Delivery Plan for the Moorland Key Wildlife Area

Introduction

Dartmoor's moorland forms the heart of the National Park, covering almost 50 % (470 square kilometres) of the total area. It is a unique and valuable wildlife resource of national and international ecological significance, recognised by the designation of more than half of the moorland as Sites of Special Scientific Interest (SSSIs) under the Wildlife and Countryside Act and Special Areas of Conservation (SACs) under the European Habitats Directive. It is also agriculturally important for extensive grazing of sheep, cattle and ponies, and much loved for its sense of wild, open landscape and varied recreational opportunities. Most of the open moorland is common land under the Dartmoor Commons Act and therefore offers rights of access on foot and horseback as well as the rights held by nearby farms and properties to grazing cattle, ponies and sheep. Moorland is essentially a feature of past human management, produced by woodland clearance and subsequent grazing by livestock. Archaeologically it provides one of the best pre-historic landscapes in Europe with many Scheduled Monuments. It also possesses a remarkable legacy of former industrial activity (particularly relating to tin workings, peat cutting and granite extraction) and past farming activity particularly post-prehistoric cultivation and abandonment. It is essential to integrate management for biodiversity with all these other interests.

High moorland, © DNPA

This Moorland Key Wildlife Area (KWA) Delivery Plan covers all those moorland habitats found within both open, and enclosed moorland on Dartmoor, namely blanket bog (8,500 ha, 3.5% of England resource) , upland heathland (7,300 ha, 3% of England resource), lowland heathland, grass moor and bracken, and valley mire. These habitats have been amalgamated into one Delivery Plan for Moorland because the major issues affecting them are shared, boundaries between them are not always clear-cut and a joint working document will prove much more

practical to use. These areas form one contiguous KWA which stretches from Okehampton to Ivybridge (north-south) and from Haytor to Mary Tavy (east-west).

The Dartmoor Moorland Vision, produced in 2006 and since reviewed, captures and sets out on a map what the commoners, statutory bodies and agencies have agreed they want the moorland areas of Dartmoor to look like in 2030. The vision is for Dartmoor moorland to remain the largest open space in southern England with its varied habitats - blanket bog, mires, heather moorland and western heath in optimum condition. It envisages a farmed (grazed) landscape relying essentially on the tradition of grazing the moorland with cattle, sheep and ponies. Management of archaeology will be paramount within Premier Archaeological Landscapes.

23,444 ha of the moorland are designated as SSSIs, representing 50% of the total Moorland KWA area. The SSSI areas are monitored on a rolling programme by Natural England (NE), with current figures showing that 4,860 ha (21%) are in favourable condition, 18,278 ha (78%) are in unfavourable recovering condition, 36 ha (<1%) are in unfavourable no change condition and 272 ha (1%) are in unfavourable declining condition. The moorland SAC covers virtually all of the moorland SSSIs, totalling 23,159 ha.

Key species for conservation action which occur mainly in moorland habitats are dunlin, ring ouzel, southern damselfly, pearl-bordered and high brown fritillary butterflies and Vigur's eyebright, whilst red-backed shrike, marsh fritillary butterfly and bog hoverfly also occasionally use some of these habitats. There are separate Delivery Plans for these species which can be viewed on the website. Other wildlife of high conservation value found in the moorland areas include snipe, cuckoo, red grouse, skylark, curlew, Dartford warbler, wheatear, whinchat, stonechat, small red and scarce blue-tailed damselflies, Kugelann's ground beetle, hornet robber fly, crowberry, cowberry, cranberry, chamomile, pale dog violet, bog orchid, stag's-horn clubmoss, fir clubmoss and the bog moss *Sphagnum imbricatum.*

The flagship species chosen for this habitat are the much loved skylark (estimated 13,000 pairs), which is found across the moorlands throughout the breeding season, and snipe (estimated 200 pairs), which breed in many of the valley mires which lie at the head of most of the Dartmoor's watercourses.


