

Delivery Plan for Dry Grassland Key Wildlife Areas

Description and importance of resource

As one moves off the open moorland onto the enclosed farmland, the landscape changes to one of small fields surrounded by hedgerows or Devon banks. These fields are managed either as permanent pasture or for hay, and where they have not been agriculturally improved, they can contain an exceedingly rich botanical diversity which in turn supports a rich invertebrate fauna. They are found on acidic or neutral soil and are scattered across the farmland of the National Park. However, there are three main clusters, namely around Postbridge, Dartmeet and Grenofen, forming the Key Wildlife Areas (KWAs), with smaller clusters around Chagford and Horndon. Whilst they can be used for grazing and/or for hay, the factor they have in common is that they have not been significantly altered by ploughing, reseeding or improvement with industrial fertilizer, such that they are a living example of a pre-industrial landscape.



Species-rich dry grassland, © DNPA

Species-rich dry grasslands are nationally rare, and over 95% of this habitat has been lost since World War 2. It is estimated that only 7,500 hectares of this habitat remain in England, with losses continuing. On Dartmoor, there are around 450 ha of species-rich dry grassland, which represents 6% of the national resource. The 3 Dry Grassland KWAs cover 1,190 ha, of which 122 ha are surveyed species-rich dry grasslands (27% of Dartmoor total). 34.6 hectares are confirmed County Wildlife Sites (CWS) and a further 24 ha are of similar quality where the landowners did not wish their land to be designated. One hay meadow (2.2 ha) is designated as a Site of Special Scientific Interest (SSSI). The remaining majority of land within the KWA should be considered for creating other meadows where appropriate. This

action plan concentrates on species-rich dry grasslands in the KWAs, as these represent the main concentrations of the habitat and hold the key populations of associated wildlife. However, it is important that the sites with this habitat occurring outside the KWAs are also managed and conserved through the same mechanisms laid out. The most beneficial management for hay meadows is a cut in late summer, after most of the flowers have gone to seed, followed by some aftermath grazing in autumn; the best grazing regime on pastures is to remove or reduce stock during the late spring and early summer months to allow the plants to flower and go to seed. Overgrazing should be avoided to prevent damage to the soil structure, whilst regular undergrazing leads to a loss of species diversity.

Monitoring a sample of dry grasslands within KWAs over the past five years has indicated that 40% were in optimum condition, 40% were in good condition and 20% were not in good condition and required urgent attention. The SSSI dry grassland was in favourable condition when monitored in 2012. Other species-rich dry grasslands on Dartmoor outside of KWAs are also monitored and advice given where required.

The most attractive and significant species found in the Dry Grassland KWAs are the various species of orchid, notably greater butterfly orchid, heath spotted orchid, and southern marsh orchid. Greater horseshoe bats and red-backed shrikes forage over unimproved grasslands using linear features such as hedgerows as flyways. Both of these animals are key species for conservation action, and have individual Delivery Plans. Other plant species of conservation value rarely found within this habitat include moonwort, frog orchid and twayblade, and also the more widespread yellow rattle, eyebright and oxeye daisy. Important animals include small pearl-bordered fritillary butterfly, marbled white butterfly, many bumblebee species including bilberry bumblebee, yellowhammer, cirl bunting and, within the hedgerows, dormouse. The flagship species for this habitat is the greater butterfly orchid, with good populations in the two larger Dry Grassland KWAs.



