

# Dartmoor Delivery Plan for Dunlin

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## Description and Importance of the Species

Dunlin (*Calidris alpina*) are small wading birds that breed in upland bogs and migrate southwards in winter to low lying mud flats along coasts and estuaries.

Dunlin are listed on the Birds of Conservation Concern red list because of declines of over 50% in 25 years in the wintering population. The breeding population in the UK is relatively stable.



Dunlin, copyright Chris Gomersall, rspb-images.com

## Current Status on Dartmoor

Dartmoor is the world's most southerly breeding location for dunlin and is the only breeding population in southern England. The species relies on blanket bog with its network of open pools and on Dartmoor is not present below an altitude of 500m. Currently there is no evidence of a decline on Dartmoor, with the population appearing to be stable at around 15 pairs. Nothing is known of the breeding success of the species here.

The specie's dependence on blanket bog links it closely to the work of the Dartmoor Mires Project which is aiming to restore degraded habitat. The species

should benefit from the restoration work and is a useful indicator of habitat condition.

### **Current factors affecting the Species on Dartmoor**

1. Habitat condition is the key factor governing the presence of dunlin on Dartmoor. Surveys have shown that the level of wetness, in conjunction with surface topography, is the critical factor determining suitability for breeding dunlin. Dunlins need areas of open water, typically in the form of small pools and water-filled channels. Vegetation at suitable breeding sites is generally short, produced by a combination of wet conditions and grazing. Deeply incised areas and tall vegetation are avoided by dunlin, as are flat, featureless areas, even if very wet.
2. Climate change models predict that the species will shift its breeding distribution northwards and be confined to Scotland by the end of the century. However, climate modelling based on current conditions puts the southern edge of its range in northern England. Maintaining good quality blanket bog on Dartmoor will give the species its best chance of a future here.

### **Current Initiatives on Dartmoor**

1. Dunlin numbers and distribution have been periodically monitored over the last 20 years, and are now assessed every three years by the Mires Project. A local recorder also makes annual counts at regularly occupied locations.
2. The Mires Project, which is blocking erosion channels on the blanket bog to restore the natural hydrological function of the bogs, has already shown signs of improving conditions for breeding dunlin at the restored sites, in particular by the creation of pools behind the dams.
3. Maps showing 'exclusion zones' to guide the management of recreation, including large events like Ten Tors, are updated periodically using the latest species distribution information.

### **Targets**

1. Favourable habitat for dunlin across all breeding sites and expansion of available habitat by 30 ha by 2017 through the work of the Mires Project.
2. Increase the breeding population, through the actions of the Mires Project and the Forest of Dartmoor Higher Level Stewardship agreement, to 20 pairs by 2022.



Dunlin using blocked gully, copyright DNPA

### **Delivery and Monitoring**

Hydrological restoration and grazing levels on blanket bog – Dartmoor Mires Project is the main delivery mechanism for restoration, with the agri-environment agreement determining the grazing levels. Liaison with NE and commoners will be needed to check appropriate grazing levels at key sites.

Regularly monitor numbers at blanket bog sites – at least every three years and use the results to inform further management decisions.

Continue annual liaison with event organisers to avoid dunlin breeding areas.

	<b>Lead</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Hydrological restoration of the blanket bog through the Mires Project</b>	<b>DNPA</b>	<b>x</b>			<b>x</b>	<b>x</b>
<b>Habitat management and restoration through appropriate grazing of the blanket bog</b>	<b>NE</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Regular (3 yearly) monitoring of dunlin distribution and numbers</b>	<b>RSPB/DNPA</b>	<b>x</b>			<b>x</b>	
<b>Recreational event management to avoid sensitive areas, especially Ten Tors.</b>	<b>MoD, DNPA</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
<b>Regular liaison with MOD on key site avoidance in their training activities</b>	<b>MoD, DNPA</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>