Skylark, © DNPA


Snipe, © Laurie Campbell

Key Issues and Opportunities

1. Achieving grazing levels that are suitable for all habitats contained in large, extensive commons with large altitudinal ranges and few if any stockproof boundaries is always going to be difficult. Therefore it is important that each common has clear prioritisation in terms of the habitats and species present, so that management can be most effective in achieving the desired objectives.
2. On some commons there are areas where grazing levels are too high, whilst others have areas with too little grazing or management and habitats may be threatened by either of these issues.
3. There is a lack of good habitat data on moorlands outside the SSSIs and none of these areas have been designated as County Wildlife Sites.
4. The level of support for upland farming will largely be controlled by the EU Common Agricultural Policy reform and the subsequent division of agricultural subsidy. This will also determine the level of support for the current Environmental Stewardship agreements, the new Agri-environment Scheme due to be launched in 2015 and the level of support for the farmers who stock the moorland.
5. There has been a decline in the number of active graziers stocking the commons and there are concerns regarding the future viability of farming in these areas.
6. Climatic change will affect habitats and species along with agricultural practices on the moorland. Most notably, it may increase the rate of grass growth, bracken spread and tree regeneration. Whilst climatic changes could reduce the potential for more northerly species to survive, it could also allow lowland wildlife to move up the hill and new species from Europe to colonise.
7. Increased vegetation growth and weather pattern changes may increase the potential for uncontrolled fires on the moorland.
8. The large reduction of Dartmoor ponies is likely to have had an impact on the grazing levels of some commons, which may be particularly significant given their ability to eat coarse vegetation and remain on the moor year-round.
9. The Forestry Commission manage approximately 1387 hectares of former moorland which was planted with conifer in the last century. Given their importance for people, the local economy and the national strategy to increase woodland cover, the immediate priority is to explore opportunities to soften the landscape impact, improve their biodiversity value through management and to increase opportunities for access and recreation.
10. The moorland is of great importance as a source of clean water for a large proportion of the population in Devon and east Cornwall.
11. About 25% of the open moorland is used as a military training area which has the potential to impact conservation interests. It also affects grazing through the regular clearance of livestock prior to training exercises.
12. There are increasing levels of recreational use on the open moors of Dartmoor, especially through the greater demand for events of all sizes, potentially causing higher levels of disturbance to wildlife such as ground nesting birds.

Highland cattle grazing common land, © DNPA

Current Initiatives

1. The Environmental Stewardship Scheme has agreements covering about 70% of the moorland area, with the majority being in the Higher Level Stewardship with targeted measures to benefit habitats and wildlife.
2. NE are working on Favourable Condition Tables for the moorland SSSIs and also looking to make the condition assessment more accessible to the graziers who are managing these commons. The SSSIs have been divided into management units to clarify the areas being assessed and the management required to improve habitat condition within them where this is required.
3. Dartmoor Farming Futures is an initiative that is being trialled on two commons to give the commoners greater control in how the outcomes required by the agri-environment schemes are delivered. The results of this approach will not be fully known for some time, but they are being carefully monitored.

Sheep and ponies grazing diverse vegetation on common land, © DNPA

4. The Moorland Fire Group co-ordinates the approach of all organisations involved with fires and their control and management within the National Park.
5. The Dartmoor Mires Project is a 5 year partnership project between DNPA, NE, Environment Agency, South West Water, Dartmoor Commoners Council and the Duchy of Cornwall that was established to investigate the feasibility and effects of restoring eroding blanket bog in 2010. It aims to assess the restoration methodology and potential benefits for biodiversity, water (in conjunction with Exeter University) and carbon, to guide potential future peatland initiatives.
6. There are a number of organisations concerned with ponies on Dartmoor whose aims are broadly to maintain sustainable numbers of ponies on the common. Their importance in grazing the moors and commons year round, and ability to eat a wide range of vegetation fulfill an important role in conservation management.
7. Recreational events with more than 50 walkers or 30 cyclists/runners are not approved by DNPA within the bird breeding season from 1 March to 15 July unless they keep entirely to tracks and rights of way. The main exception to this is the 10 Tors event which for a number of reasons has not so far proved possible to move out of this period. There is annual liaison with Ministry of Defence (MOD) to ensure that both during training and the event itself, participants avoid areas where the rarest ground-nesting birds are found.
8. An Integrated Rural Management Plan has been produced by the MOD which includes measures to minimise any potential impacts of military training on the open moor and contribute to biodiversity initiatives within the ranges.
9. The Forestry Commission are currently working on a Forest Plan which seeks to describe and integrate intended management actions over the next 10 years. The aim of the plan will be to deliver sustainable and resilient woodlands which fully consider landscape and wildlife issues.
10. The Two Moors Threatened Butterfly Project is a partnership project that has been providing ongoing site advice to farmers and landowners to get better management in place for key butterfly species within Dartmoor and Exmoor. On moorland, this has involved work targeted at high brown, pearl-bordered and marsh fritillaries and has proved very successful in getting farms into agri-environment agreements and working with them subsequently to produce increases or stabilise formerly declining populations.
11. Lydford High Down contains one of the largest populations in the world of Vigur's eyebright (see separate Delivery Plan). The local Commoners Association and NE are working through their management agreement to maintain this very rare species at the site using annual monitoring data supplied by DNPA and research being under taken by Plymouth University MSc students.


