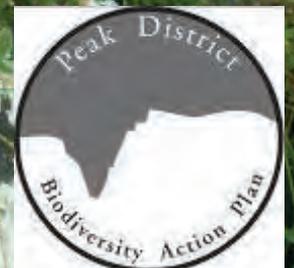


A LIVING LANDSCAPE

Peak District Biodiversity

Action Plan Review

2001 - 2010



The Peak District Biodiversity Partnership - people working together to conserve, enhance and promote the special wildlife, habitats and landscapes of the Peak District

Conserving biodiversity in the Peak District is about looking after the wildlife we have today and planning for the future. The environment of soil, water and air needs to be kept healthy if it is to provide the natural home for plants such as oak trees and Jacob's ladder, animals such as lapwing and water vole, and the landscapes that people love to visit. Looking after wildlife is good for people and local business, for health and well-being, and is strongly linked to adapting to, and preparing for, the effects of climate change.

By working together, small changes can make a big difference.

Introduction	1
Target Progress	4
SSSI Condition	5
25 Key Actions	6
Woodlands	12
Grasslands	16
Wetlands	20
Moorlands	24
Species	28
Partnerships & Projects	32
UK BAP Habitats & Species	33

This report was produced by Karen Shelley-Jones, LBAP coordinator for the Peak District

With thanks to the following for their input: PDNPA, Natural England, Derbyshire Wildlife Trust, Staffordshire Wildlife Trust, National Trust, Environment Agency, Forestry Commission, Moors for the Future, Tarmac, United Utilities, BTCV, Friends of the Peak District, and all others who contributed.

All photographic credits to PDNPA except: Karen Shelley-Jones: front cover, pg 2, 3, 13, 16, 17, 19, 26, 29, 30; Hazel Crowther: pg 24, 26; Chris Tomson: pg 10, 29; Dave Mallon: pg 31; Arkwright Society: pg15; Bankside Wildlife Garden: pg 15; BTCV: pg8, 18; Derbyshire County Council: pg 12; Derbyshire Wildlife Trust: pg 15, 19, 31; Fitzwilliam Estate: pg 25; Forestry Commission: pg 14; Friends of the Peak District: pg 8; Moors for the Future: pg 11, 27; National Trust: pg 6, 7, 18, 26; Natural England: pg 13, 14; Richard May: pg 25; Staffordshire Wildlife Trust: pg 20, 22; United Utilities: pg 14, 21, 25, 27; University of Derby: pg 7.



Peak District National Park Authority
Aldern House
Baslow Road
Bakewell
DE45 1AE

Phone: 01629 816200
Fax: 01629 816310

E-mail: karen.shelley-jones@peakdistrict.gov.uk



Nearly ten years ago, A Living Landscape – a Biodiversity Action Plan for the Peak District was produced with contributions from a wide range of organisations and individuals. Over this period, much has been achieved by those very same people. Significant input to enhancing biodiversity has been made by landowners, managers and farmers, who, through the support of agri-environment and woodland grant schemes have endeavoured to make a living from the land whilst conserving its biodiversity.

The core work of conservation organisations has contributed to maintaining and enhancing sites, habitats and species. Targeted project work has played a significant role in surveying, restoring, creating and monitoring habitats; and similarly in conserving and protecting populations of local and national BAP species. All of this work has taken place against a changing context of influences on wildlife. The wildlife of the Peak District has in turn been changing both as a result of these influences and in response to the conservation actions of BAP partners set out here.

A Changing Context

Since 2001 a variety of changing circumstances have had a significant effect on the biodiversity of the Peak District. One of the most significant changes has been the increasing emphasis on encouraging biodiversity conservation within the agricultural sector. In 2005 there was a move away from 'headage payments' which provided an incentive to maintain high sheep numbers in the uplands, and the Environmental Stewardship Scheme was launched, replacing the 'classic' agri-environment schemes (ESAs and Countryside Stewardship). Within this the Higher Level Scheme (HLS) in particular ensures that the land management is more closely linked with the features of importance on each individual site, and provides competitive financial incentives to make it an attractive option to many farmers. The Environmental Impact Assessment Regulations for Uncultivated Land and Semi-natural Areas came into force in February 2002 and there has also been increased enforcement of cross-compliance measures where necessary. Although these regulatory mechanisms have only been applied in a few cases, they reflect this increasing emphasis on conservation within farming.



In 2003 English Nature published a report on the condition of SSSIs nationally. Only 28% of SSSI land in the Peak District was assessed as being in favourable or recovering condition at the time. Achieving the Government target of 95% in favourable/ recovering condition by 2010 has therefore been a major driver for a considerable amount of conservation effort on SSSIs since that time. More details of SSSI target figures are provided on page 5, with further information included in the relevant sections of this report.

The importance of 'ecosystem services' and the likely impacts of climate change are both key issues which have been increasingly recognised over the last nine years. Implicit in this is the need for a healthy environment, of which biodiversity is a key part. This has led to a wider appreciation of the importance of restoring our moorlands in particular to good health, to improve and safeguard water quality, provide a 'carbon sink' to reduce climate change, and to alleviate flood risk.

The Water Framework Directive came into force in 2000, shortly before the Peak District BAP was launched. It has been an important driver for a lot of work on improving water quality, most notably through the Catchment Sensitive Farming Project in the Dove catchment, with associated benefits to riparian wildlife.

Conservation Action

By working in partnership, organisations have been able to bring their own expertise, time and resources together on projects and other work which has benefited the landscapes, habitats, species and people of the Peak District. In particular the day-to-day land management by private landowners, land managers and farmers underpins the maintenance and enhancement of much of the Peak District's biodiversity. This has been supported by a considerable amount of work by a number of organisations targeting agri-environment and woodland grant schemes, and securing agreements on landholdings comprising high quality habitats and supporting important species.

Other day-to-day work by organisations with a conservation remit does not always attract attention, but has played a very significant role in biodiversity conservation within the Peak District. For example, direct land management (and in a few instances acquisition) by organisations such as the National Trust, The Wildlife Trusts, Water Companies, Forestry Commission, Natural England, RSPB and the National Park Authority; conservation and enhancement measures taken through the planning process (in particular minerals sites); and the considerable amount of work that has been put into achieving favourable or recovering condition on SSSI land.



Furness Quarry, recreation access following restoration

During the lifetime of the Peak District BAP, several projects of particular importance for biodiversity have been underway. Probably the most significant of these in terms of its scale of impact has been the Moors for the Future partnership, which successfully acquired major funding from the Heritage Lottery Fund and latterly from the EU LIFE+ fund to carry out large-scale re-vegetation (and more recently re-wetting and



Sphagnum introduction) of areas of degraded blanket bog; to control disturbance through footpath restoration; and to implement an extensive programme of moorland education and information. The removal of sheep from much of Bleaklow has allowed extensive restoration to go ahead and is also resulting in the enhancement of large areas of vegetated but species-poor blanket bog within the fenceline. United Utilities' Sustainable Catchment Management Programme has been another important large-scale project resulting in substantial benefits to moorland condition, along with associated in-bye land and the development of clough woodland. Private moorland owners have also played an important part in the restoration of heather moorland from grass moor and conifer plantations elsewhere, notably on Howden Moors, Bradfield and south of Macclesfield Forest.

The Vision Project was developed as a proactive, area based approach to fulfilment of the White Peak vision through the delivery of local and national BAP targets. The project was unique in the Peak District in seeking to deliver specific

biodiversity outputs at a landscape scale through direct action and community involvement. Initiatives such as the roadside verge survey, the production of good practice and technical advice notes (e.g. for dew pond restoration), and the availability of specialist machinery to other users grew out of the project. The Vision Project showed that there is a real potential to engage both land owners and local communities in the conservation of species and habitats and that the technical concept of a Biodiversity Action Plan can be translated into a grass roots delivery process with the right approach and resources. In the local community this process translated into a wider concern for and understanding of the natural environment and therefore reinforced the wider goals of the project funders to engage and involve people.

Changes in Wildlife

Wildlife has responded to these changing pressures and conservation actions in a variety of ways. Some of the significant changes since 2001 include:

- Evidence of some spread of southerly species into the Peak District. Since 2001 for example we have seen first recent Peak District records of hornet, Dartford warbler and oak bush cricket; and stonechat populations have increased substantially.
- There is currently limited evidence of retreat of more northerly species in the Peak District, but the decline of ring ouzel populations, for example, may be related to climate change.
- A continuing recovery of pollution-sensitive species such as lichens and otters.



Ring ouzel



- A continuing decline in breeding waders on farmland, although productivity has increased on farms with targeted management measures.
- A continuing spread of species which were subject to persecution in the past such as peregrine, buzzard, raven and polecat.
- The spread of invasive species such as Himalayan balsam, signal crayfish and harlequin ladybird, with adverse effects on species of conservation importance. In particular the white-clawed crayfish, one of only three species of Global Conservation Concern in the Peak District, has been driven to the brink of extinction locally, prompting a radical change in conservation measures.
- The increasing discovery of uncommon plants such as bog rosemary, fir clubmoss, small twayblade and

northern (or bog) bilberry on Peak District moorlands, and increases in Sphagnum (left) cover.

- Overall trends in moorland bird populations were positive between 1990 and 2004 with increases in 16 species (including red grouse, curlew, lapwing, snipe, merlin, reed bunting and peregrine); declines in eight species (including carrion crow, cuckoo, dunlin, ring ouzel and particularly twite); and two species showing less than 10% change (golden plover and skylark).
- Declines in some scarcer plants outside protected sites, including maiden pink; alpine, fir and stag's-horn clubmosses; and field gentian.
- A positive response by great crested newt (a species of European importance) to dewpond restoration, colonising restored ponds and using them as 'stepping stones' to colonise other ponds.

TARGET PROGRESS

The table below summarises our progress towards the BAP targets, as revised during the 2006/7 review period. Every effort has been made to provide as accurate a picture of progress as possible. Further detail can be found in the subsequent pages of this report. Non-SSSI habitat condition has been inferred from entry into agri-environment schemes. The colours used indicate the following: = target exceeded; = target met or more than 75% met; = progress made but target less than 75% met; = little or no progress made; N/A = no relevant target set.

