Gt Yarmouth Borough Ecological Network Mapping



Compiled by R.Land Norfolk Wildlife Trust on behalf of Econet Topic Group January 2007

Great Yarmouth Borough Ecological Network Mapping

1 Introduction

This report is put forward to foster further discussion about the development of an ecological network in Gt Yarmouth Borough. The report has been produced as a draft for further discussion and refinement, and is based on consultation carried out by the Norfolk Econet Topic Group¹.

The overall aim is to take forward the findings of the County ecological network report² and identify the Borough-level priorities. Specifically the report seeks to

- identify the key statements contained in the Econet Report pertaining to the Borough
- present the views of the Norfolk Biodiversity Partnership on how the priorities set out in the Econet Report can be further developed at the Borough level.

There are considerable limitations in the information base required to develop the ecological network and suggestions are made on how these can be addressed.

2 Ecological features and BAP habitats

2.1 Summary of key ecological characteristics

The Borough is characterised by the urban and built development along much of the coast and an intensive arable farming hinterland bordering the Broads. Semi natural habitat is highly fragmented, especially away from the Broads margins and coastal areas. The agricultural landscape generally has a poor hedgerow network and very limited semi natural habitat such as ponds, secondary woodland and veteran trees. There are no ancient woodlands recorded for the Borough and no significant clusters of secondary woodland. The key ecological characteristics can be summarised as:

Coastal zone

The coastal zone is largely urbanised apart from the area to the north of Hemsby. However coastal habitats do occur along the majority of the coast but are often constrained on the landward side by urban development. The coastal habitats include the European protected sites at Winterton and North Denes comprising sand dune and heathland. In addition there are areas of soft cliff and sand dune along almost the entire coast which also link with SSSIs in Suffolk.

Lothingland

This area is dominated by the urban area of Gt Yarmouth and Belton along with holiday developments. Fritton Decoy and Lound with their open water (eutrophic standing water BAP habitat?³) and adjacent wetland habitats (wet woodland, reedbed) are important. There are several areas of low lying land adjacent the Broads, some of which is lowland wet grazing marsh, which are of actual or potential ecological value. In addition there is remnant heathland, particularly between Fritton and Belton, associated with conifer plantation.

Flegg

The most important biodiversity habitats associated with the European protected site at Winterton comprising heathland and woodland. There is also a European protected site at Hemsby comprising fen

¹ Attendees at consultation meeting: Officers from Natural England, Gt Yarmouth Borough Council, Forestry Commission, Norfolk Wildlife Trust, RSPB, Broads Authority, Norfolk County Council, Environment Agency.

² Report of the Ecological Network Project. Norfolk Biodiversity Partnership & Norfolk Wildlife Trust. Sept 2006

³ There is no Norfolk Eutrophic standing waters BAP so it is not possible to be definitive as to which sites would be covered by this BAP habitat category

Urban areas

The urban area of Gt Yarmouth/Gorleston and to some extent Caister and other settlements contains areas of public and private greenspace, brownfield sites and areas of semi natural habitat.

The juxtaposition of the Broads to the Borough cannot be ignored. The land uses within the Borough will have a major impact on the wetland habitats of the Broads. It is important that actions undertaken in the district also secure the integrity of the Broads.

2.2 BAP habitats of county and district importance

The Econet Report identified the following components of the ecological network

- Core area comprising the margins of the Broads especially at Winterton and in the Waveney Forest and Fritton Decoy area
- Core area based on the coastal zone from North Denes northwards
- Zone of heath-grass-woodland enhancement in the Lothingland area
- Zone of general habitat enhancement in the Flegg area
- Area of publicly accessible urban greenspace deprivation based on Gt Yarmouth and the coastal settlements to the north

The Econet Report identified the following BAP habitats as being County priorities

- Coastal habitats, especially sand dune and soft cliff, along much of the coast
- Heathland at Winterton, North Denes and in the Lothingland area
- Floodplain grazing marsh (and possible fen) in Lothingland eg Gapton, Bure Loop, Winterton and some tributaries on the margins of the Broads
- Wet woodland in some of the tributaries on the margins of the Broads including at Fritton Decoy and Lound

