Delivery Plan for Rhos Pasture Key Wildlife Areas

Introduction

As the rivers and streams of the open moorland descend into the surrounding farms they form broader valley bottoms that have been managed as rough grazing for cattle and ponies over many centuries. The complex mix of mainly flower-rich wet grasslands interspersed with wet woodlands, tin streaming spoil heaps and scrub represents a very rich wildlife habitat that is loosely referred to as ‘Rhos pasture’. This is a Welsh term used to describe wet, heathy areas. It usually contains abundant purple moor grass and rushes, with a good range of wetland flowers and insects.

A Dartmoor rhos pasture in late summer, © DNPA

Rhos pasture is an internationally rare habitat and the 1,200 hectares found on Dartmoor represent over 20% of the total occurring in England. Because these sites were not surveyed until the mid-nineties, they have never been considered for designation as Sites of Special Scientific Interest, although many are thought to be of this standard. The 4 Rhos pasture Key Wildlife Areas (KWA) cover 2,109 ha, of which 659 ha are surveyed rhos pastures (55% of Dartmoor total) and 385 ha are ‘confirmed’ County Wildlife Sites (CWS). This action plan concentrates on rhos pasture 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. Wet woodland occuring in these KWAs covers 43 ha (9% of Dartmoor total). The KWAs represent the main concentrations of rhos pasture surviving on Dartmoor and support the main populations of all the key species associated with this habitat. In order to maintain this important wildlife habitat, controlled grazing is usually required by cattle and/or ponies in the summer and autumn months, with invading grey willow and birch scrub controlled every few years.

Monitoring a sample of 26 Rhos pastures over the past four years has indicated that 42% were in optimum condition, 50% were in good condition and 8% were not in good condition and required urgent attention.

The most important species found in the Rhos pasture KWAs are the marsh fritillary butterfly, southern damselfly and bog hoverfly. They are all key species for conservation action, and have individual Delivery Plans. Other species of conservation importance found within this habitat include cranberry, narrow-bordered bee hawkmoth, small pearl-bordered fritillary butterfly, double line moth, keeled skimmer dragonfly, willow tit, reed bunting, grasshopper warbler, snipe and, on the scrubby fringes, dormouse. The habitats of both marsh fritillary and southern damselfly require special site protection under the European Habitats and Species Directive.

The flagship species for this habitat are the marsh fritillary, with colonies in all four Rhos pasture KWAs, and the willow tit (2012 population of 8-15 pairs), found in the wet woodlands of three of these KWAs.


Marsh fritillary, © DNPA


Willow tit, © DNPA

Key Issues

1. Agricultural abandonment of sites is leading to purple moor grass dominance and scrub encroachment from grey willow and birch, causing a loss of rare species
2. There is a lack of availability of suitable stock (principally traditional beef cattle and Dartmoor ponies) to graze wet, often small and isolated sites, containing coarse grasses
3. Agri-environment schemes targeted at these agriculturally marginal sites are essential to provide an income to pay for periodic management such as scrub control and fencing
4. There is a lack of recognition of the rhos pasture sites as Sites of Special Scientific Interest/Special Areas of Conservation, although many of them are County Wildlife Sites

5. There is a need to maintain/improve connectivity throughout each valley and enhance links between valleys where possible
6. Each valley needs to be assessed to determine the most appropriate balance between rhos pasture and wet woodland, and to identify the opportunities for restoration or creation
7. The habitat holds important populations of key species such as marsh fritillary, narrow-bordered bee hawkmoth, southern damselfly, bog hoverfly, willow tit and dormouse some of which require differing management and conditions
8. There is a currently minimal public access to Dartmoor rhos pasture sites

Current initiatives

1. The Environmental Stewardship Scheme, principally Higher Level Stewardship agreements, are in place for about half the rhos pastures in the Key Wildlife Areas, with management set to maintain or restore the habitat
2. There are 7 DNPA rhos pasture management agreements in place covering 5% of the total resource on Dartmoor
3. The Two Moors Threatened Butterfly Project, which has worked successfully with land owners in the 4 KWAs over the past 8 years to improve habitat condition, primarily for the marsh fritillary
4. There is a bid currently being drawn up through the Moor Than Meets the Eye Project (Heritage Lottery Fund Landscape Partnership) which includes a 'Natural Connections' Project with proposals to address some of the issues listed above, especially 5 and 6
5. The Wildlife Hit Squad and other initiatives are getting volunteers onto sites to carry out habitat management works
6. Rhos pasture County Wildlife Sites have been notified over whole valleys, with monitoring carried out on ownership parcels over a 12 year rolling programme
7. Both the Dartmoor Pony Heritage Trust and DNPA are working to promote the Dartmoor pony as a conservation grazing animal, especially in this type of habitat

Volunteers clearing willow scrub from a rhos pasture site, © DNPA

8. DNPA have organised monitoring and management for the southern damselfly over the past 11 years at the rhos pasture site containing one of the three Dartmoor colonies
9. There is a current research and monitoring proposal by Paignton Zoo and DNPA for a bog hoverfly study on Dartmoor
10. DNPA organised a willow tit survey covering all four rhos pasture KWAs in the years 2009-2011, with continued monitoring work being undertaken in the valley containing the highest population

Targets

1. 90% of the rhos pastures within the KWAs are at least in good condition, with 50% in optimal condition by 2017
2. Produce integrated plans for each of the 4 Rhos pasture KWAs by 2016 and targets set for 2022
3. The willow tit population remains at least stable from 2012 level
4. At least 50 volunteers annually involved in conservation works on rhos pasture sites within KWAs

   Additional targets in the Species Delivery Plans for Marsh Fritillary, Bog Hoverfly and Southern Damselfly that occur within Rhos Pasture Key Wildlife Areas

Dartmoor ponies grazing rhos pasture, © DNPA

Delivery

1. Agri-environment scheme agreements should be targeted at rhos pasture sites within each KWA
2. Work with all agencies and landowners to make potential management as rhos pasture/wet woodland, or impacts on these sites, as the first consideration when decisions are being made within the KWAs

3. Continue to support the Two Moors Threatened Butterfly Project through financial contributions, events, volunteers and site advice
4. Develop 'Natural Connections' within the 'Moor Than Meets the Eye' Project to look at management plans for whole KWAs so that agri-environment agreements and advice can be targeted most effectively
5. Raise public awareness and opportunities to appreciate Rhos pastures through the projects mentioned above, guided walks and various media coverage
6. Encourage shared grazing schemes on multiple sites in different ownerships
7. Encourage volunteers to become more involved in habitat management tasks and species surveys
8. Maintain conservation grazing herds to manage rhos pasture sites where there are no local grazing solutions
9. Encourage further research on key species within the habitat, including habitat use and dispersal patterns in willow tit

Monitoring

1. County Wildlife Sites are monitored by DNPA and Natural England (NE) staff to assess condition, with approximately 10% of these sites monitored annually. This information is then sent to the landowner and additionally NE if it is in an agri-environment agreement
2. NE's Integrated Site Assessment monitoring will also look at some rhos pastures that are not CWSs

   (See also Species Delivery Plans for Marsh Fritillary, Bog Hoverfly and Southern Damselfly which occur within Rhos Pasture Key Wildlife Areas, where monitoring will reflect habitat condition for those species)