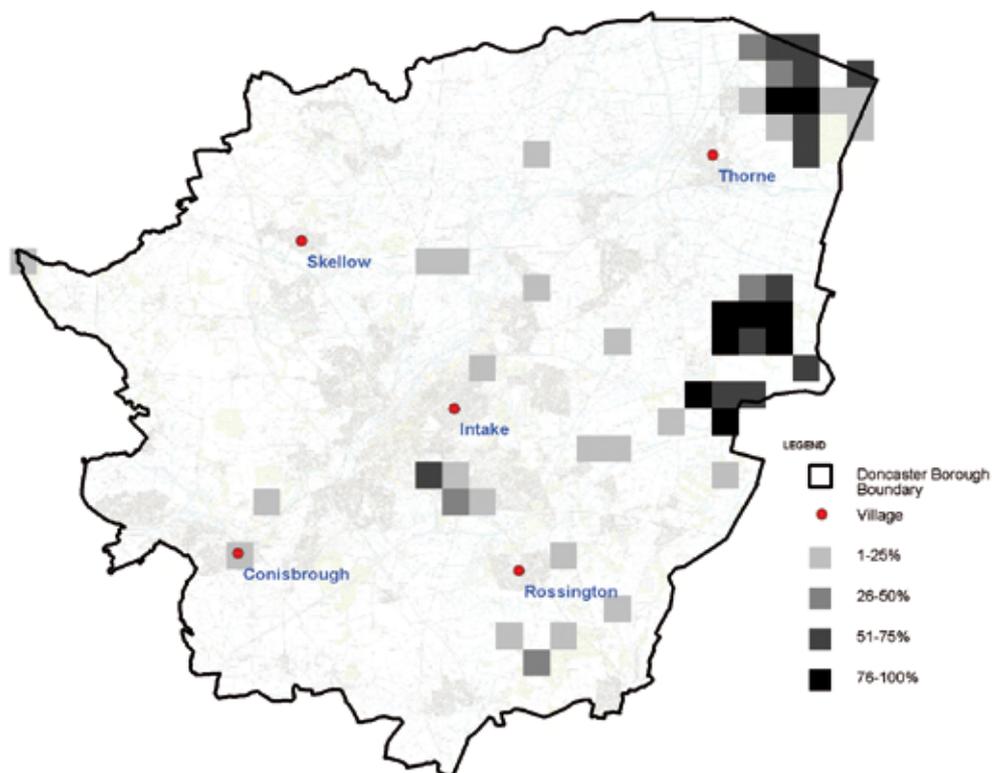


# Lowland Raised Mire

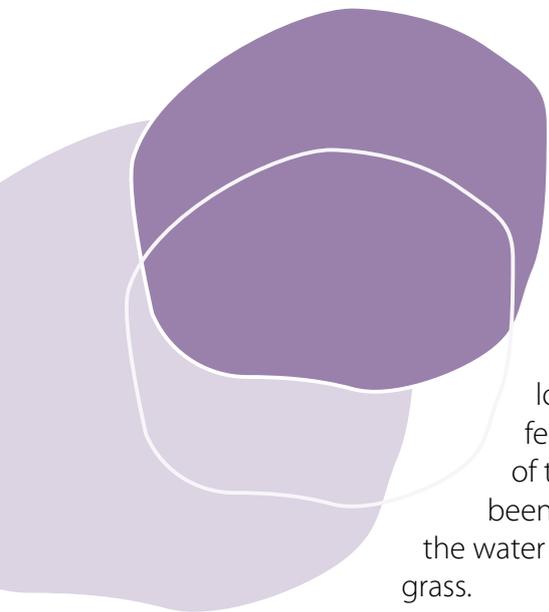
## Summary Habitat Action Plan

Doncaster Local Biodiversity Action Plan  
January 2007



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## 1 Habitat description

Lowland raised mires are peatlands that receive water exclusively by precipitation (as opposed to those mires which are fed by surface waters or groundwater in addition to precipitation). Intact lowland raised mire is a mounded structure, the centre of which can be several metres above the level of the groundwater. The mound is created by many years of accumulation of dead plant material. In their natural state, lowland raised mires are surrounded by an extensive fringe of lagg fen, which stretches toward the meandering and sluggish waters of the lowland rivers. Secondary mires are those mires which have been damaged due to peat extraction or other activities, but where the water table has stabilised allowing the re-growth of mosses and cotton grass.

Lowland raised mires support a range of distinctive plants and animals including many wetland birds and invertebrates. Over seventy species of breeding bird are found, including nightjar, nightingale, long-eared owl, teal, whinchat, water rail, curlew and woodlark. Common toad and frog, smooth newt, common lizard, grass snake and adder are found on Thorne and Hatfield Moors.

The Moors are also an important archaeological site as the peat preserves both human history and indicators of climatic change such as pollen, plant and invertebrate remains. Notable finds include the Bronze Age Trackway on Thorne Moors and the recent discovery of a Neolithic Trackway on Hatfield Moor.