Pearl-bordered fritillary, © DNPA


Vigur's eyebright, copyright DNPA

12. Dartmoor's ring ouzels are the last remaining breeding population in southern England (see separate Delivery Plan). Monitoring studies led by RSPB are looking at their numbers and distribution, breeding success rates, causes of predation, foraging behaviours and habitat preferences. This information is being taken forward with the commoners, landowners, MOD and access groups to look at ways of halting the decline through a raft of measures including vegetation management.
13. An ongoing study of ground-nesting birds on Holne Moor is being carried out by volunteers and supported by Exeter University to look at the distribution of species present, nesting success of target species, ringing fledglings, habitat use by different species and meadow pipit/cuckoo interactions.
14. Further work on the nationally declining cuckoo is being undertaken between the British Trust for Ornithology, Devon Birdwatching and Preservation Society and DNPA to monitor migration routes from Dartmoor to Africa. This will be carried forward in conjunction with a study looking at distribution within the National Park which will collate sightings from the public.

Young cuckoo in meadow pipit nest on Holne Moor, © DNPA

Targets

1. At least 90% of moorland priority habitats in good condition by 2020. The priority moorland habitats are blanket bog, upland flushes, fens and swamps, and upland heathland. Good condition is defined as being in either favourable or unfavourable recovering categories (currently 98% in SSSIs).
2. At least 50% of moorland SSSIs in favourable condition by 2022 (currently 22%).
3. 90% of key species populations either stable or increasing (currently 78%) – see Key Species Delivery Plans for dunlin, ring ouzel, southern damselfly, pearl-bordered, marsh and high brown fritillary butterflies, Vigur's eyebright, red-backed shrike and bog hoverfly.
4. Skylark and snipe remain widespread on open moorland and valley mires, with stable populations (currently estimated to be 13,000 and 200 pairs respectively).

Delivery

1. Target agri-environment scheme agreements to key commons to work towards the targets listed above
2. Deliver management for key species through their individual delivery plans
3. Dartmoor Farming Futures apply the lessons being learnt from the pilot schemes to the new environmental land management schemes being developed as part of the CAP reform programme
4. Peatland restoration – develop further our knowledge of Dartmoor's peatlands and their condition. Deliver the current Mires Project and incorporate appropriate elements into future projects to improve the condition of Dartmoor's peatlands
5. The Dartmoor Commoners Council is looking to take a leading role in the future of ponies on the moor. The importance of ponies for conservation grazing is recognised in future management and funding
6. The Moorland Fire Partnership continues to co-ordinate the management of fires on the open moorland
7. The 2015 Forest Plan which will be produced by Forest Enterprise should enable improvements to the delivery of National Park purposes within the conifer plantations on the fringes of the central moorland over the next 10 years
8. MOD Integrated Rural Management Plan annual Action Plans and the 2015 review, including reducing impact of training on rare bird nesting areas and nature conservation management on its own land
9. National Trust management of their land holdings within the Moorland Key Wildlife area

Blanket bog restoration work at Winney's Down, © DNPA

Monitoring

1. The current SSSI monitoring being completed will provide a baseline against which future monitoring can be measured
2. Agri-environment scheme agreements will continue to be monitored by Natural England through the Integrated Site Assessment programme, carried out on a 6 yearly cycle. Monitoring of the Dartmoor Forest and Haytor higher level stewardship agreements by commoners is being developed through the Dartmoor Farming Futures Project
3. The current Mires Project includes a monitoring programme looking at the hydrological changes in water leaving a damaged blanket bog and any changes occurring post restoration works. It will also measure any changes in dunlin breeding density within the restored areas
4. Assess potential for remote sensing data to be used as a monitoring tool on the open moor
5. The MOD Integrated Rural Management Plan indicates support for species monitoring and SSSI condition assessments
6. A moorland bird survey is due in 2016 to update the last one done in 2006
7. A number of Key Species for Conservation Concern that occur within the Moorland KWA that will be monitored through separate Delivery Plans (see those for dunlin, red-backed shrike, ring ouzel, southern damselfly, pearl-bordered and high brown fritillary butterflies, bog hoverfly and Vigur's eyebright)