

Introduction

As a result of changing farming practices, agriculturally unimproved meadows and pastures are now a rare resource in lowland Britain. Over the last ½ century, some 96% of all old wildflower meadows have been lost either to arable conversion or through improvement. Lowland meadows is a UKBAP priority habitat.

Within the Scarborough Local Plan area, most remaining unimproved grasslands occur on the neutral clay soils along the coast and on some leached soils overlying chalk and limestone. They support characteristic wildflowers such as Pignut, Great Burnet, Bird's foot Trefoil, Lesser Stitchwort and Betony along with grasses such as Browntop, Red Fescue, Sweet Vernal Grass and Crested Dogstail.

Our objective for Unimproved Neutral Grassland is:

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

They can be divided into old meadows and pastures characterised by Crested Dogstail-Common Knapweed grassland (MG5) in the National Vegetation Classification (NVC). Coastal mosaic grasslands and wet grasslands. These latter include small areas of flood meadow grassland characterised by Meadow Foxtail-Great Burnet (MG4), but these are as small pockets within more extensive species-rich neutral grassland and are not flood meadow grassland in the true sense. Whether they were once more extensive here is difficult to determine. Because of this uncertainty and their presence only as tiny remnants within other grassland types, they are incorporated into wet grasslands.

The coastal mosaic grasslands, although primarily neutral with characteristic species similar to the above, do have a unique character of their own strongly influenced by the sea. This allows certain species to thrive where they would not otherwise be found. This includes flowers such as Grass of Parnassus and Kidney Vetch. They are difficult to fit into the National Vegetation Classification used to identify other

vegetation types and have a completely different set of threats. Because of this they are also considered under the Coastal Cliff Mosaic HAP as well as Unimproved Neutral Grasslands.

Many neutral grasslands are in complex mosaics, often as remnants within other grassland types and habitats and particularly associated with scrub.

Old Meadows and Pastures

On the clay soils of the coastal fringe, species-rich neutral grasslands occur either as small enclosed fields close to villages, sometimes with ridge-and-furrow, or as remnant unimproved grassland areas on wetter or steeper slopes. The characteristic plant community is Crested Dogstail - Common Knapweed grassland. Typical herbs include Common Knapweed, Bird's foot Trefoil, Betony and Pignut. Examples of this occur at Hunmanby, and Ruswarp.

On the chalk and limestone of the Wolds and Moors fringe, neutral grassland occurs as pockets within a calcareous sward where leaching has reduced the influence of lime. Examples here are found at Rudston and Hunmanby.

Elsewhere, on more easily accessible or better drained land, old meadows have virtually vanished from the farmed countryside as a result of modern agricultural methods.

Wet Grasslands & Flood Meadows

These grasslands are located principally in the Vale of Pickering through to the coast. As you would expect, they are found wherever drainage is poor and too difficult to improve. Because of this they are now very rare.

They tend to have a much richer sedge flora accompanied by plants such as Ragged Robin and very rarely Meadow Rue.

A particularly rare type is the old hay and flood meadow grassland (MG4). These are found on extensive flood plains in lowland England. The UK primary resource for this is in and around the Vale of Oxford and Vale of York. The characteristic plants of this community are the grass Meadow Foxtail and Great Burnet.

Unimproved Neutral Grassland



Above: Chimney Sweeper Moth
(Photograph by Damien Money)

Below: Snipe
(Photograph by Whitfield Benson)



What you can do to help:

Enjoy meadows without picking flowers.

As such, there are no flood plain meadows in the Scarborough area. There are though a number of MG4 remnants in association with other grasslands. As one would expect these are found primarily along the banks of the Derwent and in a few fields within the Vale of Pickering.

Elsewhere, wet grasslands can grade into more acidic conditions, notably at Flixton Carr and Wykeham and more unusual species occur. For instance Purple Moor Grass occurs at one location.

Regardless of what species are present, they are a much degraded resource, even when considered semi-natural.

Distribution of Neutral Grassland in Scarborough.

	Unimproved	Scattered Scrub	Semi-Improved	Total
Coastal				
- SINC	41.06ha	13.63ha	3.29ha	57.98ha
- SSSI	18.00ha			18.00ha
Lowland Neutral	22.07ha	8.26ha	31.05ha	61.38ha
Wet Grassland	13.11ha			13.11ha
On Chalk Wolds	3.08ha	3.00ha	7.13ha	13.21ha
Limestone – Moors Fringe	2.71ha		7.50ha	10.21ha
Total	100.03ha	24.89ha	48.97ha	173.89ha

The Resource

The total Scarborough resource of neutral grassland is around 174 hectares. 125 ha of this could be considered unimproved and 49 ha semi-improved. Of the Unimproved Neutral Grassland, 72.7 ha are coastal and 8.8 ha. are on calcareous soils. This leaves only 43.4 ha. as neutral old meadow and pasture or wet grassland in lowland areas.