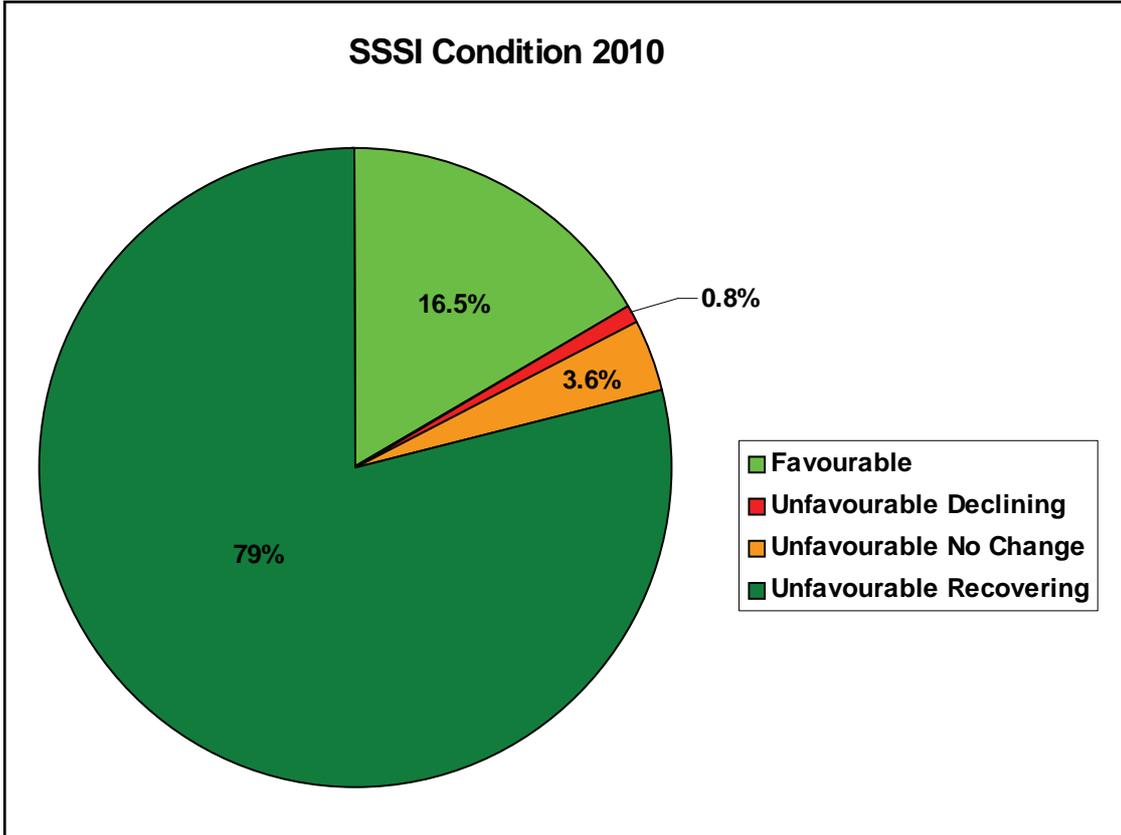
HABITATS					
	Maintain extent	Condition SSSI	Condition non-SSSI	Restoration	Expansion
WOODLANDS					
Upland Ashwoods					N/A
Upland Oak/ Birchwoods					
Wet Woodlands					
Parkland & Veteran Trees					
GRASSLANDS					
Limestone Dales					
Hay Meadows					
Unimproved Pastures				N/A	
Rough Grazing				N/A	
Lead Rakes					
WETLANDS					
Rivers and Streams					N/A
Wetlands				N/A	
Ponds					
MOORLANDS					
Limestone Heath					
Blanket Bog					N/A
Heather Moorland					

SPECIES				
	Maintain Range	Extend Range	Maintain Population	Expand Population
Water Vole				
Curlew				
Lapwing				
Twite				
White-clawed Crayfish				
Derbyshire Feather-moss		N/A		N/A

SSSI CONDITION

One of the great success stories over the last ten years has been the change in condition of SSSI units across the Peak District. In 2003 only 28% of SSSIs (by area) in the National Park part of the BAP area were assessed as being in favourable or recovering condition; by the time of the mid-term review in 2007 this figure had increased to 58%. At the time of writing, the latest SSSI assessment places 95.5% of SSSIs across the whole Peak District BAP area in favourable or recovering condition, meeting the Government's Public Service Agreement target for 2010.

This achievement can be attributed to the dedication and hard work of the statutory agencies, the public bodies, the charitable organisations, the utility companies, the landowners, the volunteers; and above all the farmers and land managers who build the dry stone walls, put up fences, maintain grazing animals, cut hay, block grips and gullies, cut and burn heather moorland, manage woodland, maintain and restore ponds, protect soil and water resources, and care for the land.



25 KEY ACTIONS

Data Collation and Survey (K1-3)

A habitat database using GIS has been created by the National Park Authority, amalgamating data from various sources and surveys over the years. This has been supplemented with data from BAP partners and with more recent survey data such as those collected during Farm Environment Plan surveys for Environmental Stewardship.

The Derbyshire Red Data Book of plants was produced in 2009 by Derby Museum. Recent work on a Wildlife Sites system has begun to identify vascular and lower plants of conservation importance for the Peak District, currently focusing on the White Peak.

Through consultation with species recorders a list of the UK BAP priority species which are understood to be present in the Peak District has been compiled. Work on identifying the types of conservation action required for each of these species is underway as part of developing the revised BAP.

The Derbyshire and Peak District Biodiversity Network has been established, partners represented are Natural England, Derby Museum, Derbyshire Wildlife Trust, Derbyshire County Council and the National Park Authority. Quarterly meetings now take place between these partners to progress Local Record Centre functions. Protected species records are collated and updated annually; red list and BAP species data collation is underway for certain groups; habitat data has been collated for Wildlife Sites & Reserves by Derbyshire Wildlife Trust, and BAP habitat data are collated by the National Park Authority.

Various species surveys have been undertaken by partners over the years including: grassland fungi and invertebrates, Jacob's ladder, veteran trees, mountain hare, water vole, curlew, lapwing, twite, dormouse, white-clawed crayfish, great crested newts, adders, aquatic invertebrates, moorland birds and woodland birds.



Moorland vegetation survey

Strategic Policies (K4-6)

Additional Habitat and Species Action Plans were not produced during the life of the Peak District BAP. Following the review of the UKBAP in 2007, however, certain riparian species and bird were added to the list of priorities for the Peak District.

Achievement of BAP targets is now embedded into the National Park Management Plan, currently being revised for 2012 - 2017, and the BAP is routinely referred to in Environmental Impact Assessments (EIAs). The Peak District Local Development Framework refers to BAP objectives, and there are close links with the new Landscape Strategy.

Company and quarry BAPs make reference to the PDBAP objectives and targets, as do documents by BAP partners, such as the Marsden Moor Conservation Report, produced in 2004.

At the East Midlands regional level the Peak District was identified as a Biodiversity Conservation Area (BCA) in the Regional Biodiversity Strategy produced in 2006. Similarly, the section of the Peak District BAP area which falls within the West Midlands is included in the Staffordshire Moorlands Biodiversity Enhancement Area (BEA).

Local experience has also been used to influence national policy and implementation, including the EIA Regulations for Uncultivated and Semi-natural Land; regulations relating to overgrazing of land; and the proposed adoption of Metalliferous Habitats/Calaminarian Grasslands as a UK BAP priority habitat (which was accepted as a new UK BAP priority habitat in 2007).

EIA Regulations and Overgrazing Regulations have been used for site safeguard. A new system of identifying Peak District National Park Wildlife Sites, initially within the White Peak, was agreed in 2009.

The Field Services Team of the PDNPA coordinate and administer the Fire Operations Group (FOG) consisting of constituent fire services, water companies, National Trust, Natural England, Chatsworth and the Moorland Gamekeepers Association. FOG is designed to pool equipment, skills and knowledge to address moorland fires at an early stage. Getting to, and fighting, fires at an early stage plays a major role in conserving the biodiversity on SSSIs, SACs and SPAs.

Conservation Action and Incentives (K7-16)

Agri-environment Schemes Within the BAP area (185,000ha), a sizeable proportion of land is entered into conservation agreements, as of March 2010, 58,500ha (31%) of land is included in schemes. Environmental Stewardship and Environmental Enhancement Schemes are now applied to the whole-holding. Converting Countryside Stewardship and Environmentally Sensitive Area schemes to whole holdings is being addressed through the agreement renewal process.

EQM The Peak District Environmental Quality Mark is an award for businesses that help conserve and enhance the Peak District National Park. The scheme was launched in July 2003 and now over 90 businesses hold the award.

To gain the EQM award, farming businesses are required to meet a set of Standards, which involve delivering environmental benefits to the Peak District through land management. They focus on these special and characteristic Peak District landscape features and wildlife habitats such as dry stone walls, traditional stone buildings, lead mining heritage, hay meadows, limestone dales, and moorland. EQM tourism businesses then include EQM farm products as part of their tourism offering, telling the story of the biodiversity of the local area to the customer.



John Mettrick and Sally Hodgson, EQM award holders

An independent evaluation of the EQM scheme by SQW Ltd (October 2006) found 50% of EQM farm businesses were undertaking specific habitat, landscape or archaeological feature conservation management for no payment, and over and above any other agri-environment scheme they are involved with, in order to comply with the Standard. In a number of cases, involvement in EQM has led farmers to enter into Higher Level Environmental Stewardship or the Peak District National Park Authority's own Environmental Enhancement Scheme. Pictured are John Mettrick of JW Mettrick & Son Ltd butchers in Glossop, with Sally Hodgson of Higher Plainsteads Farm, Glossop (both EQM award holders). John requires all farmers who supply his High Peak Lamb brand to achieve EQM.

Volunteering The **Peak Park Conservation Volunteers** have taken part in over 8,485 volunteer days of conservation/land management work since 2007. In 2009-10 the group undertook over 330 projects, with 3,040 volunteers involved in work including removing hawthorn from old hay meadows, cleaning a large number of dew ponds, rhododendron clearance, woodland management, dry stone walling and creating wildlife gardens at both Edale and Brunt's Barn.

The PDNPA Area Teams have contributed hundreds of days per annum to the delivery of biodiversity targets through HLS and direct management on land owned by the National Park Authority, BAP partners and private landowners.

Non-native invasive species have been tackled by PDNPA staff who spent 20 hours each summer of 2007, 2008, and 2009 bashing Himalayan balsam. In 2010 more than 100 people volunteered over 16 days on the River Derwent, including school children from Stoney Middleton Primary School who helped out at Calver Marshes. Over five years, 15 days per year were spent ragwort pulling on unimproved grasslands. 400 volunteer hours have gone into rhododendron removal on moorland, and 100 days habitat and predator control work to help water vole populations.



