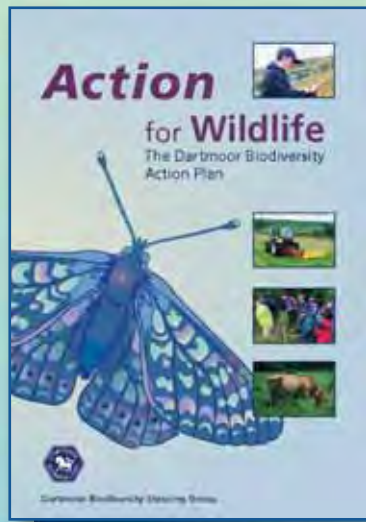


Dartmoor Biodiversity Newsletter

Dartmoor Biodiversity Partnership 2008/2009



Welcome to the seventh Dartmoor Biodiversity Newsletter, an annual update on the wide range of initiatives and activities carried out by individuals and organisations to protect and enhance Dartmoor's special wildlife.

Eight years have passed since *Action for Wildlife: The Dartmoor Biodiversity Action Plan (BAP)* was launched as a ten year plan and we continue to make excellent progress with 95% (305 out of 320) of the identified actions now completed or in progress.

A large amount of species monitoring work was carried out in 2008, highlights included extensive breeding wader surveys and woodland bat surveys.

Furthermore, moorland conservation projects such as the blanket bog restoration project and moorland management under agri-environment schemes continue to improve the quality of Dartmoor's uplands.

We hope you enjoy reading about these projects, and the wide range of achievements made over the past year in this newsletter. It demonstrates the continuing commitment of many dedicated groups and people to secure Dartmoor's wildlife for the enjoyment of future generations.

More rare bats discovered on Dartmoor

Miriam Glendell, Dartmoor National Park Authority

Fifteen of the 17 British bat species have now been found on Dartmoor, with the notable discovery of the rare Bechstein's bat last summer. Two years ago, no Bechstein's bats were found in the National Park, despite an intensive expert search effort over a period of two weeks. It is possible that with the warming climate, this southerly species is spreading further west and to higher altitudes.

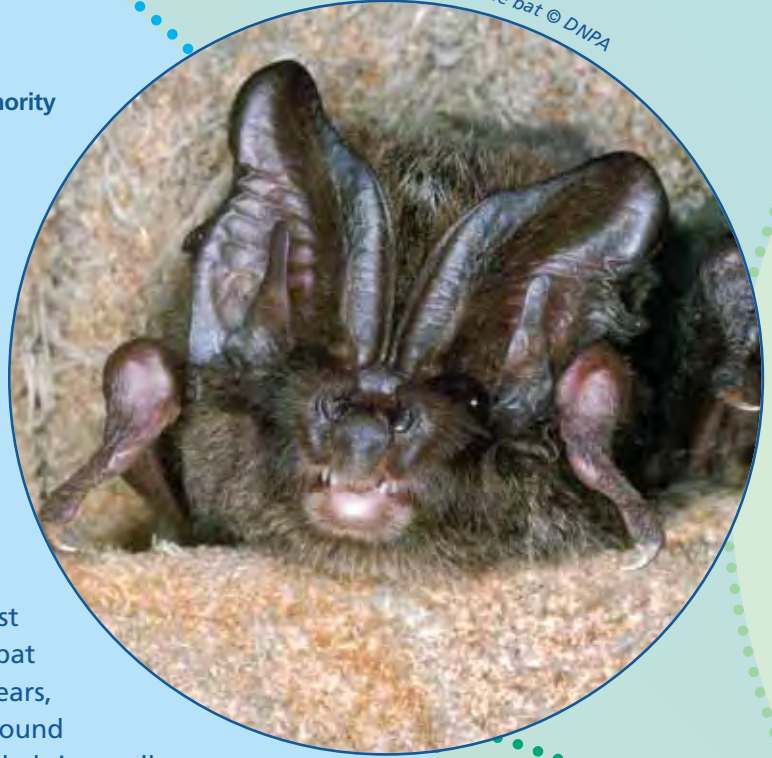
The Bechstein's bat was discovered as part of an ambitious research project set up by Dartmoor National Park Authority (DNPA), the Woodland Trust and the National Trust to investigate another rare bat on Dartmoor, the barbastelle. Over the past two years, Matt Zeale, a PhD student from Bristol University, found healthy populations of the barbastelle in two wooded river valleys - the Bovey and the Dart. The project was made possible through funding from the SITA Trust Landfill Communities Fund.