An objective of the current exercise is to identify components of the econet that are of District importance. Amongst those identified are

- Areas of Parkland (BAP habitat⁴), for example at Ormesby Hall, with associated secondary woodland
- Disused railway lines between St Olaves and Bradwell; and golf courses especially at Corton, where it protects an undeveloped stretch of coast, and Caldecott Hall (these are not shown on the current econet maps).
- Urban greenspace areas comprising numerous sites in the urban area and fringe (these are not shown on the current econet maps)
- Eutrophic standing water of Fritton Decoy/Lound (these are not shown on the current econet maps)

3 Developing an ecological network for Gt Yarmouth Borough

In the section below, the key actions for econet implementation are outlined. It is important to note that the strategy does not cover the actions required to protect and maintain existing BAP habitats; it refers only to actions required for habitat creation and/or buffering.

3.1 Econet priorities

Based on the findings of the Econet Report the following key measures are recommended in order to contribute toward the establishment of an ecological network:

- Enhance and create coastal habitats including the habitats found along the developed stretches;
- Enhance and buffer the wetland habitats associated with the Broads;
- Enhance and create urban greenspace in Great Yarmouth and satellite communities;
- Enhance and create heathland habitats in the Lothingland and Winterton area.

⁴ The current Norfolk Wood pasture and Parkland BAP does not adequately cover the parkland habitat so there is no list of parklands of particular biodiversity interest.

3.2 Strategy for econet implementation

The following features are identified on the accompanying map

Objective		Action	Potential delivery
Enhance coastal zone	1.	Produce coast conservation plan	Shoreline Management
habitats	2.	Enhance coastal habitats by linking and	Plans
		buffering habitats	S106 planning
	3.	Create habitat ecotones from coastal	obligations agreements
		habitats	
	4.	Encourage natural processes where appropriate	
Enhance Broads	1.	Develop greater connectivity between	Environmental
margins to buffer from		Broads wetlands and valley side habitats	Stewardship
adjacent land uses and	2.	Buffer Broads from adverse impacts of	FC Wet woodland
create ecotones.		hinterland	project
	3.	-	River valley planning
		habitat	by BA
	4.	Expand and link existing wetland habitats	S106 planning
	5.	Create new habitats on the Broads margins	obligations agreements
Create greenspace in	1.	Produce biodiversity plan for green	URC plan
urban areas and urban		infrastructure plan	S106 planning
fringe to ensure	2.	Create new BAP habitats in the urban/	obligations agreements
connectivity of		urban fringe areas to provide more	
habitats.		accessible greenspace	
	3.	Ensure core areas of BAP habitats remain	
		connected with wider countryside	
Increase the area of	1.	Identify potential heath creation areas	S106 planning
heathland in suitable	2.	Create new heathland adjacent other	obligations for
areas to ensure a viable		habitats or on former heathland sites and in	minerals restoration
area is created.		association with mineral extraction	and other development
		restoration	Environmental
	3.	Buffer heathland through restoration or	Stewardship
		creation of habitats adjacent to sites or	
		encouragement of low input agricultural	
		systems	

4 Other actions

There are a number of specific actions that could help establish an ecological network in the Borough. These are a mixture of practical projects and policy development. In particular, it is suggested that consideration be given to:

4.1 Strategic measures

- Local Development Frameworks: It is recommended that Gt Yarmouth Borough Council incorporate the econet concept in its Local Development Framework. This should include specific policies in the Core Strategy as well as the identification of habitat creation areas within Site Specific Proposals and Area Action Plans based on the attached map.
- Section 106 Agreements: The potential for using Section 106 planning obligations to promote habitat creation related to development should be actively explored. Specific examples include the provision of urban greenspace that contributes towards an agreed green infrastructure plan; creation of habitats along the coast or in heathland creation areas, associated in particular with holiday and recreational developments.