Balsam Bashers on the Derwent



Work on the **National Trust's** Marsden Moor estate depends on volunteer support for practical works such as gully blocking (pictured left), heather spreading, flag laying, fencing, and monitoring. Over 50 active volunteers help on a weekly basis with practical management work on site.

Volunteers for **Moors for the Future** gave over 500 days between 2003 and 2008 for practical conservation, vegetation and footpath survey, monitoring of dipwells and the effectiveness of vegetation establishment, and office work.



Conifer removal in the Alport Valley

Friends of the Peak District was inspired and founded by volunteers passionate about countryside protection. They have a team of over 50 volunteers of all ages, and from a range of backgrounds who work on a really broad range of subjects. In the last few years the volunteers have been involved in projects such as footpath construction and repair; step building, fencing and dry stone walling; clearance of rhododendron and conifers; coppicing and tree thinning; scrub clearance to aid butterflies; and heather restoration with Moors for the Future. All this in iconic locations like Stanage Edge, Macclesfield Forest, Alport Valley, Longshaw Estate, North Lees Estate, Lathkill Dale, Tittesworth Reservoir, and Win Hill.

Derbyshire Wildlife Trust's Water for Wildlife Project delivers a volunteer led monitoring scheme for otter and water vole across Derbyshire and also delivers conservation projects through the use of volunteers. A total of 210 volunteer days were recorded for 2009/10 alone.

Derbyshire Countryside Service North West Area has delivered over 2050 volunteer days around the county.

Tarmac Ltd have developed their own five-year company BAPs; the delivery of these at Ballidon Quarry, Tunstead Quarry, Dene Quarry and Darlton Quarry has created around 100 task days for BTCV volunteers. These opportunities are set to continue at Tarmac sites in coming years.

Wildlife Sites The **Derbyshire Wildlife Trust's** Wildlife Sites system remains in place in Derbyshire outside of the National Park, and includes 185 sites covering 1,895ha. The other neighbouring/administrative areas also maintain similar schemes. A comparable system is currently being established by the PDNPA, with the initial focus on the White Peak. Local naturalists have been involved in defining criteria and identifying species of conservation importance.

Nature Reserves Dove Dale NNR was declared in 2006, and Kinder Scout in 2009. The following sites were designated as Local Nature Reserves: Mousley Bottom, New Mills in 2007; Ferneydale Grassland, Buxton in April 2009; and Stubbins Park, Chinley in 2009.



BTCV volunteers tackling scrub on calcareous grassland at Ballidon Quarry.

Resources (K17)

Between 2001 and 2010 the Peak District BAP partnership has attracted over £91.1m of funding.

- Since 2002, the Sustainable Development Fund has granted over £1.5m to projects in the Peak District aimed at delivering: sustainable development and wider environmental benefit (£418,900, bringing in £2m in external match funding); education and awareness about wildlife, the Peak District and the environment (£103,360, with £1.06m match funding); and biodiversity enhancement (£113,150, with £1.3m match funding). Projects included: setting up a machinery ring for grassland management; habitat enhancement of rivers; and planting traditional orchards.
- The Moors for the Future Partnership has received two large grants on top of the contributions from project partners. The Heritage Lottery Fund granted £3m, and the partnership received a further £5.5m from European LIFE+ fund in 2010.
- The Calver Weir Restoration Project has been granted £1.841m, including £1.244m from the Heritage Lottery Fund, and £100,000 from English Heritage, for the restoration of the historic Calver Weir, of which approximately £20,000 is going towards wetland habitat restoration and creation.
- The Aggregates Levy Sustainability Fund has provided over £140,000 for the Biodiversity Vision for Wildlife project and £23,000 for the Crayfish Arks for the Peak District and Derbyshire project.
- The SITA Trust has provided funding for various projects including £100,078 for work on grassland conservation and restoration, and pond conservation and restoration; £25,000 for capital works under the Peak Birds Project; £28,175 for work on community sites at Furness Quarry, Eyam Delph and Silence Mine; and £24,400 for grassland

restoration work on the Tissington and High Peak Trails.

- Derbyshire Wildlife Trust's Water for Wildlife Project received £175,000 from the SITA Trust and £60,000 from the Tubney Charitable Trust.
- National Trust members have donated over £320,000 towards blanket bog restoration on the Kinder plateau; and a Biffaward of £250,000 was received for bare peat restoration and gully blocking on Kinder.
- An Access to Nature grant of over £400,000 has been awarded to Staffordshire Wildlife Trust, in conjunction with partners Staffordshire Moorlands District Council, RSPB and PDNPA to deliver educational and volunteering opportunities to people from Stoke and rural Staffordshire Moorlands district.
- Through United Utilities' SCaMP programme, over £3m was spent on environmental improvements in the Peak District between 2005 and 2010.
- The Environment Agency has funded small projects for water vole and ponds; contributed £5,800 for buffer fencing on the Rivers Wye and Derwent, and provided £165,000 for the installation of a fish pass at Calver Weir.
- Defra has provided £500,000 of funding for the Making Space for Water project with Moors for the Future, Environment Agency, National Trust and Natural England.
- Natural England has provided four years funding (£62,000) towards LBAP coordination, plus £6,500 for work on GIS database development, website construction, water vole habitat enhancement works, and production of the LBAP mid-term review.
- Agri-environment scheme payments total £73,246,209, and woodland grant scheme payments (WGS and EWGS) total £2,768,188.
- The Forestry Commission's Woodland Improvement Grant for woodland birds has brought in £314,000 for woodland owners/managers between April 2009 and July 2010.

Monitoring (K18-19)

Monitoring of BAP progress has taken many forms: Annual reports were produced for 2002, 2004, 2007-08, and 2008-09, and the BAP mid-term review was completed in 2007. Data have been collated on agri-environment schemes and woodland grant schemes, plus delivery by partners through other mechanisms. Action has been reported on the web-based Biodiversity Action Reporting System (BARS), and it is hoped that future developments to BARS will be conducive to greater use of it as a reporting system.

The **PDNPAs** Environmental Enhancement Scheme (EES) has been regularly monitored by the Countryside and Economy Team and Area Teams.

The effectiveness of United Utilities' Sustainable Catchment Management Programme (**SCaMP**) on the moors north of Longdendale and in the Goyt is being monitored by Penny Anderson Associates. Comprehensive monitoring of the effects of land management changes in terms of water quality, hydrology, habitat and biodiversity has been carried out through the duration of the five year programme.

Penny Anderson Associates has been appointed to conduct research for the National Trust on Howden Moors, looking at the extent of current burning and identifying how moorland could be protected from wildfire. GIS modelling is being used to produce a map based on biomass and an index of vulnerability to burning. The results are expected to be available early in 2011.

The **Moors for the Future Partnership** has instigated, supported and led numerous monitoring schemes including MICCI (Moorland Indicators of Climate Change Initiative), an innovative project involving secondary school students from across the Southern Pennines. Through a series of creative investigations, young people have learnt more about our connection with the planet by exploring the role that peat plays in carbon sequestration.

Annual vegetation surveys of all the Moors for the Future restoration sites involve teams of dedicated volunteers who collect data on the plant species and vegetation structure. In addition to this, dozens of dipwells - a simple instrument used to measure water table - have been installed in order to assess whether the re-vegetation is helping to re-wet the blanket bog. As a key aim of the work is to stabilise the bare peat, peat pins are used to determine the rate of erosion, and the accumulation of sediment as it is captured and blocked by new vegetation and gully blocks.

At Marsden Moor monitoring work by **National Trust** volunteers has been ongoing for the last two years to monitor the retention of peat and water behind dams, as well as changes in vegetation on areas where management work has been undertaken. Prior to this, some fixed point photography was carried out during the early work on dam construction and monitoring.

Awareness Raising and Public Enjoyment (K20-24)

Several guided walks, talks, events and educational activities have taken place, and tens of thousands of hours have been given by various volunteer groups and individuals to help protect and conserve the landscapes, habitats and species in the Peak District. Here are a few examples of what's been happening:

The PDNPA website was updated in 2008 with new biodiversity pages; these will be revised again with the production of the new BAP. A BAP Communication Strategy was produced in 2008 and updated in 2010. A key partnership message was devised and used in the BAP annual reports in 2007-08 and 2008-09.

The PDNPA Area Teams (Rangers and Village Officers) have undertaken a number of school activities through the decade focused on biodiversity. A regular programme of guided walks and events by the PDNPA field staff promotes the use of public transport wherever possible, and in 2010, the International Year of Biodiversity, the rangers led 45 walks or events directly related to the topic.

In 2009 alone the South Area Team undertook 88 school activities within the National Park centred around biodiversity, reaching over 1,500 children. The Area Teams support local community initiatives at a number of sites, visit local and village shows, and continue with training events for the survey and conservation of road verges.

Over the ten years 115 North Area volunteer rangers have received training on biodiversity, habitat management and species awareness. In the last year 40 people have attended guided walks focused on biodiversity, and 10 days were spent building bat & bird boxes in schools.



PDNPA Ranger guided walk on the Warslow Estate

The **Biodiversity Vision Project** employed a Community Conservation Officer working alongside rangers in engaging local schools, community groups, local residents and others in conservation activities. Between 2003 and 2006 this included 43 walks, 17 talks, 71 school activities, 21 village events and shows, 65 practical conservation tasks, 6 community-led projects, 14 training events, 15 interpretive projects, and 21 wider awareness raising events.

Derbyshire Wildlife Trust provides a programme of educational and awareness raising events and conservation activities within the BAP area including their Grounds for a Change project. This is a four year Heritage Lottery Fund funded project which aims to increase biodiversity in school grounds across Derbyshire. They carry out habitat creation on a very small scale – including wildflower meadow creation (usually 5m by 5m), heath creation (usually 7m by 5m created to mimic heather moorland habitat found locally. The peat used is sourced sustainably from the dredging of local reservoirs, and then planted up with local provenance heather, bilberry, crowberry and cotton grass); pond creation (usually 5m by 4m), woodland creation/enhancement (usually small – 20 - 350 trees max). They also help species by, for example, putting up bird, bat, toad, hedgehog boxes; making log piles, insect boxes, wildlife hotels etc. In the first 3 years (2007-2010), the team made around 191 visits to schools in the Peak District, working with approximately 4,700 children.

Farm demonstration day



The **Peak Birds Project** includes a significant awareness raising, advisory and public involvement element. Over 230 farmers have been visited and more than 90 are known to be implementing bird friendly management. Management for Birds open days were attended by 180 farmers and land managers, two on-farm training events attracted 200 people, 3 project newsletters have been produced and 30 illustrated talks given to farmers and wildlife groups.

Promotion of **Tarmac** BAP projects through site visits and open days have contributed towards raising awareness. Key activities have included school visits to Tunstead and Ballidon Quarries, and a Biodiversity Open Day at Ballidon Quarry during September 2008.

In partnership with the **Wild Trout Trust** and with funding from Severn Trent Water, **Trent Rivers Trust** helped run 'Mayfly in the classroom' in three schools in the Upper Dove Catchment. This scheme aims to provide education on the freshwater ecosystem by getting teachers and pupils into the river, catching invertebrates to take back for study and care in the classroom. The pupils return to the river to release their flies, having watched them develop through their lifecycles, from nymph to adult fly in the classroom. Hopefully a lasting understanding of the health of freshwater, and how people affect it, is imparted by this scheme. Approximately 60 pupils and 12 teachers were involved in this project.

In 2008 the **National Trust** employed a Community Warden at their Marsden Moor estate to raise the profile of the importance of the moor and its wildlife within local schools and the community. A series of events related to, or out on the moor, are run every year. The Trust work regularly with 3 local primary schools, teaching them about wildlife as well as getting them out on the moor planting cotton grass and seeing the management work first hand. These range from guided walks and 'eco-dating', to seed collecting and cotton grass planting. The Community Warden is employed 2 days a week by Kirklees Youth Offending team to provide a service for their reparation which involves various practical and learning activities out on the moor.

Research (K25)

The **Moors for the Future partnership** has increased moorland research within the Peak District, building close working relationships with several universities. The partnership has hosted four moorland conferences giving partners the opportunity to highlight and discuss research and practical management issues on moorlands.

The **Sphagnum propagation project** began in 2007 with the aim of investigating the possibility of regenerating and reintroducing Sphagnum on a wide range of degraded moorland sites. Baseline surveys have been completed and small-scale monitoring sites established; a new way of propagating sphagnum by encapsulating it in beads of liquid has been developed in conjunction with Micropropagation Services; and work is underway to develop methods of spreading the sphagnum beads over rough terrain by helicopter.



The **Making Space for Water** project in partnership with the **Environment Agency**, has recently begun and will be investigating a new approach to flood risk management in the Upper Derwent Valley, aiming to demonstrate how practical restoration of degraded moorland can have multiple benefits.

Research Notes produced by the partnership are: Breeding Bird Survey of the Peak District Moorlands; Gully Blocking in Deep Peat; Peak District Moorland Stream Survey; Heavy Metal Pollution in Eroding Peak District Moorlands; Monitoring of Burning in Uplands: a rapid assessment protocol; Moorland Restoration in the Peak District Moorlands; Air Pollution in the Peak District; Moorland Wildfire: mapping and modelling in the Peak District; Peak District Moorland Carbon Flux; The Future of Upland Farming; Looking After Grouse Moor Habitats; Soil and Water Conservation: Opportunities to Combat Climate Change; Tourism and Recreation: opportunities and threats to the visitor economy.

Research Reports produced by the partnership are: Breeding Bird Survey of Peak District Moorlands 2004; Conservation Heritage Assessment Edale Valley; Understanding Gully Blocking in Deep Peat; Increasing Water Supplies for Fighting Moorland Fires; Peak District Moorlands Visitor Attitude and Recreational Use Survey; From Cairns to Craters: conservation heritage assessment for Burbage; Analysis of Moorland Breeding Bird Distribution and Change in the Peak District; Peak District Moorlands Visitor Attitude and Recreational Use Survey; Access Improvement Survey Results; Sphagnum in the Peak District: current status and potential for restoration; Water Tables in Peak District Blanket Peatlands.

Other research on moorland restoration and hydrology has been conducted by **Penny Anderson Associates** on behalf of **United Utilities** for their SCaMP programme.

University students from Leeds and Manchester frequently conduct research work on Marsden Moor, mainly based around carbon retention and breeding bird populations.

Ecological restoration trials underway at several **Tarmac** sites contribute towards the knowledge base on restoration techniques. In particular, these concern techniques for calcareous grassland establishment within quarry restoration environments.

The **RSPB** has undertaken research and survey work on curlew populations across the South Pennines, but the results of this are not yet published. The results of research into the effects of climate change on golden plover productivity in the Peak District were published in 2010.

Natural England has undertaken extensive research on the hydrology of the River Lathkill, with the ultimate aim being to reduce the effects of water abstractions to historic mine workings. River geomorphology has increased in diversity through bed re-profiling and the installation of large woody debris.

WOODLANDS

Target Achievements

Upland Ashwoods		<ul style="list-style-type: none"> • SSSI condition: 97% favourable/recovering • Non-SSSI: 48.5% of mapped woodlands are in management agreements • Restoration: 155ha of PAWS have been restored • Creation: 7.53ha of ash woods have been created
Upland Oak/birchwoods		<ul style="list-style-type: none"> • SSSI condition: 85% favourable/recovering condition • Non-SSSI: 51.9% of mapped woodlands are in management agreements • Restoration: 396ha of PAWS have been restored • Creation: 507ha of new oak woodland have been created
Wet Woodland		<ul style="list-style-type: none"> • SSSI condition: 100% favourable/recovering condition • Non-SSSI: 44% of mapped woodlands are in management agreements • Restoration: No restoration work has been reported • Creation: 8.95ha of wet woodland have been created
Parkland and Veteran Trees		<ul style="list-style-type: none"> • SSSI condition: 100% favourable/recovering condition • Non-SSSI: 133ha of parkland is in management agreements • Restoration: No restoration work has been reported • Creation: 2 parkland sites are being created/expanded

In the White Peak the Ravine WoodLIFE project has enhanced knowledge, understanding and management of ancient ashwoods in the dales. The Forestry Commission's various Woodland Grant Schemes have enabled and supported woodland management, restoration and creation. More recently, their Woodland Improvement Grant for birds, launched in 2009, supported by RSPB, has resulted in enhanced management of woodlands for a suite of woodland specialist birds, for which the Peak District has been identified as a national hotspot.

Sensitive management and recent applications to expand areas of parkland and wood-pasture will extend the life of veteran trees and their associated flora and fauna, while individual veteran trees in the landscape are increasingly recognised and valued by landowners and local communities.

Thanks to many people and projects, including the following:

Bluebell Wood (pictured right), managed by **Derbyshire County Council's Countryside Service**, was designated a Local Nature Reserve in 2007. The site was managed with the help of a Woodland Grant Scheme between 2003 and 2008. Works included installing recycled plastic boardwalks through the wet areas, and the installation of small dams to maintain the water table.



The **Great Trees of Derbyshire** project, run by Derbyshire Wildlife Trust, and involving volunteers from all over the county, surveyed 4,150 veteran trees to provide information on location, species, size, condition and features. The majority of the veterans are oaks, but a surprising number of veteran hawthorns have been recorded. In the Peak District, 1,277 trees were surveyed, the biggest Peak District veteran amongst 300 at Chatsworth Park was an oak with a girth of 8.68m.



WOODLANDS



Sheffield City Council's work on returning conifer plantations to broadleaved woodland, funded by the Forestry Commission's Woodland Grant Schemes

The **Ravine WoodLIFE** Project ran from 2003 to 2007, funded by the EU LIFE programme, working in the Peak District Dales cSAC and the Wye Valley cSAC in Wales. The project aimed to protect, restore and de-fragment the two ravine woodland complexes covering some 2,973ha (1,961ha in the Peak District, 37% of which is wooded), to bring them under co-ordinated management and to find innovative solutions to ensure their long-term viability.

Works included control of livestock grazing, removal of non-native species, and coppicing and thinning to promote a coppice or high forest structure. Scrub management was also undertaken to maintain the conservation value of the associated grassland and scree habitats.

Through the project, some 2,090ha of woodland and associated habitats were surveyed and baseline condition assessment of the woodland conducted; management plans were drawn up for 449ha, and management agreements for 284ha were negotiated with private landowners, including selective felling, thinning, coppicing and deadwood management. 328 trees were managed to provide standing deadwood habitats in appropriate locations.



Coppicing work

A project website was established at www.RavineWoodLIFE.org.uk providing reports and information, and the Ravine Woodland Management Handbook was produced.



Oak/birch woodland planting at Dovestone by United Utilities

United Utilities has planted **91.95ha** of upland oak/birch woodland under their SCaMP project. At Didsbury Intake, Longdendale, 7.54ha of Plantation on Ancient Woodland Sites (PAWS) has been clearfelled to be planted with broadleaves during the winter of 2010-2011. An additional 89.2 hectares of woodland is under continual restoration management. Some of the tree planting at Dovestone reservoir is pictured left. Over time, these native tree species will grow to form a new area of clough woodland which will provide additional wildlife habitat to complement the existing upland habitats and assist in carbon and water storage.

WOODLANDS ACTIVITY

Woodland creation grants covering 418ha were approved by the Forestry Commission.



An army of new oak trees on United Utilities' land



Contractor selectively felling sycamore in the Dales

9.7ha of oak and wet woodland was created at Slippery Stones under the Forestry Commission's New Native Woodland Challenge Scheme.

328 trees were managed to provide standing deadwood habitats in appropriate locations in the Ravine woodlands.

1.5ha beech regeneration removed to favour oak, birch & rowan at Sheffield Wildlife Trust's Wyming Brook Reserve.

1,980 trees planted on Yorkshire Water's sites at Thornton Moor and Twizle Head Moss in 2009 through the Moors for the Future Partnership.

16.5ha of woodland management by Tarmac at Tunstead, Darlton, Dene and Ballidon Quarries.

Sheffield City Council-owned Wyming Brook has seen 19ha of natural oakwood regeneration management by allowing conifers to die off and preventing regeneration. A further 6.4ha of wet woodland at Blacka Moor & Wyming has been secured through a forest plan.



Conifer compartment in the Alport Valley after felling

Sheffield Wildlife Trust felled conifers at Black Brook reserve for creation of 6.5ha of upland oak/birch woodland.

The National Trust felled 22ha of conifers in the Alport Valley to allow native broadleaved woodland to regenerate (pictured left). Much of the timber removed has been used for gully blocking on Bleaklow Moor.

WOODLANDS ACTIVITY



Volunteers helping with woodland fencing

Woodland improvement grants targeted at woodland birds covering 525ha have been approved, or are being processed, by the Forestry Commission.

14.5ha of ashwood at Slinger Wood is managed by the Arkwright Society, who received a WES grant up to 2010.



