



Buston Links © NBP Photographer John Williamson

Working with Wildlife

Sand Dunes Habitat Action Plan

Plan Co-ordinator	Coastal Group
Plan Author	Kevin Redgrave & Sam Talbot
Plan Lead	National Trust
Latest version	January 2008

Habitats Directive, Annex 1 habitats present within the region are:

- Embryonic shifting dunes
- Shifting dunes along shoreline with Marram - *Ammophila arenaria* (white dune)
- Fixed dunes with herbaceous vegetation (grey dune)
- Dunes with Creeping willow - *Salix arenaria*
- Humid dune slacks

Description

Coastal sand dunes develop where there is an adequate supply of sand in the intertidal zone, particularly where onshore winds are prevalent. The critical factor is the presence of a sufficiently large beach plain whose surface dries out between high tides. The dry sand is then blown landwards and deposited above high water mark, where it is trapped by specialised dune-building grasses which grow up through successive layers of deposited sand. The type and extent of vegetation at various points within the sand dune system is dependent on the time elapsed since the sand was deposited, the degree of stability which it has attained, and the local hydrological conditions. The habitats supported range from embryo dunes and marram dominated mobile dunes on the seaward edge, to species rich grasslands and areas of scrub on the stable fixed dunes. Older fixed dunes, leached of calcareous sea shell remains, also support areas of heather dominated dune heath. Wetland communities develop where dune hollows or slacks are close to the water table. Northumberland's sand dunes support a range of important grassland communities, including several scarce plants, and also diverse invertebrate communities.

Six areas of dune SSSI form part of the North Northumberland candidate Special Area for Conservation (cSAC) and at Lindisfarne are part of a National Nature Reserve (NNR). The NNR also forms part of a Special Protection Area (SPA) under the EU Birds Directive and a wetland of international importance under the Ramsar Convention.

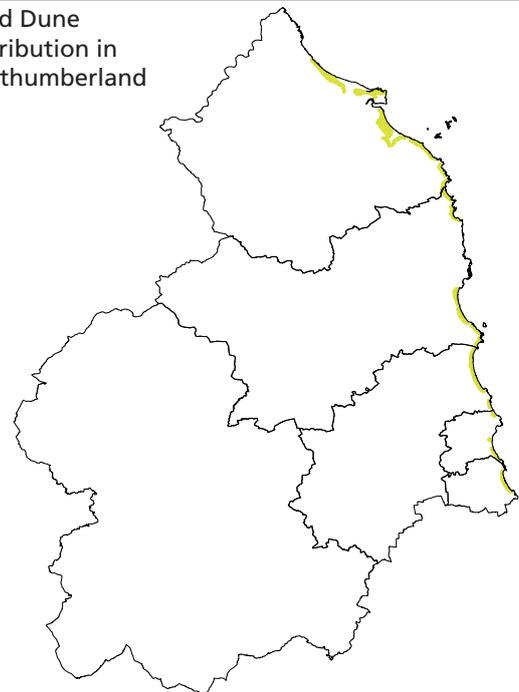
Conservation Status

Habitats Directive, Annex I
UK Biodiversity Action Plan Habitat
North East Biodiversity Action Plan Habitat

Current Extent in Northumberland

There is approximately 1211 ha of sand dune in Northumberland that are typically represented by steep narrow dune systems due to climatic and geological factors and also restrictions to development on the landward side by roads, car parks, golf courses and agriculture. Spit dunes also occur at estuaries and there is an island dune at Ross Links.

Sand Dune distribution in Northumberland



1 centimeter equals 5 kilometers

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Northumberland County Council. O.S. Licence No. 100021901. Date 2006.

Sand Dunes Habitat Action Plan

Current Factors Causing Loss or Decline

- Inappropriate management through over or under grazing
- Erosion caused by heavy trampling from recreational pressure
- Stabilisation of dunes through road construction and agriculture behind them, stopping their natural processes of retreating inland
- Erosion at the front of dunes, through the deflection of wave energy along the coast from hard sea defences
- Introduction of non native species such as piri-piri burr and red hot poker
- Extraction of sand by aggregate companies
- Invasion by bracken, gorse and scrub

Associated Action Plans

Coastal Birds
 Coastal Heathland
 Common Seal
 Grey Seal

Further Information

This sand dunes plan links to the coastal sand dunes UK BAP action plan, whose lead partner is Scottish Natural Heritage

The Sand Dune Survey of Great Britain, 1993-95

Targets

Maintain the current extent of coastal sand dune in Northumberland of 1211 hectares by 2010 (no net loss).

Code	Priority Actions	Date
SD A01	Survey the plant communities and habitat condition of the existing coastal sand dune resource to inform improved management schemes	2009
SD A02	Utilise the survey results to create targets for achieving condition for sand dune	2009
SD A03	Prioritise sand dune sites according to those in most need of improved management	2009
SD A04	Investigate the extent and impacts of non-native invasive species and disseminate results	2009
SD A05	Encourage landowners and managers to establish environmental stewardship agreements for sites in unfavourable condition	2010
SD A06	Raise awareness about the importance and management of Northumberland's sand dunes and their associated species through publicity material, events and training	ongoing
SD A07	Identify appropriate sites to extend the depth of protected dune grassland to enable mobile dunes to retreat inland	2010
SD A08	Establish management or land purchase agreements to secure sites for realignment/dune development to plan for sea level rise	2015