

# NORFOLK BIODIVERSITY ACTION PLAN

## COASTAL AND FLOODPLAIN GRAZING MARSH

Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water level, containing standing brackish or fresh water. The ditches are often especially rich in plants and invertebrates. Grazing marshes are also of importance for both breeding and wintering bird populations.

Ref 1/H7	Tranche 1	Habitat Action Plan 7
Plan Author:	English Nature	
Plan Co-ordinator:	English Nature	
Plan Leader:		
Date:	Stage:	
31 December 1998	Final Draft	
December 2005	Revised Final Draft	

### 1. CURRENT STATUS

#### National Status

- The exact extent of grazing marsh in the UK is not known but it is possible that there may be a total of 300,000 ha. England holds the largest proportion with an estimate in 1994 of 200,000 ha. However, only a small proportion of this grassland is semi-natural supporting high diversity of native plant species (5,000 ha in England, an estimated 10,000 ha in the UK).

#### Norfolk Status

- Grazing marsh is an extensive habitat within Norfolk, estimated to cover some 29,500 hectares. Individual blocks vary greatly in size, from 10 ha rising to 2,642 ha for Halvergate Marshes. Much of the resource is found in the Broads Natural Area, the North Norfolk Coast, and to a lesser degree the Wensum and Waveney valleys and the Wash hinterland.

### 2. CURRENT FACTORS CAUSING LOSS OR DECLINE IN NORFOLK

- Losses in the whole UK have been significant in the last 60 years. Losses of grazing marsh from the early 1930s to the mid-1980s include 37% in the Broads. Some of the last remaining unimproved grasslands are highly sensitive to increased nutrient loadings. Unless conservation measures to retain this habitat type are in place, with particular emphasis on the maintenance of water levels, flood regimes and appropriate grazing or cutting, most sites will deteriorate. The ESA scheme (now superseded by Environmental Stewardship) has reversed this trend in the Broads.

- The primary threats to grazing marsh are of both a widespread and localised type:

Widespread factors include:

- Drainage and water abstraction.
- Eutrophication, diffuse and point source.
- Pollution of ground and surface waters, including pesticides.
- Changes to more brackish or coastal habitats due to sea level rise (this may be beneficial overall to other habitats).

Localised effects arise from:

- Implementation of flood management works (may be beneficial to other habitats, such as pond and open water in dykes).
- Inappropriate standard of flood defence (both too high and too low).
- Lack of functioning of floodplain through river management, such as canalisation and floodbanks.
- Aggregate extraction.

- Neglect in the form of a decline in traditional grazing management.
- Land take by Industrialisation and urbanisation.
- Agricultural intensification, including conversion to arable.

### **3. CURRENT ACTION**

- A large proportion of the grazing marsh resource is protected by SSSI designation. The SSSIs within the Broads are also a recognised Special Protection Area and Ramsar site and candidate Special Area of Conservation. Those on the North Norfolk Coast are recognised as a Special Protection Area and a Ramsar site.
- The floodplains of the rivers Yare, Wensum, Waveney, Bure, Ant, Thurne, Tas and Tud are all within the Broads ESA. In addition, parts of the Wissey, Thet and Little Ouse lie within the Brecks ESA. The ESA scheme has been superseded by Environmental Stewardship, but ESA agreements will remain place until the five-year break clause is reached.
- Much of the grazing marsh within the North Norfolk Coast AONB is managed as National Nature Reserve, nature reserve, or under English Nature agreement or the Countryside Stewardship Scheme.
- The Broads is a nationally recognised wetland, forming one of the family of National Parks.
- Conservation organisations have provided much management advice via landowner contact, demonstration events and publicity material.
- Much of the grazing marsh area is subject to, or will soon be subject to Water Level Management Plans prepared by Operating Authorities.
- The Environment Agency and BESL, in developing the Broads Flood Alleviation Strategy, are undertaking flood management schemes to give flood defence assurance for land and property in accordance with that in 1995.
- Conservation organisations undertake extensive survey and monitoring of grazing marsh habitat.