Slinger Wood managed by the Arkwright Society

Derbyshire Wildlife Trust manage approximately 41ha of ancient oak woodland at Brockholes, Ladybower, Hillbridge and Parkwood and Long Clough.

24.88ha of the Haddon Estate has recently been entered into Higher Level Stewardship for parkland creation, this will add to the existing areas of parkland on the estate and provide continuity of management.



BTCV tree planting at Bankside Wildlife Garden



DWT Veteran tree survey training course

GRASSLANDS

Target Achievements

Limestone Dales		<ul style="list-style-type: none"> • SSSI condition: 95.6% favourable/recovering condition • Non-SSSI: 71% of habitats are in management agreements • Restoration: 18.6ha of habitats have been restored • Creation: 5ha of habitats have been created
Hay Meadows		<ul style="list-style-type: none"> • SSSI condition: 77.7% favourable/recovering condition • Non-SSSI: 695ha are in management agreements • Restoration: 116ha of restoration is underway or completed • Creation: 10ha of new hay meadows have been created
Unimproved Pastures		<ul style="list-style-type: none"> • SSSI condition: 70% favourable/recovering condition • Non-SSSI: 773ha (49%) are in management agreements • Creation: 11.7ha of new unimproved pastures are being created
Rough Grazing		<ul style="list-style-type: none"> • SSSI condition: 95% favourable/recovering condition • Non-SSSI: 1,633ha are in management agreements • Creation: 15.5ha of new rough grazing have been created
Lead Rakes		<ul style="list-style-type: none"> • SSSI condition: 97.9% units are in favourable/recovering condition • Non-SSSI: 104ha are in management agreements • Restoration: 4ha of restoration is underway or completed • Creation: 0.2ha of metallophyte vegetation have been created

Grassland conservation has been achieved particularly through agri-environment schemes, with ever-increasing areas of grassland being entered into Higher Level Stewardship, with options for management of the existing resource, and restoration of species-rich grassland. There has been a specific focus on surveying and mapping the extent and condition of the lead rake resource, and securing conservation management agreements on key sites. Greater knowledge and implementation of restoration techniques for hay meadows has been achieved through SITA funded projects by the PDNPA. Increasingly, the importance of unimproved grassland for fungi has been recognised with surveys commissioned by the National Trust and the PDNPA. Volunteers have been involved in grassland surveying including survey of road verges which has helped in the identification of 21 road verge reserves in the National Park, complementing the suite of reserves in other parts of Derbyshire.

Thanks to many people and projects, including the following:

The **Grassland Edges Project** has addressed the issue of scrub and bracken invasion on Longstone, Hucklow and Eyam Edges through a capital works programme aimed at enhancing and restoring BAP grassland habitats. Contractors and volunteers tackled invasive trees and scrub to open up the grasslands for wildflowers, fungi and invertebrates. Over two years the project worked on 14 different sites and facilitated 15 volunteer events. As a result of this, positive enhancement or restoration has been achieved on 11.5ha of lowland acid grassland, 22.5ha lowland calcareous grassland, 8.8ha lowland meadow, and areas of metallophyte grassland.

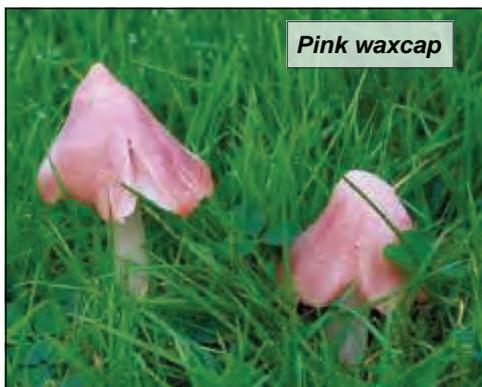
A number of landholdings along the Edges have now been entered into agri-environment agreements or other conservation schemes, securing their longer term management.



Brown argus at Longstone Edge

Delivery of positive management on **Local Wildlife Sites (LWS)** comes from a variety of landowners and much is being achieved under various conservation and agri-environment schemes. Derbyshire Wildlife Trust survey and assess LWS on a regular basis, of 185 sites extending over 1,895ha in the Peak District, 67 are currently considered to be in favourable or recovering condition, with 26 unknown.

GRASSLANDS



Pink waxcap

On the **National Trust** Longshaw Estate, 19ha of **unimproved pasture** have been surveyed over the last ten years, revealing this location to be a nationally important site for waxcap fungi, with particularly abundant *Hygrocybe calyptriformis* or pink waxcap (a UKBAP priority species). Management of the site is geared entirely towards this group of fungi. In order to do so, the National Trust had to establish how the previous tenant's stockman had grazed the site, and then model this approach. Grazing is 'moderate' to ensure grasses don't out-compete fungi but not overgrazed to avoid direct damage and compaction. A soil compaction study commissioned in 2005 revealed fungi only occur on the most intact soils with excellent profiles.

Natural England's work in the Peak District Dales, together with maintaining grassland features through appropriate grazing management, has included restoring and managing 8ha of meadows at Lathkill Dale, Wardlow Hay Cop and Middle Hay. In 2009/10 the Reserve Team spent a total of 39 days (including 5 volunteer days) managing meadows. All meadows were cut and successfully made into hay or haylage, seed was collected from the Lathkill meadows and applied to the Middle Hay meadows as part of the restoration process. Significant investment in new equipment (mower, tedder and baler) has been made to enable in-house management, and a brush harvester has been rented out to 2 other landowners to enable other restoration projects to go ahead.

The management and restoration of **mineral extraction sites** and their surrounding land represent good opportunities for biodiversity enhancement.

Four of the quarries owned by **Tarmac** fall within the BAP area, including Tunstead Quarry, one of the largest limestone quarries in the UK. Here, as part of the quarry BAP, grassland management projects have contributed to the maintenance of favourable condition of over 30ha of limestone dale grassland within Wye Valley SSSI/Peak District Dales SAC.

Between them, Ballidon, Dene, Darlton and Tunstead Quarries have contributed over 32ha of calcareous grassland management; 18.6ha of limestone dales habitat restoration and 2ha of calcareous grassland creation; 8ha of hay meadow creation; a further 15.5ha of grassland managed to increase biodiversity and 12.5ha of rough grazing has been created. Parts of these sites fall within SSSIs and SACs where management is in partnership with Natural England and Derbyshire Wildlife Trust; with BTCV volunteers contributing with practical habitat management work such as scrub removal on calcareous grassland.

Quarry BAPs are taking off, with **Longcliffe Quarries** Ltd currently producing four site BAPs; and **Marshall's** having become the first company in Derbyshire to receive the Wildlife Trust's Biodiversity Benchmark award for land management at Stoke Hall Quarry, Grindleford.

Other former minerals sites owned or managed by **Derbyshire Wildlife Trust** include Hadfields Quarry, leased to the Trust by Lafarge Cement; Hopton Quarry and Millers Dale Quarry, both SSSIs; Gang Mine notified as a Special Area of Conservation for its calaminarian grassland; and Hartington Meadows. More than 20 former quarry or mining sites now qualify as Local Wildlife Sites as a result of their flora and fauna interest, amounting to 148ha of BAP habitat.

Metalliferous hillocks designed to support calaminarian grassland species such as leadwort and alpine penny-cress were created on Rowland Common and Deep Rake by **Glebe Mines** as part of the restoration plan for the mineral site.



Alpine penny-cress (above) and common spotted orchid (below)



GRASSLANDS ACTIVITY



BTCV volunteers clearing scrub at Ballidon Dale

Management of Derbyshire Wildlife Trust reserves included scrub clearance for grassland management on around 20ha of calcareous daleside grassland at Priestcliffe Lees, Chee Dale, Deep Dale and Gang Mine.

The National Trust felled 3ha of larch plantation in Hall Dale, Dovedale SSSI for restoration to daleside grassland. Other work included 0.6ha of scrub clearance in Manifold valley with 30 volunteers; 2.25ha scrub clearance in Biggindale with a contractor.

The National Trust at Longshaw has restored 15ha of species-rich hay meadows in Grouse Inn Fields and Jubilee Barn Fields between 2003 and 2010.

36ha of conservation/restoration work on limestone dales was achieved through the Vision Project, with volunteers clearing scrub at 2 sites.

Hay making in the South West Peak



Hay meadow surveying on the Longshaw Estate

Hay meadow seed collection



77ha of hay meadow restoration initiated through the Vision Project, and the Local Seeds for Local Hay Meadows project, including restoration on 2.82ha of the National Park Authority's North Lees estate, with seed harvested from species-rich meadows for spreading on those with less interest.

Tarmac site restoration has included hay meadow creation at Ballidon Quarry (2ha) Tunstead Quarry (5ha) and Dene Quarry (1ha).

Staffordshire Wildlife Trust restored 0.7ha of species-rich grassland on semi-improved pasture at Weags Barn using local hay as seed source.

GRASSLANDS ACTIVITY



Volunteers clearing scrub at Longstone Edge

The Longstone and Hucklow/Eyam Edges Project has achieved positive enhancement or restoration on 11.5ha of lowland acid grassland, 22.5ha lowland calcareous grassland, 8.8ha lowland meadow, and areas of metallophyte grassland.

Derbyshire Countryside Service manages 0.15ha of species-rich grassland off the Sett Valley trail.

The Vision Project delivered 12ha of conservation/restoration action on rough grazing, with volunteers working on 12 sites.

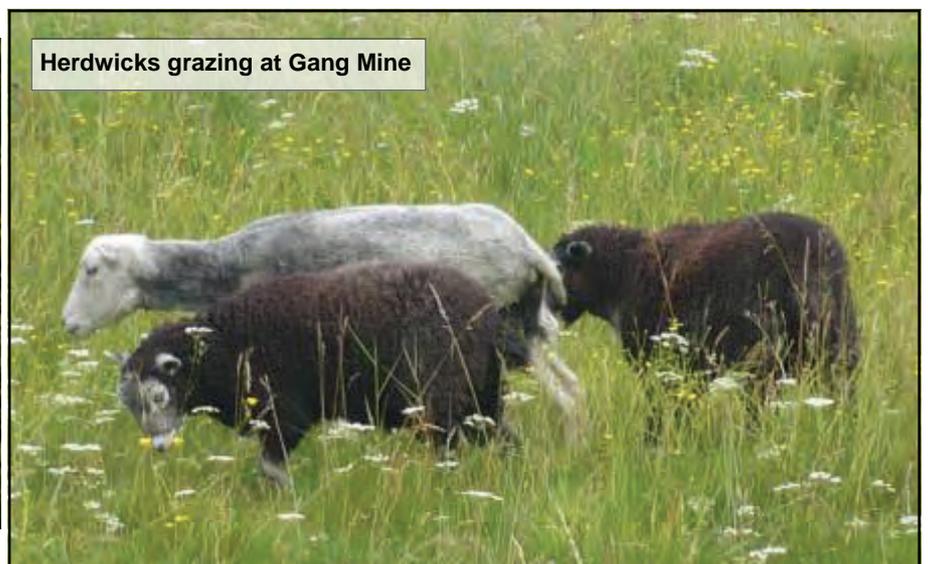


Seed spreading at The Beeches

Around 5ha of lead rake habitats are under favourable management at Rose End Meadows and Gang Mine. An additional area of approximately 3ha at Gang Mine is now under Wildlife Trust management.