## 2 Characteristic plant species

Sphagnum mosses	Common reed	Great and intermediate sundews
Heather	Greater bladderwort	Crested buckler fern
Cranberry	Bulbous rush	Masterwort
Cross-leaved heath	Bogbean	Butterwort
Cotton grasses	Royal fern	Lesser bladderwort
Round-leaved sundew	Common spike-rush	Fen violet
Bog rosemary	Bog sedge	Bogmoss flapwort
Bog myrtle	White beak sedge	
Marsh cinquefoil	Bog asphodel	

## 3 Current factors causing loss or decline

- Peat extraction has severely damaged large areas of lowland raised mire. Paleo-environmental records (such as pollen records) in the peat are lost once vegetation has been removed and the peat has dried out.
- Extraction of the minerals that lie below the peat has the potential to affect the already-damaged mire. Widespread subsidence of the surface of the Moors could result in the already-depleted bog 'dome' dropping below the water table and would drown-out the rain-fed bog habitats.
- Drainage of land adjacent to the moors could affect the ability to maintain the high water levels necessary to preserve mire habitats.

- Warping - the 'traditional' flooding of the agricultural land around the moors resulted in deep layers of silt overlaying the peat.
- Climate change may exacerbate the drying-out of mires already affected by drainage. Conversely, rising sea levels may also cause increased salinity of the ground water and affect the drainage of the land.
- Acid deposition and precipitation from air pollution is believed to affect mire vegetation.
- To prevent damage to fragile habitats, public access needs to be managed.
- Genetic purity needs to be maintained if any translocation of species is to take place.

## 4 Objectives, targets & proposed actions

Objective	Target	Ref	Action	Lead & Partners
1) To ensure the protection and maintenance of lowland raised mire.	By 2009.	1.5	Identify remnant mire habitats within the borough and evaluate against SSSI site selection criteria to see if any currently undesignated sites can be protected.	Natural England (NE), DMBC
2) To restore degraded sites and ensure appropriate management of lowland raised mire.	2010 and beyond.	2.2	<p>1) Return the water table to a state in which it is able to support wetlands and thereafter manage it sustainably.</p> <p>2) Bring all warp land around the lagg fen areas bordering the Moors SSSI boundary into Environmental Stewardship and all land within 1 km of the moors into Higher Level Stewardship.</p> <p>3) Ensure that Water Level Management Plans give due regard to nature conservation, geology, archaeology and to the record of the past environment. Implement the Hatfield WLMP and complete and implement the Thorne Moors WLMP.</p> <p>4) Influence and change the common local perception that land drainage is a desirable end in itself.</p>	NE, Environment Agency (EA), Internal Drainage Boards (IDBs), Yorkshire Water (YW), Farming and Wildlife Advisory Group (FWAG), DMBC,, Partners of the Humberhead Levels Land Management Initiative (Value in Wetness)
3) To create 2 ha of wetland habitat that could succeed to Mire habitat and to create 2 ha of complementary habitat adjacent to mire areas.	Complete Research by 2010.	3.1	1) Research and identify former areas of lowland raised mire, outside the current Natura 2000 boundary, Carry out hydrological investigation to identify areas suitable for habitat creation work.	All DBAP partners, NE and FWAG
4) Raise public awareness of the importance and special characteristics of lowland raised mire habitats.	Continuous.	4.2	Encourage all partners to adopt a Peat Free policy and promote sustainable planting materials to the public.	DMBC, All DBAP Partners
	Promotion project underway by 2008.	4.3	Promote, secure and enhance the geological, palaeo-ecological and archaeological archive found in the Levels by commissioning collation and research work.	DMBC, NE, Doncaster Naturalists' Society (DNS), English Heritage (EH), Thorne & Hatfield Moors Conservation Forum (THMCF)

## 5 This habitat in Doncaster

The following describes where in the Doncaster Borough good examples of this habitat can be found, however, named sites may be privately owned and therefore are not publicly accessible. For further information about this habitat and where it can be found in Doncaster see the 'Lowland Raised Mire Habitat Action Plan'.

Thorne and Hatfield Moors are the best places to see lowland raised mire. Managed as a National Nature Reserve by Natural England, these sites are excellent places to see large scale habitat restoration and the specialist wildlife of mire habitats.

## 6 How to take part

### 'Backyard Biodiversity – Nature in your Neighbourhood'

This is a new initiative launched by Doncaster Council to enable local people to learn about, protect and enjoy nature where they live. Community Groups and Organisations can loan activity packs and equipment to enable them to take part in activities such as bird watching, pond-dipping, building bird and bat boxes and bug hunting. The service is available FREE of charge from selected Customer Service Centres in Doncaster. A pack of Wildlife Gardening fact sheets has also been produced, which provides advice and information on how you can help the wildlife in your own garden.



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