesser dandelion.

Scattered trees and scrub are present in places. These comprise principally ash and hawthorn.

Breeding birds include curlew, skylark, meadow pipit and redstart.

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Guideline(s) for site selection:

Grassland (Gr1), Flowering Plants and Ferns (Ff2), (Ff4b), Lichens (Li3).

Owner/Occupier:

Private.

Conservation/Planning Status:

The site forms part of Clitheroe Knoll Reefs Site of Special Scientific Interest (geological).

Other Information/Comments:

Tor grass is said to have been intentionally introduced into dry grassland at the foot of the south facing slope of Worsaw Hill as a university experiment. The colony is spreading and is threatening the diverse native limestone grassland.

Lancashire County Heritage Sites

Biological Heritage Site

Biological Heritage Sites Partnership:

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- English Nature

Site Name: WORSTON COMMON, WORSTON

District: Ribble Valley

Map Sheet(s): SD 74SE

Ref: BHS 74SE09

Area (ha.):

Grid Ref: SD
768426

Date Approved:
November 1997

Date last revised:

Site Description:

The site comprises species-rich grassland situated on the edge of the village of Worston. Two species occurring at the site, namely green figwort and melancholy thistle, are included in the *Provisional Lancashire Red Data List of Vascular Plants*.

A diverse sward includes the following species: common knapweed, common bistort, common valerian, lady's-mantle, marsh marigold, marsh orchid, meadow crane's-bill, meadowsweet, meadow vetchling, cuckooflower, ragged-robin, opposite-leaved golden-saxifrage and alternate-leaved golden-saxifrage.

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Guideline(s) for Selection: Grassland (Gr3), Flowering Plants and Ferns (Ff4)

Owner/Occupier: Ownership registered with Ribble Valley Borough Council
Managed by Worston Parish Meeting.

Conservation/ Planning Status:

Other Information/Comments: