Craven Biodiversity Action Plan

Craven Biodiversity Action Group

NATURAL ENGLAND

North Yorkshire County Council

CRAVEN IN · THE · YORKSHIRE · DALES DISTRICT

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Craven Biodiversity Action Plan

(outside of the Yorkshire Dales National Park)

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Introduction

1. Introduction

1.1 Caring for Craven's wildlife

If keeping Craven rich in wildlife is important to you, then you can find out how it is planned to care for our special habitats and species in the following pages. It is not just the rare and threatened wildlife that this plan seeks to protect, commoner wildlife is important too. Around our towns, villages and homes wildlife contributes to the quality of our lives.

1.2. Craven Community Strategy 2003-13

The Government believes that the community has a key role in setting its own agenda and this has led to the establishment of Local Strategic Partnerships (LSPs), which produce Community Strategies to promote the economic, social and environmental well being of the community.

The Craven Sustainable Community Strategy has five priorities for action, one of which is 'Creating a Sustainable Future – One Planet Living. Under this priority the LSP wants to create a cleaner, greener Craven, where economic growth goes hand-in-hand with reducing impact on the environment. A new group is currently being set up to co-ordinate the delivery of aims within this priority. These aims include conserving and enhancing the district's environment.

Quality of life is important to us all, and includes access to a decent home, work, education and health. It also means a healthy environment – clean air, clean water and a rich and diverse natural world.

In the UK the destruction of the countryside and the loss of wildlife has been such that a rich and healthy natural environment is no longer guaranteed. For example, 98% of wildflower meadows, and over 2 million skylarks have been lost in less than a lifetime. We need to halt these declines, and put back where we can what has been lost - not just in protected areas or nature reserves, but in the wider countryside too. In the longer term this will help to deal with the adverse affects of climate change. Neither the scale of the task nor the urgency for action should be underestimated.

In line with Government advice, protecting biodiversity is covered in the Community Strategy and producing the Craven Biodiversity Action Plan (outside of the National Park) is the starting point to fulfilling one of the aspirations of the community.

1.3. What is biodiversity?

The term 'biodiversity' was coined at the Rio Earth Summit in 1992. It comes from biological diversity and means the whole variety of life within the natural world which both surrounds and sustains us. This also includes us. It is not just rare species of animal and plant life but covers the entire spectrum of life. Biodiversity includes not only all species of plants and animals, but also their genetic variation, and the complex ecosystems of which they are all part.

1.4 Why is biodiversity important?

Biodiversity is vital to life and, in its simplest terms, enables life to exist on the earth. It provides the air we breathe, the food we eat, the materials we use and the medicines we take. These are all linked together in a complex web with every plant and animal having its own small part to play.

1.5 The need to conserve biodiversity

The world is losing biodiversity at an increasing rate, mainly as a result of human activity. The UK alone lost 100 species in the 20th century,





with many more species and habitats in danger. On a world scale, the rate of loss is now recognised to be a cause for serious concern, requiring international action. Loss of biodiversity impacts upon Mankind in a number of ways:

- Ecosystems – natural systems provide our basic life-support structures. These provide our soil, food and oxygen.
- The natural world provides pollution control, e.g. forests to fix carbon; and flood control, e.g. lakes and marshes to absorb floodwater.
- Products – almost all of our food, fuel, medicines, cosmetics and construction materials are a product of biodiversity.
- Quality of life – the natural world offers enjoyment, health, spiritual enrichment, learning, cultural diversity and artistic inspiration.
- Economic development – thousands of jobs rely on our natural environment, including agriculture and eco-tourism. For example, angling is the largest participation sport in the UK. Craven's water bodies and water courses support fisheries for game and coarse fish. National estimates suggest that the annual economic activity associated with angling is up to £2.75 billion whilst around 20,000 full or part-time jobs depend upon the sport.
- Knowledge - the pursuit of scientific discoveries.

As climate change is felt more and more, our plants and animals will be put under great pressure. Linear habitats such as road verges, railway embankments, river and stream corridors, ditches and hedgerows will become lifelines by which species that find themselves in the wrong place through climate change, might be able to shift their ranges and colonise new areas. Isolated sites, like many of our nature reserves, may become unsuitable for the plants and animals that they were designated to conserve. Gardens may also play an important role as multi-habitat zones linking together fragments and corridors of habitat, with the involvement of the public. Corridors and habitat 'stepping stones' should be encouraged throughout the landscape.

1.6 The national framework

As a result of the Rio Earth Summit, many countries agreed to take action to arrest the loss of biodiversity on a worldwide scale. The UK Government pledged to take action, and as a result the UK Biodiversity Action Plan (UK BAP) was published (UK BAP[1]).

1.7 The UK Biodiversity Action Plan

The UK BAP is the UK's initiative to maintain and enhance biodiversity. Through this plan, the Government committed itself to a process designed to conserve and enhance:

- the range and numbers of wildlife species and the quality and extent of wildlife habitats;
- species and habitats that are internationally important or characteristic of local areas;
- species and habitats that have declined significantly over recent decades.

Various Central Government and non-government organisations have taken responsibility to be the lead partners for each UK BAP priority habitat and species. Each action plan identifies key partners. At the local level, concerned organisations/individuals are welcome to consult the lead agencies over BAP matters.

1.8 Local Biodiversity Action Plans

However, the Government recognised that biodiversity conservation would have to be delivered on a local basis, so a suite of county and district plans, referred to as Local BAPs (LBAPs) has been produced. The Craven BAP is one such plan and closely links to neighbouring LBAPs. These plans are being developed to help foster action for UK priority species and habitats at a local level, but also to determine and take action for wildlife of local importance.





The aim of the LBAP is to:

- translate national guidance within the UK BAP to action at a local level;
- identify locally important habitats and species;
- develop local partnerships to help maintain and improve biodiversity and provide guidance on how to do this;
- raise local awareness of biodiversity and its importance, and set up effective monitoring systems.

The LBAP can help integrate biodiversity action into the decision making of statutory and non-statutory bodies at a local level. For example, planners can use LBAPs as Supplementary Planning Guidance, to influence planning decisions, both to avoid harming wildlife and to encourage the restoration of habitats through after-use conditions.

1.9 Regional biodiversity

Local BAPs are being prepared and implemented across the Yorkshire and The Humber Region, based on administrative boundaries, and the Yorkshire and Humber Biodiversity Forum is producing a Regional Biodiversity Strategy. This strategy will identify how this region will deliver the England Biodiversity Strategy. The Regional Spatial Strategy and other documents such as the Regional Economic Strategy will guide the approach and will engage with key organisations at a senior level to ensure that the Strategy is useful and relevant to all aspects of the region. The document will be produced during the financial year 2008/09.

The Regional Strategy will be relevant to Craven by incorporating relevant priorities and identifying potential future funding mechanisms to assist delivery of local BAP targets that are determined to be regionally significant.

2. How the Biodiversity Action Plan fits in with other schemes

2.1 Planning context

Biodiversity Action Plans are not a statutory requirement of the Local Planning Authority (LPA), but Planning Policy Statement 9 'Biodiversity and Geodiversity Conservation' (PPS9), published August 2005, requires LPA's to take steps to further the conservation of UK BAP and local BAP steering group habitats and species.

Paragraph 11 states:
'Through policies in plans, local authorities should also conserve other important natural habitat types that have been identified in the CROW Act 2000 section 74 list. As being of principal importance for the conservation of biodiversity in England and identify opportunities to enhance and add to them', (Section 74 lists the UK BAP priority habitats and species).

The Government circular for PPS9 says in paragraph 84:
'UK BAP priority habitats and species as well as those selected by LBAP partnerships are capable of being a material consideration… [extract]'.

Further, the Local Government Act 2000 places a statutory duty on local authorities to prepare Community Strategies, and Biodiversity Action Plans have been recognised as examples of 'good practice'.

The subsequent Natural Environment and Rural Communities Act 2006 pushes the maintenance of biodiversity further into the responsibility of public bodies through Sections 40 and 41. Section 40 states 'Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.





Section 41 includes all the UK BAP habitats and species as part of this duty. This is the first specific statutory duty placed upon local authorities with regard to maintenance of specific habitats and species.

The planning process is a statutory process, which regulates and controls land use and land use change. As such the Local Planning Authority has a major role in conserving biodiversity.

Government guidance on planning matters has recently been reviewed and Planning Policy Statements, backed up by guidance, have replaced Planning Policy Guidance.

The Government Office for Yorkshire and the Humber Region is currently preparing new planning guidance in the form of Regional Spatial Strategies.

Local Authority planning is currently being revised with the production of Local Development Frameworks.

The North Yorkshire Minerals Local Plan1997 includes a nature conservation policy and an aftercare policy. A Minerals and Waste Development Framework is currently being prepared to replace the Minerals Local Plan, which is expected to contain similar policies.

The preparation and use of the Craven BAP is an important part of the planning process because, in addition to providing information, it identifies specific and positive actions that can be undertaken to conserve the District's biodiversity.

The BAP promotes the following planning related issues:

- the precautionary principle;
- no net loss of habitat;
- like for like mitigation as a minimum requirement;
- protection of SINCs;
- the need for good ecological surveys;
- the need to work with the Local Records Centre on baseline data, monitoring and reporting;
- the importance of green space for quality of life;
- the identification of habitat creation opportunities through spatial mapping.

In addition to the planning system, there is a whole array of legislation that affects biodiversity.

2.2 Sustainable Development Strategy

Many Local Authorities are preparing a Sustainable Development Strategy. Biodiversity conservation has strong links with sustainable development making the Local BAP a key part of this process.

Key initiatives require Sustainability Appraisals (SA) and key policies require Strategic Environmental Assessment (SEA) to be undertaken.

2.3 English Nature Natural Areas

In the mid-1990s English Nature (EN, now Natural England) divided the country into Natural Areas, based on the distribution of wildlife and natural features rather than administrative areas.

The following EN Natural Areas all include a part of the Craven BAP area:

- Yorkshire Dales;
- The Forest of Bowland;
- Lancashire Plain and Valleys;
- Southern Pennines.

The Department for Environment, Food and Rural Affairs (Defra) has used Natural Area thinking to create the very similar Joint Character Areas (JCA). These are used for setting area-wide targets for the Defra Environmental Stewardship Scheme (ESS) introduced in 2005. The JCA Targeting statements are also used to judge the relative





merits of non-SSSI applications and enter requests to enter additional non-designated land acquired by existing agreement holders.

3. Protected sites

3.1 Special Areas of Conservation and Special Protection Areas

Special Areas of Conservation (SAC) and Special Protection Areas (SPA) are sites of European importance which are protected under European legislation (the Habitats Directive). In UK law these habitats and species are protected under the Conservation (Natural Habitats &c.) Regulations 1994. SACs and SPAs are based on designated Sites of Special Scientific Interest (see below). SPAs are designated for their bird interest and SACs for their habitat and other wildlife interest.

There is one site in the Craven BAP area which is both a SAC and a SPA and this is the 'South Pennines Moors' (Appendix 9).

3.2 Sites of Special Scientific Interest

The best biological and geological sites are notified as Sites of Special Scientific Interest (SSSIs) by Natural England, the government wildlife advisor with powers and duties to protect and enhance the natural heritage in England. The SSSI series is a representative suite of nationally important sites. SSSIs are shown on the Natural England website and associated websites (Appendix 6).

In the Craven BAP area there are eight biological SSSIs wholly within the area and there are five geological SSSIs (these are listed in Appendix 9).

3.3 Sites of Importance for Nature Conservation

A Site of Importance for Nature Conservation (SINC) is a non-statutory designation used to identify wildlife sites in the county. Local authorities have a responsibility to take account of sites of substantive nature conservation conservation (Planning Policy Statement 9).

SINCs are shown on the Craven District Local Plan proposals map, but they are not necessarily sites that have public access. They are protected by a policy in the Craven District Local Plan and are part of the planning system, in that they require to be protected from significant effects of development. Partnership working with SINC owners is desirable and the aspiration of the Craven BAP steering group is for land owners to manage sites economically, while keeping them in a favourable condition for wildlife.

The Craven BAP recognises that SINCs are important biological units. The steering group recommends that all sites of nature conservation interest be surveyed (with landowner permission) through the independent SINC panel (SINC[2]). The classification of SINCs is largely based on the national British Plant Community criteria known as the National Vegetation Classification (NVC) system[1].

4. Creating the BAP

4.1 The Craven Biodiversity Action Plan process

North Yorkshire County Council (NYCC) has led the Craven BAP initiative, with support and funding from Craven District Council (CDC) and Natural England. The initial task was to set up a biodiversity partnership and a steering group (Appendix 1). A wildlife audit covering known habitats and species formed the basis of the decisions made by the steering group on the selection of habitat and species priorities. Individual Habitat Action Plans, Species Action Plans and Habitat Statements were then drawn up.

The Craven BAP covers the same area as the District Local Plan, a plan of which is shown in Appendix 2. It does not cover the Yorkshire Dales National Park, which has its own BAP, 'Nature in the Dales' (YDNPA[3]). Other

1 The NVC is a well-established national system for scientifically assessing and assigning plant communities to habitat types. The NVC tables are published in a series of books covering all of the main habitat types and these have been used for setting the criteria for the designation of SINC sites. However, NVC codes have not been widely used in the Habitat Action Plans in an attempt to make the Plan available to a wide audience.





neighbouring LBAPs include Harrogate, Cumbria, Bradford, and Lancashire.

This version is the first attempt at drawing together all the wildlife information available, assessing what needs the most attention and where we can contribute the most.

4.2 Criteria for the selection of habitats

Although all species of wildlife are important, the BAP concentrates on priority habitats and species. Priorities were selected by the steering group, based on the following recognised criteria:

- Any habitat for which a UK BAP has been prepared that occurs in the Craven District (excluding the National Park).
- Any semi-natural habitat that occurs in the Craven District.
- Any habitat that is characteristic of the Craven District.
- Any habitat that is locally distinctive within the Craven District.
- Any habitat that supports a priority species and occurs in the Craven District.

4.3 Criteria for the selection of species

Priorities were selected by the steering group, based on the following recognised criteria:

- Any species (not including vagrants) that has recently occurred in Craven, and for which a UK BAP has been prepared.
- Any species recognised to be of conservation concern (such as Red Data Book listing, Nationally Scarce or red/amber listed birds) and has recently occurred in Craven.
- Any species that has statutory protection under European Directives or the Wildlife and Countryside Act 1981 and has recently occurred in Craven.
- Any species occurring in the District that is considered by experts to be regionally rare.
- Any species that is considered to be locally valued or distinctive.
- Any species that is considered likely to make a good flagship species for promoting action plans.

5. Results

5.1 UK Biodiversity Action Plan priority habitats occurring in the BAP area

The following UK BAP priority habitats occur in the Craven BAP area:

- Hedgerows;
- Arable field margins;
- Lowland meadows;
- [Coastal and] floodplain grazing marsh;
- Upland hay meadows;
- Upland calcareous grassland;
- Lowland calcareous grassland;
- Eutrophic standing waters;
- Ponds;
- Rivers;
- Fens;
- Lowland raised bog;
- Upland heathland;
- Blanket bog;
- Wood pasture and parkland;
- Mesotrophic lakes;
- Upland mixed ashwoods;
- Upland oakwood;
- Wet woodland.

5.2 Habitats of Conservation Concern

Following review of the UK BAP priority habitats occurring in the BAP area and other habitats, the following 11 Habitats of Conservation Concern were selected for the preparation of Habitat Action Plans (HAPs):

- Woodland;
- Scrub;
- Parkland, ancient trees and pollarded trees;
- Farmland and grassland;
- Hedgerows;
- Wet acidic grassland;
- Upland heath and blanket bog;
- Ponds;
- Fens;
- Lowland raised bog;
- Rivers and streams.





Appendix 3 shows the relationship between habitats at the national (UK BAP) and local (Craven BAP) levels. Column 2 shows the UK BAP priority habitats. Column 1 gives the Craven BAP name for the habitat, which is sometimes different where broader habitat definitions have been used. Column 3 gives the SINC definition (using the NVC system) that most closely refers to the habitat.

5.3 Habitat Statements

Four Habitat Statements have been prepared. These are for habitats that are not seen currently to be of the highest level of conservation concern. They give background information and some advice on conservation.

- Unimproved Grassland
- Metalliferous Grassland
- Built Environment
- Gardens

5.4 UK Biodiversity Action Plan priority species occurring in the BAP area

Following revision of the UK BAP Species and Habitats list in 2007, there are now 1149 UK BAP priority species. The following 53 species are considered under threat locally:

- Water Vole
- Brown Hare
- Otter
- Harvest Mouse
- Hedgehog
- Soprano Pipistrelle Bat
- Brown Long-eared Bat
- Noctule Bat
- Curlew
- Lapwing
- Grey Partridge
- Red Grouse
- Herring Gull
- Skylark
- Ring Ouzel
- Song Thrush
- Grasshopper Warbler
- Lesser-Spotted Woodpecker
- Spotted Flycatcher
- House Sparrow
- Tree Sparrow
- Linnet
- Twite
- Bullfinch
- Reed Bunting
- European Eel
- Atlantic Salmon
- Brown Trout
- River Lamprey
- Common Toad
- Adder
- Slow Worm
- Common Lizard
- Great Crested Newt
- White-clawed Crayfish
- Cylindrical Whorl Snail
- Depressed River Mussel
- Small Heath Butterfly
- Small Pearl-bordered Fritillary
- White-letter Hairstreak
- Wall Butterfly
- Flat Sedge
- Oak Polypore (probably locally extinct)
- Olive Earthtongue (probably locally extinct)

5.5 Species of Conservation Concern

In addition to the UK BAP priority species, a range of other locally important species was selected. These have been termed Species of Conservation Concern (SoCC). Table 1 shows how these are dealt with in the BAP. Most are catered for in the HAPs, some are marked for further information to be collated and some are given dedicated Species Action Plans (SAPs). Table 2 covers some other species that are not SoCC, but which the steering group considered to be local priorities. See Millward[4].





Table 1: Relationship between Species of Conservation Concern and Habitat Action Plans

The UK BAP priority species are shown with an asterisk (*).

Mammals		
Water Vole*	*Arvicola terrestris*	Rivers and Streams
Brown Hare*	*Lepus europaeus*	Farmland and Grassland
Otter*	*Lutra lutra*	Rivers and Streams; Woodland; Wildlife Ponds; Fens
Brown Long-eared Bat*	*Plectorus auritus*	Bats SAP
Common Pipistrelle Bat	*Pipistrellus pipistrellus*	Bats SAP
Daubenton's Bat	*Myotis daubentoni*	Bats SAP
Natterer's Bat	*Myotis nattereri*	Bats SAP
Noctule Bat*	*Nyctalus noctula*	Bats SAP
Soprano Pipistrelle Bat*	*Pipistrellus pygmaeus*	Bats SAP
Whiskered Bat/Brandt's Bat	*Myotis mystacinus/ Myotis brandtii*	Bats SAP
Hedgehog*	*Erinaceus europaeus*	Gardens Statement
Birds		
Curlew*	*Numenius arquata*	Farmland and Grassland, Wet Acidic Grassland
Hen Harrier	*Circus cyaneus*	Upland Heathland and Blanket Bog
Grey Partridge	*Perdix perdix*	Farmland and Grassland
Lesser-Spotted Woodpecker*	*Dendrocopos minor*	Woodland; Parkland. Ancient Trees and Pollarded Trees
Skylark*	*Alauda arvensis*	Farmland and Grassland; Upland Heathland and Blanket Bog; Wet Acidic Grassland
Ring Ouzel*	*Turdus torquatus*	Upland Heathland and Blanket Bog
Song Thrush*	*Turdus philomenos*	Woodland, Gardens statement
Grasshopper Warbler*	*Locustella naevia*	Fens
Spotted Flycatcher*	*Muscicapa striata*	Woodland, Parkland, Ancient Trees and Pollarded Trees
Marsh Tit*	*Parus palustris*	Woodland, Parkland, Ancient Trees and Pollarded Trees
Starling*	*Sturnus vulgaris*	Woodland
Yellow Wagtail*	*Motacilla flava*	Farmland and Grassland
House Sparrow*	*Passer domesticus*	Farmland and Grassland
Tree Sparrow*	*Passer montanus*	Farmland and Grassland; Ancient and/or Species-rich Hedgerows
Linnet*	*Carduelis cannabina*	Farmland and Grassland; Scrub; Ancient and/or species-rich Hedgerows
Twite*	*Carduelis flavirostris*	Farmland and Grassland
Bullfinch*	*Pyrrhula pyrrhula*	Woodland
Reed Bunting*	*Emberiza schoeniclus*	Fens, Wildlife Ponds





Birds (Cont.)		
Lapwing*	*Vanellus vanellus*	Farmland and Grassland; Wet Acidic Grassland
Fishes		
European Eel*	*Anguilla anguilla*	Rivers and Streams
Atlantic Salmon*	*Salmo salar*	Rivers and Streams
Grayling	*Thymallus thymallus*	Rivers and Streams
Bullhead	*Cottus gobio*	Rivers and Streams
Brook Lamprey	*Lampetra planeri*	Rivers and Streams
Brown Trout*	*Salmo trutta*	Rivers and Streams
Reptiles		
Adder*	*Vipera berus*	Upland Heathland and Blanket Bog
Slow Worm*	*Anguis fragilis*	Woodland
Common Lizard*	*Lacerta vipera*	Upland Heathland and Blanket Bog
Common Toad*	*Bufo bufo*	Wildlife Ponds; Garden statement
Amphibians		
Great Crested Newt*	*Triturus cristatus*	Wildlife Ponds
INVERTEBRATES		
Crustacea		
White-clawed Crayfish*	*Austropotamobius pallipes*	Rivers and Streams
Freshwater Shrimp	*Crangonyx pseudogracilis*	Recorded at Dead Eye Pond near Cononley, further information on status required
Mollusca - snails		
Depressed River Mussel*	*Pseuanodonta complanata*	Rivers and Streams
A Snail	*Sphaerium (Sphaeriastrum) rivicola*	Vulnerable. Recorded in the Leeds - Liverpool Canal at Gargrave. Further information required
Cylindrical Whorl Snail*	*Truncatellina cylindrica*	Endangered. Specimens in Skipton Museum. Assumed extinct
A Snail	*Vertigo (Vertigo) alpestris*	Vulnerable. Recorded from Ingleton. Further information required
Craven Door Snail	*Clausilla dubia*	Said to occur in area but comment not referenced. Further information required
Lepidoptera - butterflies and moths		
Small Pearl-bordered Fritillary*	*Boloria selene*	Small Pearl-bordered Fritillary SAP
White-letter Hairstreak*	*Satyrium w-album*	Woodland; Ancient and/or species-rich Hedgerows
Green Hairstreak	*Callophgrys rubi*	Upland Heathland and Blanket Bog; Scrub





Lepidoptera - butterflies and moths (Cont.)		
Purple Hairstreak	*Quercusia quercus*	Woodland; Parks, open spaces and railway corridors; Gardens
Manchester Treble-Bar	*Anaitis paludata*	Manchester Treble-Bar SAP
Small Heath	*Coenonympha pamphilus*	Farmland and Grassland
Chilopoda - centipedes		
A Centipede	*Geophylus electricus*	Recorded at Giggleswick. Said to be of local importance. Further information required
Diplopoda - millipedes		
A Millipede	*Archiboreolis pallidu*	Said to be of local importance in the area but no details. Further information required
A Millipede	*Blaniulus gutalatus*	Said to be of local importance in the area but no details. Further information required
A Millipede	*Macrosternodesmus pallicola*	Said to be of local importance in the area but no details. Further information required
Tricladida - freshwater flatworms		
Freshwater Shrimp	*Crangonyx pseudogracilis*	Recorded at Dead Eye Pond near Cononley, further information on status required
Mollusca - snails		
A Flatworm	*Dugesia lugubris*	Recorded from Dead Eye Pond, Cononley and said to be unusual. Further information on status required
A Flatworm	*Planaria torva*	Recorded from Dead Eye Pond, Cononley and said to be unusual. Further information on status required
Hirudinea - leeches		
A Leech	*Dina lineata*	Occurs in Ellerbeck, near Skipton and is the only record for Yorkshire. Further information on status required
PLANTS		
Vascular Plants		
Northern Spike-rush	*Eleocharis austriaca*	Rivers and Streams, Floodplain Grazing Marsh
Narrow-leaved Marsh Orchid	*Dactylorhiza traunsteineri*	Fen
Marsh Gentian	*Gentiana pneumonanthe*	Wet Acidic Grassland
Bird's Eye Primrose	*Primula farinosa*	Fen
Mountain Currant	*Ribes alpinum*	Hedgerows
Downy Currant	*Ribes spicatum*	Nationally scarce. Occurs in Tenley Plantation. Further information required





Vascular Plants (Cont.)		
Blue Moor-Grass	*Sesleria caerulea*	Unimproved Grassland statement
Lesser Tussock Sedge	*Carex diandra*	Fen
Black Poplar	*Populus nigra spp. betulifolia*	Unverified claim from Skipton area in 2003. Further information required
Lower Plants		
Fungi		
Oak Polypore*	*Piptoporus quercinus*	Parkland, Ancient Trees and Pollarded Trees.
Olive Earthtongue*	*Microglossum olivaceum*	UK BAP species. Pre-1960 records. Presumed extinct.

Table 2: Relationship between locally valued species (but not Species of Conservation Concern) and Habitat Action Plans.

Birds		
Merlin	*Falco columbarius*	Upland Heathland and Blanket Bog
Barn Owl	*Tyto alba*	Farmland and Grassland
Redshank	*Tringa totanus*	Farmland and Grassland; Wet Acidic Grassland
Snipe	*Gallinago gallinago*	Farmland and grassland; Wet acidic grassland
Swift	*Apus apus*	Built Environment statement
Swallow	*Hirundo rustica*	Built Environment statement
House Martin	*Delichon urbica*	Built Environment statement
Invertebrates		
Bumblebees	*Bombus spp*	Farmland and Grassland; Unimproved Grassland statement; Gardens statement
Vascular Plants		
Bluebell	*Hyacinthoides non-scripta*	Woodland
Spring Sandwort	*Minuartia verna*	Unimproved Grassland statement
Vascular Plants		
Devil's Bolete*	*Boletus satanus*	Former UK BAP species. Pre-1960 records. Presumed extinct
Pink Waxcap*	*Hygrocybe calyptriformes*	Former UK BAP species. Recorded from the lawn of a Skipton garden. Covered in the Parkland, Ancient Trees and Pollarded Trees and Gardens statement
Lichens	-	Built Environment statement





5.6 Species Action Plans

Individual Action Plans have been prepared for one species group and two species:

- Bats
- Small Pearl-bordered Fritillary Butterfly
- Manchester Treble-Bar Moth

5.7 The Habitat Action Plans, Habitat Statements and Species Action Plans

Each plan has been prepared by experts on the steering group and provides information on the current status, the reasons for decline, examines the national and regional response if appropriate and sets objectives, targets and actions which can be monitored over a five-year period.

The Craven BAP aims to achieve conservation through targets based upon protection, enhancement and re-creation:

- The key means of protecting habitats and species are by protecting the existing resource at sites, often using designations such as: Special Areas of Conservation (SAC), Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI), Sites of Importance for Nature Conservation (SINC), Local Nature Reserves (LNR) and Nature Reserves (NR). Such sites require favourable management, often through Management Agreements with the owners.
- Enhancement seeks to improve existing degraded habitat to a state of favourable condition for wildlife.
- Re-creation seeks to expand the resource.

6. Next steps

6.1 Biodiversity Action Plan co-ordination and implementation

The most important part of the BAP process, is the co-ordination and delivery of projects based around the published actions, to achieve the action plan targets. This will require a high level of commitment from the partners. The co-ordination of BAP projects will require a degree of fund-raising to initiate local projects.

The action plan is a five-year programme.

6.2 Generic targets and actions

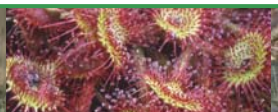
In addition to the specific targets and actions for each Habitat Action Plan and Species Action Plan, there is also a set of generic targets and actions, which will ensure implementation of the BAP. Some of these relate to the delivery, reporting and reviewing of the Craven BAP, and some relate to Section 6 'Next steps' and Section 7 'Key wildlife actions'.

All of the BAP targets and actions are given in part 2 of the Craven BAP ~ **The Craven BAP Action Programme**.

6.3 Baseline information

English Nature (now Natural England) commissioned a Phase 1 habitat report of Craven outside the National Park in 1990-91 (Allinson[5]). This habitat data was then used to identify second tier wildlife sites (SINCs). However, information is still relatively patchy, notably with species. The steering group has identified a lack of baseline data for some of the priority habitats and species. Where baseline data is patchy or absent, a true picture has not been established and without addressing this, the task of monitoring progress against targets is difficult. To assist in overcoming this problem it is hoped that a partnership will be set up between Craven District Council and the North and East Yorkshire Ecological Data Centre to hold relevant information and make it available for work involved with the BAP.

NEYEDC has prepared species distribution maps for each priority species, based upon current data it holds. Maps can be viewed on the North Yorkshire BAPs page of the website (NEYEDC[6]), with an on-line recording form to encourage members of the public to add to the database.


6.4 Survey and Monitoring

The need for on-going survey work has been identified, to enable the biodiversity partnership to establish and monitor the status of both habitats and species. Although the Craven BAP sets out to monitor biodiversity gain, there is no mechanism for measuring and recording biodiversity losses.

6.5 Reporting

BAP progress requires monitoring and reporting to the public, the BAP Steering Group and to the UK BAP. This will form a large part of the work of the steering group. Targets and actions for the individual action plans have been written so that they fit the national Biodiversity Action Reporting System (BARS), which is the approved system for reporting.

6.6 Review

The BAP will need to be reviewed in the light of monitoring information. Whilst the plan will initially cover a period of five years it can be updated at any time.

6.7 Advice

If required, advice and expertise is available from local organisations such as Natural England (NE), Farming and Wildlife Advisory Group (FWAG), Linking Environment And Farming (LEAF), Forestry Commission (FC), Environment Agency (EA), Craven District Council (CDC), North Yorkshire County Council (NYCC), Yorkshire Naturalists' Union (YNU), Yorkshire Gardens Trust (YGT) and Yorkshire Wildlife Trust (YWT) amongst others. For contact details, see Appendix 6.

7. Key wildlife actions

7.0 Introduction

There is a series of actions that can be applied across the whole district that will benefit wildlife. The suggestions below give some ideas on what can be done.

7.1 Agri-environment Schemes

Agri-environment schemes are a major delivery mechanism for biodiversity on agricultural land. DEFRA launched the Environmental Stewardship Scheme (ESS) in 2005, which has built on the success of earlier schemes such as Countryside Stewardship. The five main aims of the ESS are to:

- Conserve wildlife (biodiversity).
- Maintain and enhance landscape quality and character.
- Protect the historic environment.
- Protect natural resources.
- Promote public access and understanding of the countryside.

Two secondary aims are:

- Genetic conservation.
- Flood management.

The ESS has three parts - an Entry Level Scheme (ELS), an Organic Entry Level Scheme (OELS) and a Higher Level Scheme (HLS). Further information is given in the Farmland and grassland HAP.

The year 2005 also saw the launch of the England Woodland Grant Scheme (EWGS). This has been designed to function as a linked scheme to the ESS Higher Level Scheme. It is administered by the Forestry Commission.

7.2 Site protection and management

The South Pennine Moors SAC and SPA is of European importance and this site, of which only a small part falls within Craven, as well as all of the SSSIs need to be protected by planning policy and managing in a favourable way for wildlife. Much of this work will fall to Natural England which has a statutory duty to maintain SSSIs in a favourable or recovering condition.

SINCs form a second tier of nature conservation sites, which enhance the ecological network and where many of the district's priority habitats





are found. A partnership called the North Yorkshire SINC Panel is responsible for surveying and assessing sites for SINC status. It is the responsibility of Craven District Council to ratify these sites and show them in the Local Development Framework.

The BAP steering group recommends:

- landowners are fully informed of SINCs on their land;
- landowners have access to good advice;
- a rolling programme of SINC survey and monitoring is supported;
- landowners are encouraged to manage SINCs in a favourable way for wildlife.

7.3 Planning control and other statutory consultations

There are a number of application types which, under the planning system or relevant legislation, require a period of public consultation. These include planning applications, the Environmental Impact Regulations (EIA), felling licences, Tree Preservation Orders, hedgerow removal notices, England Woodland Grant Schemes and regulations relating to protected species. Each of these has the potential to impact upon biodiversity. Planning Policy Statement 9 also states, 'planning decisions should aim to maintain, and enhance, restore or add to biodiversity'. There is also scope for using Section 106 money for environmental improvements.

7.4 Advice and support

Much of Craven's biodiversity is outside protected sites and therefore it is vital that farmers and landowners have access to good advice and support. There are good examples of how wildlife management has been successfully integrated with economic opportunities and there are a number of supportive schemes which can help with funding.

7.5 Invasive non-native species

Invasive non-native species can have a serious adverse impact upon native ecosystems. There are alarming examples from both aquatic and terrestrial environments. For example, the introduced New Zealand Pygmy Weed can grow up to 1m a day and soon chokes ponds. It was brought to the UK as an exotic pond plant. Similarly the Water Fern can rapidly blanket whole ponds. On land, the worst plant offenders are Japanese Knotweed and Himalayan Balsam with the latter being particularly associated with river and stream corridors.

Introduced mammals too, can be a problem, with Grey Squirrels damaging trees and predating nests, American Mink predating Water Voles and the North American Signal Crayfish affecting populations of our native White-clawed Crayfish. Survey, monitoring and control of these species may need to be undertaken where there is a direct nature conservation benefit. Some species such as the Rabbit were introduced so long ago that their impacts on the natural environment have to be accepted.

7.6 Publicity and environmental education

Public support is essential if the Craven BAP is to succeed. Whilst only a small number of people will want to be actively involved, there is considerable interest in the natural environment of Craven amongst residents and visitors. Therefore opportunities should be taken to promote and celebrate this natural heritage and to support environmental education.

7.7 Good practice

While the individual action plans have specific targets and actions, the following table gives a number of areas of good practice, which could apply to anyone.





Table 3: Good practice

Reduced disturbance	Wild animals require freedom from disturbance, so that they can concentrate resources on breeding, foraging or resting. Care should be taken to minimise disturbance, for example when exercising dogs close to a concentration of birds (e.g. at a roost or where ground-nesting birds may be present).
Resist picking fungi and flowers	Leave flowers to set seed and for others to enjoy and so that they can function as part of the food web. Picking and collecting can damage populations and for some species is an offence.
Environmental education	Support the teaching of natural history, which is poorly represented in the National Curriculum. Young people also need to become stakeholders in the BAP process – understanding and taking responsibility for wildlife.
Submit biological records	Species records can be passed to Vice-County Recorders. For more details see www.ynu.org.uk. Alternatively, NEYEDC manages biological records for the region and welcomes data. See www.neyedc.co.uk
Careful siting of habitat creation schemes	The creation of habitats, such as a pond or a wood, should not be undertaken until the site has been checked for existing wildlife interest. This ensures a better habitat is not unintentionally lost.
Protection of migrating birds in southern Europe	Summer visitors, including the Craven priority bird species Yellow Wagtail, pass through the Mediterranean region where illegal bird shooting and trapping is a serious issue. Support could be given to organisations such as the RSPB who are fighting this.

7.8 Business involvement

Business and industry can use the BAP to identify wildlife priorities to be taken into account in their environmental management systems, such as ISO 14001. This is an audit that businesses can be accredited with, to demonstrate good environmental practice.

8. Contacts

If you believe you have something to contribute, we would be pleased to hear from you. For more information please contact:

Biodiversity Officer
Countryside Service
North Yorkshire County Council
County Hall
Northallerton
North Yorkshire
DL7 8AH
Telephone: (01609) 533240
E-mail: countryside@northyorks.gov.uk

or

Planning Officer
Craven District Council
Granville Street
Skipton
North Yorkshire
BD23 1PS
Telephone: (01756) 706212
Fax: (01756) 700658





Habitat Action Plans

Woodland
Scrub
Parkland, Ancient Trees and Pollarded Trees
Farmland and Grassland
Hedgerows
Wet Acidic Grassland
Upland Heathland & Blanket Bog
Ponds
Fens
Lowland Raised Bog
Rivers and Streams

Woodland

Woodland Habitat Action Plan

Our objectives for Woodland are:

- ➢ **To protect the ancient woodland resource.**
- ➢ **To restore degraded ancient woodland sites and increase the number under favourable management.**
- ➢ **To increase the amount of woodland in the District with new planting.**
- ➢ **To promote the value of woods for nature conservation.**

Introduction

This Habitat Action Plan covers British woodland - both ancient native woodland and recent woodland. Ancient woods are those that have had continuous woodland cover since 1600. Some of these have a long history and have stood for many hundreds, if not thousands of years. Older woods are more valuable for wildlife because they have had longer to gain species of plant and animal. These are our ancient semi-natural woodlands and those of greater than 2 ha are recorded on the Ancient Woodland Inventory (AWI), (Carter[7]). Their conservation is the highest priority.

Recent woodland is woodland, which has developed for whatever reason, since 1600. The planting of new semi-natural woods is a lower priority. In some situations exotic tree species, including Beech, have been planted in earlier centuries as part of designed landscapes, and these should be taken into account.

The Forestry Commission's England Woodland Grant Scheme (EWGS) prioritises woodland conservation as follows:

- Ancient woods are effectively an irreplaceable resource and the absolute priority is to protect them.
- The restoration of Plantation on Ancient Woodland Sites (PAWS).
- The planting of new semi-natural woodland.

The UK does not have many large tracts of woodland, and is therefore missing some classic forest species such as wild boar and wolf. British woods are fragmented and the proportion of woodland edge is quite high.

Management has had a strong influence on the character of woodland. Previously much woodland would have been managed as coppice for both timber and for charcoal. In the past century the requirement for these products has lessened and fast-growing conifer species grown for their straight stems and easier milling qualities have been preferred.

A wood though is not just a group of trees; there are many types, each with a range of plants and animals suited to particular conditions. Associated with all semi-natural woodland types are rich fungi, invertebrate and bird communities, and this is by far the greatest in ancient woods. The structure of woodland is important and features that are especially valuable are the age range, the number of post-mature trees, the amount of dead and decaying timber, clearings, flushes and streams. The woodland floor, woodland streams and old trees are valuable for their ferns, mosses and lichens.

Of key importance is the amount of woodland edge in favourable wildlife condition and woods are better where they have adjoining habitats such as scrub, hedgerows, grassland and wetland. One of the Government's national indicators of health is the woodland bird index, which monitors woodland bird populations.





Very little of the BAP area is wooded and information given in the habitat audit (Megson[8]) does not provide detail on woodland types.

This plan covers three UK BAP priority woodland habitat types – 'Upland Mixed Ashwoods', 'Upland Oakwood' and 'Wet Woodland'. Under 'Recent woodland' other woodland types are also covered, but not recent coniferous plantations.

Oak Woodland

Oak Woodland is the principal woodland community on moist, neutral to slightly acid soils. The vegetation corresponds to the Sessile Oak – Bracken - Bramble community (W10 in the National Vegetation Classification or NVC). This can extend into the upland fringes where semi-natural stands are most likely to be located, as a Sycamore – Wood Sorrel community (W10e). This woodland type is often planted with conifers and Sycamore can be frequent. Where a native understorey of Hazel, Holly, Rowan and Birches is present the woodlands are considered to be semi-natural. The Upland Oakwoods of higher ground are a UK BAP priority habitat.

Heathy Oak-Birch woodland with Wavy-hair Grass (W16) is characteristic of acid, sandy soils and drier, shallower peat. It can regenerate on suitable 'neglected' land but it most typically survives or develops on the upland fringes of the Yorkshire Dales and Forest of Bowland. These acid woodlands are often dominated by Silver Birch, but older stands are often dominated by Sessile oak with Holly and Rowan present in less grazed stands.

Vascular plant diversity is generally low in these woodland types, but suitable situations can support rich bryophyte (mosses and liverworts) communities and distinctive fern floras. The ground flora is often dominated by Bluebell, Bramble, Honeysuckle and Wood Anemone.

Ash Woodland

The principal NVC woodland community dominated by Ash (but with a variety of other tree and shrub species) is the Ash – Field Maple – Dog's Mercury community (W8), known as Lowland Mixed Ashwoods. These are concentrated in limestone areas, and on calcareous and neutral drift where it occurs in valleys. The majority of W8 woodland is located within ancient woodland sites, but secondary Ashwoods readily colonise calcareous and neutral ground.

Ancient lowland mixed Ash is the richest woodland vegetation in terms of plant diversity and many ancient woodland indicators are present. They support a rich ground flora often dominated by Dog's Mercury, with Common Dog Violet, Early Purple Orchid, Giant Bellflower and Primrose. Normally, ancient W8 woods have an understorey of Hazel and Wych Elm but the most pristine examples also have a higher frequency of southern shrubs, such as Field Maple, Dogwood, Spindle and Purging Buckthorn. Many ancient ashwoods are probably secondary regeneration from post-war felling, as they are relatively young, even aged and their canopies Ash-dominated. Oaks would naturally have been more frequent in such woods but have regenerated badly. There is also usually very little over-mature wood.

Upland Mixed Ashwood is the other type of Ash woodland and corresponds to the Ash – Rowan – Dog's Mercury (W9) community. Stands of this woodland type, however, are rare and fragmentary. This is a UK BAP priority habitat.

Wet Woodland

As the name suggests, these are the very wet woodlands found where soils are waterlogged. They are often scrubby in character with smaller, multi-stemmed trees, rather than tall woodland. They can also have a complex and rich assemblage of plants and animals. Because of their nature, Wet woodland mainly occurs as small patches within other woodland types, for instance around springs and flushes or along stream sides. They are a UK BAP priority habitat and the UK HAP describes wet





woodland as including NVC community types W1 to W7. These woodlands are found on poorly drained and/or seasonally wet soils with Alder, Willow and Birch species dominating the woodland canopy and understorey. The W1, W5, W6 and W7 communities are thought to occur in the Craven BAP area.

The Sallow – Marsh Bedstraw woodland community (W1) is widespread, usually small and fragmentary in damp hollows and alongside standing or slow-moving water.

The Alder – Greater Tussock Sedge NVC woodland (W5) is scarce and are mainly associated with waterlogged floodplains. Known W5 sites are all believed to be ancient woodland and are usually semi-natural.

The Alder – Stinging Nettle (W6) woodland is often dominated by Willow species and is generally uncommon and often associated with seasonally wet lowland flood plains. It may occur in the Ribble valley.

The Alder – Ash – Yellow Pimpernel (W7) community has a localised distribution, typically situated on upland fringes and around flushes in lowland woods. Often such stands consist of linear fragments within other woodland vegetation or are relicts of larger woods within upland pastures.

Wet woodland is a UK BAP priority habitat.

Recent woodland

This category includes deciduous plantations, Lowland Ash woodland and other naturally re-generating woodland such as Birch.

National status

Thousands of years ago the 'wild wood' covered most of the country, but today less than 0.1% of our remaining woodland is ancient. Woodland cover of all types is 11.6% in Great Britain (8.4% in England), compared to the European average of 30% (Selman[9]).

Regional status

Woodland cover in the Region is 5.8% (some 92,000 ha) (The National Inventory of Woodland and Trees 2002). This Region has 6,000 ha ancient woodland (some 6.7% of the England and Wales resource) (Selman[9]).
Upland Mixed Ashwoods - 2,338 ha in the Region.
Upland Oakwood - 2,946 ha in the Region.
Wet Woodland - 343 ha in the Region.

Local status

The Ancient Semi-Natural Woodland Inventory gives 239 ha for Craven spread over 46 woods. These range in size from 0.6 ha to 30.7 ha (Lawkland Hall Wood). All of this is eligible for SINC status under the SINC guidelines, however, the 37 SINC sites that include semi-natural broad-leaved woodland, cover an area of only 89 ha.

Oak woodland – no detailed information. A few small woods, especially on the millstone grit, for example in the Forest of Bowland.

Upland Mixed Ashwoods - no detailed information. A few small woods likely to occur in areas of calcareous geology.

Wet Woodland - rare in the District and locally distributed, especially along river edges and on the fringes of Bogs and Fens, such as at Hesley Moss SSSI and Austwick Moss SSSI.

Recent woodland - no detailed information. Only a small amount of woodland has been planted, including small projects funded by the Council for the Protection of Rural England (CPRE) and the Skipton Civic Society. Some woodland planting has been grant aided by the Forestry Commission (FC).





Local examples with public access:

- Greta Woods at Burton in Lonsdale – entrance at SD651719. A very good quality woodland with a large patch of Herb Paris. Managed by the Woodland Trust.
- A public footpath runs through the wood at Park Foot, between Ingleton and High Bentham at SD672717.
- Skipton Woods, north of the town – entrance for public access at SD 993522.
- Both Hesley Moss SSSI and Austwick Moss SSSI have areas that can be accessed on public footpaths and through Open Access.

Legal status

- Forestry Act 1967 (as amended).
- Felling licences required from FC under Forestry Regulations.
- Environmental Impact Assessment (EIA) Determination required from FC for new woodland planting.

Threats

- Clearance of woodland for other uses.
- Invasion by non-native plants, such as Rhododendron and Himalayan Balsam.
- Increasing Rabbit and Roe Deer numbers, Grey Squirrels, grazing farm animals and high numbers of Pheasant.
- Woods becoming isolated as habitat corridors between them are broken.
- Decline in woodland edge and adjoining habitats such as scrub, which are in favourable condition for wildlife.
- Neglect of previously managed woods, for example coppiced woodland.
- Inappropriate management.

Requirements

- Ancient woodland is irreplaceable, so none should be lost.
- Management to maintain and improve the wildlife value of woodland.
- Reduction or removal of non-native species where appropriate, particularly Rhododendron.
- Traditional management, such as coppicing, where appropriate.
- Decaying wood of all sizes is important as habitats, notably for invertebrates and fungi.
- Protection from damage by Sheep, Rabbit, Roe Deer and Grey Squirrel.
- Increase of woodland resource by 'halo-planting' around existing ancient woods.

Recent woodland can be enhanced for wildlife by undertaking the following:

- Management to encourage a diverse age structure.
- Leaving some over mature and dying trees after forestry operations.
- Creating diversity of habitat by leaving fallen and standing dead wood, managing rides, maintaining wet hollows, ditches etc.
- Maintaining or creating undisturbed dense shrub layers.
- Providing bat boxes/bird boxes if no suitable sites are available.
- Re-establishing coppicing where there is a potential benefit to wildlife.
- Fencing against Rabbits and grazing stock.
- Protecting regenerating trees and planting native trees with tree guards.

Current local action

- The Forestry Commission (FC) is preparing a Delivery Plan for the Forestry Strategy for England ('England's Trees, Woods and Forests') for early 2008.
- The Regional Forest Strategy for Yorkshire and The Humber Region, 'The value of trees in our changing region' was launched in 2005. This has been adopted by the Yorkshire and Humber Assembly as the woodland element of the Regional Spatial strategy (RSS), and the Delivery Plan was launched in November 2007.





- The FC regulates all tree felling through felling licences.
- The FC has produced Forest Practice Guides for different woodland types.
- FC National Inventory of Woodland and Trees published in 2001.
- Data collected as part of the Woodland Grant Scheme (WGS) documentation.
- Yorwoods has an advisor to assist owners of woodlands with free advice.
- Yorwoods maintains a database on woodlands in the District.

Opportunities:

- The new English Woodland Grant Scheme (EWGS) prioritises woodland management as follows - protection of ancient woods, restoration of degraded ancient woods and increasing woodland through new native species planting.
- Reversion of PAWS to semi-natural woodland. N.B. This should be undertaken over a number of years to avoid moisture loss and the impact of increased light levels.
- The new EWGS will encourage woodland management planning, planting native and broadleaf mixtures and pay management grant to those satisfying the necessary criteria.
- NE works closely with the FC in respect of woodland management and planting under agri-environment schemes. In particular HLS has more potential to manage larger sites and somewhat larger areas of planting than past schemes. For example, Keasden Woods SINC and adjoining woodland are under HLS agreements on two farms.

What you can do to help:
Enjoy wild flowers in their natural place, without picking them.
Leave fallen timber to decay rather than burning it.





Scrub

Scrub Habitat Action Plan

Our objective for Scrub is:

➢ **To maintain a good distribution of Scrub around the District.**

Introduction

Scrub communities are a natural component of many habitat types often where past management has lapsed or been reduced. In some circumstances, such as high altitude, Scrub can be the climax vegetation community. More often Scrub is seen as a threat and in some circumstances Scrub invasion does need to be controlled in order to protect grassland, heathland or wetland communities, such as Silver Birch on Lowland Raised Bog SSSIs. However, Scrub can be of significant nature conservation in its own right, for example, species-rich Scrub on limestone soils. Depending on its stage of development Scrub can form dense single-species stands or scattered open stands.

The presence of Scrub provides valuable structural variety for a range of animals that would not otherwise occur on a site. This is particularly the case in relation to invertebrate faunas. As a consequence the maintenance of a balance between open habitats and Scrub can be important in maintaining the ecological interest of a site.

Scrub as a climax vegetation is dominated by locally native shrub species, usually less than 5m tall, occasionally with a few scattered trees. Scrub type is therefore dependent on local species and may be dominated by Gorse, Juniper, Bramble, Dog Rose, Willow, Elder, Hawthorn or Blackthorn. Some Scrub habitats, particularly those where Willows occur, can be wet.

Of the non UK BAP woodland types, Scrub is one of the most valuable, but is often perceived in a negative way. It is important for some Species of Conservation Concern (SoCC) such as Song Thrush, Linnet, Whitethroat and Yellowhammer. As well as cover for nesting, Scrub provides roosting and winter food in the form of berries. Many species provide an abundant nectar resource, including Blackthorn, Hawthorn, Elder and Gorse. The ground flora beneath Scrub is generally poor due to a high degree of dryness and shade.

This plan does not cover any UK BAP priority habitat types.

National status

Widespread but no baseline data.

Regional status

Widespread but no baseline data.

Local status

Widespread but no baseline data. Scrub types in the BAP area include Gorse, Hawthorn and Blackthorn. Scattered Scrub occurs on 28 SINC sites, amounting to a total of 15 ha. The largest concentration is just over 2 ha on Farnhill Moor SINC.

Local examples:

- Gorse Scrub beside the road from Clapham Station, running parallel to the railway at SD733676 to 738671.
- Scrub is developing on areas of Newby Moor SSSI, which is on Open Access land.





Threats
- Grubbing up and removal.

Requirements
- Management or reduction to be undertaken out of the bird breeding season.

Current local action
- None known.

Opportunities
- Increased areas under Environmental Stewardship Scheme (ESS) agreements.