- Landscape Characterisation: It will be important for any landscape characterisation to be
 integrated with the ecological network concepts. This integration helps identify mutual objectives
 and possible areas of conflict.
- **Development of a green infrastructure plan for the Borough**. As a significant urban area it will be important to develop a plan for the development of accessible greenspace involving the strategic provision of new greenspace in the form of BAP habitats. It is recommended that a study to look at green infrastructure requirements related to urban and fringe areas be undertaken. This would look at integrating the ecological network with socio economic requirements for publicly accessible greenspace.

4.2 Gaining further information

The following actions are considered necessary to provide information to facilitate conservation planning and development of implementation projects:

1. Identify heathland creation opportunities

There is a need to assess the areas where heathland could be created and to identify implementation mechanisms and areas of conflict. There are a number of approaches to carrying out this work and there is some information already available on methodologies⁵ but this needs to be more specific and an agreed heathland creation plan drawn up for the Lothingland area.

2. Produce a coastal habitat enhancement plan

There is a need to enhance the coastal habitats which comprise a considerable ecological asset, even outside the European protected sites. They are severely affected by the built development that now constrains them. A plan to restore, enhance and manage these habitats and to create new habitats on the coastal plain is required.

3. Developing the role of CWSs in delivering the ecological network

There is a need to obtain information about the distribution and status of BAP habitats in the district and to assess each site to ascertain the opportunities for enlargement or buffering. Further survey work is required to identify BAP habitats and to assess the conservation needs of individual sites in terms of buffering and enlargement.

4. The Broads valley assessments

The Broads Authority's whole valley planning approach should integrate buffering and habitat creation opportunities outside of the Executive Area. The margins of the broads are priority area for action involving buffering of broads habitats and creation of ecotones from wetland to dry.

5 Explanation of District ecological network map

5.1 GIS layers provided

The following layers make up the Gt Yarmouth District ecological network map. The information is based on the County ecological network map but has been refined and expanded after consultation with representatives from Natural England, Broads Authority, Forestry Commission, Environment Agency, RSPB, Norfolk Wildlife Trust, Norfolk County Council, North Norfolk Council, NB. Some features have not been shown on the map but are mentioned in the text above. They are, however, considered as important in a District or even County context. Their omission was primarily based on the need to maintain the clarity of the map.

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⁵ North Norfolk Heath Creation Strategy English Nature and FC/RSPB Heathland Opportunity mapping Project.

5.2 District ecological network map

- 1. Landscape Description Unit (LDU) 1:50000 layer from Norfolk County Council
- 2. Gt Yarmouth district boundary and Broads Authority Executive Area boundary
- 3. Zone of grass-heath-wood enhancement. Based on the County ecological network map
- 4. Zone of general habitat enhancement. . Based on the County ecological network map
- 5. Wetland habitat enhancement zone based on the LDUs that are classified as 'wetland' and the 1:100 flood risk area from Environment Agency. It is assumed that this incorporates the majority of the area available for the creation and enhancement of the following BAP habitats wet woodland, reedbed, fen, chalk river, grazing marsh, mesotrophic waters and to a great extent eutrophic waters
- 6. <u>Coastal habitat zone</u> Based on the County ecological network map coastal core area but expanded to include all LDUs with a coastal frontage. Between Winterton and Hopton it is defined as up to 250m from the coastline. It is assumed that this will incorporate the majority of area available for the creation and enhancement of the following BAP habitats all intertidal habitats, sand dune, shingle beach, saline lagoon as well as grazing marsh and reedbed
- 7. <u>Heathland core area</u> defined as an area around the margins of the Broads (Winterton) and in Lothingland and broadly based on the County ecological network map.
- 8. <u>Buffer zones for Broads and coast</u>. Two <u>buffer zones</u> around the Broads national park (1km) and the coast. These are shown as buffered to 1km to highlight the extreme importance of these areas and the need to consider adjacent land use
- 9. <u>Urban areas</u> of Towns Gt Yarmouth
- 10. <u>Core habitat corridors</u>. Indicative arrows showing desirable connectivity between core areas of heathland

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