

NRA - Conservation 13

SOMERSET LEVELS AND MOORS WATER LEVEL MANAGEMENT AND NATURE CONSERVATION



NRA

*National Rivers Authority
Wessex Region*

502.2 NAT

2

1 80

AFBP

NRA WESSEX REGION
LIBRARY



DAC

ENVIRONMENT AGENCY
SOUTH WEST REGIONAL LIBRARY

This book is due for return on or before the last date shown below.

--	--	--

Don Gresswell Ltd., London, N21 Cat. No. 1207

DG 02242/71

A HISTORY OF LAND DRAINAGE

Six thousand years ago the Levels and Moors were an inlet of the sea. As the sea retreated, freshwater marshes formed and as they decayed created thick layers of peat. Over the centuries this ancient wetland was gradually colonised by humans and to the present day their activities have shaped the development of the landscape.

Westonzoyland Pumping Station, an early steam driven pump. Photo: Geoff Roberts, Somerset County Council.



ENVIRONMENT AGENCY



130697



In the long summer days the fields dry quickly and a hay crop is taken. Photo: Geoff Roberts, Somerset County Council.



*Marsh Fritillary (*Euphdryas aurinia*). Only the traditionally managed meadows provide food for the larvae. Photo: English Nature.*



TRADITIONAL FARMING

Up to the end of the eighteenth century much of the area consisted of open commons. Gradually drainage schemes were developed using ditches that today can still be seen throughout the area. Enclosing the small damp fields these 'wet fences' provide drinking water for cattle and act as drains in winter and irrigation channels in summer. Traditionally grass is the main crop with cattle grazing in summer and hay being cut in most years.

It is this system of 'low intensity' farming along with regular flooding and damp conditions that has provided ideal conditions for a special community of wetland wildlife.

WETLAND WILDLIFE

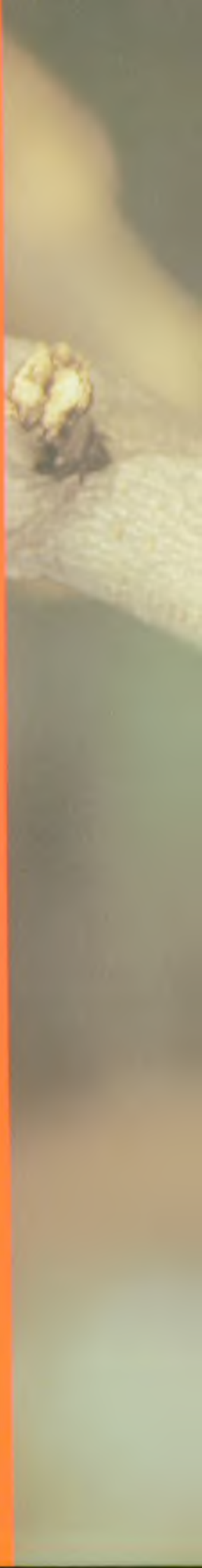
The Levels and Moors are very rich in wildlife. The network of ditches and the tradition of regular shallow flooding of grassland in winter and spring make the area attractive to many species of plants and animals. When they occur winter floods bring large flocks of birds into the area to feed and if fields stay damp into spring and early summer the wading birds which find their food in soft damp soil will settle to nest.

ARCHAEOLOGY

The Somerset Levels and Moors have been occupied for thousands of years. Many remains from the past have been found preserved in the waterlogged peat including possibly the oldest trackway in the world. Archaeologists consider that many interesting remains are still to be found. Continued waterlogging will safeguard these relics and possible future discoveries.

RECENT PROBLEMS

In recent decades the modern demands of land drainage and agriculture have changed the wetlands. Today there are fewer traditionally managed fields. Cereal crops have been planted in some places and fast growing grasses, fed with artificial fertilisers, have replaced the wildflowers and other rare plants on the damp pastures. Drier conditions are not as attractive for many species of wading birds and in the Levels and Moors their populations have declined dramatically in recent years.





*A flower rich meadow on
Shapwick Heath. Today there
are fewer traditionally
managed fields.
Photo: English Nature*





A reconstruction of the Sweet Track (circa 4,000 BC). To safeguard these features drying of the peat must be prevented. Photo: Geoff Roberts, Somerset County Council.



The Snipe (Gallinago gallinago) feeds by probing in soft damp soil with its long beak. The number of snipe breeding on the Somerset Levels has more than halved in the last ten years. Photo: RSPB.



THE ROLE OF THE NATIONAL RIVERS AUTHORITY

- The NRA has responsibility for the protection of the water environment, safeguarding the quality of water and the animals and plants that depend on it.
- The protection of property and lives from flooding is also an important responsibility of the NRA and wherever practicable the aim is to limit the risks of dangerous and damaging floods.
- Recognising the very special nature of the Somerset Levels and Moors and the threats to the rare plants and animals that the wetlands support, the National Rivers Authority has produced a water management strategy to facilitate changes in the way in which water levels are controlled.
- On selected areas higher water levels need to be held throughout the winter and spring to provide the waterlogged and flooded conditions on which the wetland wildlife depends. In late spring levels will be reduced but still held at or above the current summer pen.
- In conjunction with the local drainage board, water levels will be carefully managed and monitored by the NRA to ensure that the special wetland features



Photo: Jim Hallett

of the area are protected and traditional methods of land use are able to continue.