Song Thrush

Parkland, Ancient Trees & Pollarded Trees

Parkland, Ancient Trees and Pollarded Trees Habitat Action Plan

Our objectives for Parkland, Ancient Trees and Pollarded Trees are:

- **To increase the extent of Parkland under nature conservation management, while managing for landscape and historic interest.**
- **To protect and conserve Ancient Trees.**
- **To protect and conserve Pollarded Trees.**

Introduction

Parkland sites are best expressed as country estates and should not be confused with the more familiar town parks. They have existed for centuries and are the result of particular types of landscaping, planting and subsequent management. Exotic tree and shrub species such as Rododendron, were often part of the original designed landscape. Parkland management usually involves grazing beneath large, well-spaced trees.

A common feature of the medieval landscape of North Yorkshire was the deer park, which was a status symbol for the gentry. There were 67 in the North Riding, each between 40-80 ha in size, usually developed on unimproved pasture and woodland and enclosed by boundaries. However, they were also economically important, used for hunting, pannage (pigs), rabbiting, grazing for horses, the location of dog kennels and a source of local materials such as timber and Holly. Deer parks had their peak in the fourteenth century and many have disappeared in the intervening centuries, leaving only their outlines visible as hedge lines and boundary ditches.

Parkland sites are of archaeological, historic, cultural and landscape importance. Many are referred to as deer parks because of their previous long history of managing deer.

Key characteristics are a long-established tradition of grazing, which may include deer, cattle or sheep and the continuity of generations of trees, with at least some ancient trees in the ancient stage of their life, known as Ancient or Veteran Trees. Ancient Trees are often trees whose lives have been artificially extended through the management of man, usually a history of pollarding. Pollarded trees have been cut back to a point on the trunk above grazing height. From this point the tree is multi-stemmed.

Ancient and Pollarded Trees contain an abundance of dead or decaying wood and provide a range of cavities, hollows and rot holes which are colonised by fungi, including the UK BAP species Oak Polypore, and invertebrates, as well as bats and birds. As the creation of country estates and designed landscapes are from a past era, we are left with an ageing resource and one of the chief conservation challenges is to ensure a continuation of trees that can be managed to become future Ancient Trees.

Unimproved, grazed grassland in parkland is important for fungi, including in Craven the likelihood of the species Pink Waxcap, which is likely to have been overlooked.

Important parkland and designed landscapes of national importance are recorded on the English Heritage (EH) ‘Register of Parks and Gardens of Special Historic Interest in England’. Regional EH offices can provide advice on the conservation of parks and may offer grants for the repair of grade 1 and 2 sites.

This Plan also covers Ancient Trees that occur in other habitats, such as hedgerows, woodland and fields. These Ancient Trees do not need to be native species to qualify.

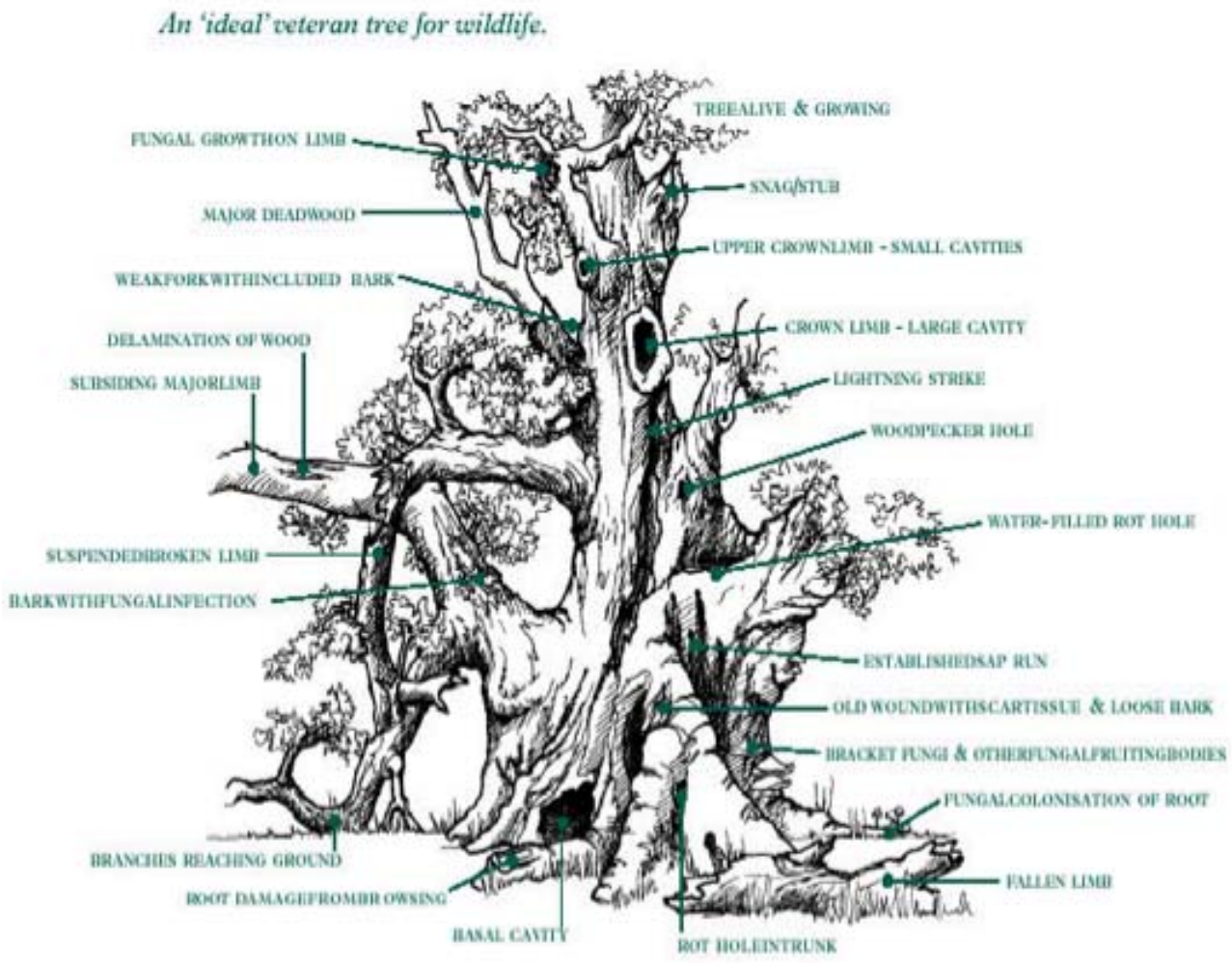




There may be good examples of Sycamore, Beech and others.

This plan covers the Wood Pasture and Parkland UK BAP priority habitat.

The following diagram illustrates the main features of an Ancient Tree.



National status

Parkland of countryside estates is important in the European context. The figure of 10,000 - 20,000 ha is given in the UK BAP. However a recent study has shown that nearly half of England's pre-1918 parkland has been lost.

Regional status

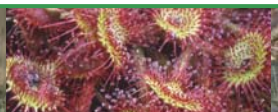
This is a rich resource in the region, with famous examples such as the World Heritage site, Studley Royal. The English Heritage Register of Parks and gardens (2003) lists 45 sites in North Yorkshire, many of which have a historic park. However 15,600 hectares (or 47%) of historic parkland has been lost to agricultural change, development pressure or golf courses since 1918.

Local status

There is currently little available information on Parkland and Ancient Trees and it will be important for the BAP to address this. Sites tend to be private and include Coniston Hall and Broughton Hall.

Local examples:

- Broughton Hall (private but with an annual open day).


Legal status

- Tree Preservation Orders (TPOs) can be placed on important trees by Craven District Council.
- Trees are subject to felling licence regulations under the provision of the Forestry Act 1991.

Threats

- Changes to traditional levels of grazing.
- Felling of Ancient Trees, due to public safety fears.
- Skewed age structure leading to a break in the continuity of old trees.
- Unskilled and inappropriate tree surgery.
- Renovation of parkland using native species, where exotics are an original feature of the design.

Requirements

- A continuity of ageing trees.
- Grazing in Parklands.
- Guidelines on species selection for renovation schemes for sites where exotic species are appropriate.

Current local action

- English Heritage has a register of parks and gardens and a conservation programme.
- The Ancient Tree Forum (run by the Woodland Trust) has a national register of ancient trees.
- The Tree Council provides coloured ties for marking hedgerow trees to be left to grow into standards.
- EH distributes a leaflet called 'Farming the historic landscape, caring for historic parkland'.
- The Yorkshire Gardens Trust works to promote the interest, education and involvement of the public with Yorkshire's gardens, parks, designed ornamental landscapes and urban open spaces. The YGT actively encourages the protection and conservation of such places.

Opportunities:

- There may be opportunities under the Environmental Stewardship Scheme (ESS) run by DEFRA; Parkland, especially designated sites, are targeted by HLS. This habitat is targeted in the local Joint Character Areas (JCA).

What you can do to help:

- Report details and location of old trees.





Farmland and Grassland

Farmland and Grassland Habitat Action Plan

Our objectives for Farmland and Grassland are:

- **To improve farmland for wildlife.**
- **To protect and manage surviving unimproved grasslands for wildlife.**
- **To enhance semi-improved grasslands for wildlife.**

Introduction

Farmland is a working environment, which consists of many different and important habitats. Together these create the elements of the countryside which give Craven its characteristic landscape. Two main types of farming occur and these are arable farming and livestock farming. Farming in Craven (both in and out of the National Park) is primarily for grassland and livestock, with only small arable areas. In-field habitats such as arable field margins and beetle banks are associated with arable production and grassland types with pasture. Ancient and/or species-rich Hedgerows and dry stone walls are common features within Craven.

This plan covers four UK BAP priority habitat types:

- Lowland Meadows;
- Upland Hay Meadows;
- Floodplain Grazing Marsh;
- Arable Field Margins.

Since 1945 farming has undergone many changes, and the technological advances and the move towards production-orientated farming practices since this time have played a major role in the losses of natural habitat and the decline of some of the species in farmland habitats. These include arable weeds, bumblebees and farmland birds, which have all suffered serious national and local declines declines (UK BAP[1], Gregory[10]). However, a few farmers manage their land not just for crop production, but also for its wildlife interest. There has been a reduction in the use of chemicals on farmland and recently the net loss of hedgerows in England has been reversed.

Many farms include areas of good wildlife habitat, the best of which are designated as Sites of Important Nature Conservation (SINC), which form important refuges for species. These can be managed positively for their wildlife value. SINCs form islands of wildlife habitat from which restored and re-created habitats can be colonised. They may need to be buffered to safeguard them from adverse effects such as spray drift.

Good work was delivered through the long-running DEFRA Countryside Stewardship agri-environment Schemes.

Some significant changes in farming policy are currently being implemented. Through European Union changes to the Common Agricultural Policy (CAP) in June 2003, there was a move to de-couple crop production from subsidies, which is generally agreed will benefit the natural environment on farms and marks a significant change in agricultural policy. Since January 2005 a Single Farm Payment is made to farmers and is dependent on a reasonable degree of environmental cross compliance detailed under Good Environmental and Agricultural Condition (GEAC).

A new agri-environment scheme, called the Environmental Stewardship Scheme (ESS) was launched in 2005. This is made up of three levels of environmental good practice – an Entry Level Scheme (ELS), an Organic Entry Level Scheme (OELS) and a Higher Level Scheme (HLS).





The ELS and OELS applications will be automatically accepted providing they meet an area based points threshold and will be self-assessed. Examples include buffers around waterways and in-field trees, hedge and field margin management, winter stubbles and low nutrient input grasslands. The two entry-level parts of Environmental Stewardship represent a major change in agricultural policy with the intention of bringing about widespread and more wildlife friendly management practices on farmland in order to bring about biodiversity gains on a landscape scale. It is intended that the schemes should achieve at least 70% uptake across the country.

The HLS is competitive with more advanced conservation options and applications will be scored. A Defra targeting statement will set the criteria for scoring. The existing ten-year CSS agreements will run their course and some may be transferred to the new scheme at the five-year CSS break.

Examples of agri-environment options

Floristically enhanced grass margin	Enhanced wild bird seed mix plots (rotational or non-rotational)	Unharvested, fertilizer-free conservation headlands (rotational)
Fodder crop management to retain or re-create an arable mosaic (rotational)	Species-rich, semi-natural grassland	Wet grassland for breeding waders
Wet grassland for wintering waders & wildfowl	Enhanced buffer strips on intensive grassland	Semi-improved or rough grassland for target species

Nitrate vulnerable zones (NVZ) come under the Nitrates Directive. Member States of the European Union have to protect watercourses from the effects of agricultural nitrogen and farmers are obliged to introduce 'action programmes' on agricultural land limiting fertiliser inputs to 170 kg/ha/yr of inorganic nitrogen, on all arable land. DEFRA is to phase in reductions on other land, mostly grassland. The Ribble Valley from the Giggleswick and Hellifield area south to the border with Lancashire is an NVZ.

Arable field margins have become common place under agri-environment schemes, allowing margins of wild bird cover, arable flowers and semi-improved grassland to proliferate.

Farmed Grasslands

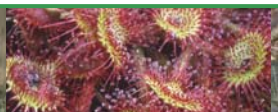
Upland Hay Meadows

Upland Hay Meadows are colourful, flower-rich meadows on neutral soils. They are a traditional part of the upland farm, being grazed in the winter and then left to grow over the summer before being cut late in the summer. Nutrient input is low, being reduced to occasional dressings of manure and lime. The hay is stored and used as winter-feed for stock. Due to the overall decline in traditional farming, the Upland Hay Meadows have greatly declined in number and it is now a very scarce resource. They are recognised as being of very high biodiversity importance.

Typical species are Meadow Cranesbill and Wood Cranesbill, with Sweet Vernal Grass, Yorkshire Fog, Quaking Grass, Pignut, Meadow Buttercup and a variety of other herbs. Hay Meadows are used by Lapwing and Curlew, and historically were well-known for supporting breeding Corncrake (now locally extinct). This is also a key breeding habitat for Yellow Wagtail.

National status

Upland Hay Meadow - a recent report gave a total of 610 ha of good quality habitat in England (all in the Northern Pennines) (Selman[9]).


Regional status
Upland Hay Meadow is restricted to Richmondshire, Craven and the Yorkshire Dales National Park. With 96 ha in the Region the quantity is very small (Selman[9]) and most sites are less than 2 ha in size.

Local status
Upland Hay Meadow – two sites in CSS agreements. No further information. Some will occur on SINC sites, but vegetation reports are ambiguous.

Floodplain Grazing Marsh
Floodplain Grazing Marsh is defined as periodically inundated pasture or meadow and includes types in the following situations:

- Semi-natural floodplain grassland where floodplains are subjected to seasonal flooding.
- Wet grassland around the margins of lakes and ponds which may be temporarily inundated owing to seasonal water level increases.
- Washlands, which are embanked areas created for the purpose of flood storage.
- Wet grassland with intensive water level management.

These wet grasslands have high nature conservation interest: they provide fish with important spawning and nursery habitats. Fish actively move out onto floodplains during flood events, to shelter from high flows and to exploit food resources that can be found there. However, fish can become stranded if flood banks prevent their return to the river following a flood. Floodplain Grazing Marsh is also an important habitat for breeding and over-wintering birds, many of which are scarce and or declining. Breeding, however, can be affected by agricultural disturbance, therefore, Floodplain Grazing Marsh sites should be 10 ha or greater, of open aspect and not crossed by hedges, power lines or busy rights of way.

The key to habitat conservation is appropriate (generally traditional) management, which includes low levels of nutrient input and grazing. Most individual pieces of unimproved grasslands are now small but there may be the potential to restore quite large areas.

National status
Floodplain Grazing Marsh – a 1994 estimate assessed 300,000 ha in the UK with 200,000 in England, but only 10,000 ha is semi-natural (Selman[9]).

Regional status
Floodplain Grazing Marsh – key areas are the Humberhead levels and the Derwent Valley. The nearest Floodplain Grazing Marsh parcels on the Dargie (1995) Lowland Wet Grassland resource survey map are just over the border on the Lune, plus smaller blocks in Lancashire and in the Aire valley in West Yorkshire (Dargie[11]).

Local status
Floodplain Grazing Marsh – the River Ribble/Long Preston Deeps SSSI is some 158 ha of which at least 136 ha is extensive and periodically flooded enough to meet the criteria for Floodplain Grazing Marsh.

The River Aire to the west of Skipton near Cononley includes flood storage washlands on grazing land that is important for post-breeding wading birds. The Environment Agency manages the flood embankments and structures to reduce flood risk downstream. The grazing land and associated drainage is managed by the landowners and farmers.

Lowland Meadows
Lowland Meadow comprises most forms of unimproved neutral grassland across the lowland landscapes of the UK, including grasslands managed for a hay crop and for grazing.

The richest Hay Meadows are traditionally cleared of stock at the beginning of the growing season and are cut, usually in July, for hay





which is used as winter feed for stock. They receive only light dressings of manure and occasional liming and are characterised by Pignut, Great Burnet, Bird's-foot Trefoil, Common Knapweed, Lesser Stitchwort and Betony, along with grasses such as Common Bent, Red Fescue, Sweet Vernal Grass and Crested Dog's-Tail.

Although these grasslands form part of the farmed landscape, a few occur on sites with other land use, such as road verges and churchyards. The way in which the majority of this habitat is managed as working farmland is crucial for its conservation.

National status

Lowland Meadow - as a result of changing farming practices, agriculturally unimproved meadows and pastures are now a rare resource in lowland Britain. Between 1930 and 1984, some 98% of all old wildflower meadows have been lost either to arable conversion or through improvement. Further losses to the remaining 200,000 ha have occurred (Selman[9]).

Regional status

Lowland Meadow - many neutral grasslands are in mosaics, often as remnants within other grassland types and Scrub. The resource is small and declining.

Local status

Lowland Meadow – this habitat is classified as 'Unimproved Neutral Grassland' and 'Semi-Improved Neutral Grassland' in the SINC survey. Some will occur on SINC sites, but vegetation reports are ambiguous.

Taken together, these three habitats occur on 41 SINC sites where they are recorded as Unimproved Neutral Grassland covering 71 ha, and on 33 SINC sites where they are recorded as Semi-Improved Grassland covering 104 ha. None occurs on SSSIs.

Local examples:

- River Ribble floodplain near Long Preston, can be viewed from the Ribble Way (access from Cow Bridge).

Threats

- Habitat degradation through inappropriate management, including drainage, re-seeding, conversion to silage, fertiliser input, herbicide use and poor grazing regimes.
- Inappropriate cutting of road verges.
- Un-contained road salt piles on verges.
- Loss of habitat and habitat fragmentation due to land take, development, agricultural intensification and road building.

Wildlife-friendly farming

Natural England and the National Farmers' Union have produced a useful leaflet called the 'Five Point Plan for Wildlife-friendly Farming'. This covers the following five steps:

1. Take stock of natural assets on the farm.
2. Look after your natural assets.
3. Manage your inputs and farm waste carefully.
4. Consider new opportunities for wildlife.
5. Join a scheme under the England Rural Development Programme.

The EN booklet 'Farmland Wildlife, Past, Present and Future', gives the following top tips from farmers and wildlife experts:

1. Manage wildlife habitats as part of an overall farm plan and seek advice where needed.
2. Provide the mixture of habitats that wild animals need throughout their lives.
3. Avoid spreading organic manure and other fertilisers on non-crop habitats.
4. Manage fallow land, such as set-aside, to benefit wildlife.
5. Minimise the impact of pest and weed control on non-target plants and animals.
6. Restore existing wildlife habitats.





7. Create new wildlife habitats.
8. Take advantage of financial incentives to farm less intensively within fields.

Current local action

- A joint NE, RSPB led project – the Long Preston Deeps project (Floodplain Grazing Marsh).
- Yorkshire Pennine Local Seeds Project, led by AB Consultancy (covering both Upland and Lowland Meadows).
- Yorkshire Wildlife Trust Living Churchyard Project.
- Countywide Special Interest Road Verge Project (NYCC, YDNP, YWT led in the Craven area), with a number of SI verges managed in the Craven area.

Opportunities:

- Increased areas under Environmental Stewardship Scheme (ESS) agreements.

What you can do to help:

- Leave some rough grass and plant wild flowers for bumblebees.
- Adopt a species-rich road verge and manage for wildlife.

Brown Hare





Hedgerows

Hedgerows Habitat Action Plan

Our objectives for Hedgerows are:

- ➢ **To increase the resource.**
- ➢ **To manage the resource for wildlife.**

Introduction

This is a UK BAP habitat. Ancient Hedgerows, which tend to be those that support the greatest diversity of plants and animals, are defined as those that were in existence before the Enclosure Acts of 1720 to 1840. Some of the most valuable derive from early woodland clearance that left a narrow strip of 'wildwood' between adjacent woodland clearances.

Hedgerows are a complex of habitats and can include Woodland, Scrub, Grassland, Streams and Ditches. Mature and Veteran Trees are important components of Hedgerows.

Under the Hedgerow Regulations (1997) 'important' species-rich Hedgerows are defined as containing five or more native woody species, on average, in selected 30m lengths (four or more in northern England). Recent species-rich hedges, less than 30-years-old, are not included. Many of the straight Hawthorn hedges that characterise later parliamentary enclosures and single species hedges of garden Privet, Yew, Beech or non-native species are excluded, as are garden hedges.

Hedges have farming, landscape, cultural and archaeological importance. Ancient Hedgerows are best considered as being irreplaceable. The replanting of Hedgerows to the same species mix as Ancient Hedgerows cannot be regarded as 're-creation' as there is more to re-creating the conditions found in Ancient Hedgerows than planting species typical of such Hedgerows.

Hedgerows form a significant wildlife habitat. They are a refuge for many animal species and can act as wildlife corridors allowing migration and dispersal and provide feeding opportunities for a variety of animals including small mammals and birds.

Between 1947 and 1985 about 22%, or 300,000 km, of Hedgerows were lost in England and Wales. Between 1984 and 1990 there was an estimated loss of 21% of English hedges. Prior to the 1997 Hedgerow Regulations the net loss of hedges was 1.7% through removal and 3.5% through neglect per annum. The 1997 Hedgerow Regulations make it an offence to remove a hedge without permission from the local planning authority. The key threats are therefore neglect, over management, inappropriate timing and inappropriate management (UK BAP[1]).

The value of a Hedgerow lies in its:

- history and origins;
- plant and animal species it contains;
- structure and management of the Hedgerow components and;
- landscape, aesthetic and recreational aspect.

The most valuable examples are those that are old and have retained, or have acquired, a variety of plant and animal species. They will tend to be those that are less intensively trimmed and are relatively large, tall and bushy. A lack of damage by fertiliser or spray drift will contribute to the development of retention of a species-rich ground-flora.

National status

In 1995 the UK total for all hedges was estimated at 450,000 km. Analysis of data from 1978 and 1990 indicates that about 42%, or





154,000 km, of British hedges are ancient and/or species-rich. These are concentrated mainly in south-west England and south Wales. About 33%, or 41,000 km, of hedges in Northern Ireland are ancient and/or species-rich, giving a combined UK total resource of 195,000 km (UK BAP[1]).

Regional status

The Countryside Agency (CA) estimated in 1990 that the region had 10% of England's Hedgerows and gave the North Yorkshire stock as 18,000 km (all types).

Between 1991 and 1998 123.5 km of native species hedge was planted in North Yorkshire with aid from the Countryside Stewardship Scheme (CSS).

Local status

No data, but thought to be widespread and well distributed across the BAP area.

Requirements

Hedgerows benefit from:

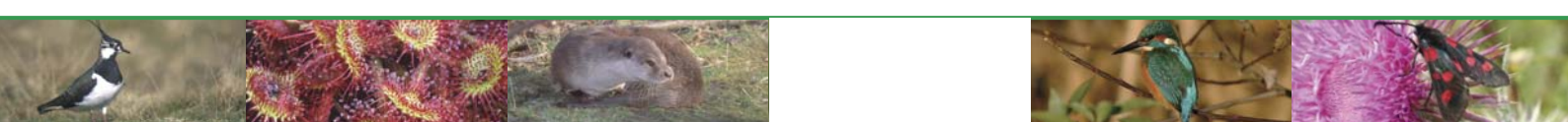
- Cutting at the right time of year for wildlife – avoiding the nesting season and avoiding the fruiting period.
- Agri-environment schemes – one of the best mechanisms for delivering targets for hedges.
- The retention and sympathetic management of hedgerow trees.
- Planted trees should be native and be of local provenance and be typical for the area.
- Sympathetic hedge management, including laying or coppicing, in keeping with local custom and to prevent degradation by allowing hedges to become tall and outgrown.
- Hedges to be cut to promote branching and the development of a wide, shade casting base as is achieved by cutting to an A-shape in profile.
- Hedges to be cut infrequently e.g.: every second or third year.
- Protection from agricultural spray drift, particularly the hedge bottom flora.

Current local action

- Craven District Council implements the Hedgerow Regulations.
- LEAF (Linking Environment And Farming) demonstration farms in the region.
- Hedgerows are a habitat targeted by the ESS.
- Advice is available from FWAG and Natural England.
- Traditional hedge management courses are available, e.g.: organised by FWAG and BTCV.

Threats

- Preference for alternative methods of stock control. The use of fences for stock-proofing weakens the need for good hedges.
- The illegal removal of hedges.
- Neglect of hedge-cutting or laying changes hedges into a line of trees with gaps.
- Frequent or badly-timed cutting leads to a build-up of woody material, creates gaps, discourages certain shrub species and affects berry-producing capability.
- Regularly flailing of hedges can lead to instability through the development of woody growth below the point of cutting.
- Fragmentation of the hedgerow network, reducing the overall resource and affecting species like bats that fly along hedge lines.
- Felling of hedgerow trees and unsympathetic branch pruning (particularly ash as a safety measure).
- Agricultural spray drifts killing hedge components, particularly the sensitive ground-flora.
- Fertiliser application enriching the soil and favouring weed species.
- Cultivation too close to the hedge line, damaging root systems and hedge stability.



