Acidic Grassland

Introduction

Acidic Grasslands are found on low pH soils and in Scarborough occur on three main soil types.

- podsols forming thin, droughty peat soils in the Vale of Pickering;
- base-poor soils overlying sandstones; and
- very leached soils in the Yorkshire Wolds.

They are characterised by relatively species-poor grassland that grades at one end into dry heath and at the other into wet acidic mire communities. The sward is dominated by species such as Common Bent, Yorkshire Fog, Sheep's Fescue, Wavy Hair Grass, Sheep's Sorrel, White Clover, Catsear, Ribwort Plantain, Tormentil and Bird's Foot Trefoil. Other species that can occur include Heath Milkwort, Heath Bedstraw, Heath Speedwell, Heather and Bell Heather.

Our objective for Acidic Grassland is:

To maintain and increase the resource and ensure that it is managed for favourable wildlife status.

Because of the geology of the Scarborough BAP area, the conditions likely to suit the development of Acid Grassland are limited although in the upland areas of the North Yorkshire Moors, Acidic Grasslands are widespread. In the lowland areas it is, therefore, a much scarcer resource. This largely mirrors the national picture.

Because of this, Acidic Grasslands do not develop into any extensive heathland in the Scarborough area, although in a few coastal locations the grassland is verging on heath, with Heather and Bell Heather appearing as a restricted component of the flora.

The Resource

In the Scarborough plan area, the total known resource of this type of grassland amounts to 35.72 ha, of which only 18 are classed as Unimproved, the rest comprise semi-improved grassland with or without scattered scrub.

Distribution of Acid Grassland in the Scarborough area.

	Unimproved	Semi-Improved	Light Scrub
Acid Substrate	7.23ha	8.21ha	2.69ha
Leached Calcareous	9.56ha	6.31ha	
Coastal	1.26ha	0.46ha	
Total	18.05ha	14.98ha	2.69

Of this, only 6 sites are over 1 ha. These are:

Speeton Hills	10.53 ha
Wykeham Pits	5.08 ha
West End	4.26 ha
Goosedale	2.2 ha
Oliver's Mount	1.92 ha
Turnerdale Sack	1.36 ha

Acid Grasslands are divided almost equally between being derived from acid substrates, largely to the north of Scarborough, and leached calcareous soils on the Wolds. Speeton Hills is the most extensive area and is derived from leached calcareous soils, as are the West End Farm fields.

Pockets of acidic grassland also occur elsewhere on valley slopes in the Wolds but are difficult to define. In conservation management terms they are best considered under the Habitat Action Plan for Calcareous Grassland since they occur within larger units of unimproved chalk pasture.

The most extensive areas derived from acid substrates are at Wykeham. This is the only known site to have developed on podsolic soils, probably with an underlying iron pan.

Sites derived from acidic rock substrates are much more limited and, as on calcareous soils, tend to be in mosaics with other habitat types such as Neutral Grassland.

Above: Adder
(Photograph by James Mortimer)

Links to Habitat and Species Action Plans and Guidance Notes.

Priority habitats and species associated with this HAP:

Reptiles, Wet Flush and Mire Communities

Action Plans have been prepared for those in bold.

The most diverse of these is at Turnerdale Slack and it is now known that a further equivalent area is present within the same holding.

Elsewhere, Acid Grasslands occur as mosaics in mire communities and within the coastal slope.

Acid Grasslands also occur at a number of other sites, notably within the Seamer Carr Tip and at Jacob's Mount. Their status has yet to be verified.

In Ryedale, Acid Grasslands also occur on lime-deficient sandy soils along the southern edge of the Vale of Pickering, for instance at Ganton, but suitable conditions are limited in Scarborough to a small area at the A64 Roundabout at Staxton and there are no known examples there.

Lowland Dry Acidic Grassland is identified as a Priority Habitat in the UK BAP.

The invertebrate and faunal value of this habitat is inadequately known.

Acid Grassland at Whitby:
(Photograph by Graham Megson)

Threats

As with most grassland habitats the main threat has always been agricultural improvement and Acid Grassland is no different. In particular drainage and heavy marling very quickly impoverish the habitat.

In Scarborough, those sites in the Vale of Pickering have particular threats due to the nature of the ground on which they have developed. They tend to be on very poor drained podsolic soils that in agricultural terms are of very limited value. As such they have been targeted for other land uses, such as gravel extraction, refuse disposal and re-afforestation.

Because of the very limited extent of the coastal resource and particularly because of heath interest of some of the locations, erosion could have a very significant effect.

Potential for Enhancement

Within the Scarborough plan area, Acid Grassland is a very small and threatened resource. The restricted nature of suitable conditions for this habitat to develop, mean that this has probably always been the case. However, because of the specialised conditions under which they develop and the agricultural improvements that have been made, re-creation is likely to be difficult to achieve. Emphasis should therefore be on maintaining the existing resource and raising the conservation status of semi improved acid grassland.

Current action

Through the review of SINC sites, Acid Grassland sites have been identified and the extent of the resource is now known.