

Coastal and Floodplain Grazing Marsh



1 Definition

This type of grassland is found on low-lying alluvium around estuaries and along floodplains of rivers. It is characterised by a water table at or above ground level for some part of the year.

Grazing marsh is defined as periodically inundated pasture or meadow, with ditches to maintain the water levels. Coastal grazing marshes can contain standing brackish or fresh water. Almost all areas are grazed and some are cut for hay or silage. Sites may contain seasonal ponds with emergent swamp communities, but not extensive areas of tall fen species like reeds; although they may merge with fen and reed swamp communities. The mosaic of habitats within these sites provides diverse conditions, which support a wide range of plants, invertebrates, birds and animals.

These areas of flat, grazed land are especially important for breeding, roosting and feeding waders and wildfowl. Ditches are especially rich in plants and invertebrates. Large losses of this habitat have occurred throughout the UK in the last century.

Coastal grazing marshes and their associated dyke systems are an important brackish habitat for many estuarine species. They lie at or below sea level, and are almost all enclosed by seawalls, having originally been reclaimed from saltmarsh. These brackish water dykes are an important habitat nationally and locally.

2 Current status

2.1 National

There is about 300,000ha of coastal grazing marsh in the UK. The vast majority of this has been agriculturally improved by draining, fertilising and reseeded, or converted to arable. Nationally about 10,000 ha remains semi-natural in the UK.

2.2 Local

In Suffolk there is over 10,000ha of grazing marsh. Between 1955 and 1958 some 20% of grazing marsh in Suffolk was converted to arable. The exact extent of wet coastal grazing marsh of nature conservation importance in Suffolk is not known but approximately 2,000ha of wet grassland occurs in SSSIs and County Wildlife Sites and livestock grazes most of this grassland. This represents 20% of the total potential area of grazing marsh in Suffolk.

Most of the botanically rich grazing marshes, with the exception of significant areas at Sizewell and Minsmere are located away from the coast. The seasonal inundation of water gives the vegetation a distinct composition, with species such as Orange foxtail *Alopecurus aequalis*, Creeping bent *Agrostis stolonifera*, Southern marsh orchid *Dactylorhiza praetermissa*, and Lesser Spearwort *Ranunculus flammula*. Many improved grazing marshes have regionally important dyke systems such as at Kessingland.

Important components of the grazing marsh ecosystem are the ditches that often form the field boundaries. These can support a variety of marginal and aquatic plant species, including water soldier *Stratiotes aloides*, arrowhead *Sagittaria sagittifolia*, frogbit *Hydrocharis morsus-ranae* and water violet *Hottonia palustris*. These ditches also support a variety of animals including water vole *Arvicola terrestris* and invertebrates such as the Norfolk Hawker dragonfly *Aeshna isosceles*.

The grazing marshes in Suffolk are also particularly important for breeding, passage and wintering birds. Typical breeding birds of grazing marsh include Redshank (*Tringa tetanus*), Snipe *Gallinago gallinago* and Lapwing (*Vanellus vanellus*). Rarer species like Ruff *Philomachus pugnax* also breed on these areas. Internationally important populations of wintering wildfowl also occur including Wigeon (*Anas penelope*) and Shoveler (*Anas clypeata*).

2.3 Natural Areas

Suffolk coasts and heaths natural area

3 Current factors affecting coastal and floodplain grazing marsh in Suffolk

- Neglect through decline in levels and extent of traditional grazing, including grazing of marginal vegetation.
- Impacts of drought and ground water abstraction.
- Ecologically insensitive flood defence.
- Saltwater intrusion from periodic inundation allowing brackish habitat.
- Agricultural intensification, including over grazing, 'over-efficient' dredging of dykes, maintenance of low water levels and spray drift from surrounding agricultural land.
- The Suffolk River Valley Environmentally Sensitive Area (ESA), Essex Coast ESA, the Broads ESA and the Brecks ESA encourage sensitive management of grazing marshes.
- Coastal squeeze impacts upon grazing marsh in instances where managed realignment takes place, grazing marsh may be lost.