What you can do to help:

- Map the ancient/species-rich hedges in your parish.
- Farmers can leave hedges unmanaged for two to three years (assuming no health and safety issues such as visibility along country lanes).
- Attend a hedge management training course.
- Manage hedges traditionally rather than by flailing.
- Cut hedges only when necessary and only during the months of January to February.

Goldfinch





Wet Acidic Grassland

Wet Acidic Grassland Habitat Action Plan

Our objectives for Wet Acidic Grassland are:

- **To establish a complete inventory of Wet Acidic Grasslands.**
- **To maintain Wet Acidic Grassland sites in a favourable wildlife condition.**

Introduction

Wet Acidic Grassland covers the Mire, Rush Pasture and Purple Moor Grass grasslands in the District. Some have high plant diversity and are consequently of regional conservation value. Purple Moor Grass habitat is of European importance. The plants Lesser Skullcap and Marsh Gentian is known from this habitat in the BAP area. They are also important for invertebrates, particularly the Small Pearl-Bordered Fritillary. Breeding waders such as Curlew, Lapwing, Redshank and Snipe are important components.

Wet Acidic Grasslands include National Vegetation Classification (NVC) vegetation type M23 and some small areas of M6/M23/M25 mosaic vegetation, as well as the wetter ends of U5 and U6 plant communities.

This habitat is not a UK BAP priority habitat. The plan overlaps with the Fens HAP. The floristic description of this habitat is as follows:

Mire (M23)

NVC community M23 is the Soft Rush, Sharp-Flowered Rush and Marsh Bedstraw pasture. These are meadows and pastures of moist mineral and peaty soils with flushes or impeded drainage. This community is closely related to M6, with the transition from Sedge to Rush dominance related to a combination of grazing, drainage and burning. A characteristic suite of plants are found in common in these communities, including Star Sedge, Purple Moor Grass, Sweet Vernal Grass, Brown Bent, Devil's-Bit Scabious, Lesser Spearwort, Marsh Willowherb and Lady's Smock.

Mire (M25)

NVC community M25 is the Purple Moor Grass, Tormentil habitat, which also contains Sharp-Flowered Rush and Soft Rush in more acidic habitats. Heather is present with Cross-Leaved Heath on wetter ground. M25 is a very variable vegetation type which also includes transitions to Blanket Mire, Rush Pasture and Tall Herb Fen.

Acidic and Montane (Upland) Grassland (U5 and U6)

The wetter ends of the U5 and U6 NVC communities are best considered as 'Wet Acidic Grassland'. The U5 grassland is the Mat-Grass – Heath Bedstraw Grassland community and the U6 community is the heath Rush – Sheep's Fescue Grassland.

National status

Not known.

Regional status

Not known.

Local status

Sites are usually small areas of less than 0.5 ha within larger blocks of rough grazing. Some of the larger patches are on Sites of Special Scientific Interest (SSSI), but many are in areas inaccessible for farming and being small have no protection and are generally disregarded.

Some of the largest of these habitat patches are on Newby Moor SSSI and other smaller patches are on other SSSIs - Keasden Moor, Lawkland & Austwick Mosses, Hesley Moss, and Cocket Moss.





The area between Wigglesworth and Tosside contains severable notable examples including an unnamed mire near Whelpstones at (SD771591) which is at least 5 ha in extent but badly damaged by recent drainage. These examples are generally unprotected.

Local examples:
- Newby Moor SSSI, which has Open Access

Threats
- Drainage.
- Habitat fragmentation.
- Reduction in available grazing stock due to changes in farming.

Requirements
Management plans and local agreements with landowners, possibly using agri-environment scheme money should be explored. In general, management should be aimed at the following, but with a focus on encouraging violets, the food plant of the Small Pearl-Bordered Fritillary Butterfly. This is the only habitat used by the butterfly in Craven. See also the Small Pearl-Bordered Fritillary SAP.

- Rotational regimes to control rank vegetation, bracken and encroaching Scrub.
- Prevention of shading of areas of violet habitat.
- Prevention of drainage of mire sites.
- Prevention of damaging agricultural operations such as:
  - Application of any fertilisers, lime or insecticides.
  - Inappropriate grazing regimes; especially grazing by sheep during the growing season.
  - Abandonment (Long-term lack of grazing or mowing).
  - Intensive mowing.
- Light cattle grazing during late summer and winter is likely to be beneficial.

As the habitat includes sub-sites within larger habitat complexes, better knowledge of the resource is required.

Current local action
- Many of the sites are SSSIs and so Site Management Statements under the Wildlife Enhancement Scheme (WES) have been prepared, which include elements of the above.

Opportunities
- NE directed management to get SSSIs into a recovering or favourable wildlife status, using the DEFRA ESS.
- Promotion of ESS options to conserve small, wet corners of farms. For example, one of the farms at Long Preston Deeps has a block of Wet Acid Grassland managed for breeding waders, with some hedgerow restoration planned for future years on this holding.
- More extensive management of sites.





Upland Heathland and Blanket Bog

Upland Heathland & Blanket Bog Habitat Action Plan

Our Objectives for Upland Heathland and Blanket Bog are:

- **To maintain Upland Heathland and Blanket Bog in a favourable wildlife condition.**
- **To restore Upland Heathland and Blanket Bog which is not in favourable wildlife condition.**
- **To establish viable populations of all of the priority species.**

The two upland habitats Upland Heathland and Blanket Bog are dealt with together as they occur close together and complement each other, to produce the large tracts of land commonly referred to as moorland. Both are UK BAP priority habitats.

Actively growing Blanket Bogs are included in the EC Habitats Directive and nesting birds are protected by the Wildlife and Countryside Act 1981, with Hen Harrier and Merlin having special protection as Schedule 1 species.

With regard to Open Access, under the CROW Act 2000, it is possible for local restrictions to be imposed through the introduction of byelaws where appropriate. These could be used to protect the biodiversity interest. Further, between 1st March and 31st July, or at any time in the vicinity of livestock, the legislation requires dogs to be on a fixed lead of no more than two metres.

Introduction – Upland Heathland

Upland Heathland tends to be found above the level of field enclosure (usually 250-300 m), where the rainfall is above 1,000 mm/year. It forms on shallow peat of less than 50 cm depth or on peaty podsol soils and is dominated by dwarf shrubs such as Heather. An important assemblage of birds such as Meadow Pipits, Wheatears, breeding waders, Red Grouse, Merlin and Hen Harrier, and a diverse range of invertebrates, is associated with Upland Heathland.

Extensive areas of wet or dry Upland Heathland can occur, or the habitat can be found in a mosaic with Acid Grassland, Blanket Bog, flushes, rocky outcrops and acid scree - supporting bracken, scattered trees and scrub.

The structure and composition of Upland Heathland is strongly influenced by climate, topography and soil moisture conditions and also by management practices, especially grazing and burning. A history of over-grazing has eliminated Heather from some Heathlands and species-poor, upland Acidic Grasslands have become widespread.

National status

Of the UK resource of Upland Heathland (estimated 2.9 m ha), about 269,000 ha is in England, much of which is designated SSSI (for its national importance) and SAC (for its European importance) (Selman[9]).

Regional status

The Yorkshire and The Humber region holds about 76,000 ha of Upland Heathland, which is 28% of the resource occurring in England (Selman[9]). There are a number of extensive areas.

Local status

Craven district contains roughly 720 ha of Upland Dry Heathland (R. Goodison, Pers. Comm.). Upland Wet Heathland is included with Blanket Bog as these habitats often form a mosaic. Some Dry Heathland lies within the SSSI series, with no SINCs containing this habitat type.





Local examples:
- Farnhill Moor
- Elslack Moor
- Skipton Moor
- Burn Moor

Introduction – Blanket Bog

Blanket Bog comprises a layer of Peat more than 50 cm deep, covering the hill tops in areas of high, regular rainfall on slopes of up to 30%. Both actively growing and degraded Bogs are included in this plan because of their international significance. Post-war drainage through the digging of grips has dried out and damaged many bogs, as well as contributing to flooding problems in the lowlands. Subsidiary habitats include bog pools.

Specialised plants occur, including Sphagnum Mosses, Sundews, Common Butterwort and both Cotton-Grasses (Common and Harestail). A variety of insects are associated with this habitat. It is important for breeding birds and is often managed for Red Grouse (as well as sheep). A key breeding species is Hen Harrier, with the Bowland Fells (largely in Lancashire) being the only regular, current English breeding area. Many other suitable areas exist but evidence gathered by the RSPB shows that this species is heavily persecuted.

National status

There is an estimated 1.5 million ha in the UK, with most found in Scotland (Selman[9]).

Regional status

The Yorkshire and The Humber region has approximately 53,000 ha, which is 3.5% of the estimated UK amount (Selman[9]).

Local status

Blanket Bog and Upland Wet Heathland cover roughly 1830 ha of Craven District (R. Goodison, Pers. Comm.).

Blanket Bog occurs on one SINC, where it is termed Blanket Sphagnum Bog. This is Moss Bottom SINC which covers 1 ha. A number of small areas may occur on the higher ground of the Bowland Fells (SINC Panel[2]).

Threats

- Inappropriate grazing levels – both under-grazing and overgrazing.
- Spread of Bracken.
- Inappropriate burning regimes, including too-frequent burning and a lack of burning in some areas.
- Drainage.
- Direct threats from clearance and conversion to other land uses, notably forestry.
- Other damaging activities such as arson.
- Atmospheric pollution, such as nitrate deposition.
- Climate change is a potential future threat to this habitat.
- Recreational pressures, including erosion and disturbance, particularly in Open Access areas.
- Fragmentation, particularly of actively growing Bogs, isolates species.
- Illegal persecution of birds of prey, especially Hen Harrier.

Requirements

- Appropriate management, including good structural diversity of Heather.
- Range of micro-habitats including bare ground, Scrub, Bogs and open water.
- Fire control, including control of accidental fires, arson and managed burns.
- Control of invasive plants where appropriate. Plants such as Bracken, Gorse and Silver Birch can become dominant.
- Light grazing to control invasive species.
- Good working relationships with moorland managers, gamekeepers and users.

Current local action

- Most of the resource protected within SSSIs.
- Condition statements on favourable wildlife status are prepared for SSSIs by NE.
- Many moors are managed and keepered for Red Grouse shoots.





- Research by Leeds University on identification of active as opposed to non-active moorland drainage grips.
- The Moorland Association represents landowners.
- 'Operation Artemis' Hen Harrier project.

Opportunities

- Support of the Police Wildlife Liaison Officer (WLO) 'Operation Artemis', to tackle Hen Harrier persecution in the UK.
- Promotion of ESS options.

What you can do to help:

- Keep dogs on leads when crossing open country during the bird-nesting season.
- Avoid fire risk.

Common Lizard





Ponds

Ponds
Habitat Action Plan

Our objectives for Ponds are:

- **To maintain Wildlife-rich Ponds and encourage sympathetic and well-informed management of surrounding habitat, including creation of buffer zones around ponds.**
- **To encourage the restoration of Wildlife-rich Ponds, where these have deteriorated due to natural succession, hydrological changes, drying-out or dense shading.**
- **To create, conserve and enhance pond clusters.**

Introduction

The Craven BAP area contains many Ponds of varying origins including Field Ponds, Spring-fed Ponds, Oxbow Ponds, Dew Ponds, Village Ponds, Garden Ponds and Fish Ponds. These vary greatly in their wildlife interest, for example fish ponds are top heavy with predators, while village ponds fouled by feral ducks are nutrient-rich and affected by algal growth. However, many ponds support a good diversity of wildlife.

'Ponds' is a UK BAP priority habitat. This includes various aquatic, Swamp and fFn communities, including OV28 – OV35 in the National Vegetation Classification. Ponds of high ecological quality could be either permanent or seasonal bodies of water up to 2 ha in extent. They would be of high conservation importance based on Habitats Directive criteria, hold species of high conservation importance (listed species) or contain exceptional assemblages of key biotic groups. The 1996 Lowland Pond Survey undertaken by DEFRA suggested that between 2 – 5% of ponds would fall into the above category. This survey showed 50% of ponds in the wider countryside to be degraded, with seasonal ponds being particularly affected. Pond numbers in the UK are thought to be at a historic low, with the loss of 70% of ponds existing in 1880. In recent years there has been a reversal of the loss of ponds, with many new ponds created in farmland, gardens and amenity areas, although these are often isolated and will mainly benefit common and mobile species. There is also a high turnover of ponds and the modern trend is for ponds to be created as recreational fishing lakes. The resource therefore includes relatively few old ponds.

In general, wildlife-rich ponds have extensive vegetation cover, shallow water and are long-established. Most are relatively isolated from pollution. Clusters of ponds are particularly valuable for some species, especially amphibians. Amphibians, as well as species such as dragonflies, require good quality terrestrial habitat adjacent to open water, especially other semi-natural habitat types. Semi-natural habitat also buffers the effects of more intensive land use. Features such as richly-vegetated margins should be considered for their biodiversity contribution. Seasonal, fluctuating or periodically dry ponds can be very valuable for biodiversity, for example by removing natural predators for a short time. Wildlife-rich ponds are mostly located amongst other semi-natural habitats such as wetland, native woodland or herb-rich grassland.

A pond at Cononley Lead Mines (SD981460) was created as part of the mineral extraction process and was known to support smooth newt in 1982.

This HAP covers wildlife ponds up to 2 ha in size and larger water bodies such as Chelker Reservoir, Whinney Ghyll Reservoir (Skipton),





Hellifield Flash and the lake in the grounds of Coniston Hall, which may be important for wildfowl, fishes, invertebrates and aquatic plants.

National status

Frequent and well-distributed, but no national data.

Regional status

Frequent and well-distributed, but no national data.

Local status

Six ponds covering a total of 0.8 ha lie within Sites of Importance for Nature Conservation (SINC). The Craven Conservation Group has identified 60 ponds on private land.

Hellifield Flash is a candidate SINC for its bird interest. It is an important wetland along the 'Aire gap' used by waders, wildfowl and gulls migrating across country from the Humber estuary to the west coast. Around 120 species of bird have been recorded including breeding Shelduck and Little Ringed Plover. The Flash never completely dries out. The land around the lake is currently being developed and this may have some adverse impacts, such as increased recreational disturbance. However the planning permission included a condition on the developer to prepare and implement a wildlife management plan.

Coniston Lake in the grounds of the Hall covers 10 ha of open water.

Local examples:

- Ponds on Newby Moor at grid reference SD 707701 and SD 727683.
- Hellifield Flash at SD 845573.
- Dead Eye Pond near Cononley, a small pond at SD 991481.
- A pond at Cononley lead mine at SD 981460.

Threats

- Very rare species recorded from only a few wildlife-rich ponds may be vulnerable to local extinction if these sites are lost or degraded.
- Deliberate or accidental introduction of exotic water plants is a threat to ponds, with highly invasive ornamental species like Parrot's Feather, Curly Waterweed, Water Fern and New Zealand Pygmy Weed becoming a nation-wide problem.
- Conversion of wildlife-rich ponds to angling ponds is always likely to be detrimental, both directly by deepening and re-profiling and indirectly by introducing high densities of predatory fish.
- Unconsented introductions of fish. Before stocking with fish, written consent must be obtained from the Environment Agency (under Section 30 of the Salmon and Freshwater Fisheries Act 1975). This is to prevent the spread of fish diseases and to minimise damage to fisheries or the environment that may be caused by unregulated or inappropriate fish movements.
- Release of ornamental fish into wildlife ponds. This not only affects amphibians and invertebrates, but also native fish such as the Crucian Carp (*Carassius carassius*), which interbreed easily with Goldfish (*Carassius auratus*) and Common Carp (*Cyprinus carpio*)
- Seasonal, fluctuating or periodically dry ponds can be very valuable for biodiversity, so that 'improvement' by deepening or re-profiling may be damaging.
- Many field ponds are believed to have been lost due to infilling, land drainage, conversion to arable and urban development.
- Nutrient enrichment.
- Increased concern amongst the public and officials regarding the health and safety dangers of open water.





Requirements

- Funding - pond creation, management and restoration is popular amongst land managers. On farm holdings, grants will often be available through the agri-environment schemes but elsewhere funding is limited.
- Management of wildlife-rich ponds and their banks needs to be assessed on a site-by-site basis, using detailed ecological surveys where possible. 'Overgrown' ponds, for example, can be very rich in biodiversity and drastic management may be inappropriate. In other cases, active management may be essential.
- Minimal disturbance from people and dogs.
- Buffering from pollution, including fertilisers.
- New ponds should not be created on sites of existing wildlife interest.

Current local action

- A number of wildlife-rich ponds are managed through the DEFRA Countryside Stewardship Scheme (CSS).
- NE organised a BTCV workforce to clear out Keasden Pond, with wildlife in mind and with the permission of Ingleborough Estate.
- For Fisheries Management Advice, contact the Environment Agency Fisheries and Recreation Team (Appendix 6).

Opportunities:

- Options available in the Environmental Stewardship Scheme (ESS).

What you can do to help:

- Create a pond for wildlife, rather than for Goldfish.
- Organise supervised pond dipping events for children and adults.
- Gather up discarded fishing tackle and dispose of carefully.
- Report sightings of Water Vole and Great Crested Newt to the North and East Yorkshire Ecological Data Centre (NEYEDC).





Fen

Fen Habitat Action Plan

Our objective for Fen is:

➢ **To increase the Fen resource through habitat creation, while maintaining all sites in a favourable ecological condition.**

Introduction

Fens are areas of wet ground lying on top of peat, which receive water and nutrients from ground water as well as from rainfall. They are dominated by sedges and tall herbs. Wet Scrub (carr woodland) can be a component of Fen and this can become the dominant habitat type. In natural terms, Fen is a habitat that is very close to the Wet Acidic Grassland (Mire) habitat. It is balanced between the wetter Reedbed and Swamp and the drier Grazing Marsh and Wet Woodland and these often form a mosaic of habitats. Changes in water levels or in management such as grazing can change Fen habitat one way or the other. This Habitat Action Plan (HAP) also covers the other types of wet Swamp, of which drier examples are referred to as Tall-herb Fens.

This HAP covers all types of Fen - such as Basin and Floodplain Fens, Valley Mires, Upland Acid Flushes and Base-rich Flushes associated with springs and rills.

Fens can be described as 'poor-fens' or 'rich-fens'. Poor-fens occur mainly in the uplands or within lowland heaths. They are characterised by short vegetation with a high proportion of mosses. Rich-fens are mainly confined to the lowlands.

Fen habitats support a diversity of plant and animal communities, including a higher proportion of UK BAP species than any other wetland habitat. Some Fens can contain up to 550 species of plant and several thousand insect species, including dragonflies and aquatic beetles (UK BAP[1]). Many of the plant species require waterlogged conditions and this habitat is also good for amphibians, and birds including Reed Bunting, Water Rail, Snipe and Grasshopper Warbler. Such conditions are also ideal for the Water Shrew, a species of increasing conservation concern.

Most Fens date from the last Ice Age, some 10,000 years ago, when much of the North Yorkshire lowlands were covered with extensive wetlands including Lakes, Fens and Reedbeds.

Fen and other aquatic habitats have lost significantly more plant species than terrestrial habitats, which shows that Fen is one of the habitats least resilient to change in the landscape. Fens are one of the most problematic habitats to restore, because of the need for two components – a layer of peat and a spring.

The floristic description of Fens follows that of the Yorkshire Dales National Park BAP 'Nature in the Dales' (YDNPA[3]):

Mire 6 NVC community M6, is the Star Sedge – Sphagnum Moss Mire. It is a mire community typical of peat and peaty, waterlogged soils in north-west Britain. These mires are irrigated by base-poor water and are essentially poor-fen types where either small sedges or rushes dominate over a carpet of Sphagnum mosses, often with ferns.

Mire 9 NVC community M9, is the Bottle Sedge – Calliergon Moss community which is characteristic of soft, spongy peats kept permanently moist. It is commonest in the wetter parts of topogenous mires and in natural hollows.





Mire 10 NVC community M10, is the Separate-headed Sedge – Common Butterwort vegetation community. This is a typically soligenous mire of mineral soils and shallow peats kept very wet by base-rich waters.

Mire 26 NVC vegetation type M26 is the Purple Moor Grass – Marsh Hawksbeard Fen.
This is only present in small areas of the district. M26 mire is a very local community of moist, moderately base-rich and calcareous peaty mineral soils in the sub-montane Northern Pennines. With agricultural improvement or careless management, marked changes occur. Heavy grazing on impeded soils, enrichment by fertiliser or dunging can alter the generally stable and floristically rich M26 vegetation causing rushes to become more abundant and help effect a shift towards M23 Soft Rush/Sharp-flowered Rush - Marsh Bedstraw Rush Pasture which is more widespread. Consequently, the close monitoring of grazing is essential.

National status

Prior to the expansion of the European Union (EU), the UK was said to hold a large proportion of the European fen resource. This has been lessened by the expansion of the EU to include eastern European countries. Fen vegetation has declined dramatically in the UK in the past century.

Regional status

The regional audit (Selman[7]) only has data for Fen vegetation on SSSIs. It lists 78 sites distributed across the region with concentrations in the Yorkshire Dales, the North York Moors and the Humberhead Levels.

Local status

The regional audit has no records for Craven District. However, Fen occurs within the SINC series (SINC Panel[2]), listed under four sub-habitat types:

Basic Fen Mire - 1 site - 0.07 ha
Floodplain Mire – 0
Swamp – 6 sites – 2.6 ha
Valley Mire – 0
Total - 2.67 ha.

Fen habitat also occurs within a number of SSSIs, including Newby Moor SSSI and Pan Beck Fen SSSI.

The area is likely to contain numerous tiny and un-mapped examples.

Local examples:
- Fen areas on Newby Moor SSSI, where there is Open Access.
- Pan Beck Fen SSSI.

Threats

- Loss of area by drainage and conversion to agriculture or forestry.
- Small total area of habitat, fragmented resource and critically small population sizes of key species.
- Drainage or abstraction of water from Fens or the surrounding area.
- Pollution, particularly nutrient enrichment leading to vegetation change. Valley Fens susceptible to agricultural run-off.
- Lack of sustainable management allows drying and Scrub encroachment.

Requirements

- Water level management to keep the soil surface wet.
- Light grazing of Fen plants to prevent tree incursion.
- Creation of new areas of open water within drying Fen systems.

Current action

- Water Level Management Plans and local water quality is monitored by Environment Agency (EA).
- Advice to Fen owners on management, extension and creation is available from the UK BAP working group.
- The UK BAP working group monitors the population size and productivity of key Fen species.





- The EA has been encouraged to incorporate Fen protection, management or creation in its Catchment Flood Management Plans.

Opportunities

- Conservation options in agri-environment schemes.
- EA, RSPB and NE have produced a Wetland Feasibility Study for North Yorkshire to identify opportunities for the creation of Wetland. There is an opportunity to deliver actions identified by this study.

Bird's Eye Primrose





Lowland Raised Bog

Lowland Raised Bog Habitat Action Plan

Our objectives for Lowland Raised Bog are:

- **To maintain the distribution of Lowland Raised Bogs.**
- **To maintain Lowland Raised Bogs in a favourable condition for wildlife.**

Introduction

Lowland Raised Bogs are peatland ecosystems which develop primarily, but not exclusively, in lowland areas such as along river floodplains and in topographic depressions. In such locations drainage may be impeded. The resultant water-logging provides anaerobic conditions which slow down the decomposition of plant material which in turn leads to an accumulation of peat. Continued accrual of peat elevates the bog surface above regional groundwater levels to form a gently-curving dome from which the term 'raised' Bog is derived. The thickness of the peat mantle varies considerably but can exceed 12 metres.

Accumulation of peat separates the Bog surface from the influence of groundwater, so that it becomes exclusively 'rain-fed' by precipitation. Consequently, the surface of a 'natural' Lowland Raised Bog is typically waterlogged, acidic and deficient in plant nutrients. This gives rise to a distinctive suite of vegetation types, which although low in overall diversity, support specialised plant assemblages dominated by a colourful range of mosses of the genus Sphagnum. A number of higher plants have become increasingly scarce in the lowlands including Bog Rosemary, Great Sundew and Cranberry.

Sphagnum mosses are the principal peat forming species on natural UK Lowland Raised Peat Bogs and their dominance in the living vegetation layer gives a Bog its characteristically 'spongy' surface. The ability of this layer to store water is thought to be important in keeping the Bog surface wet during the summer.

A number of plant communities defined by the National Vegetation Classification can be found on Raised Bogs. Plant communities that are typical of natural raised bogs include the Bog pool communities M4 and M5.

Peat accumulation preserves a unique and irreplaceable record of plant and animal remains and some atmospheric deposits from which it is possible to assess historical patterns of vegetation and climate change and human land use.

As elsewhere across north-west Europe there has been a dramatic decline in the area of Lowland Raised Bog habitat since around the start of the nineteenth century.

Future decline is most likely to be the result of the gradual desiccation of Bogs damaged by a range of drainage activities and/or a general lowering of groundwater tables.

Scottish Natural Heritage (SNH) published a report in 1996 called ‘An Inventory of Lowland Raised Bogs in Great Britain’. The inventory is maintained by SNH and provides an assessment of the condition and conservation of Lowland Raised Peat Bog sites and an estimate of the area of land covered by this habitat. It also records the status of sites in terms of SSSI or NNR designations.