Greater butterfly orchid, © DNPA



Southern marsh orchid, © DNPA

Key Issues

1. Agricultural improvement, including cultivation and reseeding, use of fertilizers or herbicides, or changing from hay to silage leads to a near total loss of species diversity
2. Agricultural neglect or abandonment of sites leads to dominance of rank grasses and encroachment of scrub, gorse or bracken, causing a loss of characteristic species
3. Many fields are small and difficult to access, and there is a lack of suitable stock and machinery to manage these sites
4. Agri-environment schemes targeted at these agriculturally marginal sites are essential to provide an income to pay for management, including some late haycuts and boundary works
5. There is a lack of recognition of the dry grassland sites as SSSIs with only one site designated; although many of them are CWSs
6. There is potential to restore or enhance the quality of many neutral grasslands within the KWAs that are not currently species-rich
7. There is currently little public access to Dartmoor dry grassland sites and a lack of awareness and recognition of the local resource

Current initiatives

1. Agri-environment schemes, including the ESA Scheme and the Environmental Stewardship Scheme, principally Higher Level Stewardship agreements, are in place for 80% of the dry grasslands in the KWAs, with management set to maintain or restore the habitat
2. There are 3 DNPA haymeadow management agreements in place covering 1% of the resource within the KWAs.
3. Within the current 'Moor Than Meets the Eye' Project bid (Heritage Lottery Fund Landscape Partnership) there is a 'Postbridge Hay Meadows' Project with proposals to address some of the issues listed above, especially 3, 6 and 8
4. The Wildlife Hit Squad and other initiatives are getting volunteers onto sites to carry out habitat management works
5. Species-rich dry grassland County Wildlife Sites are being monitored on a 12 year rolling programme
6. The Action for Wildlife Project and DNPA have organised some guided walks and orchid counts on Dartmoor haymeadows over the last 10 years to increase public awareness
7. DNPA have previously helped promote hay meadows as a visitor attraction, linking guided walks with eg Devon cream teas, or promoting Bed and Breakfasts with good hay meadows as places to stay as part of the Wealth of Wildlife Project
8. DNPA have produced a '*Create your own Dartmoor hay meadow*' leaflet which describes how to create and manage a hay meadow and lists local sites from which to obtain green hay



Hay cutting on a Dartmoor meadow, © DNPA

Targets

1. At least 90% of the species-rich dry grasslands within the KWAs are in good condition by 2020
2. If 'Moor Than Meets The Eye' Project is successful, to have 3 guided walks a year between 2015 and 2019, 4 interpretation boards within visitor centres and local hostelries, and have at least 20 volunteers annually involved in conservation works on dry grassland sites within KWAs
3. The greater butterfly orchid population remains at least stable and present in 17 meadows in Grassland KWAs on Dartmoor
4. Promote spreading of green hay to 10 hectares of suitable receptor sites by 2020.



Haymeadow guided walk, © DNPA

Delivery

1. Agri-environment scheme agreements should be targeted at maintaining existing species-rich dry grassland sites and increasing diversity in less good meadows within each KWA
2. Work with all agencies and landowners to improve and co-ordinate grassland management through shared grazing and machinery schemes on neighbouring sites in different ownerships
3. Develop 'Postbridge Hay Meadows' within the 'Moor Than Meets the Eye' Project to look at improved and better co-ordinated site management within the KWAs so that agri-environment agreements and advice can be targeted most effectively
4. Raise public and community awareness and opportunities to appreciate species-rich dry grasslands through the project mentioned above, guided walks and various media coverage
5. Encourage volunteers to become more involved in habitat management tasks and species surveys through the 'Moor Than Meets the Eye' Project
6. Develop use of conservation grazing herds to manage dry grassland sites where there are no local grazing solutions
7. Promote the sale and distribution of Dartmoor species-rich green hay both for habitat restoration within the KWAs and for the general public to use in domestic settings through the Project

Monitoring

1. County Wildlife Sites are monitored by DNPA and Natural England (NE) staff to assess condition, with approximately 7% of these sites monitored annually. This information is then sent to the landowner and if in an agri-environment agreement, to NE
2. NE's Integrated Site Assessment monitoring will also look at dry grasslands that are not CWSs
3. Dunnabridge Meadows SSSI is monitored through NE's Common Standards Monitoring programme

(See also Species Delivery Plans for Greater Horseshoe Bats and Red-backed Shrike)