This is arguably the most threatened habitat both in Scarborough and in Yorkshire as a whole. For instance York only has approximately 19 ha of this habitat remaining, although it does have extensive areas of flood meadow grassland. Similarly Ryedale has only an estimated 26 ha and like Scarborough has lost most of its flood plain grassland.

The table above highlights the distribution of neutral grassland in the Scarborough area. As can be seen, the main location for Unimproved Neutral Grasslands is as part of the coastal slope mosaic from

Scarborough through to Speeton and from Whitby to Sandsend. As one would expect there is little semi-improved grassland on the coast as opposed to the inland locations.

Outside of the coast, the majority of the neutral grassland is scattered throughout the Borough as odd fields often as small horse paddocks close to old villages. The most extensive area is at Ruswarp, as a neutral/acid grassland mosaic.

Wet grassland is almost entirely in the Vale of Pickering with the largest element being at Muston.

Another wet grassland type; coastal grazing land, is considered separately under Coastal Wetlands. These are found at Ruswarp on the Esk estuary.

Threats

The principal threat to this habitat in the past has been agricultural improvement but sites on the fringes of settlements are often sought after by developers for house building, and development is now a principal threat in the urban and urban fringe areas.

Abandonment of traditional management by hay making or grazing is also a problem, resulting in the encroachment and domination by coarse grasses such as False-oat and Cocksfoot.

A further possible loss is from erosion of the coastal resource by the sea. The impact of this is uncertain but much of the existing grassland on the coastal slope has been derived from the cliff top resource. This resource has now largely been destroyed through agricultural improvement and

holiday camp development. The present interest is therefore being maintained by seeding back into newly created bare ground from the existing cliff/coastal slope vegetation. This potentially leaves some species open to extinction and therefore could lead to an impoverishment of the resource. This is discussed in more detail in the Coastal Mosaics HAP.

With regard to wet grasslands, the main threat has always been drainage and further river works to the Derwent and Hertford would certainly affect the remnants of old grassland on the flood banks.

Potential for Enhancement and Re-creation

It is most important to protect and manage existing grassland, with re-creation being of secondary importance. As with any habitat re-creation, great care is needed in order to ensure that the correct conditions

prevail. However, it is perhaps a little easier to ensure that conditions are suitable for neutral grasslands than for either acidic or calcareous ones. Wet grasslands are more complex, generally requiring wet conditions to be maintained throughout much of the year, but this can be achieved. The agricultural feasibility is also better. There are therefore opportunities to carry out wildflower establishment on agricultural land. There are also opportunities to establish wildflower grasslands as part of any major development proposal. The use of seeds of local provenance is desirable.

This re-creation though is primarily aimed at wildflowers. In some ways this is acceptable as it provides a key part of the basic ecological infrastructure. It is though also the visible face of nature conservation and important in convincing people to accept nature conservation habitat as part of their everyday environment rather than a neatly mown but sterile green 'carpet'.

It is accepted that this may not necessarily benefit all insects and particularly some of the rare species but until their habitat requirements are better understood, this may be the best that can be achieved. Where possible, however, consideration should always be given to managing or creating some grasslands for particular invertebrates or other organisms as well.

This lack of knowledge on the detailed life of many species, particularly insects and invertebrates, is the reason why it is so important to maintain our existing resource.

Both management of the existing resource, enhancement of semi-improved swards and re-creation are dependent on incentives to encourage landowners to implement them. The present Countryside Stewardship Scheme has done much to foster this and it is hoped that the forthcoming change to the Environmental Stewardship Scheme will continue this.

Wildlife gain through planning controls is also very much an important way of enhancing or increasing the resource.

Current Action.

- Recommendations are made with regard to landscape proposals and to landowners with regard to reseeding wildflower grasslands on suitable sites.
- No planning agreements have yet been negotiated with developers to protect remaining old neutral meadows.
- Advice and practical assistance has been provided to a number of owners as part of Countryside Stewardship Scheme applications.
- A number of Wildlife Sites have been identified as primary examples of these habitats. This includes sites such as Cayton Meadow, Hunmanby Meadow, Northgate Lane Meadow and the Derwent corridor.
- Scarborough Borough Council manage some of their own resource under Countryside Stewardship.
- Scarborough Borough Council is developing a major wetland recreation scheme at Star Carr that will include the development of some Wet Grassland and Flood Meadows.

Unimproved Neutral Grassland:
(Photograph by Graham Megson)



Links to Habitat and Species Action Plans and Guidance Notes.

Old Meadows and Pastures.

Ponds, Flushes, Species Rich Hedges, Coastal Cliff/Slope Mosaics

Wet Grasslands and Flood Meadows

Ponds, Ditches, Rivers

Unimproved Neutral Grassland

Chimney Sweeper Moth
Barn Owl
Green-winged Orchid

Wet Grasslands and Flood Meadows are often important for ground nesting birds such as Snipe, Redshank.

Action Plans have been prepared for those in bold.