Primary Raised Bogs present an unbroken profile of peat, undisturbed by peat cutting or agricultural tillage, and range from Bogs supporting natural or near-natural vegetation to Bogs exhibiting varying degrees of degradation as a consequence of fire, drainage and Scrub encroachment.





Secondary Bogs are those which have been subject to partial peat removal, usually through peat cutting for fuel or horticultural usage.

The third main condition class includes land which has been claimed for agricultural cropping or built development.

Lowland Raised Bog is a UK BAP priority habitat.

National status

The area of Lowland Raised Bog in the UK retaining a largely undisturbed surface is estimated to have diminished by around 94% from an original c95,000 ha to c6,000 ha at the present day (England 37,500 ha reduced to 500 ha, Scotland 28,000 ha to 2,500 ha, Wales 4,000 ha to 800 ha, Northern Ireland 25,000 ha to 2,000 ha). Historically, the greatest decline has occurred through agricultural intensification, afforestation, and commercial peat extraction (UK BAP[1]).

Regional status

The region has 2,121 ha with major concentrations in the Thorne, Goole and Crowle Moor complex (Selman[9]).

Local status

The district has two important Lowland Raised Bogs – Austwick and Lawkland Mosses (10 ha) and Hesley Moss (7 ha). Newby Moor SSSI and Cocket Moss SSSI may also contain elements of Lowland Raised Bog. Two SINC sites may also be relevant – Hall Moss/ Hurder Moss (6 ha) and Badger Moss (1.4 ha). Around 25 ha in total (Megson[8]).

Local examples:

- Hesley Moor SSSI, accessed from public rights of way and Open Access land.

Legal status

Annex 1 of the EC Habitats Directive includes two Lowland Raised Bog habitats: the active Raised Bog category and degraded Raised Bogs.

Threats

Factors which either disrupt the balance of these conditions, or which lead more immediately to the destruction of Raised Bog habitats and their remnants, include:

- Landfill development.
- Regional drainage pressures.
- Pollution.
- Scrub encroachment.
- Livestock and game management (such as Pheasant rearing and rough grazing) frequently accompanied by drainage, trampling, burning and surface contamination with feed and droppings.
- Atmospheric nitrogen deposition and climate change could have management implications for Lowland Raised Peat Bogs.

Requirements

- There are three key conditions which have to be maintained if Lowland Raised Bogs are to retain their characteristic features. Firstly, they must remain waterlogged. Secondly, maintain water input from precipitation, which is low in solutes. Thirdly, the living layer of vegetation acts as a 'natural' regulator for water loss and must remain undamaged.
- Establish appropriate hydrological and management regimes to achieve favourable condition of sites that have been damaged but still retain nature conservation interest (i.e.: ‘primary’ degraded and ‘secondary’ drained sites).
- Identify areas, timescales and targets for restoration or improvement of significantly altered Raised Bog areas, including those used for agriculture and woodlands.
- Use national methods for defining and assessing the condition of Lowland Raised Bogs and monitor the effectiveness of conservation management.
- Promote the use of sustainable alternatives to peat to speed up reduction of peat used in both amateur and professional markets.





Current local action

- SSSI management plans in place.
- NE is monitoring the condition of SSSIs, according to the agreed process of Common Standards Monitoring.

Opportunities

Conservation management options under the Government's Environmental Stewardship Scheme (ESS).

Sundew





Rivers and Streams

Rivers and Streams Habitat Action Plan

Our objective for Rivers and Streams is:

- **Maintain and enhance the biological diversity of Rivers and Streams in Craven.**

Introduction

This broad Habitat Action Plan covers the riparian corridors of flowing water, including rivers and streams. It includes the UK BAP Priority Habitat 'Rivers'. In their natural unmodified condition rivers are dynamic systems that are continually creating, maintaining and eroding a complex of habitats, including both aquatic and bank-side ones. Due to the geology and landscape of Craven, there is a good variety of river types.

The mosaic of features found in rivers and streams supports a diverse range of plants and animals, including mammals, birds, fishes and invertebrates. For example, riffles and pools support aquatic species, and eroding banks, shingle beds and sandbars are important for invertebrates - notably ground beetles, spiders and craneflies. Marginal and bank-side vegetation is included in the HAP; this habitat supports an array of plants and animals, as well as providing cover for fish, controlling bank erosion and acting to reduce the amount of diffuse pollution entering watercourses. Rivers and streams often provide a wildlife corridor link between fragmented habitats in intensively farmed or urbanised areas. Many rivers have greatly changed through engineering works to control water flow and river catchments have been affected by changing land use.

Waterways are dynamic features and the management of river systems is best viewed holistically, including the river corridor together with its tributaries, ditches, and associated wetlands.

In the 1970s-1980s, gripping in moorland areas was grant-aided and these drainage initiatives led to a change in the speed at which rainwater left catchments, sometimes increasing flood problems downstream. There are now some initiatives to reverse this by blocking the most active grips.

Since the privatisation of water companies in 1990 there has been a dramatic improvement in the quality of water in rivers, with fish returning to areas where they had been absent for over a hundred years. However, new European Union standards will mean that new ways of managing rivers will need to be adopted. This is because instead of just using chemical content and dissolved oxygen as a way of measuring the health of rivers, the Water Framework Directive demands much higher standards of river management, including maintaining water flows and diversity of life, and the removal of hormone disrupting substances. The Directive also applies to lakes, estuaries and ground waters that were previously not measured.

Key species include a number of fishes, such as Brown Trout and Grayling, and typical birds include Kingfisher, Dipper, Sand Martin and Grey Wagtail. The European Eel is now of conservation concern due to severe declines reported across the species' range – the International Council for the Exploration of the Seas (ICES) has declared that 'the population as a whole has declined in most of the distribution area, that the stock is outside safe biological limits and that the current fisheries are not sustainable. Recruitment is at a historical low and most recent observations do not indicate recovery (Anon.[13]).

Stoneworts are important and are good indicators of water quality, but require more research and a number of specialist invertebrate





communities are associated with rivers and their deposits. Crustaceans and molluscs are valued and include our native Crayfish and the Depressed River Mussel.

National status

This habitat is widespread across the UK. Whilst rivers in general are important habitats for a range of wildlife, only substantially unmodified examples or particular types of river are regarded as worthy of special status, such as SSSI designation.

Regional status

This habitat is widespread in the region.

Local status

There are a number of key rivers, with a good variety of river types in Craven district, resulting from different geological strata. The BAP area has examples of fast flowing, upland, cobble-bedded streams as well as larger rivers with slower flows, meandering through their floodplains. The eastern part of the area is the catchment of the River Ribble and its tributaries. The main game fish of interest on the River Ribble are Atlantic Salmon, Sea Trout, Brown Trout and Grayling. There are also coarse fish species such as Chub and Barbel, the former in the slower moving waters near Rathmell bottoms. European Eels have also been caught recently.

Local examples:

- There are riverside walks along all the major rivers.
- River Greta west of Ingleton, along the north bank from the A65 at New Bridge at SD689727 to woodland near Lund Farm at 677727.
- River Greta west of Burton-in-Lonsdale, along the south bank from Greta Woods at SD648717 to 642719.
- River Wenning, both banks from High Bentham to Low Bentham. North bank from SD663689 to 653691; south bank from 667687 to road at 650691.

Legal status

- Under the Water Resource Act 1991, the Environment Agency (EA) has the powers to maintain and improve main rivers in order to ensure the efficient passage of flood flow and to manage water levels. Their powers to carry out flood defence work apply to main rivers only, but their other duties and functions extend to all watercourses including the promotion of conservation of the aquatic environment. The Internal Drainage Boards (IDB) and local authorities are also responsible for certain watercourses.
- All freshwater fish are protected under the Salmon & Freshwater Fisheries Act 1975.
- Under the Water Resources Act 1991 and associated byelaws, works in, over, under or adjacent to main rivers require the consent of the EA. This is to ensure that they neither interfere with the Agency's work nor adversely affect the environment, fisheries, wildlife and flood defence in the locality. The Yorkshire byelaws state that this 'protected bank-side land' is any land lying within 8m of a river bank or flood bank or wall.
- Both White-clawed Crayfish and Otter are legally protected.
- The habitat of Water Vole is legally protected and the Joint Nature Conservation Committee has recommended full protection from 2005.

Threats

- Wildlife interest may be adversely affected by land drainage or flood defence works and erosion control if this is not carried out appropriately.
- Artificial barriers such as weirs preventing aquatic organisms to move freely along watercourses. These break up longitudinal connectivity, blocking natural migration paths of many species. Reduced lateral connectivity with the floodplain also impacts upon aquatic organisms as these areas are actively sought out during flood events.





- Pollution from agricultural, industrial and domestic sources.
- Water abstraction direct from rivers and from groundwater – low flows adversely affect wildlife.
- Damage or disturbance caused by recreational use, such as trampling of bank-side vegetation.
- Invasive, non-native species. Problems include American Mink (throughout), Signal Crayfish, Giant Hogweed, Japanese Knotweed and Himalayan Balsam.
- Conflict between anglers and fish-eating predators, such as Otter, Goosander, Cormorant and Grey Heron.
- Stocking of fish into water courses affecting the natural ecosystem. Before stocking with fish, written consent must be obtained from the Environment Agency (under Section 30 of the Salmon and Freshwater Fisheries Act 1975). This is to prevent the spread of fish diseases and to minimise damage to fisheries or the environment that may be caused by unregulated or inappropriate fish movements.
- Overgrazing or high stock densities can cause poaching and erosion of riverbank.
- Development within the floodplain.

Requirements

- Buffer zones between arable land and watercourses, especially for higher risk soils, and appropriate crops and cultivation methods to the site.
- Reduction of grazing adjacent to riverbanks to prevent erosion.
- Fencing to exclude stock from key banks.
- Delivery of wetland restoration and creation, for sites identified by the NE, EA and RSPB study.
- Production and implementation of Catchment Flood Management Plans (EA statutory duty), to incorporate enhancement for biodiversity.
- Identification of areas suitable for flood water storage. The needs of wildlife should be taken into account at the design stage; poor design of washlands can lead to fishbecoming stranded after flood events.
- Undertake sympathetic management of riparian trees and woodlands.
- Greater use of Sustainable Drainage Systems (SUDS) in new developments.
- Compliance with and enforcement of Farm Waste Regulations 2004.
- Compliance with and enforcement of Nitrate Vulnerable Zones.
- Detection and remedy of point sources of pollution (EA statutory duty).
- Evaluation of river abstractions and ground water abstractions (EA statutory duty).
- Review and continue invertebrate monitoring.
- Surveying and research of gravel shoals for invertebrates, fish and breeding birds, and riparian woodlands for birds.
- Investigate and devise control programmes for invasive species.
- Assessment of levels of fish re-stocking and impacts upon wildlife.
- Assessment of abundance of key insect and plant species associated with fish.
- Survey of all fish species and their access to required sub-habitats.
- Eliminate barriers to migration in order to restore longitudinal and lateral connectivity. Restored connectivity would allow freshwater and freshwater/marine species (e.g. Salmon, Sea Trout, Eels) to move freely within the river system.
- Appropriate habitat improvements taking natural processes into account.
- Research, surveys and management to benefit Otter, Water Vole, Water Shrew and Bats.
- Monitor water quality (used in Government's State of the Environment Report) (EA statutory duty).
- Identification and conflict resolution of adverse recreational impacts.
- Promotion of the EA leaflet 'Best Farming Practice'.
- Identification of honey pot sites and collation of all projects planned in the river corridor.





- Dissemination of information and partner working.
- Promote management that allows for natural river processes, including erosion and meanders and allows the re-establishment of a natural floodplain. Also see UIMG[12].

Current local action

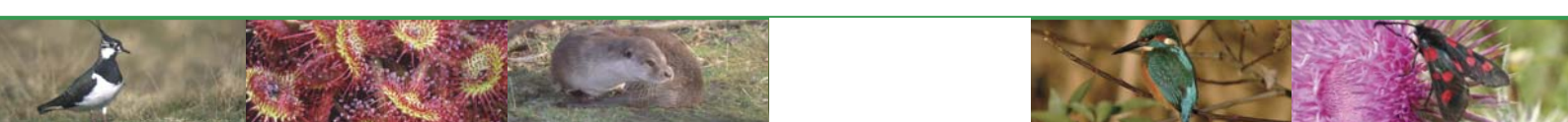
- Research and monitoring is undertaken and funded by the EA, for example surveys for White-Clawed Crayfish in the Aire Catchment.
- Water abstraction is licensed by the EA. The EA completed a Catchment Abstraction Management Strategy (CAMS) for the River Aire in May 2007, and is preparing a CAMS for the River Ribble.
- The EA has published the Integrated Catchment Management Plan for the Ribble (June 2007), which includes biodiversity objectives for a number of habitats.
- The EA is currently preparing a Catchment Flood Management Plan and a Flood Risk Management Strategy for the River Aire catchment which will include Biodiversity aims.
- The EA is currently preparing the River Ribble Catchment Flood Management Plan, which includes opportunities for biodiversity benefits.
- The EA undertakes annual invertebrate and fisheries monitoring programmes.
- The Ribble Catchment Conservation Trust is delivering a project to fence stretches of river bank.
- Some stretches of river are actively managed by angling clubs, where they own the fishing rights.
- Fish introductions need to be consented by the EA.

Opportunities

- Opportunities for habitat restoration may arise through Flood Risk Management Plans.
- EA, RSPB and NE have produced a Wetland Feasibility Study for North Yorkshire to identify opportunities for the creation of Wetland. There is an opportunity to deliver actions identified by this study.
- Options under the ESS. These include resource management, which includes drawing up soil management plans.
- The planning process offers potential for delivering ecological improvements, particularly with regard to mill redevelopments. Fish passage easements can often be made whilst a redevelopment is taking place, and is in line with PPS9 guidelines on maintaining networks.

What you can do to help:

- Keep dogs under control.
- Dispose of discarded fishing tackle safely.
- Avoid pouring car engine oil, paint, etc down the drain.
- Report pollution incidents.



Habitat Statements

Unimproved Grassland
Metalliferous Grassland
Built Environment
Gardens

Unimproved Grassland

Unimproved Grassland Habitat Statement

Our objective for Unimproved Grassland is:

➢ **To expand Unimproved Grassland habitats in parks and open spaces.**

Unimproved Grassland

Grasslands included under this set of habitat guidelines include traditionally-managed meadows and pastures of lowland and upland situations on neutral, acid and calcareous soils. Meadows, pastures, road verges and churchyards are included.

Neutral grassland

Unimproved Neutral Grassland habitat underwent a major decline in the 20th Century. It was estimated in 1994 that less than 15,000 ha of Species-rich Neutral Grassland remained within the UK (both upland and lowland). In England there is significantly less than 10,000 ha of Species-rich Neutral Grassland (UK BAP[1]). As a result this habitat now remains throughout much of the UK in small sites with a localised and fragmented distribution.

Neutral Grasslands support a high proportion of broad-leaved herbaceous species relative to grasses. Commoner characteristic species include Meadow Crane's-Bill, Yellow Rattle, Pignut and Red Clover. Characteristic species of this habitat that are now scarce include Green-Winged Orchid, Pepper Saxifrage, Dyer's Greenweed and Adder's-Tongue Fern.

Semi-natural Neutral Grasslands occur in a range of circumstances in upland and lowland locations. The UK BAP priorities Upland Hay Meadows, Floodplain Grazing Marsh and Lowland Meadows are covered in the Farmland and Grassland HAP.

Acid Grassland

This statement deals with the Dry Acidic Grasslands. Wet Acidic Grassland has its own HAP. Acid Grasslands typically occur on nutrient-poor acid substrates situated on acidic rocks, sands or gravels. Acid Grassland can also occur on wetter substrates such as peat that can mask the nature of the underlying rocks. These grasslands occur in a range of circumstances in Upland and Lowland locations and are often associated with other habitats such as Upland and Lowland Heathland, Parkland, Flushes, Blanket Bogs and other mire types. In most circumstances they are managed as grazing pasture whether in upland or lowland situations.

Acid Grasslands are typically botanically species-poor. In the uplands they can form large expanses of uniform habitat, but in other circumstances where there are differences in rainfall, altitude, and hydrology a range of communities can develop.

In the UK BAP there is a separate HAP for Lowland Dry Acid Grassland. This habitat occurs on free-draining acidic soils often associated with acidic rocks, sands or gravels. Characteristic plant species include Heath Bedstraw, Sheep's Fescue, Sheep's Sorrel, Common Bent Grass, Wavy Hair-Grass, Tormentil and Heather species at low abundance. In the UK there is estimated to be only 30,000 ha of Lowland Dry Acid Grassland with only approximately 50 ha or less in North Yorkshire (Selman[9]). Only a tiny amount, if any, occurs in the Craven BAP area.

Upland Acid Grasslands have not been selected as a priority habitat. Estimated coverage of Upland Acid Grassland in the UK, however, is over 1,200,000 ha (UK BAP[1]). In the Uplands





Acid Grassland is often of low botanical interest and can develop as a result of management such as, overgrazing, and drainage of other habitats including Upland Heathland.

Calcareous Grassland

Calcareous Grassland occurs on shallow lime-rich soils usually derived from limestone rocks. There are two UK BAP plans for Calcareous Grassland – Upland Calcareous Grassland (of NVC communities CG9 to CG14) and Lowland Calcareous Grassland (of NVC communities CG1 to CG9). The community CG9 straddles both the uplands and the lowlands.

It is estimated that 55-66,000 ha of Calcareous Grassland occurs in the UK of which 33,000 - 41,000 ha lies within the lowlands and 22,000 - 25,000 ha occurs within the uplands (UK BAP[1]). The bulk of the Lowland Calcareous Grassland resource lies on chalk. Approximately 10,000 ha of the UK's Upland Calcareous Grassland resource is found in England.

Calcareous Grasslands support a very rich flora including many locally and nationally rare species. Invertebrate faunas can also be very rich including nationally scarce species. Carboniferous limestone grassland of the Craven Pennines in the Yorkshire Dales is a significant component of the upland resource.

In Craven, Calcareous Grasslands are associated with shallow lime-rich soils overlying the Carboniferous limestone. They typically occur as components of habitat mosaics, which are generally managed as rough grazing land for domestic livestock.

Road verges and churchyards

Road verges and churchyards constitute an important grassland resource.

Local status

The SINC system categorises grassland as Marshy Grassland, Semi-improved Neutral Grassland, Unimproved Acidic Grassland, Unimproved Calcareous Grassland and Unimproved Neutral Grassland. Marshy Grassland is assumed to refer to the floodplain grazing marsh and lowland meadow habitats covered in the Farmland and Grassland HAP. Most of the Semi-improved Neutral Grassland and the Unimproved Neutral Grassland will be covered by the Upland Hay Meadows HAP. An unknown amount will refer to the Neutral Grassland referred to in this habitat statement. The Unimproved Acidic Grassland and Unimproved Calcareous Grassland SINC categories also refer to the habitat covered by this statement.

Acid Grassland – some 76 ha scattered on eleven SINC sites, the two largest areas being 22 ha at Hall Moss – Hurder moss and 28 ha at Huntworth common (SINC[2]).

Calcareous Grassland - 30 ha is given in the Regional audit (Selman[9]), 8 ha of which occurs on four SINC sites (7 ha likely to be Upland Calcareous and 1 ha Lowland Calcareous). The rest may be on SSSIs or on undesignated sites.

Neutral Grassland – an unknown amount on road verges, in churchyards and on SINC sites.

Requirements

The way in which the majority of this habitat is managed as working farmland is crucial for its conservation. The uptake of DEFRA's Environmental Stewardship Scheme by farmers will be critical to the conservation of these rare grasslands.

Conservation action is required for Unimproved Grassland road verges. These should be surveyed and any qualifying for SINC status be assessed by the SINC Panel. The best of the non-qualifying verges should be termed Special Interest Verges and managed favourably for wildlife by those responsible, which may be North Yorkshire County Council, Craven District Council, parish councils or individual landowners. The management of verges is required to maintain those in good wildlife condition and to enhance those that have the potential to be richer.

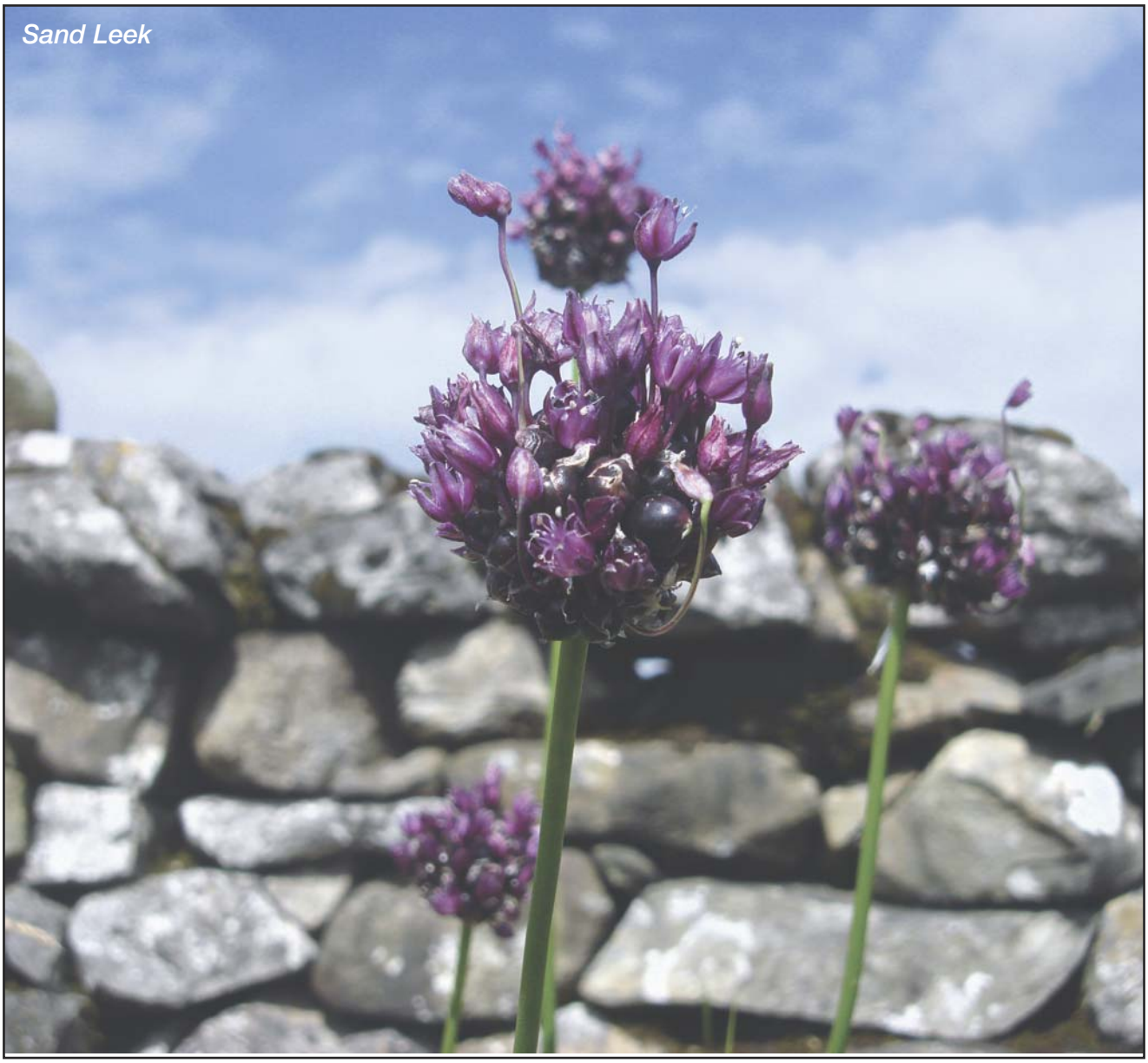




Patches of Unimproved Grassland surviving in churchyards have largely survived by luck, due to a long history of traditional and non-intensive management. Interested parties need to be advised, good practice shared and good examples of what has been referred to as 'God's acre' celebrated.

Opportunities

- ESS agreements.
- Changes in Highways Authority verge cutting management, to benefit verges of special interest.
- Expansion of Unimproved Grassland habitats into parks and open spaces, through changes to policies and management practices of local authorities.



Sand Leek





Metalliferous Grassland

Metalliferous Grassland Habitat Statement

Our objective for Metalliferous Grassland is:

➢ **To maintain the existing resource, enabling it to develop naturally.**

Introduction

Metalliferous Grasslands may be species-rich and are of conservation interest because the species are extremely specialised and examples are rare. These are communities that have developed on toxic mining spoil from earlier lead, silver, zinc, barium and fluorspar mining, and on river shingle bars where waste from historic ore dressing plants was released into rivers. Contamination levels vary depending upon the age and mineral content of the waste. This grassland type is also called Calaminarian Grassland. It is likely to include at least some OV37 Sheep's Fescue - Spring Sandwort NVC community if it is well-developed.

Metalliferous Grassland is typically rabbit-grazed and the most contaminated sites are sparsely vegetated, with metal-tolerant species and rich lichen communities. Over time heavy metals are leached out allowing less tolerant species to seed in, eventually forming a closed canopy of grasses and later shrubs and woodland. This process is increased in areas of high rainfall and where grazing is absent.