Spring Sandwort or 'Leadwort'



Herdwicks grazing at Gang Mine

WETLANDS

Target Achievements

Rivers and Streams		<ul style="list-style-type: none"> • SSSI: 13.9% is in favourable/recovering condition • Non-SSSI: 71% of sampled rivers in 2009 were assessed grade A or B • Restoration: 15km of rivers and streams have been restored
Wetlands		<ul style="list-style-type: none"> • SSSI: 89% favourable/recovering condition • Non-SSSI: 156ha of wetlands are in management agreements • Creation: 13.45ha of wetland habitats have been created
Ponds		<ul style="list-style-type: none"> • High Value: 134 ponds of highest ecological value are in management agreements • Other: 52% of other recorded ponds are in management agreements • Restoration: 82 ponds have been restored • Creation: 74 ponds have been created

The Environment Agency and Natural England's Catchment Sensitive Farming project, supported by significant input from the Trent Rivers Trust, has contributed to improvements in water quality and associated wildlife in the Dove catchment, one of 50 priority catchments nationally. This has been complemented both in the Dove catchment and elsewhere by the Wildlife Trusts' Water for Wildlife projects, tackling habitat and predation issues in liaison with angling clubs and river keepers, and targeting the conservation of water vole populations in particular. Restoration techniques for dewponds are also now well-established with a large number of sites restored since 2001 through SITA and Aggregates Levy funded projects by the PDNPA.

Thanks to many people and projects, including the following:

The **Wildlife Trusts** have been installing Large (and Coarse) Woody Debris in rivers and streams. Woody debris performs many useful functions: stabilising river banks and beds, trapping sediments and organic matter, and providing wildlife habitat. The presence of large woody debris can benefit fish by providing shelter, shade, refuges and sites for feeding, spawning and nurseries. Leek and District Fly Fishing Association and Swainsley Fly Fishing Club have been key partners. Staffordshire Wildlife Trust, for Severn Trent Water, with funding from the PDNPA Sustainability Development Fund, undertook a trial project to explore options for erosion control on the River Churnet near Tittesworth visitor centre. Work included strategic positioning of large woody debris and an engineered log jam. These works form part of a suite of wetland habitat enhancements and monitoring.



Trent Rivers Trust, with funding from Severn Trent Water, installed approximately 300m of soft brush revetments at heavily eroded sites on the River Manifold in order to halt excessive erosion of the banks. These works formed part of agreements with landowners to prevent conventional agricultural land reclamation actions such as straightening of the river channel using heavy machinery, and the dredging of the river substrates.

The added benefits of soft revetments are improved habitat for wildlife, particularly juvenile fish and freshwater invertebrates. The impact on wildlife of these revetments has been measured by two separate surveys by Hull University and Aquascience. The latter indicated that invertebrate populations had increased on the study sites, and three nationally rare mayfly species were discovered, including the first record of Southern Iron Blue, a BAP species.

WETLANDS

United Utilities and **DWT** have restored a pond at Woodhead Reservoir, a site which used to support water voles in 2001. Work on this pond aims to improve general biodiversity but there are hopes that water vole will return.



Newly restored pond in 2007



The restored pond in 2010

Under the management of **Derbyshire County Council Countryside Service**, Mousley Bottom, alongside the River Goyt just west of New Mills, has undergone a remarkable transformation from rubbish tip, sewage works and gas works, to become a beautiful Local Nature Reserve.

The site was initially reclaimed in the early 1980's, with paths laid and large areas of plantation and grassland established. The real change, however, has been in the last 6 years as the DCS Rangers have implemented a long term habitat improvement plan which is slowly changing the relatively sterile plantations of close-planted trees in straight lines into beautiful woodlands rich in wildlife and far more attractive for people to walk through. At the same time footpath improvements have made the site far more accessible for people.

One of the areas of current work is the ditch which carries water from the former refuse tip old mine workings in the hills to the River Goyt. The water in the ditch is ochrous in colour due to its ferrous content. The ditch is unattractive to people and wildlife with its narrow course, steep sides and discoloured water.

The **Red River Project**, supported by the Environment Agency, will transform this straight ditch into a meandering stream and wetland area. The result will be to improve the site for both people and wildlife. Work in 2009 included bringing in reeds from another site, and installing Large Woody Debris (LWD) in partnership with the Environment Agency, the Wild Trout Trust, and Disley and New Mills Angling Club. Additional outcomes will be improved wetland habitats including newly established reedbeds which will help to filter and clean the water before it enters the River Goyt. Interest in this project was used to generate a similar but larger (c 0.25ha) wetland creation project on adjoining land owned by New Mills Town Council, illustrating how good practise can be spread.

The **Proliferating Ponds in the Peak** project was run by **PDNPA**, with funding from SITA and the Aggregates Levy. Over three years, the project completed management work on 24 ponds, restoration on 50 ponds and has re-created 65 ponds.

Ponds were prioritised for action according to the presence or proximity of populations of great crested newts. The Derbyshire Amphibian and Reptile Group in 2008 surveyed 170 ponds, over 70 of which supported great crested newts. Many of the newly restored ponds supported great crested newt populations within months of the work being completed. Physical pond work has been carried out by PDNPA rangers, volunteer groups and contractors. Materials have been kindly donated by Tarmac (limestone grit) and Glebe Mines (clay).



WETLANDS ACTIVITY



Peak Park Conservation Volunteers pond restoration

A school pond was created by BTCV as part of Derbyshire Wildlife Trust's Grounds for a Change project near Eyam primary school, plus another pond at Hope primary school.

Currently 45 ponds are being managed by landowners under Higher Level Stewardship scheme agreements for maintenance of ponds of high wildlife value.

A total of 5 ponds have been restored at Lathkill Dale, including one through a partnership between Natural England and PDNPA. This pond utilised a butyl membrane to eliminate the problems of newly restored clay-lined ponds failing. Work on a further pond has recently started at Cressbrook Dale on Wardlow Hay Cop.



A restored dewpond holding water

The Vision Project delivered conservation and restoration work on 16ha of river corridor habitats, working on 10 sites, 4 of these with volunteer involvement.

10ha of new wetland habitats were created by Severn Trent Water at Tittesworth reservoir in 2004; with further river corridor work ongoing by Staffordshire Wildlife Trust.



Dragonfly pools created at Severn Trent Water's Tittesworth Reservoir

At Tunstead Quarry 2.5ha of existing ponds and wet grassland are managed to enhance biodiversity within Longsidings former silt lagoon. An additional 3ha of new wetland has been created at Bold Venture silt lagoon.

Two pools, each around 0.5ha in area were created at Eldon Hill Quarry, owned by Chatsworth Estate, as part of the quarry restoration scheme.

WETLANDS ACTIVITY

In January 2007 a dam burst at Cavendish Mill, the fluorspar processing facility operated by Glebe Mines Ltd. This released a huge volume of semi-liquid tailings from a settling lagoon which flowed down Stoney Middleton Dale, through homes and fields and into Stoke Brook and subsequently the River Derwent, with material recorded as far downstream as the River Trent.

The tailings smothered the bottom of the brook and also acted as a cement in between the river and brook gravels, leading to a reduction in the value of the stream sediments for breeding invertebrates and fish. The tailings were also very rich in heavy metals. The Environment Agency required the company to implement the restoration of the brook and the river as well as the surrounding land.

The restoration works were carried out through the summer of 2008 and are recognized as having set a new benchmark in terms of the quality and sensitivity of river restoration works. A machine was specially commissioned which has low ground pressure, the ability to walk over the banks of the brook rather than on them, and with a sieve attachment allowing the finer tailings to be washed out of the stream gravels. In total, 987 tonnes of material was removed from Stoke Brook, Calver Weir and the River Derwent.

A programme of monitoring of fish tissue was initiated and is to be continued post-remediation whilst invertebrate surveys have begun to assess the success of the works.

The remediation works also incorporated elements of environmental gain: the positive redesign of an on-line pond swamped by tailings, and an adjacent wetland (part of Coombsdale flood alleviation scheme), in addition to the creation of a new pond/wetland area adjacent to the brook.



High-tech low-impact machinery in operation



New wetland created as part of the clean-up

Numerous volunteers have been out pulling non-native invasive Himalayan balsam (pictured below) from river banks around the Peak: Peak Park Conservation Volunteers, Derbyshire Wildlife Trust, Trent Rivers Trust and work experience students on the Manifold; PPCV, the Scouts and National Trust volunteers on the Ilam Estate; PDNPA rangers, volunteers and the Calver Weir Restoration Project on the Derwent.



Extensive research on the hydrology of the River Lathkill has been undertaken by **Natural England**, the ultimate aim being to reduce the effects of abstractions to historic mine workings. River geomorphology has increased in diversity through bed re-profiling and the installation of large woody debris.

MOORLANDS

Target Achievements

Limestone Heath		<ul style="list-style-type: none"> • SSSI: 72.4% favourable/recovering condition • Non-SSSI: 70.16ha are in management agreements • Restoration: 17.84ha are under restoration • Creation: No limestone heath creation has been reported
Blanket Bog		<ul style="list-style-type: none"> • SSSI: 94.6% favourable/recovering condition • Non-SSSI: 831.69ha are in management agreements • Restoration: 4,135ha are under restoration
Heather Moorland		<ul style="list-style-type: none"> • SSSI: 98% is in favourable/recovering condition • Non-SSSI: 962.16ha of habitats are in management agreements • Restoration: 2,537.35ha are under restoration • Creation: 158ha of heather moorland have been created

Much of the day-to-day management and capital works on moorlands have been achieved through agri-environment agreements. In recent years there has been a significant push through Natural England to reach the Government PSA target for SSSIs. The development and agreement of Moorland Management Plans over significant tracts of land has helped to reach this target. Work by large landowners such as NGOs and utilities companies has made a substantial contribution towards these BAP targets, not to mention the work of private landowners and large estates. Financial support from external grants and the involvement of volunteers have also played a significant role in establishing projects and in physical delivery and monitoring.