## **4. ACTION PLAN OBJECTIVES AND TARGETS**

### **National**

- Maintain the existing habitat extent (300,000 ha) and quality.
- Rehabilitate 10,000 ha of grazing marsh habitat which has become too dry, or is intensively managed, by the year 2000. This would comprise 5,000 ha already targeted in ESAs, with an additional 5,000 ha.
- Begin creating 2,500 ha of grazing marsh from arable land in targeted areas, in addition to that which will be achieved by existing ESA schemes, with the aim of completing as much as possible by the year 2000.

### **Norfolk**

- Maintain the existing habitat extent (29,500 ha) and its quality.
- Rehabilitate 2,950ha (10% of the total resource in Norfolk) of grazing marsh habitat in intensive management by 2010
- Aim to create 350 ha of grazing marsh from arable land on the North Norfolk Coast by 2010. This target is in addition to any habitat creation that may be necessary as a result of changes in coastal management.

## Coastal and Floodplain Grazing Marsh - Norfolk Action Plan

NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
<b>5.1</b>	<b>Policy and Legislation</b>			
<b>5.1.1</b>	Take account of the conservation requirements of grazing marsh habitat in developing and adjusting agri-environment schemes.	Take account of the conservation requirements of grazing marsh habitat in developing and adjusting agri-environment schemes, especially the High Level Scheme options.	RDS	
<b>5.1.2</b>	Consider extending existing river corridor ESAs at the next review to cover whole floodplains/valley bottoms in relevant catchments.	Influence targeting of high level schemes.	RDS	
<b>5.1.3</b>	Continue to ensure that flood defence works are undertaken in an ecologically sensitive manner.	Continue to ensure that flood management works are undertaken in an ecologically sustainable manner.	EA, EA/BESL and IDBs	
		Evaluate washland creation and set-back as flood management solutions in the Broads, Nar and Little and Great Ouse.	EA/BESL EN and BA	
<b>5.1.4</b>	No national action.	Establish criteria and CWSs in the Broads by 2006.	NWT, EN, NCC and BA	
		Complete the identification of locally important sites throughout Norfolk as County Wildlife Sites by 2010.	NWT, EN, NCC and BA	
<b>5.1.5</b>	Continue existing programmes for SPAs and/or Ramsar designation by 2004.	Ensure Local Development Frameworks give adequate protection to SSSIs and County Wildlife Sites.	LPA's, NWT, BA, RSPB and EN	
<b>5.1.6</b>	No national action.	Promote creation of new grazing marsh to meet targets for the North Norfolk coast.	EA, RSPB, NWT, DEFRA, FWAG and EN	