Indicator lists are usually developed from less common species occurring in the appropriate National Vegetation Communities. These may be either widely geographically spread or extremely localised on exceptionally good examples. Characteristic plants include Spring Sandwort, Alpine Penny-Cress, Sheep's Fescue, Mountain Pansy, Common Scurvy Grass, Wild Thyme, Thrift and Moonwort. Sparsely vegetated sites are important for invertebrates.

Regional status

This habitat is scarce but widespread, closely linked to former mining areas especially in the uplands.

Local status

This unique vegetation community occurs at Cononley lead mine at grid reference SD 980458, where it is still in a stage of ecological development and does not yet show the full suite of typical species.

Scrutiny of the individual SINC citations has revealed that Metalliferous Grassland does not occur on any SINC.

Requirements

These grasslands are mostly in areas of sheep grazing, so their current management tends to be one of grazing both by sheep and rabbits. The re-working of spoil for minerals re-activates toxins and can take sites back to an early successional stage. These sites are little threatened and are best managed by the current regime of sheep grazing.

Opportunities

- ESS agreements.





Built Environment

Built Environment Habitat Statement

Our objective for the Built Environment is:

- **To promote wildlife and nature conservation management across the Built Environment.**

Introduction

The Built Environment of the Craven BAP area consists of market towns and villages, with small hamlets and some isolated farm buildings, connected by a network of roads and lanes. Some good examples of flower-rich road verges occur in the area and these provide relict patches of Unimproved Grassland habitat.

Both active and disused railway lines occur with engineered cuttings, embankments and bridges. The development of transportation is further demonstrated by the Leeds and Liverpool Canal, with its associated tow paths, aqueducts and tunnels.

Dry stone walls are a common landscape feature. Built with local stone they are geologically and therefore biologically diverse. Minor features such as stone cattle creeps provide further built diversity and further wildlife opportunities.

Farmland is drained by a network of ditches which may be dry, slow flowing or standing water. Exploited by wildlife they are currently managed by the Internal Drainage Board (IDB) or individual landowners.

The area's legacy of winning raw material from the ground has left features such as old mines, shafts, spoil heaps and quarries. As these features are reclaimed by nature they provide good habitat.

Within towns and villages, examples of green space abound, and these include private areas such as factory grounds as well as public open space such as parks.

Urban green space, such as parks, churchyards, village greens, allotments and schools grounds provide a home and food source to a whole range of species, including some declining species, for example Song Thrush and Bullfinch. Some stonework, brickwork and gravestones are important for flowering plants, ferns, mosses and lichens, as well as insects and spiders.

Taken together, these wild spaces provide a significant habitat resource for species living in our towns and villages as well as those that use them as corridors linking areas of more open landscape. With careful thought, the value of these important spaces to wildlife can be enhanced without affecting their economic or social value, whilst allowing residents to derive considerable pleasure from watching urban wildlife thrive.

Many of these habitats link to gardens and in turn to semi-natural habitats. Because many of them are accessible to the general public, they are ideal candidates for public involvement in conservation.

Elements of the Built Environment with existing or potential wildlife value:

Parks
School grounds
Churchyards
Road verges
Railway corridors (including disused)
Disused quarries
Mines
Tunnels
Cattle creeps
Amenity fields
Golf courses
'Waste ground'
Canals
Ditches
Dry stone walls
Wildlife-friendly caravan sites
Buildings





Current issues, threats and opportunities

Buildings harbour wildlife, from nesting birds and roosting bats to tiny ferns and lichens. However, conversions and repairs often exclude wildlife, partly due to the widespread belief that wildlife is always damaging to property. Conservation organisations have the opportunity through the BAP to reassure and advise on these matters. Planning officers must ask for appropriate surveys (protected species, such as Bats, are a material consideration in the planning process) and can introduce mitigation in to planning decisions.

Most of the very best species-rich road verges are threatened by mismanagement, uncontained salt piles or neglect. It would be relatively easy to work with the Highways Authority, parish councils and verge owners to conserve the best examples.

The long-term maintenance of dry stone walls is important as these landscape features are vulnerable over time to collapse and abandonment. Key communities of mosses and lichens occur, as well as stone walls providing nesting and invertebrate hibernation sites. The rarer lichens are so sensitive to chemicals that they are damaged by atmospheric pollution and even by the high zinc content in drips falling from wall-top wiring.

Urban green space includes both greenfield and brownfield sites. Brownfield sites are on land that has been previously used but are currently abandoned or derelict. These then develop pioneer vegetation communities and as they get older, natural succession leads to wildlife-rich habitats. There is a turnover of brownfield sites as some with well-established habitats are lost to new development and existing plots are abandoned.

Government policy favours the re-use of brownfield sites for development, so these are best seen as temporary wildlife assets. There is also likely to be a net loss of such sites over time. However, careful planning can lead to the better parts of sites being retained for their biodiversity interest upon re-development. It is therefore important that brownfield habitats are surveyed and recorded.

Sensitive ditch management helps ditch communities. Approved methods of clearing ditches include doing alternate sides and not dumping the dredgings immediately onto the bank top.

Various open spaces can be positively managed for wildlife, such as council parks, shelter belts, school grounds, churchyards and private grounds such as caravan parks, golf courses and hospitals. Many well-maintained sites could be both wildlife-friendly and attractive for the public, while saving on maintenance costs. Again there is a role for interested parties to lobby and advise managers and the public, and to present a case for having a mixture of these habitats along with more formal ones.

Targets

- To offer good conservation advice to appropriate decision-makers.
- To lobby decision-makers as appropriate, to conserve good wildlife habitat and wildlife corridors.
- To promote wilder areas within currently formal settings.
- To promote environmental education within schools and clubs.
- To celebrate wildlife in the Built Environment.

Opportunities

- Nature conservation gains through the planning process.
- Partnerships with community groups.
- ESS agreements to include dry-stone wall conservation.
- Agreed wildlife-friendly after use for former mineral sites.





Gardens

Gardens Habitat Statement

Our objective for Gardens is:

- **To promote wildlife gardening and the responsible use of resources such as water, peat and soil.**

Introduction

Gardens and gardeners can play an important role in caring for the wildlife of Craven. This habitat statement covers private gardens, but it links with much of the open green space covered in the Built Environment habitat statement. Different gardening techniques lead to a great diversity of gardens - from those that are managed intensively, to those where gardeners find pleasure in allowing a degree of wildness into the garden. There is no doubt that gardens are important for people and with over 25 million in the UK they also provide an important wildlife resource. Indeed, each is like a pocket nature reserve and the variety of plants and animals is enormous.

Gardens are part of the network of corridors formed by hedgerows, streams, ditches, wooded shelter belts, road verges and railway corridors. These wildlife corridors and stepping stones are important for the dispersal of plants and animals. As the adverse impacts of climate change increase, the importance of a mechanism by which wildlife can migrate to more suitable conditions will become critical. Nature Reserves are static in the landscape, but parks and gardens have a greater degree of flexibility, which may allow habitats to 'migrate' with changing environmental conditions.

The decline in familiar plants and animals has been highlighted by the inclusion of a number of "common" species into the revised UK BAP habitats and species list (2007). These include Hedgehogs, Song Thrush, Bullfinch and the Common Toad. Gardens are a valuable resource for these species, and are important habitats for invertebrates as well, including many scarce species.

Responsible gardening - protected species

Some species have special protection, a few of which such as Bats and Badgers, use gardens. It is a legal requirement to consult Natural England if a protected species is to be affected - disturbing or causing harm to them is illegal. NE staff are available to give advice. It is also illegal to knowingly disturb nesting birds, so care needs to be taken when, for example, cutting hedges or removing shrubs and trees. The best time to undertake such work is mid-August to mid-March.

Current issues, threats and opportunities

Many gardening decisions depend upon soil type and it is worth knowing the type of soil you are working with. Although popular, the excessive use of chemicals including pesticides and fertilisers can damage the environment if they get into watercourses and can kill beneficial wildlife as well as target pest species. There is an opportunity for reducing chemical use by organically gardening.

Understandably gardens are often full of exotic, non-native species, some of which provide valuable food and cover. However some non-native species are invasive and once in the wild become a problem. Examples include Rhododendron, Japanese Knotweed, Himalayan Balsam and a variety of exotic pond plants, the worst being New Zealand Pygmy Weed, which can grow up to 1m a day! Some other plants have become naturalised and need monitoring in case they become problematic. These include Lupins and Shasta Daisy. Buddleias are now widespread, due to their role





as colonisers of dry habitats such as railway sidings and brickwork.

A serious issue and one with international consequences is the use of peat products. Using peat is poor environmental practice because it is a non-renewable resource that is dug from peatlands that are of international wildlife value, destroying them in the process. Although many British peatlands are now protected by our robust legislation, large amounts are being imported from Eastern Europe. As the debate continues about the gardening qualities of peat alternatives, gardeners can try other products for themselves and boycott the use of peat.

Similarly, 'water worn' limestone is a natural and irreplaceable resource that forms our nationally important limestone pavements, including ones within the Craven portion of the Yorkshire Dales National Park. Although British pavements are well-protected by legislation those in Ireland and elsewhere are being exploited and destroyed for the garden industry. Gardeners can make a stand by not buying rockery limestone.

The issue of provenance has recently come to the fore. Many seeds, for example tree seeds used to produce trees at nurseries, are sourced from the continent. There is some evidence to show that native British species such as insects fare better on varieties that have a long history of growing in their area.

Targets

- Promote the benefits and joys of wildlife gardening.
- Monitor the spread of naturalised non-native species and control if appropriate.
- Encourage the development of peat alternatives by supporting garden centres that are investing in non-peat products.
- Where possible buy native provenance varieties.

Some suggestions on what you can do to help.

Good gardening practice to benefit wildlife:

- Buy and use only peat-free compost or make your own compost from kitchen peelings and garden cuttings. Recycling measures such as composters and water butts are readily available. Avoid buying rockery limestone that may have come from limestone pavements, which are irreplaceable.
- Reduce the use of pesticides, including slug pellets, to a minimum - try alternative methods of pest control.
- Maintain lawns that have never had chemicals put on them (e.g. fertiliser or weed killer). These can be rich in fungi, including in one case, Pink Waxcap, and invertebrates.
- Avoid introducing garden plant material (tubers, roots, seeds), including pond plants into the wild – some are very invasive.
- Fit your cat with a collar and bell.
- Feed the birds and provide fresh water.
- Avoid cutting hedges during the bird-nesting season from March to August.
- Leave seed-bearing flower heads to mature and provide food for birds before winter pruning.

Build a wildlife garden

- Set aside a small part of the garden to become 'wild' with less intensive management. Allow an area of lawn to develop into a wildflower meadow for plants and insects.
- Plant fruit trees, berry bushes and soft fruit and leave windfall fruit for foraging birds and insects.
- Use varieties and a mix of flowers, shrubs and trees (native ones where possible) that provide a continuous supply of nectar, fruit and berries.
- Grow native climbers such as Ivy as shelter and nest-sites for birds and insects.

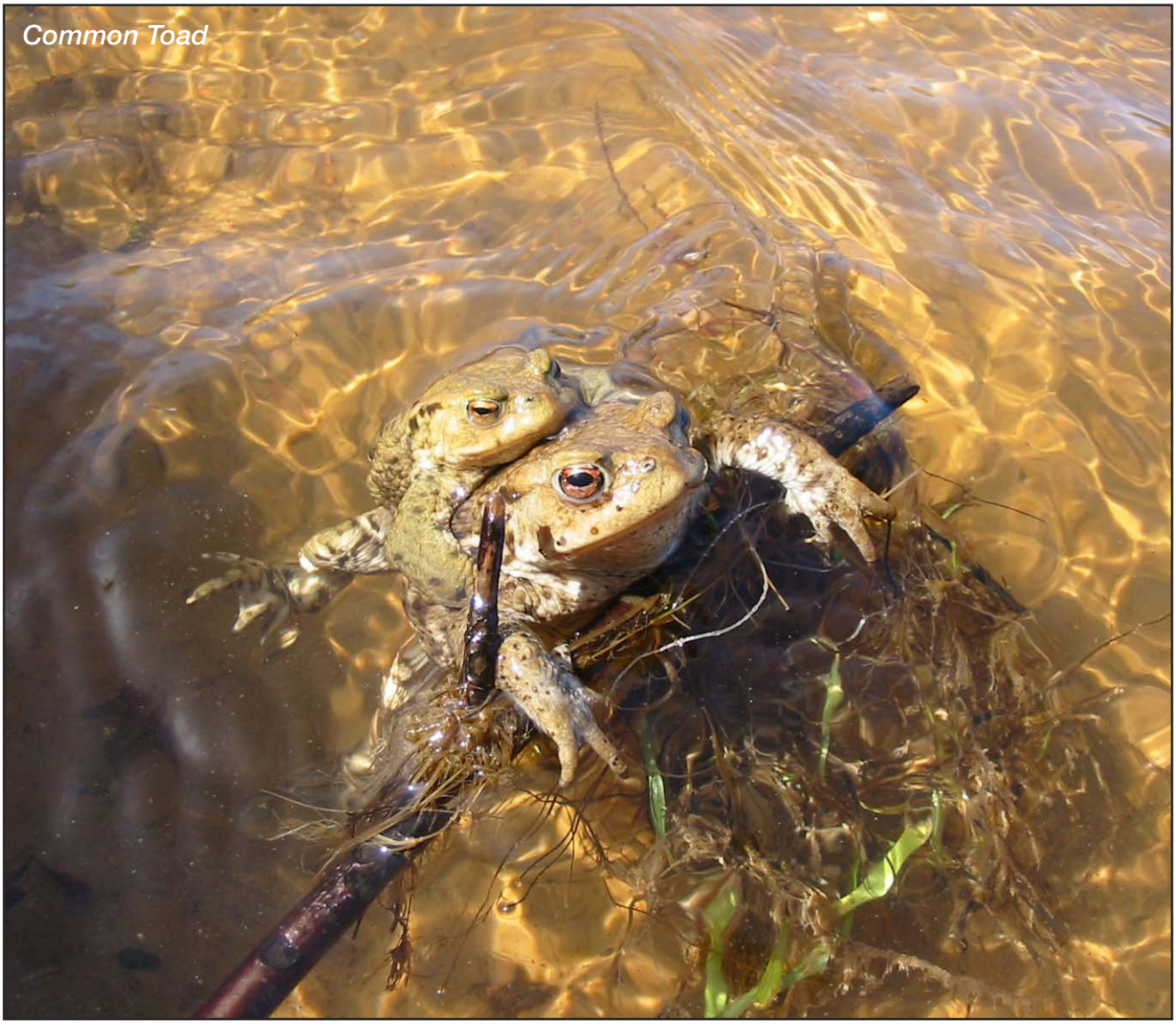




- Leave fallen timber to decay so that fungi can grow, and make log piles for hibernating Toads, Frogs and Newts in damp corners of your garden.
- Provide nest boxes for birds, including House Martins, Bumble Bees and Bats or perhaps create a nesting site for the Mason Bee using special bee bricks. Leave openings in barns and outhouses to give entry to nesting Swallows.
- Water is important for wildlife so consider creating a wildlife pond - without Goldfish – advice on the design of wildlife ponds is readily available.

Wildlife gardening information is readily available including the following free English Nature pamphlets (Visit the Natural England website):

- Plants for wildlife-friendly gardening.
- Reptiles in your garden.
- Mini-beasts in the garden.
- Amphibians in your garden.
- Dragonflies and damselflies in your garden.
- Gardens and biodiversity.
- Composting and peat-free gardening.
- Focus on bats.
- EN Gardening for Wildlife CD.



Common Toad





Species Action Plans

Bats
Small Pearl-Bordered Fritillary Butterfly
Manchester Treble-Bar Moth

Bats

Bats
Species Action Plan

Our objectives for Bats are:

- **To ensure the maintenance of the full range of species at natural population levels within the District.**
- **To improve the habitats available to Bats.**

Introduction

There are 16 species of Bat in Britain, eight of which can be found locally. Each species has its own particular requirements, but as a group they may be found in all habitats. Most species do use buildings, so Bats have a special connection with humans.

During the past century most species are thought to have declined, although there is now some evidence from the National Bat Monitoring Programme that some species are beginning to recover. However, anecdotal evidence suggests that Bats are not as common as they used to be. The secretive nature of Bats and the difficulties this presented for their study prior to the development of sophisticated technology makes it hard to quantify the losses.

Bats feed on insects and in summer can often be seen hunting along rivers and woodland edges where insects are numerous. In winter, when insects are difficult to find, Bats hibernate. Although summer roosts are mainly in warm locations, hibernacula are usually in cold places with stable temperatures, such as caves. This helps minimise energy loss, an important consideration for small mammals. Being long-lived animals they return to the same places year after year.

National status

Sixteen species of Bat breed regularly in the UK with the greatest range of species in the south.

Regional status

Nine species occur within Yorkshire and the Humber Region, eight of which have been confirmed in North Yorkshire. These are Whiskered, Brandt's, Daubenton's, Natterer's, Common Pipistrelle, Soprano Pipistrelle, Noctule, Brown Long-Eared and Leisler's Bats. There are historic records of Lesser Horseshoe and Barbastelle Bats and a few records of Nathusius' Pipistrelle.

Local status

In Craven there are no records of Leisler's Bat, but the other eight Yorkshire species have been recorded. There are relatively few records in the District outside of the National Park, but this is likely to be due to under-recording.

Legal status

All Bats and their roosting places are fully protected under the Wildlife & Countryside Act 1981 (as amended). Protection applies to roosts even when the Bats are absent. Bats are also protected under Conservation (Natural Habitats, &c.) Regulations 1994.

Conservation status

Whiskered bat &/or Brandt's Bat – few roosts known.
Daubenton's Bat – widespread but restricted to areas near water.
Natterer's Bat – few roosts known, probably under-recorded.
Common Pipistrelle Bat – common and widespread.
Soprano Pipistrelle Bat – probably widespread, especially near water.
Noctule Bat – few roosts known.
Brown Long-Eared Bat – widespread, third commonest species.





Threats

- Loss of roost sites and hibernacula, both accidental and deliberate.
- Reduction of food sources through the widespread use of insecticides.
- Habitat removal and fragmentation of the landscape leading to disruption of commuting routes.

Requirements

- A variety of maternity and hibernation sites including houses, bridges, hollow trees, caves and tunnels.
- A mosaic of habitats to provide good sources of insects on which to feed, especially trees, hedges, unimproved grassland and freshwater.
- A network of wildlife corridors and habitats to allow Bats to move between feeding, roosting and hibernation sites.
- Building works to be planned and timed to avoid disturbing Bats and destroying or obstructing roosting places.
- Better understanding of Bats and their requirements.
- Monitoring of Bats - ideally each roost owner to count their own Bats and pass the information to the North Yorkshire Bat Group (NYBG).
- Continuing public relations work.

Current local action

- NYBG holds records of all known Bat roosts within the county and provides advice to householders, landowners and others in conjunction with Natural England.
- The Bat Conservation Trust (BCT), with the support of Government agencies and volunteers, runs the National Bat Monitoring Programme to monitor changes in populations of various species.
- NYBG organises public events to foster a public understanding of Bats and their conservation.
- Developers wishing to carry out works which would impact on Bat roosts are required to obtain a licence for such works and to provide suitable mitigation measures to enable bat populations to be maintained. The Local Planning Authority is required to consider Bats as part of the planning process.
- North Yorkshire County Council surveys all bridges prior to maintenance work.

What you can do to help:

- Report roosts, including date and time of emergence to NYBG.
- Include Bat-friendly features when carrying out repairs to buildings.
- Plant night scented garden plants to attract insects on which Bats feed.





Manchester Treble-Bar Moth

Manchester Treble-Bar Moth Species Action Plan

Our objectives for the Manchester Treble-Bar are:

- **Protect and manage the existing site.**
- **Maintain a viable, self-sustaining population through good habitat management and species management.**

Introduction

The UK conservation status of the Manchester Treble-Bar is notable / Nb. This means that the species is restricted to 31-100 of the 10km squares of Great Britain.

The Manchester Treble-Bar is an attractive Geometrid moth up to 30mm across its wings. These are of a pale grey ground cover barred with brown with a bright rusty reddish flush. The adult is readily disturbed from the vegetation and flies on warm days during August. The eggs over-winter and the larvae emerge in the spring. The caterpillars are reddish with a yellowish-green stripe. They feed on the flowers and leaves of Bilberry, Cowberry and Cranberry. However, details of the life history are poorly known (Sutton and Beaumont[14]), and details of exact habitat requirements are unknown (P. Marsh, pers. comm.).

National status

It has a predominately northern distribution, being widespread and probably under-recorded in northern and central Scotland. It is found widely in upland Northumberland but otherwise rather scarce south of the Scottish border. It is found on a very few bogs and mosses in western England from Cumbria to Shropshire (Waring[15]).

Regional status

Regionally it has been recorded from only four 1km squares within Watsonian Yorkshire and two in Watsonian Lancashire (Vice County 60). Few breeding sites are known in northwest England. Lately it has been found on Caton Moor (Lancashire VC60) and it is found on a few sites in the Lake District.

Local status

The Manchester Treble-Bar is a recent re-discovery in both Yorkshire and Lancashire. The first two Yorkshire records since lists in 1883-6 and 1904 (Porritt[16],[17]) are at Ribblehead (VC64 in the Yorkshire Dales National Park) on 3/8/97 and at Low Bentham (VC64 Craven district) on 12/8/97 (Beaumont[18]).

This species was located on Burn Moor, near High Bentham in 2003, (VC64 Craven district, 18/7/03), (Whitaker pers com). In 2004 it was confirmed as locally common in early August on part of this site straddling the border with Lancashire (VC60) (Marsh pers com).

This currently leaves the Craven BAP area with one site:

- Burn Moor, 'Great Stone of Fourstones' near High Bentham, on an area of wet heath at SD 670.664, straddling the border with Lancashire. In 2004 it was confirmed as locally abundant on this site.

Threats

The Burn Moor site, the only known breeding location in Yorkshire, is a particularly vulnerable habitat of wet heath/rush pasture and wet mosses. Habitat deterioration before the ecological requirements of the species are researched and understood is therefore a concern. There is a potential problem that stock may congregate in bad weather or if fed, causing localised damage to the vegetation, on lower lying parts of the site such as near Great Stone of Fourstones.





Requirements

- The status and local distribution of the moth on and around Burn Moor is not fully understood and requires further attention.
- Further work is needed on the extent and distribution of these habitat types on and around the site.
- Further work is needed on the habitat requirements of the moth, of which little is known.
- Owners and land managers of the two sites to be contacted with the aim of positively managing the sites for the moth.

Due to this lack of knowledge, no detailed recommendations can currently be made.

Current local action

- Burn Moor (Bentham) is under a 2001 Upland Countryside Stewardship agreement (for commons), which arose following a situation where overgrazing was an issue.
- Ad hoc survey of suitable sites by Butterfly Conservation volunteers.

Opportunities

- Survey and research by the charity Butterfly Conservation, especially for the Low Bentham site where the species was last reported in 1997.
- The formation of management advice and land management agreements under the DEFRA ESS.
- Identification and management of connected wet grassland sites, which could be managed to support the recovery and expansion of the known meta-populations.





Small Pearl-Bordered Fritillary

Small Pearl-Bordered Fritillary Species Action Plan

Our objectives for the Small Pearl-Bordered Fritillary are:

- **Maintain viable self-sustaining populations of Small Pearl-Bordered Fritillary through good habitat management and species management.**
- **Protect populations threatened by small size and lack of connectivity with other populations.**
- **Increase the distribution of the species by expanding the population to new and former sites.**

Introduction

In the uplands, especially the north and west, the Small Pearl-Bordered Fritillary occurs on open moors and marshy pastures with the larvae using Marsh Violet. This is now the most common location for Small Pearl-Bordered Fritillary, reflecting the disappearance of suitable lowland habitat in the south and east of England. The lowland habitat is the early stages of woodland, where Common Dog Violet is the larval food plant used. Historically the butterfly occurred in suitable habitats over much of England, Wales and Scotland, but over the last 150 years the bulk populations of the two Pearl-Bordered Fritillary species have been gradually restricted to the west of mainland Britain.

The Small Pearl-Bordered Fritillary is a UK BAP priority species. In Craven it is one of only two species of butterfly identified as 'high priority' by Butterfly Conservation's North East Regional Action Plan. Small Pearl-Bordered Fritillary was included in the first tranche of species in 'Nature in the Dales', the Yorkshire Dales National Park BAP (YDNPA[3]) requiring a SAP in addition to actions listed in relevant habitat action plans.

National status

The majority of the British Small Pearl-Bordered Fritillary sites are now found in Scotland although the species is still locally common in parts of the English Lake District.

Regional status

In Yorkshire, the Small Pearl-Bordered Fritillary occurred widely in the eastern and central lowlands at the start of 20th century (Porritt[20], [21]). However, the species has disappeared from south, south-east and central Yorkshire. In the first summary of Yorkshire Lepidoptera distribution since 1904, the Lepidoptera Committee of the Yorkshire Naturalists' Union (YNU[22]) noted Small Pearl-Bordered Fritillary as being locally common on sites in vice-counties VC61 (York, Selby, East Yorkshire and Humberside) & VC62 (North York Moors area) but the only VC64 locality was Austwick Moss in Craven. It is highly likely that the marked county-wide decline in the first half of the 20th century can be attributed to the end of coppicing and the subsequent decline of their food plant.

Local status

In 1989 Sutton & Beaumont[23] listed four sites in VC64 (Austwick Moss SSSI, near Clapham, Newby Moor SSSI, Lawkland Moss SSSI and Cocket Moss SSSI and one site near Aysgarth in VC65 (Richmondshire area). It is probable that this summary did not adequately reflect the distribution of the species due to under-recording.