Both the barbastelle and the Bechstein's bats are rare woodland species, with only a few confirmed breeding colonies nationally, so the Dartmoor discoveries add significantly to our understanding of their ecology and distribution. Both roost under peeling bark and in splits and holes in damaged and dead trees - just the sort of habitat one might be inclined to 'tidy up' in woodland. In addition, these secretive woodland bats benefit from the large areas of well connected habitat that still exists in the National Park and from the 'dark skies' that enable them to fly undetected by predators.



Snipe © Andy Hay rspb-images.com

Hembury barbastelle bat © DNPA



2008 Dartmoor breeding snipe survey

Kevin Rylands, RSPB

In 2008, 36 sites, located mainly on the southern moor, were surveyed for snipe. The primary aim was to look at sites not covered by other recent surveys to enable a total population estimate for Dartmoor to be made. The survey was part of the Dartmoor Wader Project - a partnership between DNPA, Duchy of Cornwall, Natural England (NE), RSPB and MOD, to take co-ordinated action to safeguard Dartmoor's breeding waders. Surveying involved walking through sites on a 50m grid pattern, recording snipe and assessing potential breeding. Snipe are not easy to survey; they are most likely to be located by chipping (their "song"). Habitat was key to the distribution of snipe. Snipe live in the wettest parts of valley mires and marshes, and prefer sites with a wide and open aspect. Narrow valleys and marshes with extensive shrub growth, as well as areas of dense rush or molinia, are avoided. Grazing levels of cattle are an important aspect of providing these suitable conditions, with patches of well grazed vegetation between tussocks most attractive to snipe. It was estimated that a minimum of 66 pairs of snipe were present at the sites surveyed. When added to other survey data, this indicates that there are a minimum of 126 pairs of snipe on Dartmoor. With the actual figure likely to be at least 150 pairs, this makes it the largest breeding population in southern England.



Dartmoor Blanket Bog Restoration Project

Frances Cooper, Action for Wildlife Partnership

The *Action for Wildlife Partnership* has undertaken pilot work towards restoring blanket bog on two sites during 2008. The first site is on Amicombe Hill where varied techniques were used to block four ditches which drain the blanket bog at a former peat cutting. The work has been valuable in terms of what we have learned about the practical resources necessary to successfully restore blanket bog. We were able to use this experience to restore six hectares of blanket bog at Blackabrook Down, where regular small channels are draining the bog on the flat hilltop. 200 small peat dams have been created to block the drains at regular intervals. Peat was sourced from within the channels. About half of the dams have timber structure to hold the peat in place where the gradient is steeper. Monitoring schemes to measure the effects on the water table and vegetation are being set up. A further hectare of blanket bog was restored at Blackabrook Head where management and environmental conditions have resulted in irregular erosion gullies forming. Once again, peat dams have been used to block water movement. The peat used was largely sourced from eroding peat 'islands' within the gullies which were stranded due to the lowered water table. Early indications suggest that this area in particular has been successful and the gullies have become a series of pools in which it is hoped bog plants will be able to colonise. This kind of erosion is prevalent on Dartmoor's blanket bog so this technique may be used elsewhere in future.



Water builds up behind dams within minutes © AFW



After restoration: Water lying in a previously eroded channel © AFW, DNPA



Curlew chick © Jon Avon



Operation Wader Update

Tom Stratton, Duchy of Cornwall

Operation Wader is now in its fourth year. The RSPB, Duchy of Cornwall, NE, DNPA and the MOD as project partners meet on a regular basis to discuss the progress of this initiative which seeks to monitor and improve the breeding success of lapwing, golden plover, dunlin, curlew and snipe on Dartmoor. Jon Avon continues his role as Project Adviser and carries out the monitoring of breeding waders. An annual post-breeding season report is produced for the Steering Group, summarising the findings.

This year Jon's work has focussed mainly on the breeding success of lapwing and curlew at their known sites. The hatching rates for known lapwing and curlew clutches have generally improved, probably as a result of predator control. Chick survival however remains poor and this is something that requires on-going investigation and consideration in the context of national data. The majority of breeding sites are now in good condition although the need to cut back vegetation at Hanger Down and Harefoot Cross to assist lapwing has been identified.

