Wetlands

Introduction

These form a small but significant component within most of the major habitats in the Scarborough area and occur throughout. In the not so distant past they would likely have formed one of the major habitats in the area but, as with many others, there have been considerable losses over many years.

The Vale of Pickering itself would once have been a more or less continuous wetland from the coast to the Vale of York. Indeed this would have lasted right up to the 19th Century, until the major drainage works that culminated in the straightening of the River Hertford.

Our objectives for Wetlands are:

To maintain and improve the quality of existing Wetlands.
To re-create Wetlands, particularly in areas where they were historically present in a much greater quantity.

This is highlighted by the fact that the last wolf in England was purportedly killed in the mid 18th Century on a wooded 'island' behind Folkton, perhaps the focus of the local werewolf legend.

Elsewhere within the Borough, wetlands would also have been much more extensive, particularly within the undulating clay of the coastal strip where impeded drainage still creates flooding. Again drainage has largely removed this habitat from the landscape.

Wetlands themselves come in many forms that can grade into open water, wet meadow or carr (wet woodland) habitats. They range from reed beds and swamps to marshes, bogs and fens. Their nature being dependent on exactly how wet they are and whether there is a high level of lime in the water (base status). Swamps form where the water level is generally at or above the ground level, marshes form where there is a waterlogged mineral soil. Fens (dominated by sedges and flowers) and bogs (dominated by sphagnum moss) form where the soil is peaty; fens developing where the base status is high, bogs where it is low and acidic. There are no bogs known within the Plan area.

Common Reed, although frequent throughout the area, particularly in the Vale of Pickering, does not occur as extensive reedbeds. This is largely due to past drainage.

Most of Scarborough's wetlands are formed due to the shape of the land (topography), i.e. they form where water is trapped in a hollow. Another way that wetlands form is where water comes out of the rock as a spring or flush. These rarely form extensive wetlands but they are extremely valuable. They can be home to particularly uncommon plants; such as Butterwort and Marsh Lousewort, and are especially important to invertebrates. They therefore increase the overall diversity of an area substantially. Wetlands and many wetland species are identified in the UKBAP as priority habitats and species.

Most wetlands within the Scarborough area occur as small mosaic patches within other habitat types. In particular they grade into grasslands of various types and wet woodland (carr). In their own right, they only occur as extensive habitat in the Vale of Pickering.

The Resource

Wetland habitats occur throughout the Borough and local plan area, nearly always as part of a habitat mosaic. They are though very limited in the Wolds, primarily due to the free draining nature of the chalk.

Where they do occur in the Wolds, they are of great interest. Their occurrence however is limited to small flushes where fractures in the underlying chalk direct water out onto the surface. The most valuable of these is at Speeton where there are several flushes on the hillside that have an especially diverse flora and almost certainly a diverse invertebrate fauna.

There are also a whole series of springs that follow the foot of the chalk slope on the edge of the Vale of Pickering. Some of these have a relatively natural vegetation, others have been ploughed into fields and may or may not have had some drainage carried out. They do though still provide a valuable resource providing small, wet areas important for species such as Lapwing, which use them for breeding or feeding young.

Curlew:
(Photograph by Whitfield Benson)

Links to Habitat and Species Action Plans and Guidance Notes.

Priority habitats and species associated with this HAP:

Redshank, Snipe, Lapwing, Curlew, Reed Bunting, **Water Vole, Great Crested Newt, Otter**, Dromius sigma (a ground beetle), Enochorus melanocephalus (a beetle).

Action Plans have been prepared for those in bold.

Elsewhere, there are small areas of wetland left on the clays of the coastal zone, for instance on Sands Lane, Hunmanby and at Cloughton Marsh.

There are also some very valuable sites on the coastal slope, where slip planes and springs outcrop on the cliffs. These have a very wide variety of wetland plants including Bogbean, Marsh Valerian, Great Tussock Sedge and False Fox Sedge.

Springs on the more acidic areas around Hatterboard and Whitby also have their interest with plants such as Marsh Lousewort and Marsh Pennywort.

Wetlands outside of SINC sites can occur as small fragments along streamsides or within improved fields.

The extent of these habitats is shown in the following table.

Distribution of Wetland habitats in the Scarborough area.

	Coastal	Vale of Pickering	Inland	Total
Acid Flush	0.02ha		0.11ha	0.13ha
Basic Flush	1.44ha		0.16ha	1.6ha
Fen Mire	0.5ha		0.52ha	1.02ha
Basic Fen			0.76ha	0.76ha
Acid Fen		1.12ha		1.12ha
Marshy Grassland	2.31ha	8.32ha	2.46ha	13.09ha
Swamp	0.55ha	3.86ha	0.76ha	5.17ha
Total	4.82ha	13.3ha	4.77ha	22.89ha

Threats

Wetlands are now a particularly threatened habitat although in the past, they would once have been much more extensive. In some areas, such as the Vale of Pickering, they would have been primary habitat.

Past losses have occurred for a number of reasons but are mainly due to drainage for agricultural improvement and afforestation to maximise value from less productive land. These are still threats to the remaining areas today.

Other threats stem from pollution, both agricultural and industrial, and water extraction lowering water table levels.

A particular threat today is the reduction in management that has occurred due to their economic viability and the difficulty in managing the remaining sites because of their small size.

Basic Fen:
(Photograph by Graham Megson)

Potential for Enhancement

The re-creation of wetlands are one of the key BAP targets and are included within many of the Countryside Stewardship area targets and there can be many opportunities to do this either from raising water levels by blocking drains and ditches or by excavating to create pools or wet hollows. As such the physical formation of a wetland can be relatively straightforward. The development of a basic wetland flora can also be achieved relatively easily and within a relatively short time a valuable area can be developed which will attract a wide diversity of birds, insects and other species. More difficult to achieve is the development of a specific wetland type which requires a considerable degree of control on water levels. However, almost any wetland type can be of benefit to the diversity of an area and can be created in most situations other than on very free draining soils such as on chalk.

Current action

Locally Scarborough Borough Council has been working on:

- Identifying the resource;
- Providing advice and developing proposals with landowners to create wetlands as part of Countryside Stewardship and other proposals;
- Incorporating wetlands as part of SUDS (Sustainable Urban Drainage Systems) within planning consents; and
- Providing practical assistance with management through Environmental Task Force and Modern Apprentices.

In addition the Council along with partners such as the RSPB, is re-creating wetland habitat at Star Carr in the Vale of Pickering.

What you can do to help:

Keep dogs on a lead.

Don't collect frogs, toads and newts from wild ponds.