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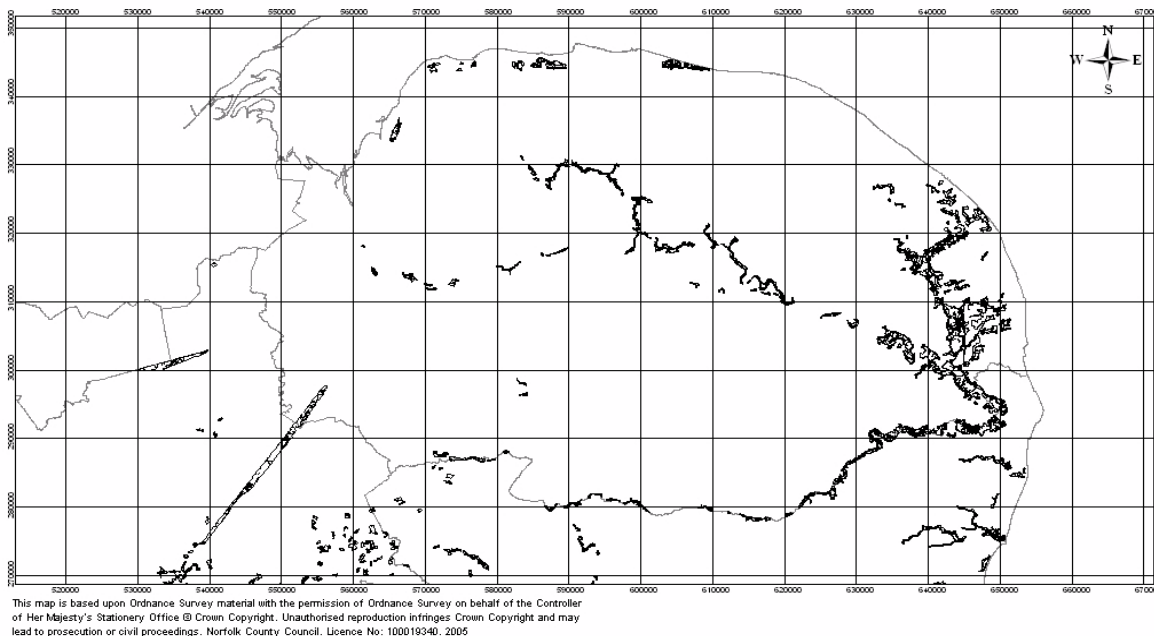
NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
5.1.8	No national action.	Facilitate restoration and creation of grazing marsh through inclusion of appropriate targets and actions in all appropriate plans and strategies.	EA and LA	
5.2	<b>Site Safeguard and Management</b>			
5.2.1	Promote the existing programme of water level management plans for grazing marsh SSSIs in England and Wales and encourage their production in Scotland and Northern Ireland by 1998. Ensure plans are established on all grazing marsh SSSI by 2000.	Implement all necessary tasks identified within Water Level Management Plans by 2008.  Examine issues associated with sea-level rise, climate change and water supply and resolve.	IDBs, EA, EN and BA  EA, BA and EN	
5.2.2	No national action.	Ensure sites above 10ha which are currently unmanaged are prioritized for management – with preference for sites which are part of large wetland systems – and identify sites for non-intervention.	EN, RSPB, NWT, BA, RDS and FWAG	
5.4	<b>Advisory</b>			
5.4.1	Encourage the exchange of data and information on best management practice for grazing marsh through Eurosite, the International Waterfowl and Wetlands Research Bureau and the international voluntary Wader Study Group.	Disseminate good management practice to grazing marsh owners and contractors, eg via farm visits and ESA newsletters.	RDS, EN, BA, FWAG, RSPB, NT, NWT and IDB	
5.5	<b>Future Research and Monitoring</b>			
5.5.1	Support projects which quantify the remaining extent and distribution of grazing marsh in the UK and evaluate the conservation status.	Map areas with potential for wet grassland and agree county 'opportunity map'. Prioritise suitable sites and undertake feasibility studies to identify future action.	EN, EA, RSPB, NWT, NT and BA	

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NATIONAL ACTION		NORFOLK ACTION	ACTION BY:	PARTNERS:
		<p>Monitor hydrology, water quality, management and catchment effects on dyke interest.</p> <p>Monitor extent and quality of dykes of conservation interest via periodic marsh dyke survey.</p> <p>Carry out breeding and wintering bird surveys.</p> <p>Research influence of water quality and quantity on dyke flora. Research effectiveness of management prescriptions.</p> <p>Promote research into the ecology of grazing marsh species, including invertebrates such as the lesser water measurer (<i>Hydrometra gracilentia</i>) and the ground beetle, <i>Badister peltatus</i>. Particular emphasis should be placed on assessing management requirements and the impacts of water quality and quantity.</p>	<p>EA, EA/BESL, RDS, IDBs</p> <p>EN, EA, RDS, EA/BESL and BA</p> <p>RSPB and BESL</p> <p>EA, BA, RDS and EN</p> <p>EA, EN, BA, RSPB, and NWT</p>	
<b>5.5.2</b>	Identify and undertake conservation research on areas where rehabilitation and re-creation of grazing marsh could be targeted.	Monitor and assess new management techniques.	RDS, EA/BESL, EN, BA, RSPB and NWT	

## NORFOLK DISTRIBUTION

The current distribution of coastal and floodplain grazing marsh is shown in the map below.



## MANAGEMENT GUIDANCE

Please refer to the Wet Grassland Guide.

## REFERENCES

Benstead, P, Drake, M, José, P, Mountford, O, Newbold, C and Treweek, J (1997). *The Wet Grassland Guide: Managing Floodplain and Coastal Wet Grasslands for Wildlife*. RSPB, Sandy.

The Broads Grazing Marsh Dyke Survey, 1997. English Nature, Broads Authority and Environment Agency.

The Broads Grazing Marsh Strategy. RSPB, Broads Authority and English Nature.

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