In 1996, Whitaker[24],[25],[26] set out to relocate and investigate the species on these five West Yorkshire sites and to look for the species elsewhere in VC64 & 65. This resulted in the identification of seven sites in the YDNP and six in the Craven lowlands and Gisburn Forest in





Lancashire. One of all these sites (Newby Moor SSSI) was found to be a complex of small local habitat patches which supports a true meta-population of the butterfly. Subsequently the species has become extinct on at least four of these sites including that long established on Austwick Moss (Whitaker pers com. 2005).

This currently leaves the Craven BAP area with four sites:

- Newby Moor SSSI.
- Austwick and Lawkland Moss SSSI (2 sites).
- Cocket Moss SSSI.

These should be considered as integral to the wider group of sites that extend into the southern YDNP and the mid-Ribble Valley area of Lancashire close to Craven (Whitaker[27]).

Threats

- Loss of populations through habitat degradation.
- Isolation of fragmented populations.
- Heavy grazing, especially by sheep, during the growing period is likely to be detrimental.

Requirements

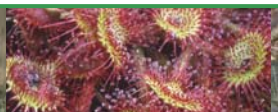
- Good management of the appropriate habitats is desirable (Whitaker[26], Ellis[28],[29],[30]). In Craven the butterfly is usually found on mire sites and is dependent on Marsh Violet on parts of the site which are usually a mosaic of the following NVC communities:
  M6 - Star Sedge - *Sphagnum recurvum/ Sphagnum auriculatum* mire,
  M23 - Soft Rush / Sharp-Flowered Rush - Marsh Bedstraw Rush Pasture,
  M25 - Purple Moor Grass - Tormentil Mire.
- In general, management should be aimed at encouraging Violets (the larval food plants) and preserving adjacent areas of nectar plants which are important to the adults. The M23 vegetation community is likely to be the most important part of the habitat mosaic and the most likely to support the Marsh Violet and therefore the butterfly. During the growing season Marsh Violet needs a prolonged period free from competition with rank vegetation, drought and grazing. However, light cattle grazing during late summer and winter is likely to be beneficial. The following are requirements:
  1) Rotational regimes to control rank vegetation, Bracken and encroaching Scrub.
  2) Prevention of shading of areas of Violet habitat.
  3) Prevention of drainage of Mire sites.
  4) Prevention of damaging agricultural operations such as:
     a) Application of any fertilisers, lime or insecticides.
     b) Inappropriate grazing regimes; especially grazing by sheep during the growing season.
     c) Abandonment (long-term lack of grazing or mowing).
     d) Intensive mowing.
  5) Light cattle grazing during late summer and winter is likely to be beneficial.
  6) Formal notification of the local statutory planning authorities and Natural England with accurate location and the significance of all breeding sites.

Current local action

Ad hoc surveys by Butterfly Conservation volunteers.

Opportunities

- Survey and research by the charity Butterfly Conservation (BC).
- Identify suitable habitats and the status of the species on those sites (BC). Identify sites that are potentially suitable and consider protection of the habitat.
- The formation of management advice and land management agreements under the DEFRA ESS. The species would be considered for HLS with appropriate habitats included in any application.


Appendices

Appendices

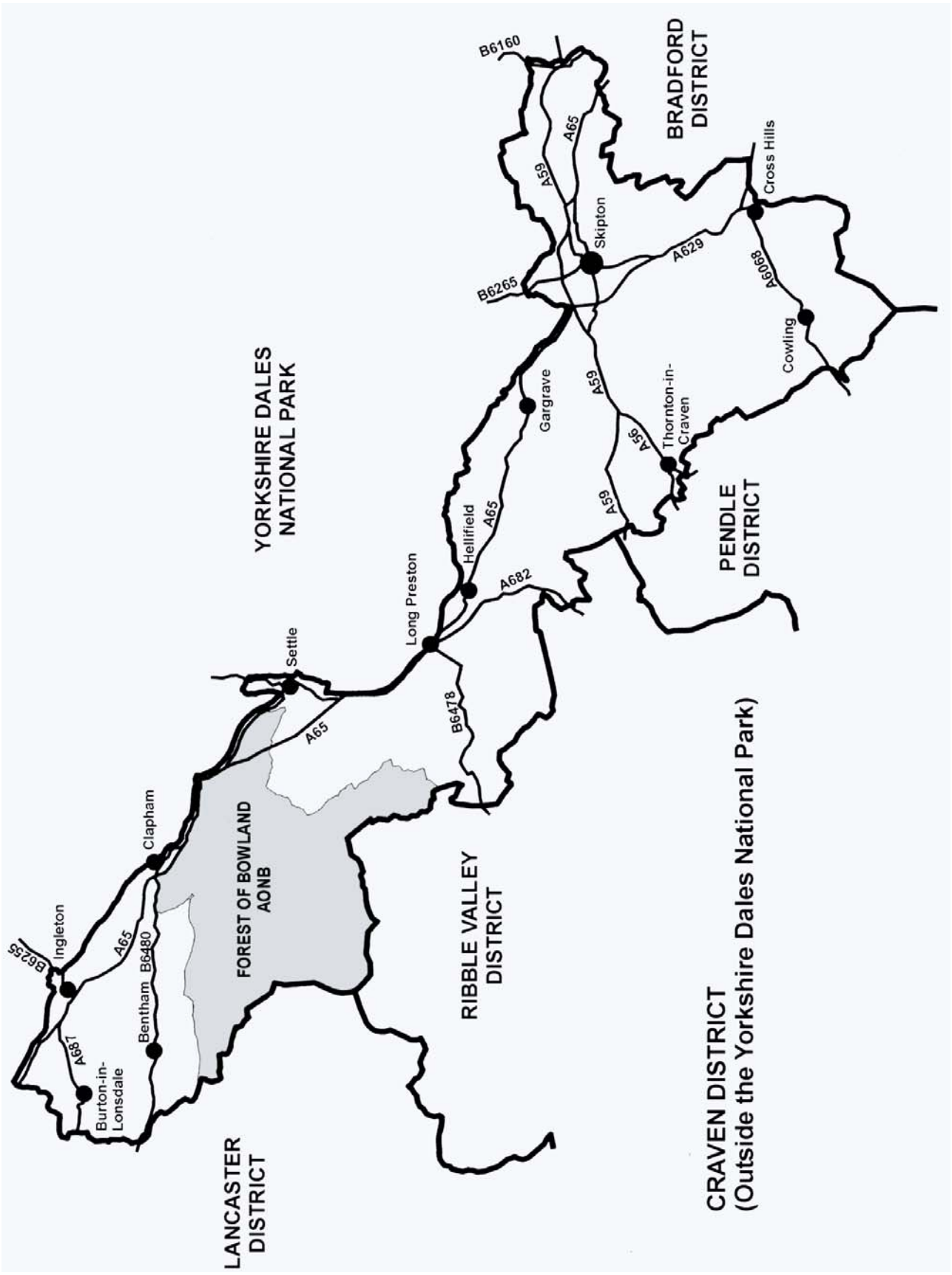
Appendix 1
Craven Biodiversity Action Plan Steering Group

Name	Organisation (if any)
Phyll Abbott	Botanical Society Of The British Isles
Judith Allinson	Craven Conservation Group
Amanda Best	Environment Agency
Julia Birkinshaw	North Yorkshire County Council
Ann Blackburn	AB Consultancy and Yorkshire Pennine Local Seeds
Dr Mike Canaway	Craven Conservation Group
Ian Court	Yorkshire Dales National Park Authority
Jeremy Dick	Forestry Commission
John Drewett	North Yorkshire Bat Group
Phil Eckersley	Natural England
Sam Ellis	Butterfly Conservation
Hilary Fenten	CPRE
Martin Fuller	Environment Agency
David Fullwood	Internal Drainage Board
Robert Goodison	Natural England
Mick Hoban	Forestry Commission
Jean Kendrew	Cross Hills Naturalists' Society
Phil Lyth	FWAG
Graham Megson	North Yorkshire County Council
Matthew Millington	North Yorkshire County Council
Liz Neale	Craven Conservation Group
Roger Neale	Craven Conservation Group
Simon Pickles	NEYEDC
Ben Scotting	Yorwoods
Helen Sergeant	Craven Conservation Group
Kate Senior	Craven District Council
Brian Shorrock	Craven Conservation Group
Elizabeth Shorrock	Craven Conservation Group
Brian Slater	Individual
Terry Smithson	Yorkshire Wildlife Trust
Robert Starling	Craven Conservation Group
Tim Thom	Yorkshire Dales National Park Authority
Anne Tupholme	Yorkshire Gardens Trust
Dr Terry Whitaker	Butterfly Conservation
Tim Youngs	RSPB

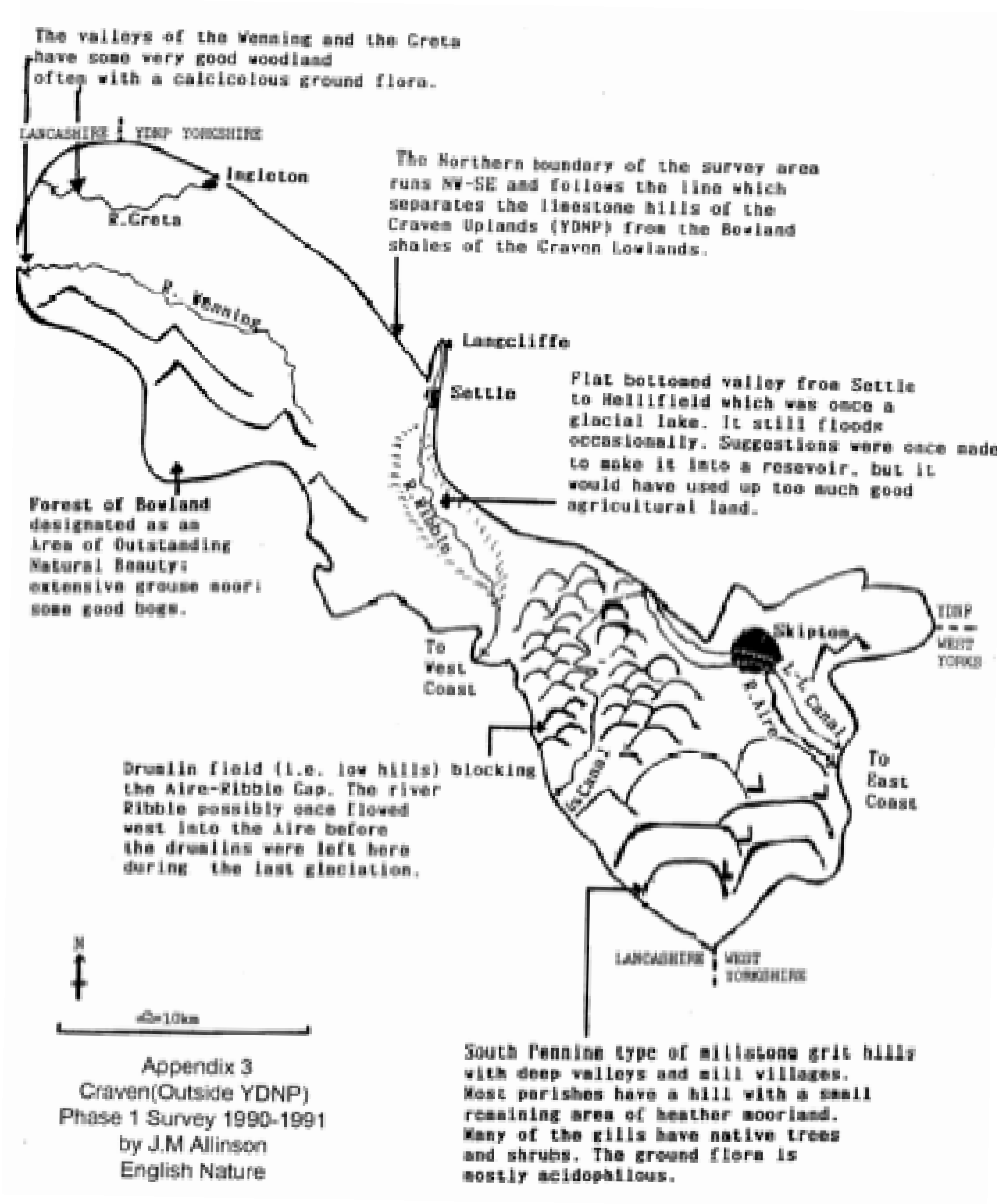




Appendix 2
Map of Craven Biodiversity Action Plan area



Appendix 3
Major Landscape Features of Craven outside the Yorkshire Dales National Park







Appendix 4
Area Measurements for Phase 1 Habitat Categories in Craven outside YDNP 1990-1991 (Allinson[5])

Habitat	Area (ha)	Area (%)	
Woodland & Scrub	378	(1.0)	Broadleaved semi-natural
	239	(0.6)	Broadleaved - plantation
	471	(1.3)	Coniferous - Plantation
	188	(0.5)	Mixed - Plantation
	69	(0.18)	Scrub – *Crataegus monogyna*
	23	(0.06)	Scrub – *Ulex europaeus*
Grassland & Marsh	63	(0.71)	*Agrostis-Festuca-acetosella*
Acid 1883 ha (5.1%)	438	(1.2)	*Agrostis-Festuca*
	876	(2.4)	*Nardus stricta*
	506	(1.4)	*Juncus squarrosus*
Neutral 1008 ha (2.7%)	61	(0.16)	5 hay meadow indicators (HMI)
	947	(2.6)	1 hay meadow indicator
Calcareous 30 ha (0.08%)	30	(0.08)	Calcareous grassland
	1599	(4.31)	Rush pasture
Marshy & Rushes 1630 ha (4.4%)	31	(0.08)	Marshy grassland
Of no conservation Interest 25272 ha (68%)	13238	(35.7)	Improved, no HMI
	487	(1.3)	Improved, no HMI; ridge & furrow
	4281	(11.5)	Very improved or re-seeded
	3760	(10.1)	Re-seeded
Of no conservation	3272	(8.8)	Newly re-seeded. Arable/ley
	31	(0.08)	Arable
	203	(0.5)	Amenity
Of no conservation Interest	231	(0.6)	Bracken
	9	(0.02)	Tall ruderal including *Urtica dioica*
Heathland 1857 ha (5%)	1655	(0.71)	*Calluna vulgaris*
	65	(0.2)	*Vaccinium myrtillus*
	102	(0.3)	*Empertrum nigrum*
	32	(0.08)	*Erica tetralix*





Habitat	Area (ha)	Area (%)	
Mire 1231 ha (3.3%)	104	(0.3)	*E. angustifolium; S recurvum; Drosera*; Water
	456	(1.2)	*Molinia Caerulea* wet or dry
	635	(1.7)	*E. vaginatum*
	11	(0.03)	Acid flush. NVC M6
	18	(0.04)	Basic flush. NVC M10
	7	(0.02)	Fen. NVC M27
Swamp	31	(0.08)	All NVC swamp communities
Water	270	(0.7)	Running or still open water
Rock exposures &	109	(0.3)	Quarry
Waste	4	(0.01)	Mine spoil
	33	(0.08)	Boulders
Miscellaneous	23	(0.06)	Sewage beds
	1903	(5.1)	Buildings, roads & verges
	224	(0.06)	Railways
	5	(0.01)	Mud motor cycle track





Craven Local BAP Habitat	UK BAP	SINC Panel Habitat Types (including NVC types where known
1. Woodland (Wet woodland & riparian corridors) (Upland mixed ashwoods) (Oak woodland)	Wet woodland Upland mixed ash woodland Upland oakwood	Wet woodland (W1 -W7) Upland mixed ash woodland (W9). Also W7 especially 7c, and some of the W8 sub-communities particularly d, e and g but occasionally a, b and c (which also cover Lowland Ash woodland) Upland oakwood (W10, W11, W16, W17) Lowland mixed ash woodlands (W7, W8) Lowland oak/birch rowan woodlands (acid, W10, W16)
2. Scrub		Scrub (W21-W25)
3. Parkland, ancient trees & pollarded trees	Wood pasture and parkland	Parkland (MG6, MG7, W10 + more see UK BAP)
4. Farmland and grassland (arable)	Arable field margins	Cereal field margins Arable weed communities (OV1-OV17)
4. Farmland and grassland (Floodplain grazing marsh)	Coastal and floodplain grazing marsh	Unimproved and semi-improved neutral grassland (species-rich) (MG8) Also MG9-11 and MG13 with bits of more improved MG6/7
4. Farmland and grassland (Lowland meadows) 4. Farmland and grassland (Upland hay meadow)	Lowland hay meadow Upland hay meadow	Unimproved and semi-improved neutral grassland (species-rich) (MG1, MG3 - MG6)
5. Hedgerows	Hedgerows	Ancient and/or species-rich hedgerows (W8, W10, W21-W25) Dry ditches and banks (see NVC for relevant vegetation types)
6. Wet acidic grassland		Acid grassland U5, U6. Mires M23, M25
7. Upland heathland and Blanket bog	Upland heathland Blanket bog	Upland heathland (H9, H10, H12, M16) Blanket bog (M3, M19, M20)
8. Ponds	Ponds Eutrophic standing waters Mesotrophic lakes	Standing water (includes reservoirs) (A2, A5, A7, A8-A13, A14?, A15, A16, A19, A20, A24)
9. Fens	Fens Reedbeds Purple moor-grass meadows	Fen, carr (W1-W6) and reedbed (S1, S3, S4) marsh and swamp (S5-S10, S12, S14, S15, S17-S23, S25-S28; M1/2 unlikely, M3, M10, M13, M16 M21-M23, M25-M27, M36)
10. Lowland raised bog	Lowland raised bog.	Raised and blanket mire (M1-M3 and M18), wet heath (M15), blanket mire (M19), blanket and raised mire (M20), mire (M25) and woodland (W4)
11. Rivers and streams	Rivers	Rivers and streams (A2, A5, A8-A12, A15-A18, S14, S22, S23 & S26)





Craven Local BAP Habitat	UK BAP	SINC Panel Habitat Types (including NVC types where known
Habitat statements		
1. Unimproved grassland (Calcareous grassland)	Lowland calcareous grassland Upland calcareous grassland	Calcareous grassland (CG2, CG9 & CG10)
2. Metalliferous grassland		Calcareous grassland (CG9, CG10, OV37)
3. Built environment		Improved grassland (includes species-poor semi-improved grassland) (MG6, MG7, MG9, MG10) Urban/industrial (communities on unnatural/mixed strata)
4. Gardens		





Appendix 6
Glossary of terms

Animal
Any species belonging to the Animal Kingdom, including mammals, birds, fish, reptiles, amphibians, insects, etc.

Arable weeds
Wild flowers, often annuals, that grow in regularly disturbed soil in an arable environment. This does not include pernicious weeds such as thistles and Goosegrass.

Biodiversity
The variety of life. The term embraces the full range of habitats, species, and the variation found within species (including genetic variation).

Biodiversity Action Plan (BAP)
A plan to conserve or re-create biodiversity. The term may be used to describe the whole process by which this happens, or sometimes a document that sets out how this is to be achieved.

Craven Biodiversity Action Plan
The Craven Biodiversity Action Plan is the plan that leads the process by which action is taken locally to conserve wildlife. It includes those habitats and species for which organisations in Craven have a special responsibility under the UK BAP.

Distribution
The extent of a species' range.

Ecosystem
A community of inter-related organisms.

Eco-tourism
The generation of income through 'green' tourism, e.g. wildlife holidays, bird watching.

Habitat
A type of landscape (e.g. Wet Woodland) characterised by particular communities of vegetation and animals.

Habitat Action Plan (HAP)
One of two sorts of plans contained within the BAP document (see also Species Action Plan). A plan geared towards the conservation or re-creation of a particular habitat.

Habitat Regulations
The Conservation (Natural Habitats &c) Regulations 1994, known as 'The Habitat Regulations', are UK regulations passed to deliver the EC Council Directive 'The Habitats and Species Directive'. They refer to planning, land use, land management and environmental regulation, with emphasis on the roles of Local Authorities (called Competent Authorities). The Regulations are the basis of the Natura 2000 network of sites known as SPAs, SACs and cSACs. The Habitats Regulations aim to protect site of European Community (EC) importance.

Invertebrate
Any animal lacking a backbone. This group include insects (e.g. butterflies, moths, flies, bees, wasps, beetles) and non-insect invertebrates (e.g. worms, molluscs, crustaceans such as Crayfish).

LNR
Local Nature Reserve. A site designated by the Local Authority under the 1949 National Parks and Access to the Countryside Act. A Local Nature Reserve has an educational as well as a wildlife remit.

Meta-population
The stronghold of a population. New sites may be colonised by individuals spreading from this core.

National Vegetation Classification (NVC)
A system for surveying habitats and allocating them to a recognised scientific type. The NVC is a nationally accepted system.

Phase 2 habitat survey
More detailed habitat survey than phase 1, based on individual sites.





Range
The area across which a species can be found.

Riparian
Concerned with rivers e.g.; the corridor of habitat along a water course.

SINC
Site of Importance for Nature Conservation. A non-statutory site recognised by the Local Authority for its nature conservation interest.

SSSI
Site of Special Scientific Interest. Nationally important site given legal protection by the Wildlife and Countryside Act (1981), as amended. SSSIs are notified by Natural England.

Species
A taxonomic group into which a genus is divided, the members of which are capable of interbreeding. For example, the Blackbird *(Turdus merula)* and Song Thrush *(Turdus philomelos)* are related. They are in the same genus so share the genus name *Turdus*. However, they are different species and so have specific second names.

Species Action Plan (SAP)
One of two sorts of plans contained within the BAP document (see also Habitat Action Plan). A plan geared toward the conservation of a particular species.

Sustainable development
Actions to be taken to promote sustainability. Sustainability has been described as "the ability to meet our needs without compromising the needs of our children".

UK Biodiversity Action Plan (UK BAP)
The BAP for the United Kingdom. The UK Government has produced 391 SAPs and 45 HAPs, which detail actions necessary for a wide range of the country's habitats and most threatened plants and animals.





