

Resolution of conflict in wetland management: the example of the Somerset Levels, UK.

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	Land over 300m		River Parrett Trail
	Land 250m - 300m		Main Road
	Land 200m - 250m		Secondary Road
	Land 150m - 200m		Minor Road
	Land 100m - 150m		Parking Area
	Land 50m - 100m		Viewpoint
	Land 10m - 50m		Tourist Information Centre
	Land below 10m		Levels & Moors Information Centre

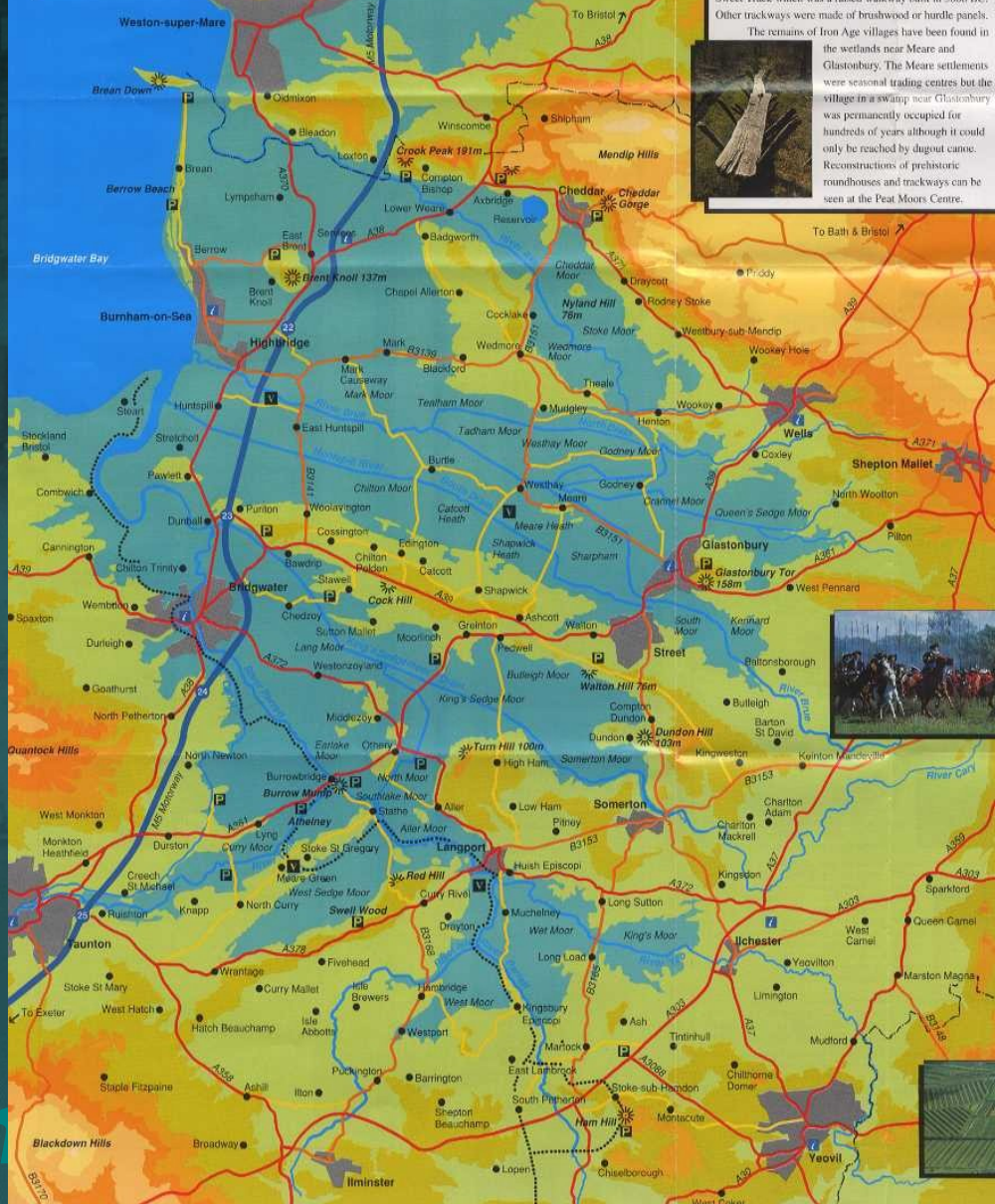


HISTORY OF THE LAND OF THE SUMMER PEOPLE

After the last glaciation ended 10,000 years ago the sea level rose rapidly. All of the levels and moors area in Somerset was under water until c.4500 BC when peat deposits began to form in salt marsh, fen and raised bog environments.

To cross these wetlands and reach the islands of rock and sand in the valleys, prehistoric people built wooden trackways. Because of the waterlogging of the peat these structures survive to the present day. The oldest was the Sweet Track which was a raised walkway built in 3806 BC. Other trackways were made of brushwood or hurdle panels.

The remains of Iron Age villages have been found in the wetlands near Meare and Glastonbury. The Meare settlements were seasonal trading centres but the village in a swamp near Glastonbury was permanently occupied for hundreds of years although it could only be reached by dugout canoe. Reconstructions of prehistoric roundhouses and trackways can be seen at the Peat Moors Centre.



Somerset Levels and Moors

Landscape components

- **Peripheral hills: large upstream catchments, supplying large quantities of silt.**
- **Hills and islands within the moors - providing sites for settlement**
- **Coastal silt belt - higher land, forming a barrier between the moors and the seas**
- **Moors - peaty low-lying areas, often flooded, providing high quality summer grazing.**

Somerset Levels

- **Some drainage in 13th Century - conflict between institutions competing for the resource (Wells Cathedral and Glastonbury Abbey)**