4 Current action

4.1 Legal Status

- Some 800ha of grazing marshes are designated as SSSI and most of these are also protected through such international designations as SPA and Ramsar sites. About 90ha are also designated as SACs.
- The Suffolk River Valleys ESA and the Broads ESA currently provides the principle mechanism for encouraging the management of grazing marsh. Countryside Stewardship is able to support grazing marsh outside the ESA area.
- The Environment Agency, Water Companies, Inland Drainage Boards and Local Authorities have a statutory duty to further conservation where consistent with purposes of enactment relating to their functions.
- Water Level Management Plans are required for all SSSIs. The Environment Agency, where they are the drainage authority, has written these.
- The Environment Agency is currently reviewing all consents that potentially impact on any of the European designated sites as a result of the Habitats Directive.

4.2 Management, research and guidance

Within the ESA areas, farmers can voluntarily enter into an agreement in which they receive payment for adopting or maintaining traditional farming practices on areas of grassland. Additional management guidelines designed to benefit wildlife attract a higher tier of payment. Such guidelines include the maintenance of a high water table, restrictions on grazing and the use of machinery during the bird breeding season, and controls on the use of pesticides and inorganic fertilisers.

Most of the ecologically important grazing marshes are managed by either English Nature as National Nature Reserves, the RSPB, the National Trust or the Suffolk Wildlife Trust. A wealth of technical expertise has been accumulated which would be valuable in advising and guiding other landowners wishing to manage or recreate ecologically important grazing marsh. This advisory role has proved effective in Renewing the Alde Habitat Restoration Project. The TEN (Transnational Ecological Network) Project in the Little Ouse and Waveney valley should also fulfil this role as it progresses.

A survey of breeding waders on coastal grazing marsh was undertaken by the Suffolk Wildlife Trust, RSPB and English Nature in 1997 and the BTO in 2002, both revealed large declines in numbers since the last surveys in 1988.

5 Action Plan objectives and targets

- 1 Improve knowledge of extent and quality of coastal and floodplain grazing marsh.*
- 2 Maintain the existing extent of biologically important grazing marsh, ensure no net loss.*
- 3 Take steps to restore and re-create 200ha of grazing marsh by 2018.*
- 4 Integrate grazing marsh restoration into initiatives for reedbed and fens creation.*
- 5 Ensure there is no net loss of coastal grazing marsh during the implementation of flood defence strategies in Suffolk's estuaries, which may involve managed realignment schemes.*
- 6 Encourage the restoration and improvement of degraded grazing marsh.*

6 Coastal and floodplain grazing marsh: Proposed Action with Lead Agencies

Action	Date	Partners
POLICY AND LEGISLATION		
Ensure compliance with Habitats Directive for designated grazing marsh in all Strategic Plans, Development Plans and Policy documents.	2004 2005 2006 2007	EN, EA, LAs, BA
Include grazing marsh targets in relevant Strategic Plans, Development Plans and Policy documents.	2004 2005 2006 2007	EN, Defra, EA, SWT, RSBP, LAs, BA, NT
SITE SAFEGUARD AND MANAGEMENT		
Improve water quality and water availability by reviewing existing abstraction licences and discharge consents affecting SPA grazing marshes by 2006.	2004 2005 2006	EA, EN
Implement positive management agreements on appropriate grazing marshes through agri-environment schemes, SSSI Management Plans.	2004 2005 2006 2007	EN, Defra
Ensure important grazing marshes have SSSI status and where appropriate SPA and Ramsar designation by 2007.	2007	EN, SBRC, Defra, SWT
Complement information gathered during Lifescapes project and improve knowledge of the quality and extent of grazing marshes.	2004 2005 2006 2007	SBRC, EA, EN, SWT,
RESEARCH AND MONITORING		
Continue to monitor impact of agri-environment management on nature conservation interests. Use interpretation of results for future management recommendations.	2005 2007	Defra, SBRC
ADVISORY		
Promote the creation of high quality grazing marsh and provide management advice through the planning process and dissemination of information, on site advisory visits, fact sheets and appropriate literature.	2004 2005 2006 2007	Wetland HWG, EA, LAs, SWT, RSPB, BA, NT, Defra, FWAG
COMMUNICATIONS AND PUBLICITY		
Raise public awareness of the importance of Suffolk's grazing marshes, the decline in traditional grazing and hydrological management of these sites.	2004 2006	Wetland HWG, Defra, RSPB, EN, SWT, NT