- Initially attention will be focused on the most important areas for nature conservation – the Sites of Special Scientific Interest.
- In areas where there is a consensus that water levels should be raised farmers participating in the Environmentally Sensitive Areas scheme operated by the Ministry of Agriculture Fisheries and Food will be eligible for special payments. Alternatively management agreements may be negotiated with English Nature.
- Detailed investigations and full consultation will take place as plans are developed for each site.

PRIORITY SITES

English Nature has identified a list of priority sites for primary attention. These are:

- Catcott, Edington and Chilton Moors
- Kings Sedgemoor
- Moorlynch
- Northmoor
- Southlake Moor
- Tealham and Tadham Moors
- West Sedgemoor
- Wetmoor



THE SOMERSET LEVELS AND MOORS

- Environmentally Sensitive Areas
 - Sites of Special Scientific Interest
- 1 Catcott, Edington and Chilton Moors
 - 2 Kings Sedgemoor
 - 3 Langmead and Weston Level
 - 4 Meare Heath
 - 5 Moorlynch
 - 6 Northmoor
 - 7 Shapwick Heath
 - 8 Street Heath
 - 9 Southlake Moor
 - 10 Tealham and Tadham Moors
 - 11 Westhay Heath
 - 12 Westhay Moor
 - 13 West Moor
 - 14 West Sedgemoor
 - 15 Wet Moor

THE SOMERSET LEVELS AND MOORS WATER LEVEL MANAGEMENT AND NATURE CONSERVATION STRATEGY

Following detailed consultations the National Rivers Authority has adopted the following strategy:

- 1 The National Rivers Authority recognises the outstanding nature conservation interest of the Somerset Levels and Moors and that this is in decline.
- 2 The Authority seeks to restore and maintain the wildlife and landscape of this internationally important wetland, consistent with its given duties, and to conserve the archaeological interest.
- 3 The Authority has statutory obligations as regards water management, including the control of water abstraction, discharges, water quality, drainage and water levels.
- 4 The Authority will give special consideration to the environmental impact of abstraction and discharges throughout the Levels and Moors.
- 5 The Authority will review its flood defence practices and take into account the requirements for nature conservation, to ensure sympathetic management within the Environmentally Sensitive Area (ESA). Formal management plans will be agreed with English Nature (EN) over activities which affect Sites of Special Scientific Interest (SSSIs). English Heritage will be consulted over matters that affect Scheduled Ancient Monuments (SAMs).
- 6 The Authority will adopt a presumption in favour of positive water level management for nature conservation on SSSIs, and in other appropriate areas where there is general agreement. Priority will be given to the core areas of SSSIs.
- 7 Where raised water levels affect agricultural productivity the Authority will support the introduction of a water level premium on ESA payments and/or Section 15 management agreements with English Nature to offset these costs.
- 8 The Authority will liaise with relevant organisations to draw up a list of priority sites where enhanced water levels are required to maintain and restore the nature conservation interest.
- 9 The Authority will take action after consultation with the Ministry of Agriculture, Fisheries and Food, English Nature, Internal Drainage Boards and landowners in order to achieve the conservation objectives.
- 10 The importance of the 'withy' growing industry is fully recognised and in implementing its strategy the NRA will seek to accommodate its special requirements.
- 11 In implementing the strategy the Authority will take special account of the statutory, practical and financial position of Internal Drainage Boards.
- 12 Any changes in strategy must ensure that there is no increase in flood risk to human life, habitation or communications.

ENGLISH NATURE

English Nature (The Nature Conservancy Council for England) is the statutory adviser to Government on nature conservation in England and promotes the conservation of England's wildlife and natural features. Through the Joint Nature Conservation Committee, English Nature works with sister organisations in Scotland, Wales, and Northern Ireland on UK and international conservation issues.

English Nature
South West Regional Office
Roughmoor, Bishops Hull
Taunton TA1 5AA
Tel: (0823) 283211

MINISTRY OF AGRICULTURE FISHERIES AND FOOD

MAFF through the Environmentally Sensitive Areas Scheme offers farmers payments to adopt farming methods aimed at protecting the landscape, wildlife and archaeology of the Somerset Levels and Moors. MAFF also provides financial assistance towards the costs of flood defence and coastal protection.

Ministry of Agriculture, Fisheries and Food
Taunton Divisional Office
Quantock House, Paul Street
Taunton TA1 3NX
Tel: (0823) 337922

National Rivers Authority

Wessex Region

Rivers House

East Quay

Bridgwater

Somerset TA6 4YS

Tel: (0278) 457333

Fax: (0278) 452985