



Working with Wildlife

Lindisfarne National Nature Reserve © NBP Photographer John Williamson

Saltmarsh & Mudflats Habitat Action Plan

Plan Co-ordinator	Coastal Group
Plan Author	Maria Hardy
Plan Lead	Environment Agency
Latest version	January 2008

Conservation Status

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

Description

Coastal saltmarsh is defined as the upper, vegetated portions of intertidal mudflats occupying the area approximately between mean high water neap tides and mean high water spring tides. Saltmarshes occur on soft, shallow shores in sheltered coastal areas and estuaries. Mudflats are sedimentary intertidal habitats created by deposition in low energy coastal environments, particularly estuaries and other sheltered areas. Their sediment consists mostly of silts and clays with a high organic content.

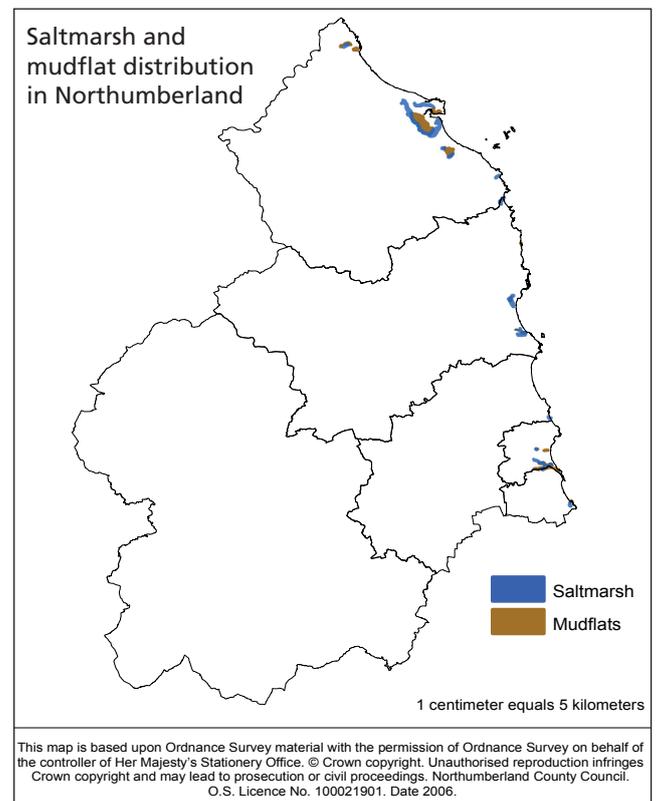
Saltmarsh vegetation consists of a limited number of salt tolerant species adapted to regular immersion by the tides, with a clear zonation of vegetation according to frequency of inundation. Characteristic species include glassworts *Salicornia spp*, sea aster *Aster tripolium* and common saltmarsh grass *Puccinella maritima*. The saltmarsh at Alnmouth in Northumberland is dominated by sea-purslane *Halimione portulacoides*, with an abundance of free-living forms of seaweed *Bostrychia scorpioides*, *Fucus vesiculosus* and *Pelvetia canaliculata*, considered to be the most northerly example of this community in Britain.

Saltmarsh areas with a high structural and plant diversity, particularly where freshwater seepages provide a transition from fresh to brackish conditions, are particularly important for invertebrates. Mudflats are characterised by high biological productivity supporting an abundance of invertebrates, such as lugworms, sand mason worms and bivalves. These habitats are important breeding sites for wading birds and winter feeding areas for waders and wildfowl, including wigeon, teal and redshank. They also provide sheltered nursery sites for several species of fish.

The 2006 review of the UK Biodiversity Action Plan identifies saltmarsh as one of three habitats still in decline.

Current Extent in Northumberland

In Northumberland, saltmarsh is estimated to cover around 384 hectares and mudflat 771 hectares. This represents approximately 0.8% and 0.3% of the national resources respectively (based on the UK BAP figures of 45,500 hectares and 270,000 hectares). Saltmarshes and mudflats are found in the estuaries of all the major rivers, with the largest site being Lindisfarne in north Northumberland. The estuaries of the Tweed, Aln, Coquet, Wansbeck and Blyth are all notified as SSSI's, as is Lindisfarne. The Tweed Estuary is also a SAC. Lindisfarne is an SPA and has also been included within the Berwickshire and North Northumberland Coast SAC.



Saltmarsh & Mudflats Habitat Action Plan

Current Factors Causing Loss or Decline

- Land claim of saltmarsh for industry, harbour facilities, transport infrastructure and waste disposal
- Drowning of mudflats from barrage construction
- Disruption of natural coastal processes required for saltmarsh development by coastal and flood defence works
- Erosion and 'coastal squeeze' from inappropriate coastal developments
- Pollution incidents and poor water quality, including increases in nutrient levels
- Reduction in vegetation diversity through invasion of Common cordgrass (*Spartina anglica*) to mudflats
- Under and over grazing of saltmarsh
- Disturbance from recreational and military activity

Associated Action Plans

Coastal Birds
Common Seal
Grey Seal
Otter

Further Information

This coastal saltmarsh and mudflat plan links to the coastal saltmarsh UK BAP action plan and the mudflats UK BAP action plan, both led by the Environment Agency.

Targets

Maintain the current extent of coastal saltmarsh in Northumberland of 384 hectares by 2010 (no net loss)

Maintain the current extent of mudflat in Northumberland of 771 hectares by 2010 (no net loss)

Code	Priority Actions	Date
SM A01	Survey the extent, plant communities and habitat condition of the existing saltmarsh and mudflat resource to inform improved management schemes	2010
SM A02	Use the survey results to create targets for achieving condition for saltmarsh and mudflat habitats	2010
SM A03	Work with land managers to ensure no further net loss of extent of saltmarsh and mudflat habitats	2010
SM A04	Provide farm management advice and promote agri-environment schemes to protect and enhance saltmarsh	2010
SM A05	Work with farmers to encourage creation of saltmarsh habitat through the Northumberland 4shores project	2009
SM A06	Promote and develop demonstration sites for the management and creation of saltmarsh and disseminate results	2009
SM A07	Raise awareness about the importance and management of Northumberland's saltmarsh and mudflats and their associated species through publicity material, events and training	ongoing
SM A08	Investigate the extent and impacts of non-native invasive species and disseminate results	2009
SM A09	Identify possible locations for saltmarsh restoration and creation utilising the survey results from existing sites	2010
SM A10	Use the results from the feasibility study for restoration and creation sites to create restoration and expansion targets	2010