Separate fieldwork completed by Mike Sampson identified two golden plover territories and eight pairs of dunlin.



Kugelann's Ground Beetle in the Teign Valley

Adrian Colston, National Trust

Kugelann's ground beetle *Poecilus kugelanni* is a nationally rare species, with only 25 recorded sites since the 1800s. It is a priority species within the Dartmoor Biodiversity Action Plan. I surveyed suitable habitat - heathland with small rocky granite outcrops - in National Trust property just below Castle Drogo in May 2008 on three occasions, and found Kugelann's ground beetle each time. The population is probably sizeable as the beetles were found within minutes of arrival every time. The species

Kugelann's Ground Beetle © John Walters



identification was confirmed by John Walters who is a national expert on the species.

John has kindly supplied the following account *"The earliest record was in 1911 from Newquay, Cornwall. Its historic range covered southern and central England. Between 1960 and 1990 it was recorded only once.*

Recent survey work was part of English Nature's Scarce Ground Beetle Project. The beetle is currently known to be present on 13 sites."

It is always pleasing to find a rare species in a new location. During 2009 I will try and establish whether the species occurs on heathland further down the Teign Valley. This discovery adds weight to our aims to control the invasion of heath by gorse and birch. This work will be funded by NE under an ESA capital project. For further information visit www.devon-inverts.blogspot.com offered by Adrian Colston.

Rhôs Pastures at Willsworthy

John Loch, MOD

The days of a Defence Land Agent are occasionally leavened by a call from an ecologist from the DNPA asking if one would like to go for a walk. This walk was to inspect those rhôs pastures on the MOD freehold at Willsworthy. We visited the pastures at Standon Farm where the land is grazed under a grazing licence. There are no tenant's obligations in the licence and the result is a fine balance of different habitats. Haphazard grazing of stock close-cropping the palatable areas, casually eating off the coarser leaved moor grass but leaving some thatch to balance the trodden boggy bits has occurred. There is some evidence of scrub encroachment. Grazing was sometimes heavy but of very short duration. The area was used like a transit camp as a holding area on a temporary basis. Sometimes cattle were there, more often sheep and occasionally ponies.

No poaching was in evidence, and because of the extent of the site, minor excesses were balanced. A way forward could be to introduce heavier stocking with cattle for one year only in preference to mechanical cutting.

Fritillary Action

Anja Borsje, Butterfly Conservation

Another year has passed which was packed with lots of positive action for the fritillary butterflies of Dartmoor. An example of progress is the work at Yardworthy Farm. Here, with financial help from NE through an ESA agreement, the landowner has fenced an important area of habitat for the marsh fritillary. This has allowed re-introduction of grazing with cattle and ponies over the summer. Willow, birch and gorse scrub had started to dominate the area.

Scrub is an important aspect of the special rhôs pasture habitats, but a balance needs to be found between both habitats, and levels of 5-10% on a site are desirable. Scrub was managed to bring it back to these levels. The landowner breeds pedigree Dartmoor ponies, that are ideal hardy stock to graze habitat for the butterflies. With her help we have also been able to re-introduce management at another important site nearby. Fernworthy Reservoir is managed by the South West Lakes Trust, and they, together with NE, have helped with funding for fencing and scrub management. As a result, you can now also admire these beautiful ponies grazing marsh fritillary habitat at Fernworthy.

Ponies grazing, Fernworthy © Anja Borsje



2008 News in brief

2008 was a busy year for the *Action for Wildlife* Partnership **Dartmoor Natural Networks** project in the Walkham valley. A web site was set up to enable local participants to share news and photos. A grant fund was launched to support owners of annually trimmed hedgerows to extend their trimming regimes to allow the hedgerows to grow up over 3 years. Dormouse survey work is ongoing and a new record has shown that dormice are present further up the valley than previously thought. A project, aiming to support management and creation of species-rich haymeadows was launched with a guided walk.



Walkham valley © AFW, DNPA

It was a bumper year for **southern damselflies** on Dartmoor, despite the generally poor flying weather. Highest ever numbers were counted at two of the three colonies and a record peak count of 239 individuals was made on the 1 July at the DNPA management agreement site near Whiddon Down.