Thanks to many people and projects, including the following:

The **National Trust** along with other partner organisations (through the Moors for the Future Partnership), has been focusing on restoring the moors and peat on the worst affected areas of Kinder and Bleaklow, using innovative and experimental techniques.

Techniques involved in establishing the vegetation have included: spraying the peat with grass by helicopter, planting cotton grass plugs and spreading heather brash to help create a protective skin. They are also helping to return the moors to blanket bog by gully blocking the many thousands of ditches which scar the high moors. This also helps stabilise the peat and stops it being washed down into the reservoirs.

With Biffaward support, helicopter lifts move timber, stone and plastic piling up to the Kinder plateau for gully blocking work. In addition, bare peat must be stabilised, so 1,200 helicopter bags of heather brash were supplied, airlifted and spread, enough to cover approx 8ha of bare peat. This is a pre-requisite to cotton grass planting, which takes place in the autumn and spring. Monitoring of water table, erosion rates and vegetation has commenced.

In the Derwent Valley, the National Trust has worked with their tenants to help re-create heather moorland, having to date managed to convert over 300 hectares of acid grassland into a mixture of heather, bilberry and other dwarf shrub. The result in this area has been a significant increase in wildlife, especially a rise in the number of curlew, golden plover and mountain hare.

Work by the **National Park Authority** on their 5,300 hectares of moorland estates (The Roaches, Warslow Moors, Stanage/North Lees and the Eastern Moors) has seen considerable input to achieving favourable/recovering condition on 99.1% of its SSSI landholdings. Active management has included grip blocking using various methods; scrape and pond creation for waders; heather cutting and burning; heather and sphagnum harvesting for Moors for the Future projects; heather seeding at Big Moor; creation of a woodland stock enclosure to encourage natural rowan regeneration; rush and molinia cutting; scrub control; and fencing and walling for grazing management including the introduction of traditional breed cattle onto five moors and adjacent in-bye land. Almost all of the moorland is now in agri-environment schemes with three large moorland HLS agreements being recently concluded on the Warslow Moors.



MOORLANDS

Putting United Utilities ‘SCaMP’ into action has only been possible due to OFWAT, the water industry financial regulator, allowing United Utilities to fund the programme as part of its AMP4 investment programme. The funding enabled **United Utilities**, together with its partners **RSPB, NE, FC, PDNPA** and farm **tenants**, to enhance habitats, benefit wildlife and improve raw water quality. Additional funding and support came from Natural England through the ESA scheme, and the Forestry Commission through EWGS. At the start of SCaMP in 2005, just over 14% of UU’s SSSI landholdings in the Peak District were in favourable or recovering condition. After five years, over 99% is now judged to be meeting the Government’s Public Service Agreement target.

Work has included: achieving SSSI condition on **6,795ha** of blanket bog and **2,672ha** of upland heathland; restoring blanket bogs by blocking **40km** of drainage ditches; re-vegetating areas of eroded and exposed peat; restoring hay meadows; establishing clough woodland; diversifying heather moorland; providing new farm buildings for indoor wintering of livestock and for lambing; providing new waste management facilities to reduce run-off pollution of water courses; and fencing to keep livestock away from areas such as rivers and streams, and from other sensitive habitats.



Blanket bog re-vegetation at the top of the Chew Valley



Private moorland owners have been working to restore degraded moorland back to heathland. 164ha of land dominated by purple moor-grass (*Molinia*) has been turned back to heather moorland at High and Piggford Moors (below left). A further 138ha of *Molinia* and bracken dominated land has been restored at Howden and Abney Moors, the largest single area of moorland restoration to be completed with private funding.

On the Bradfield Moors, Fitzwilliam (Wentworth) Estates, is currently two-thirds of the way through a scheme to fell a third of the commercial conifer plantation to restore the area to its former heather moorland habitat (below right). This will benefit birds such as curlew, golden plover, merlin and red grouse. In the remaining woodland, native broadleaves (birch, oak, holly and rowan) are being planted along streams and gullies, and the woodland is being managed for long-eared owl, crossbill, hairy wood-ant and nightjar.



Restored heather moorland in the South West Peak



Sensitive working methods leave land in good condition

MOORLANDS ACTIVITY

Over 40km of moorland grips and gullies have been blocked by United Utilities, National Trust, PDNPA, and private moorland owners to reduce water run-off and re-wet blanket bog.

Natural England and the National Trust have trialled methods of restoring and creating limestone heath at Cressbrook Dale and Wetton Hill respectively.

PDNPA purchased 4ha of land at Low Moor in 2008 and is restoring it to limestone heath.



Contractor grip blocking on the Roaches



Belted Galloway grazing on the Warslow Estate with sensitively erected fencing taking account of landscape issues

Over 1,000 hectares of moorland is now entered into a Higher Level Stewardship option for moorland restoration

More than 60km of fencing has been erected to control, remove or introduce stock grazing to improve management on degraded moorland.

Over 250,000 plug plants of cotton-grass have been planted by National Trust volunteers, and 135,000 by Moors for the Future.



National Trust volunteers plug planting at Kinder



National Trust volunteers planting cotton-grass on the Marsden Moor Estate

MOORLANDS ACTIVITY



United Utilities flying in heather brush to be spread by hand



Contractors spreading heather brush at Dovestone

United Utilities has constructed 14 dams out of heather bales, and several others using 250tonnes of stone, to reduce water run-off from the moors.

The Moors for the Future partnership has re-seeded 982ha of bare peat; laid over 150km of stabilising Geojute; airlifted 1500 tons of heather brush to cover 100ha of bare peat; blocked 127.5km of grips and gullies; and restored over 12 miles of footpaths and bridleways.

The partnership has also controlled nearly 600ha of bracken and rhododendron on the moors.

Coir rolls being installed on Bleaklow



Coir rolls and Geojute on Black Hill



12ha of blanket bog and mire (with rush-pasture) at Stanley Moor Local Wildlife Site is in favourable condition and about to go into an HLS agreement.

SPECIES

Target Achievements

Water Vole	  	<ul style="list-style-type: none"> • Range maintenance: 175 1km squares occupied • Range expansion: 17 additional 1km squares occupied since 2005 • Population: Stable or increased at 80% of 36 monitoring sites in 2009
Curlew	   	<ul style="list-style-type: none"> • Moorland range: 367 1km squares moorland habitat occupied in 2004 • Farmland range: 25% increase in 1km squares occupied 2002 to 2007 • Moorland population: 17.5% decline 2004 to 2009 in the North Staffordshire Moorlands • Farmland population: 21% decline: 266 pairs (2002) to 211 pairs (2007)
Lapwing	  	<ul style="list-style-type: none"> • Range: Approx. 228 1km squares habitat occupied in 2007 • Moorland population: 27.3% decline 2004 to 2009 in the North Staffordshire Moorlands • Farmland population: 40% decline: 1174 pairs (2002) to 705 pairs (2007)
Twite	 	<ul style="list-style-type: none"> • Range: 10 1km squares occupied • Population: 23 - 30 breeding pairs recorded
White-clawed Crayfish	   	<ul style="list-style-type: none"> • River Manifold population: Presumed extinct • Range: 3 ark projects operating with mixed success • Range: Few known crayfish sites in favourable management • Lathkill population: Individuals released, status currently unknown
Derbyshire Feather-moss		<ul style="list-style-type: none"> • Population: Maintained

Much of the work on species conservation has focused on securing appropriate habitat management on landholdings which either support already, or are suitable to support, the relevant BAP species. Increasing application of Higher Level Stewardship will assist in devising detailed management plans to protect and enhance key populations, particularly of farmland waders. Projects with a tight remit to work with landowners and river keepers have made great strides at spreading the right messages about habitat management, site protection and species conservation. The efforts of volunteers involved in survey and monitoring work have increased our understanding of the distribution and populations of these BAP species, and helped in the targeting of action.

Thanks to many people and projects, including the following:

Derbyshire Wildlife Trust, through the Water Voles in the White Peak project has implemented mink control on the Rivers Dove, Hamps and Manifold with no known losses of water vole populations from these rivers since 2005. DWT also co-ordinate and support fishing club coverage of mink control on the rivers Derwent and Wye from the upper reaches down to Ambergate. Mink were present at 30 out of 142 monitoring sites in 2009 compared to 81 out of 137 sites monitored in 2007.

More than 600 hectares of land has been put forward into agri-environment scheme applications as a result of advice from the **Peak Birds Project**. Advice has been given on land supporting two-thirds of the Peak District's Lapwing population to date. 80 scrapes have been created on farmland to benefit breeding birds. 94 farmers are known to be implementing bird friendly management. Since July 2005, whole farm plans covering 10,473ha have been drawn up for United Utilities under the Sustainable Catchment Management Programme (SCaMP).

Twite numbers in the Peak District remain low despite efforts under **RSPB** and **Natural England's** English Twite Recovery Project (which is concentrating mainly in the South Pennines outside the Peak District). Surveys in 2008 and reports in 2010 revealed breeding twite in nine to ten 1km squares. Six of the survey sites returned negative results. The main populations remain in the north part of the Peak, with outlier colonies remaining in two White Peak quarries, and no recent reports from the South West Peak. A feeding station was established at Winscar Reservoir in 2009 following a sighting of twite, but breeding has not yet been confirmed here.

SPECIES

The **Peak District Lapwing Monitoring Project** spanned three breeding seasons from 2006 to 2008 across the Peak District both inside and outside the Peak District. A research assistant was employed by the **RSPB** to monitor 29 lapwing breeding sites every three weeks, with a total of 5 visits to each site. Regular planned routes were walked on each visit to avoid disturbing the breeding lapwings and to ensure continuity.

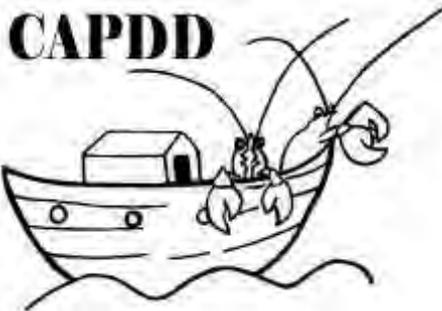
Counts of total numbers of lapwing were made on visits two and three and the peak count was divided by two to give an estimate of the number of breeding pairs on each site. The numbers of lapwing broods and chicks in different age classes were counted on each visit. Lapwing productivity was measured by comparing the number of fledged chicks with the number of breeding pairs on the site at the beginning of the season.

