

Levels and Moors



rhyne and wet grassland

The North Somerset Levels and Moors are a nationally important area of coastal and floodplain grazing marsh, close to the urban centres of Bristol and Weston-Super-Mare. The Romans began the process of enclosing and draining the inhospitable marshes alongside the Severn Estuary to create today's landscape of small, scattered settlements and cattle grazed fields bounded by a network of thousands of kilometres of rivers and drainage ditches, known locally as rhyne.

It is within these rhyne that the area's most important biodiversity is found. A large proportion of the rhyne network have been designated as Sites of Special Scientific Interest (SSSI) in recognition of the exceptionally diverse plant and invertebrate communities. Other important habitats associated with the area include inter-tidal saltmarsh and mudflats, wet woodland and hedgerows, which support a rich variety of species including dragonflies, buzzards, owls and otters. The area is also archaeologically important containing Iron Age, Romano-British and medieval sites.

The Levels and Moors are an area of unique natural heritage. Like most large areas of coastal and floodplain grazing marsh, the Levels and Moors are vulnerable to changes in climate, water level management regimes, agricultural practices and inappropriate development. The area also offers huge potential to deliver national, regional and local wildlife targets.

Causes of decline

Past flood defence works, agricultural intensification, and a decline in traditional management have all contributed to a reduction of coastal and floodplain grazing marsh biodiversity. In North Somerset, loss has also occurred through development, which has associated pollution.

Management

Coastal and floodplain grazing marsh requires sensitive management to allow the ecosystem to flourish.

Features of rhyne that make them more valuable to wildlife:

- **variety of vegetation and shade** – creating a wide range of habitats will encourage greater plant and invertebrate diversity, providing enough light to the water surface as well as cover. Non-linear watercourses, pools, wide banks, and gently sloping watering bays for stock create more edge habitat for emergent plant species, whilst grazing with stock can provide long-term management of the coarse vegetation and scrub
- **stable water levels** – keeping levels from frequently dropping too low/high helps maintain the plant and invertebrate communities throughout the year



cattle on floodplain grazing marsh

The North Somerset Wetland Programme

Avon Wildlife Trust has run a successful North Somerset Levels and Moors conservation project since 1995, as well as directly managing six nature reserves in the area. From 2011, the new programme will build on this extensive history and endeavour to support land managers interested in maintaining and restoring this valuable wetland habitat.

The very nature of the Levels and Moors means that large areas of North Somerset are interconnected and affected by conditions across the complex system of rhynes. All landowners therefore have a part to play in maintaining this unique area and the wildlife it supports.

Local knowledge

In the first instance, we will be contacting landowners and farmers in areas of coastal and floodplain grazing marsh for permission to survey the rhynes and surrounding land on their property.

The programme will assess the habitat condition across a large area, with surveys of:

- aquatic invertebrates
- wet grassland
- rhyne and bank plant species
- hedgerows



rhyne enhancement



raft spider



lapwing



large red damselflies

The new programme would like to survey much of the rhyne system of the Levels and Moors to update local records, and we need the help of farmers and land managers whose knowledge can better inform sustainable and beneficial conservation work in the region.

Work on the ground

Combining local knowledge with assessing the wildlife in the rhyne system will help identify areas that may be suitable for restoration. We are keen to work with all landowners that have an interest in maintaining or restoring areas of coastal and floodplain grazing marsh, and the programme can help with:

- agri-environment scheme applications, or advice on options and capital works implementation
- ditch management plans
- grazing regimes
- vegetation/scrub removal plans
- grassland management for breeding waders
- buffer strip design
- small grants for practical rhyne conservation work

Funded by:



Supported by:



North Somerset Wetland Programme

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