Appendix 7
List of abbreviations and acronyms

AP	Action Plan
BAP	Biodiversity Action Plan
BARS	Biodiversity Action Reporting System
BBS	Breeding Bird Survey
BCT	Bat Conservation Trust
BC	Butterfly Conservation
BTCV	BTCV
BTO	British Trust for Ornithology
CA	Countryside Agency
CAP	Common Agricultural Policy
CAMS	Catchment Abstraction Management Strategy
CBC	Common Bird Census
CDC	Craven District Council
CFMP	Catchment Flood Management Plans
CPRE	Council for the Protection of Rural England
CSS	Countryside Stewardship Scheme
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EC	European Community
EH	English Heritage
EIA	Environmental Impact Assessment
ELS	Entry Level Scheme (ESS)
EN	English Nature
ESS	Environmental Stewardship Scheme
EU	European Union
EWGS	England Woodland Grant Scheme
FC	Forestry Commission
FE	Forest Enterprise
FEP	Farm Environment Plan
FWAG	Farming and Wildlife Advisory Group
GCT	Game Conservancy Trust
GEAC	Good Environmental and Agricultural Condition
ha	Hectare
HAP	Habitat Action Plan
HLS	Higher Level Scheme (ESS)
IACS	Integrated Administration and Control System
IAW	Inventory of Ancient Woodland
ICT	Invertebrate Conservation Trust
IDB	Internal Drainage Boards
IUCN	International Union for the Conservation of Nature
JCA	Joint Character Area
JNCC	Joint Nature Conservation Committee
km	Kilometre
LBAP	Local Biodiversity Action Plan
LDF	Local Development Framework
LEAF	Linking Environment And Farming
LNR	Local Nature Reserve
LPA	Local Planning Authority
LSP	Local Strategic Partnership
LUCT	Lower Ure Conservation Trust
NCC	Nature Conservancy Council
NE	Natural England
NEYEDC	North & East Yorkshire Ecological Data Centre
NR	Nature Reserve
NS	Nationally Scarce
NT	National Trust
NVZ	Nitrate Vulnerable Zones
NYBG	North Yorkshire Bat Group
NYCC	North Yorkshire County Council
OELS	Organic Entry Level Scheme (ESS)
OS	Ordnance Survey
PAT	Partnership and Task Group (see LSP)
PAWS	Plantation on Ancient Woodland Site
PPS	Planning Policy Statement
RDB	Red Data Book
RDS (DEFRA)	Rural Development Service
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
SAP	Species Action Plan
SD	Sustainable Development
SEA	Strategic Environmental Assessment
SEPA	Scottish Environment Protection Agency





SINC	Site of Importance for Nature Conservation
SAC	Special Areas of Conservation
SoCC	Species of Conservation Concern
SPA	Special Protection Area
spp	Species
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Schemes
TPO	Tree Preservation Order
UK	United Kingdom
UK BAP	UK Biodiversity Action Plan
VC	Vice County
WES	Wildlife Enhancement Scheme
WIGS	Woodland Improvement Grant Scheme
WGS	Woodland Grant Scheme
WLO	Wildlife Liaison Officer (Police)
WT	Woodland Trust
WTs	Wildlife Trusts
WWP	Water for Wildlife Project
YDRT	Yorkshire Dales Rivers Trust
YGT	Yorkshire Gardens Trust
YHBF	Yorkshire and Humber Biodiversity Forum
YNU	Yorkshire Naturalists' Union
YOARP	Yorkshire Otters And Rivers Project
YW	Yorkshire Water Services Ltd
YWT	Yorkshire Wildlife Trust





Appendix 8
Useful addresses

Useful websites for SSSI data:
http://www.naturalengland.org.uk
http://www.magic.gov.uk

Websites for biological recording information:
http://www.nfbr.org.uk (National Federation for Biological Recorders)
http://www.brc.ac.uk (Biological Records Centre)
http://www.nbn.org.uk (National Biodiversity Network)

AB Consultancy, Ann Blackburn,
6 Victoria Street, Cullingworth, Bradford, West Yorkshire BD13 5AE
Tel: (01535) 271462
Mob: 07801 593433
E-mail: ABC-aquila@care4free.net

Ancient Tree Forum c/o Woodland Trust
Autumn Park, Dysart Road, Grantham, Lincolnshire, NG32 6LL
Tel: (01476) 581111
Fax: (01476) 590808

British Trust for Ornithology
BTO, The Nunnery, Thetford, Norfolk IP24 2PU
Tel: (01842) 750050
Fax: (01842) 750030
http://www.bto.org

BTCV
3, 5 & 7 Leake Street, off Lawrence Street, York, YO10 3BR
Tel: (01904) 644300
Fax: (01904) 644302
http://www.btcv.org/

Buglife -The Invertebrate Conservation Trust
170A Park Road, Peterborough, CAMBS, PE1 2UF
Tel: (01733) 760881
Fax: (01733) 760884
http://www.buglife.org.uk/

Butterfly Conservation
Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP
Tel: 0870 7744309
Fax: (01929) 400210
E-mail: info@butterfly-conservation.org

Botanical Society of the British Isles
Botany Department, The Natural History Museum, Cromwell Road, London, SW7 5BD
E-mail: coordinator@bsbi.org.uk
http://www.bsbi.org.uk
Craven District Council
Granville Street, Skipton, North Yorkshire, BD23 1PS
Telephone: (01756) 706212
Fax: (01756) 700658
www.cravendc.gov.uk

Natural England
Leyburn Office, Asquith House, Leyburn Business Park, Harmby Road
Leyburn, DL8 5QA
Tel: (01969) 623447
Fax: (01969) 621298
E-mail:leyburn@naturalengland.org.uk
http://www.naturalengland.org.uk

Environment Agency
Coverdale House, Aviator Court, Amy Johnson Way, Clifton Moor, YORK, YO3 4UZ
Tel: (01904) 822565
Fax: (01904) 693748
E-mail: enquiries@environment-agency.gov.uk
http://www.environment-agency.gov.uk/





Environment Agency Fisheries and Recreation Team
Phoenix House, Global Avenue, Leeds, LS11 8PG
Tel: (01132) 134848

Farming and Wildlife Advisory Group
Racecourse Lane, Northallerton, North Yorkshire, DL7 8BR
Tel: (01609) 783632
E-mail: northyorks@fwag.org.uk

Flora locale
Denford Manor, Hungerford, Berkshire, RG17 0UN
Tel: (01488) 680457
E-mail: info@floralocale.org

Forestry Commission
Wheldrake Lane, Crockey Hill, York, North Yorkshire, YO19 4FF
Tel: (01904) 448778
http://www.forestry.gov.uk/

The Limestone Pavement Action Group
c/o Cumbria Wildlife Trust
Plumgarths, Crook Road, Kendal, Cumbria, LA8 8LX
Tel: (01539) 816300
Fax: (01539) 816301
E-mail: info@cumbriawildlifetrust.org.uk

The Mammal Society
2b Inworth Street, London SW11 3EP
Tel: (020) 7350 2200
Fax: (020) 7350 2211

E-mail: enquiries@mammal.org.uk

North and East Yorkshire Ecological Data Centre (NEYEDC)
5 College Street, York, YO1 7JF
Tel: (01904) 641631
Fax: (01904) 557236
E-mail: info@neyedc.co.uk
http://www.neyedc.co.uk/

North Yorkshire Bat Group
3 Victoria Row, Eppleby, Richmond, North Yorkshire, DL11 7BE
Tel. (01325) 718133
E-mail: johndrewett@btinternet.com

North Yorkshire County Council
Heritage & Environment Section, Development & Countryside Service, County Hall, Northallerton, North Yorkshire, DL7 8AH
Tel: (01609) 533240
Fax: (01609) 532558
E-mail: countryside@northyorks.gov.uk
www.northyorks.gov.uk

PLACE (People, Landscape and Cultural Environment of Yorkshire)
York St John College, Lord Mayor's Walk, York, YO31 7EX
Tel: (01904) 716753
http://www.place.uk.com/

Plantlife International
14 Rollestone Street, Salisbury,Wiltshire, SP1 1DX
Tel: (01722) 342730
Fax: (01722) 329035
E-mail:enquiries@plantlife.org.uk
www.plantlife.org.uk

The RSPB
The Lodge, Sandy, Bedfordshire, SG19 2DL
Tel: (01767) 680551
E-mail: wildlife@rspb.org.uk
www.rspb.org.uk

The Vincent Wildlife Trust
3&4 Bronsil Courtyard, Eastnor, Ledbury, Herefordshire, HR8 1EP
Tel: (01531) 636441
Fax: (01531) 636442
E-mail: vwt@vwt.org.uk
http://www.vwt.org.uk/





Wildlife Crime Officer
PC1038 Mark Rasbeary
Leyburn Police Office, The High Street,
Leyburn, North Yorkshire DL8 5AQ
Tel: 0845 6060247
Mob: 07980 988287
Fax: (01969) 625044
E-mail:
mark.rasbeary@northyorkshire.pnn.police.uk

The Wildlife Trusts
The Kiln, Waterside, Mather Road, Newark,
Nottinghamshire, NG24 1WT
Tel: 08700 367711
Fax: 08700 360101
http://www.wildlifetrusts.org/

The Woodland Trust
Autumn Park, Grantham, Lincolnshire, NG31
6LL
Tel: (01476) 581135
http://www.woodland-trust.org.uk/

Yorkshire Gardens Trust
Valerie Hepworth, Vice Chairman, The Manor
House, Skeeby, Richmond, North Yorkshire,
DL10 5DX

Yorkshire Naturalists' Union
Mr J A Newbould, Stonecroft, 3 Brookmead
Close, Sutton Poyntz, Weymouth, Dorset, DT3
6RS
E-mail: john_newbould@btinternet.com
http://www.ynu.org.uk/

Yorkshire Wildlife Trust
1 St George's Place, York, YO24 1GN
Tel: (01904) 659570
E-mail: info@ywt.co.uk
http://www.yorkshire-wildlife-trust.org.uk/

Yorwoods
Unit 9, Sycamore Business Park, Dishforth
Road, Copt Hewick, Ripon
North Yorkshire, HG4 5DF
Tel: (01765) 609355
Fax: (01765) 607616
E-mail: info@yorwoods.org.uk





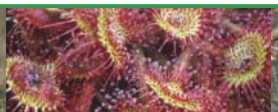
Appendix 9
Scientific names of plants and animals
(Given in order of appearance in the Craven BAP)

Species referred to in the introduction	
Skylark	*Alauda arvensis*
Water Vole	*Arvicola terrestris*
Brown Hare	*Lepus europaeus*
Otter	*Lutra Lutra*
Pipistrelle Bat	*Pipistrellus pipistrellus*
Grey Partridge	*Perdix perdix*
Song Thrush	*Turdus philomenos*
Spotted Flycatcher	*Muscicapa striata*
Tree Sparrow	*Passer montanus*
Linnet	*Carduelis cannabina*
Bullfinch	*Pyrrhula pyrrhula*
Reed Bunting	*Emberiza schoeniclus*
Great Crested Newt	*Triturus cristatus*
White-clawed Crayfish	*Austropotamobius pallipes*
Depressed River Mussel	*Pseudanodonta complanata*
Oak Polypore	*Piptoporus quercinus*
Devil's Bolete	*Boletus satanus*
Pink Waxcap	*Hygrocybe calyptriiformes*
Olive Earthtongue	*Microglossum olivaceum*
Brown Long-Eared Bat	*Plectorus auritus*
Daubenton's Bat	*Myotis daubentoni*
Natterer's Bat	*Myotis nattereri*
Noctule Bat	*Nyctalus noctula*
Soprano Pipistrelle Bat	*Pipistrellus pygmaeus*
Whiskered Bat/Brandt's Bat	*Myotis mystacinus/Myotis brandtii*
Hen Harrier	*Circus cyaneus*
Lesser Spotted Woodpecker	*Dendrocopos minor*
Ring Ouzel	*Turdus torquatus*
Grasshopper Warbler	*Locustella naevia*
Marsh Tit	*Parus palustris*
Starling	*Sturnus vulgaris*
House Sparrow	*Passer domesticus*
Twite	*Carduelis flavirostris*
Atlantic Salmon	*Salmo salar*
Grayling	*Thymallus thymallus*
Bullhead	*Cottus gobio*
Brook Lamprey	*Lampetra planeri*
Brown Trout	*Salmo trutta*
Adder	*Vipera berus*
Slow Worm	*Anguis fragilis*
Common Lizard	*Lacerta vipera*
A Freshwater Shrimp	*Crangonyx pseudogracilis*
A Snail	*Sphaerium (Sphaeriastrum) rivicola*





Species referred to in the introduction	
Cylindrical Whorl Snail	*Truncatellina cylindrica*
A Snail	*Vertigo (Vertigo) alpestris*
Craven Door Snail	*Clausilla dubia*
Small Pearl-Bordered Fritillary	*Boloria selene*
White-Letter Hairstreak	*Satyrium w-album*
Green Hairstreak	*Quercusia quercus*
Purple Hairstreak	*Callophrys rubi*
Manchester Treble-Bar	*Anaitis paludata*
A Centipede	*Geophylus electricus*
A Millipede	*Archiboreolis pallidu*
A Millipede	*Blaniulus gutalatus*
A Millipede	*Macrosternodesmus pallicola*
A Flatworm	*Dugesia lugubris*
A Flatworm	*Planaria torva*
A Leech	*Dina lineata*
Northern Spike-Rush	*Eleocharis austriaca*
Narrow-leaved Marsh Orchid	*Dactylorhiza traunsteineri*
Marsh Gentian	*Gentiana pneumonanthe*
Bird's Eye Primrose	*Primula farinosa*
Mountain Currant	*Ribes alpinum*
Downy Currant	*Ribes spicatum*
Blue Moor-Grass	*Sesleria caerulea*
Lesser Tussock Sedge	*Carex diandra*
Black Poplar	*Populus nigra spp. betulifolia*
New Zealand Pygmy Weed	*Crassula helmsii*
Water Fern	*Azolla filiculoides*
Japanese Knotweed	*Fallopia japonica*
Himalayan (or Indian) Balsam	*Impatiens glandulifera*
Grey Squirrel	*Sciurus carolinensis*
American Mink	*Mustela vison*
Signal Crayfish	*Pacifastacus leniusculus*
Species referred to in the Action Plans	
Sessile Oak	*Quercus petraea*
Bracken	*Pteridium aquilinum*
Bramble	*Rubus fruticosus agg.*
Sycamore	*Acer pseudoplatanus*
Wood Sorrel	*Oxalis acetosella*
Hazel	*Corylus avellana*
Holly	*Ilex aquifolium*
Rowan	*Sorbus aucuparia*
Wavy-hair Grass	*Deschampsia flexuosa*
Silver Birch	*Betula pendula*
Bluebell	*Hyacinthoides non-scripta*
Honeysuckle	*Lonicera periclymeum*
Wood Anemone	*Anemone nemorosa*
Ash	*Fraxinus excelsior*


Species referred to in the Action Plans	
Field Maple	*Acer campestre*
Dog's Mercury	*Mercuralis perennis*
Common Dog Violet	*Viola riviniana*
Early Purple Orchid	*Orchis mascula*
Giant Bellflower	*Campanula latifolia*
Primrose	*Primula vulgaris*
Wych Elm	*Ulmus glabra*
A Millipede	*Blaniulus gutalatus*
Dogwood	*Cornus sanguinea*
Spindle	*Euonymus europaeus*
Purging Buckthorn	*Rhamnus catharticus*
Alder	*Alnus glutinosa*
Sallow	Generally applied to *Salix caprea* and *S. cinerea* and their *hybrids.*
Marsh Bedstraw	*Galium palustre*
Greater Tussock Sedge	*Carex paniculata*
Stinging Nettle	*Urtica dioica*
Yellow Pimpernel	*Lysmachia nemorum*
Rhododendron	*Rhododendron ponticum*
Rabbit	*Oryctolagus cuniculus*
Roe Deer	*Capreolus capreolus*
Pheasant	*Phasianus colchicus*
Gorse	*Ulex europaeus*
Juniper	*Juniperus communis ssp. communis*
Dog Rose	*Rosa canina agg.*
Elder	*Sambucus nigra*
Hawthorn	*Crataegus monogyna*
Blackthorn	*Prunus spinosa*
Meadow Crane's-bill	*Geranium pratense*
Wood Crane's-bill	*Geranium sylvaticum*
Sweet Vernal Grass	*Anthoxanthum odoratum*
Yorkshire Fog	*Holcus lanatus*
Meadow Buttercup	*Ranunculus acris*
Pignut	*Conopodium majus*
Corncrake	*Crex crex*
Great Burnet	*Sanguisorba officinalis*
Bird's-foot Trefoil	*Lotus corniculatus*
Common Knapweed	*Centaurea nigra*
Lesser Stitchwort	*Stellaria graminea*
Betony	*Stachys officinalis*
Common Bent	*Agrostis capillaris*
Red Fescue	*Festuca rubra*
Crested Dog's-tail	*Cynosurus cristatus*
Garden Privet	*Ligustrum ovalifolium*
Yew	*Taxus baccata*
Beech	*Fagus sylvatica*
Purple Moor Grass	*Molinia caerulea*





Species referred to in the Action Plans	
Soft Rush	*Juncus effusus*
Sharp-flowered Rush	*Juncus acutiflorus*
Star Sedge	*Carex echinata*
Brown Bent	*Agrostis canina*
Devil's-Bit Scabious	*Succisa pratensis*
Lesser Spearwort	*Ranunculus flammula*
Marsh Willowherb	*Epilobium palustre*
Lady's Smock	*Cardamine pratensis*
Tormentil	*Potentilla erecta*
Heather	*Calluna vulgaris*
Cross-leaved Heath	*Erica tetralix*
Mat Grass	*Nardus stricta*
Heath Bedstraw	*Galium saxatile*
Heath Rush	*Juncus squarrosus*
Meadow Pipit	*Anthus pratensis*
Wheatear	*Oenanthe oenanthe*
Red Grouse	*Lagopus lagopus ssp. scoticus*
Common Cotton-grass	*Eriophorum angustifolium*
Hare's-tail Cotton-grass	*Eriophorum vaginatum*
Smooth Newt	*Triturus helveticus*
Shelduck	*Tadorna tadorna*
Little Ringed Plover	*Charadrius dubius*
Parrot's Feather	*Myriophyllum aquaticum*
Curly Waterweed	*Lagarosiphon majus*
Goldfish	*Carassius auratus*
Reed Bunting	*Emberiza schoeniclus*
Water Rail	*Rallus aquaticus*
Snipe	*Gallinago gallinago*
Grasshopper Warbler	*Locustella naevia*
Water Shrew	*Neomys fodiens*
Bottle Sedge	*Carex rostrata*
Calliergon Moss	*Calliergonella cuspidata* formerly *Calliergon cuspudatum* and historically *Acrocladium cuspidatum*
Separate-headed or Dioecious Sedge	*Carex dioica*
Common Butterwort	*Pinguicula vulgaris*
Marsh Hawksbeard	*Crepis paludosa*
Marsh Bedstraw	*Galium palustre*
Bog Rosemary	*Andromeda polifolia*
Great Sundew	*Drosera anglica*
Cranberry	*Vaccinium oxycoccus*
Kingfisher	*Alcedo atthis*
Dipper	*Cinclus cinclus*
Sand Martin	*Riparia riparia*
Grey Wagtail	*Motacilla cinerea*
Sea Trout (same sp. As Brown Trout - migratory form)	*Salmo trutta*
Chubb	*Leuciscus cephalus*





Species referred to in the Action Plans	
Barbel	*Barbus barbus*
Giant Hogweed	*Heracleum mantegazzianum*
Goosander	*Mergus merganser*
Cormorant	*Phalacrocorax carbo*
Grey Heron	*Ardea cinerea*
Adder's-Tongue Fern	*Ophioglossum vulgatum*
Spring Sandwort	*Minuartia verna*
Alpine Penny-Cress	*Thlaspi caerulescens*
Mountain Pansy	*Viola lutea*
Common Scurvy Grass	*Cochlearia officinalis agg.*
Wild Thyme	*Thymus polytrichus* formerly known as *T. praecox*
Thrift	*Armeria maritima*
Moonwort	*Botychium lunaria*
Common Frog	*Rana temporia*
Common Toad	*Bufo bufo*
Badger	*Meles meles*
Lupin	*Lupinus polyphyllus*
Shasta Daisy	*Leucanthemum lacustre x L. maximum or L. x superbum*
Buddleia	*Buddleja davidii*
Ivy	*Hedera helix*
House Martin	*Delichon urbica*
Mason Bee	*Osmia species (several)*
Leisler's Bat	*Nyctalus leisleri*
Bilberry	*Vaccinium myrtillus*
Cowberry	*Vaccinium vitis-idaea*
Cranberry	*Vaccinium oxycoccus*
Common Violet	*Viola riviniana*
Marsh Violet	*Viola palustris*
Sheep's Fescue	*Festuca ovina*
Spring Sandwort	*Minuartia verna*
Marsh Bedstraw	*Galium palustre*
Purple Moor Grass	*Molinia caerulea*
Manchester Treble-Bar	*Carsia sororiata anglica*
Sharp-flowered Rush	*Juncus acutiflorus*
Soft Rush	*Juncus effusus*
Sphagnum	*Sphagnum fallax,* formerly known as *S. recurvum* for NVC purposes
Sphagnum	*Sphagnum denticulatum,* fomerly known as *S. auriculatum* for NVC purposes
Yellow Rattle	*Rhinanthus minor*
Red Clover	*Trifolium pratense*
Green-Winged Orchid	*Orchis morio*
Pepper Saxifrage	*Silaum silaus*
Dyer's Greenweed	*Genista tinctoria*
Crucian Carp	*Carassius carassius*
Common Carp	Common Carp





Appendix 10
Bibliography

1. The UK Biodiversity Action Plan comprises of the following documents:
Biodiversity: The UK Action Plan, 1994 (UKBSG), HMSO, London.
Biodiversity: the U.K. Steering Group Report Volume 1: Meeting the Rio Challenge, 1995 (UKBSG).
Biodiversity: The UK Steering Group Report Volume 2 (UKBSG),
UK Biodiversity Group Tranche 2 Action Plans, Volumes 1 to 6, referred to as the UK Biodiversity Action Plan (UK BAP) (UKBSG).
UK Biodiversity Group: Index to the Steering Group Reports and Tranche 2 Action Plans (UKBSG).
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2. SINC Panel. Ed. Baker, Shepherd and Gillespie, 2001, Sites of Importance for Nature Conservation in North Yorkshire, pvt report.

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6. North and East Yorkshire Ecological Data Centre website – www.neyedc.co.uk

7. Carter A, 1987, 'North Yorkshire Inventory of Ancient Woodland' Part 1: Craven and Craven, English Nature.

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Appendix 11
Special Areas of Conservation (SAC), Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI) and Sites of Importance for Nature Conservation (SINC) in the Craven BAP area.

Within Craven district there are a number of recognised nature conservation sites ranging from those of European importance to those of local importance, as shown in the following table.

Designation	European Status	National Status	Local Status (non-statutory)
Special Protection Area (SPA)	1		
Special Area of Conservation (SAC)	1		
Ramsar site	0		
Site of Special Scientific Interest (SSSI)		12	
National Nature Reserve (NNR)		0	
Site of Importance for Nature Conservation (SINC)			82 + 6 candidate
Local Nature Reserve (LNR)			0
Yorkshire Wildlife Trust Nature Reserve			0

SAC sites in Craven district
1. South Pennine Moors (partly in Craven)

SPA sites in Craven district
1. South Pennine Moors (partly in Craven)









SSSIs in Craven district

Site name	Parish	Grid reference	Size Ha)	Special Interest	Notified Features
Biological SSSI					
Austwick and Lawkland Mosses	Austwick/ Lawkland	SD 762 665	83.76	Lowland raised mires, Fen Meadows and Wet Woodland	M10 - *Carex dioica - Pinguicula vulgaris* mire M18 - *Erica Tetralix - Sphagnum Papillosum* Raised And Blanket Mire M25 - *Molinia caerulea - Potentilla erecta* mire M26 - *Molinia caerulea - Crepis paludosa* mire W4 - *Betula pubescens - Molinia caerulea* woodland
Cocket Moss	Rathmell	SD 787 618	20.28	Species-rich valley mire with bog rosemary and lesser bladderwort	M21 - *Narthecium ossifragum - Sphagnum papillosum* mire M27 - *Filipendula ulmaria - Angelica sylvestris* mire M4 - *Carex rostrata - Sphagnum recurvum (fallax)* mire M5 - *Carex rostrata - Sphagnum squarrosum* mire
Hesley Moss	Rathmell	SD 783 602	10.96	Lowland raised mire with bog asphodel and a diversity of Sphagnum bog mosses	M18 - *Erica Tetralix - Sphagnum Papillosum* Raised And Blanket Mire M2 - *Sphagnum cuspidatum/recurvum* (fallax) bog pool community W4 - *Betula pubescens - Molinia caerulea* woodland
Keasden Moor	Clapham cum Newby	SD 725 664	10.7	A rare location for Marsh Gentian	Nationally scarce plant - *Gentiana pneumonanthe*, Marsh Gentian
Newby Moor	Clapham cum Newby	SD 717 692	274.98	A complex of rare wetland habitats: basin mires, fens, swamp plants and acidic & basic flushes	M10 - *Carex dioica - Pinguicula vulgaris* mire M21 - *Narthecium ossifragum - Sphagnum papillosum* mire M23 - *Juncus effusus / acutiflorus - Galium palustre* rush pasture M25 - *Molinia caerulea - Potentilla erecta* mire M27 - *Filipendula ulmaria - Angelica sylvestris* mire M4 - *Carex rostrata - Sphagnum recurvum* (fallax) mire M5 - *Carex rostrata - Sphagnum squarrosum* mire M9 - *Carex rostrata - Calliergon cuspidatum/giganteum (Calliergonella cuspidata/Calliergon giganteum)* mire S27 - *Carex rostrata - Potentilla palustris* swamp
Pan Beck Fen	Hellifield	SD 848 559	2.54	Rush pastures with basic flushes. Special plants include narrow-leaved marsh orchid and stoneworts	M10 - *Carex dioica - Pinguicula vulgaris* mire M23 - *Juncus effusus / acutiflorus - Galium palustre* rush pasture M25 - *Molinia caerulea - Potentilla erecta* mire M27 - *Filipendula ulmaria - Angelica sylvestris* mire





SSSIs in Craven district

Site name	Parish	Grid reference	Size Ha)	Special Interest	Notified Features
Biological SSSI					
River Ribble (Long Preston Deeps)	Long Preston/ Rathmell/ Settle	SD 809 621 - SD 827 570	158.94	An unusual, relatively high altitude meandering river with notable plants such as northern spike rush. Rough pastures have locally important breeding waders and a variety of wildfowl in winter	Assemblages of breeding birds - Lowland fen without open water Flowing waters - Type VI: base-rich, mesotrophic rivers in western and northern Britain, with a moderate to fast current.
South Pennine Moors (part)	Cowling (partly)	SD 920 300	515.0	Mire Blanket Bog	Aggregations of breeding birds - Curlew, *Numenius arquata* Aggregations of breeding birds - Golden Plover, *Pluvialis apricaria* Aggregations of breeding birds - Merlin, *Falco columbarius* Aggregations of breeding birds - Twite, *Carduelis flavirostris* Assemblages of breeding birds - Upland moorland and grassland without water bodies ED - Namurian ER - Namurian EW - Namurian H12 - *Calluna vulgaris* - *Vaccinium myrtillus* heath H18 - *Vaccinium myrtillus* - *Deschampsia flexuosa* heath H9 - *Calluna vulgaris* - *Deschampsia flexuosa* heath M16 - *Erica tetralix* - *Sphagnum compactum* wet heath M19 - *Calluna vulgaris* - *Eriophorum vaginatum* blanket mire M20 - *Eriophorum vaginatum* blanket and raised mire M25 - *Molinia caerulea* - *Potentilla erecta* mire M4 - *Carex rostrata* - *Sphagnum recurvum* (fallax) mire M6 - *Carex echinata* - *Sphagnum recurvum* (fallax) */auriculatum (denticulatum)* mire U2 - *Deschampsia flexuosa* grassland U4 - *Festuca ovina* - *Agrostis capillaris* - *Galium saxatile* grassland U5 - *Nardus stricta* - *Galium saxatile* grassland U6 - *Juncus squarrosus* - *Festuca ovina* grassland





SSSIs in Craven district

Site name	Parish	Grid reference	Size Ha)	Special Interest	Notified Features
Geological SSSI					
Hambleton Quarry	Draughton	SE 058 533	12.25		ED - Dinantian
Haw Crag Quarry	Gargrave	SD 913 564	9.56		ED - Dinantian
Holywell Bridge	Halton East /Skipton	SE 028 533	1.5		ER - Dinantian
Stonehead Beck (Gill Beck)	Cowling	SD 947 432	0.57		EW - Namurian

SINCS

82 ratified sites and proposed to be included in the Craven Local Development Framework.
6 candidate sites which require further survey prior to assessment