The majority of the sites were being managed within an agri-environment scheme. However, all 29 sites had received management advice from the Peak Birds Project Officer and all were being managed to varying degrees to benefit lapwings.

Results showed that lapwing pairs increased by 23% over the three years, from 269 pairs in 2006 to 331 pairs in 2008. Productivity in 2006 and 2008 averaged six chicks fledged per ten pairs of lapwings, which is a level sufficient to maintain the population. Productivity in 2007 was very high, with 19 chicks fledged per 10 pairs of lapwings, a level which should promote population growth.

There was no overall effect from agri-environment scheme management on hatching success, but productivity was higher on sites managed within an agri-environment scheme. Lapwing population trends were positive across the whole study area with the most pronounced increase higher on sites managed within an agri-environment scheme.

Subsequently, the **South West Peak Wader Recovery Project**, jointly run by **Natural England** and the **PDNPA**, has continued to monitor lapwing breeding success in 'hotspot' areas in 2009 and 2010. Preliminary results indicate a good breeding season in 2010, with predator control and good weather both factors in breeding success.



The Crayfish Arks for the Peak District and Derbyshire Project is a partnership between PDNPA, Derbyshire Wildlife Trust, Staffordshire Wildlife Trust, National Trust, Environment Agency and Natural England. With funding from Natural England through Defra's Aggregates Levy Sustainability Fund, and in-kind contributions from partners. Ten former aggregates sites were assessed as potential ark sites for **white-clawed crayfish**, together with five possible donor populations. One ark site comprising two limestone pools, was established in Derbyshire with 101 crayfish translocated from a publicly accessed site to a less visited, more secure location. Preparations for a second ark site are in progress.



Project team measuring and checking crayfish



Young crayfish being introduced to their new home

SPECIES ACTIVITY



Weed wiping to manage rush pasture for waders



Rush cutting and scrape creation

RSPB breeding bird surveys at Dovestone Reservoir recorded an increase in the number of **curlew** pairs from 27 in 2004 to 36 in 2009. Habitat restoration work to raise the water table by re-vegetating degraded blanket bog appears to have benefitted dunlin, showing an increase from 7 to 15 pairs over this five year period.



Coir rolls used to retain water and help with re-vegetating bare peat



Beginning in 2000, English Nature/Natural England, with Haddon Estates and David Rogers Associates ran a LIFE-funded project to investigate the ecology of **white-clawed crayfish** (pictured right). Following LIFE funding a captive breeding program was established with the aim of developing husbandry techniques and methods enabling large numbers of crayfish to be reintroduced into potential ark sites with minimum impact on donor populations. 230 crayfish were released into the River Lathkill. The breeding project ceased in 2010 following an outbreak of suspected crayfish plague.



SPECIES ACTIVITY



Joint work by Derbyshire Wildlife Trust and the PDNPA with the landowner at Wardlow Mires cleared a section of ditch to improve habitat for **water voles** and other species such as dragonflies.



Ditch clearing (left) at Wardlow Mires for water vole (pictured above)

The site before work (left) and after work (right)



Derbyshire Wildlife Trust, with the Environment Agency, the landowner and the Fifty Nine Fly Fishers Club developed a project to enhance habitat for **water voles** near Milldale on the River Dove by restoring open water to 70 metres of existing dry channel; increasing water depth in sections currently in open water by removing accumulated silt; re-profiling banks where necessary to create banks suitable for burrowing; reducing shade levels to encourage bankside grasses and other plants to flourish; and protecting the channel from livestock damage. This work also benefited brown trout by creating suitable spawning sites, and otters by creating a log pile otter holt on National Trust land.

Natural England have coordinated regular monitoring of the White Peak population of **Derbyshire feather-moss** to ensure the ongoing conservation of this species. A survey was conducted to ascertain the exact position and extent to provide baseline data, and annual water quality monitoring is undertaken.

PARTNERSHIPS AND PROJECTS

Partnerships and Projects established over the last ten years include:

- Alport Valley Project** (National Trust, Forestry Commission)
- Biodiversity Vision for Wildlife Project** (PDNPA & Natural England)
- Calver Weir Restoration Project** (Calver Weir Restoration Project, Environment Agency, PDNPA, English Heritage)
- Catchment Sensitive Farming Project** (Natural England, Trent Rivers Trust)
- Crayfish Arks for the Peak District & Derbyshire Project** (PDNPA, Derbyshire Wildlife Trust, Staffordshire Wildlife Trust, Environment Agency, National Trust, Natural England)
- Dark Peak Woodland Project** (Jonathan Winn, PDNPA, Sustainable Development Fund, Forestry Commission)
- Dormouse Reintroduction Project** (Derbyshire Mammal Group, Staffordshire Mammal Group, National Trust)
- Dovestone Partnership** (United Utilities & RSPB)
- Eastern Moors Partnership** (PDNPA, RSPB, National Trust)
- Grassland Edges Project** (PDNPA)
- Great Trees of Derbyshire Project** (Derbyshire Wildlife Trust, Natural England, Derby City Council)
- Hay Meadows Project** (PDNPA)
- Lapwing Monitoring Project** (RSPB)
- Lapwing Recovery Project** (PDNPA, RSPB)
- Lathkill Crayfish Project** (Haddon Estate, Natural England, Derby University)
- Lead Rakes Project** (PDNPA, Natural England, English Heritage)
- Limestone Heath Project** (PDNPA)
- Living Don Project** (Wildlife Trust for Sheffield and Rotherham, Environment Agency)
- Moors for the Future Partnership** (PDNPA, Natural England, National Trust, United Utilities, Severn Trent Water, Environment Agency, Derbyshire County Council, Sheffield City Council, Moorland Owners & HLF)
- Peak Birds Project** (PDNPA, RSPB)
- Proliferating Ponds in the Peak Project** (PDNPA)
- Quarry BAPs** (Longcliffe, Tarmac, Marshalls)
- Ravine WoodLIFE Project** (English Nature, Forestry Commission, National Trust, the Wildlife Trusts, the Woodland Trust, WWF, CCW, Wye Valley AONB)
- SCaMP (Sustainable Catchment Management Programme)** (United Utilities, RSPB, NE, FC, PDNPA, tenants)
- Twite Recovery Project** (RSPB & Natural England)
- Value in Meadows Project** (Derbyshire Wildlife Trust)
- Water for Wildlife Projects** (Derbyshire Wildlife Trust & Staffordshire Wildlife Trust)
- Water Voles in the White Peak Project** (Derbyshire Wildlife Trust)
- Woodland Birds Project** (Forestry Commission)
- Woodland GIS Project** (Forestry Commission, Natural England, PDNPA)

And a wealth of local projects including:

- Eyam Delph Nature Reserve** (Local community, PDNPA)
- Furness Quarry** (British Mountaineering Council, PDNPA)
- Silence Heritage Site** (Local community, PDNPA)

65 UKBAP Priority Habitats
19 in the Peak District
1150 UKBAP Priority Species
157 in the Peak District

UK BAP HABITATS AND SPECIES

UKBAP Review

In 2005 - 2007 the UKBAP was revised, new priority habitats were included and some of the original 49 were renamed and re-defined. There are now 65 priority habitat types listed in the UKBAP, of which 19 are represented in the Peak District. Similarly changes took place with species; of the original 577 priority species listed in 1994, 123 were removed due to not meeting the BAP criteria. The UKBAP priority species list now stands at a total of 1150 species, of which 157 are understood to have been recorded in the Peak District since 1990.

Priority Habitats

Peak District BAP habitats now added to the UKBAP priority list are:

- Calaminarian Grassland (called Lead Rakes in the PDBAP), listed due to the UK having international responsibility for this habitat type, the degree of risk and the association with key species.
- Ponds, largely due to their association with BAP species.

New UKBAP priority habitats relevant to the Peak District are:

- Open Mosaic Habitats on Previously Developed Land (i.e. quarries, brownfield sites);
- Upland Flushes, Fens and Swamps;
- Inland Rock Outcrop and Scree Habitats; and
- Traditional Orchards.

Priority Species

Peak District BAP species which have recently been added to the UKBAP priority list are:

- Curlew
- Lapwing
- Twite

Curlew was added to the UK list as 41% of the European population is in the UK, and the population has experienced a UK decline of 40% over 25 years.

Lapwing was added due to their IUCN assessment as vulnerable, and a population decline of 51% over 25 years in the UK.

Twite was added as 95% of the European population is found in the UK, and the population has experienced a decline of 25-50% over 25 years.

Peak District BAP species removed from the UKBAP priority list, and the PDBAP priority list is Appleyard's Feather-moss, now no longer considered to be a separate species.

Newly recorded UKBAP species in the Peak District are:

Southern Iron Blue - a river mayfly, which was recorded in the River Manifold in 2009 and 2010. No previous records for this species in the Peak District could be found. This species is an excellent indicator of the health of riverfly fauna.

Lecanora sublivescens - a greyish, nondescript, nationally scarce lichen of ancient trees. This is the first record of the species in England north of Herefordshire.

Barbastelle bat - a new, and as yet, unconfirmed record in 2003.

SUMMARY

Despite the successes to date, the challenge is on for the future. The pressing need to build resilience into our landscapes and habitats to enable species to adapt in the face of climate change is greater than ever, whilst the current financial climate will inevitably restrict our actions. The challenge is on to find more innovative ways of funding and delivering enhanced biodiversity, to ensure that everyone from policy makers to the general public understands and appreciates the value of biodiversity to our everyday lives and to future generations.

The next ten years of the Peak District Biodiversity Action Plan will see a move away from Habitat and Species Action Plans towards a more landscape based approach. Our aim is still to secure and enhance biodiversity across the whole Peak District, measuring progress in terms of conservation of the UKBAP priority habitats and species. The focus of delivery, at least in the next few years, will be on the highest priorities and the elements at greatest risk. Areas of highest biodiversity value must be secured, defragmented and buffered by diverse habitats. The dramatic decline in lapwing numbers must be halted and reversed. Blanket bog restoration work should continue, focusing on restoring the hydrological integrity of the peat.

The need to work together is greater than ever, organisations, companies, communities and individuals will all have a part to play in safeguarding and increasing biodiversity within the iconic landscapes of the Peak District. As 2010, the International Year of Biodiversity, draws to a close, we celebrate our biodiversity achievements over the last ten years and we look forward to meeting the challenge of conserving and enhancing biodiversity in the Peak District over the next ten years.