One of the wettest summers on record is not the best time to search for a very rare beast that is difficult to find, even in ideal conditions. However, the **bog hoverfly** 5 year monitoring survey carried out last autumn did reveal all areas in appropriate management and a new site was found behind the new Haytor Information Centre.



Bog hoverfly © DNPA

A significant colony of **lesser horseshoe bats** was discovered in the stable loft at Parke, Dartmoor National Park Authority's headquarters, in summer 2008. Emergence counts carried out in July and August counted up to 97 bats leaving the loft. The extent of the roost had previously gone undiscovered as the main roost is present in an (to humans) inaccessible part of the loft. The numbers indicate that the roost is a breeding colony.

A small but very fine area of **wet heath** was discovered behind the new Haytor Information Centre in summer 2008 by DNPA ecologists. Willow was encroaching into this area, which was also being swamped by dense rush thatch, so several work parties were carried out to remove the willow and to cut and rake the rush to enable the dwarf shrub and sphagnum mosses to thrive.



Tree pulling, behind Haytor Information Centre © DNPA

Information on the best areas of wildlife habitat on Dartmoor has been reviewed by the Devon Biological Records Centre to identify sites that could be put forward for designation as **County Wildlife Sites**. This designation recognises the rich mosaic of important habitats and focuses the attention of conservation bodies to work with landowners to secure their sympathetic management. Over 250 parcels of land have been identified and landowners have been approached to give their consent to the designation.

The **Restoring Ancient Woodland (RAW) Project** is coming to an end in March 2009, in name only as the RAW work will continue with the support of the Woodland Trust. Any advisory work will be picked up by Rupert Lane as part of the service offered by DNPA. The project had been ably managed by Richard Knott until September 2008. There are no plans to take the project beyond its planned end in March 2009.



Wet woodland © DNPA

The *Action for Wildlife* Partnership has launched a project to promote and enhance **wet woodlands**, a sometimes neglected habitat associated with a distinctive characteristic range of wildlife. The project will target specific valley systems and look for opportunities to extend, link, and wet up existing areas. Work will be undertaken jointly by NE and DNPA with support from the Environment Agency (EA).



Western heath © DNPA



Moorland Conservation on Dartmoor: a brief history of agri-environment Schemes

Pete Stevens, Natural England

The Dartmoor Environmentally Sensitive Area (ESA) Scheme was inaugurated in 1994. After a slow start, and following work by the Grazing Management Team (Farming and Rural Conservation Agency, later Defra), data was gathered on the condition of many commons and a number entered the Scheme in the late 1990s. In 2004, most commons and newtakes were under Agreement with moorland management plans in place. Guidelines for management were produced and a number of moorland forum meetings were held to disseminate best practice. In 2001 the Forest of Dartmoor entered ESA agreement, a landmark in English moorland conservation.

In 2004, Environmental Stewardship started and offered a more flexible approach to moorland conservation. However, with most commons still under ESA agreement, management under the Scheme and monitoring continued. Vegetation recovery has been slow, with many commons starting from a very poor base. Commoners' Associations have become gradually more proactive with burning plans, scrub control and shepherding all playing their part in the recovery.

Re-survey of some of the Duchy Newtakes has shown good recovery. Brimpts Newtake has moved from only 28% cover of dwarf-shrubs to over 60% in 2008. A programme of controlled burning and scrub cutting is now addressing issues of vegetation age structure and availability of forage.

Lessons have been learnt by both statutory agencies and Commoners' Associations over the last 14 years and Higher Level Stewardship Scheme now provides a future for moorland conservation and continued stewardship by the Commoners of Dartmoor.

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Dartmoor Biodiversity Partnership

*Co-ordinated by the Dartmoor
Biodiversity Steering Group,
the Dartmoor Biodiversity
Partnership embraces all those
people and organisations who
are working positively to protect
and enhance Dartmoor's wildlife.*

Dartmoor Biodiversity Steering Group members

Dartmoor Commoners'
Council

Dartmoor National
Park Authority

Devon Birdwatching
& Preservation Society

Devon County Council

Devon Wildlife Trust

Duchy of Cornwall

Environment Agency

Forestry Commission

National Farmers' Union

National Trust

Natural England

Royal Society for the
Protection of Birds

Defence Training Estates