- **Several attempts to drain in 16th - 18th Century - never resolved conflict of interlocking local interests.**
- **Drainage only really resolved in 1940s & 50s.**
Partly as a result of the war effort
(Huntspill river, built initially to provide water for a munitions factory, is now a major drain)
Partly with creation of new Drainage Authorities

Somerset Levels – crisis in the early 1980's

- **UK policy of increasing food production**
 - In particular Drainage grants
 - Example - the Fenlands of East Anglia
- **European Food mountains**
 - Now in Food surplus
 - Birth of Environmental Concern

Conflict

- **The wish of the farmers to improve the land**
To find a way of increasing production, and so improving their own circumstances
- **The wish of the conservation bodies to preserve the landscape and prevent any further ‘degradation’**

The Players

- **The farmers - not organised**
 - extremely fragmented patterns of land holding
- **The Internal Drainage Boards**
- **The Wessex Water Authority**
- **The Ministry of Agriculture, Fisheries and Food**
 - Local drainage officers
 - National MAFF policy
- **The Nature Conservancy Council**
- **The Department of the Environment**
 - (sponsoring department for the Nature Conservancy Council)
- **Large land-holders, favouring the “improvement” of the levels**
- **The Royal Society for the Protection of Birds (RSPB)**
 - and other naturalist groups
- **The Somerset County Council**

Enormous complexity of the interlocking responsibilities and interests

Conflict

- **1997 Wessex Water Authority proposed a major drainage scheme for West Sedgemoor**
 - Increase the agricultural productivity
 - Improve the chronic access problems
- **1982 NCC designated West Sedgemoor as a Site of Special Scientific Interest**
 - seen as a test case
 - Resulting outcry among the farmers
 - Reaction against outside interference



Effigies of the conservationists burned by Somerset farmers in 1983. Photo: Roger Hutchins

SOMERSET LEVELS & MOORS ENVIRONMENTALLY SENSITIVE AREA SCHEME



Jane Poore, DEFRA

ESA SELECTION CRITERIA

National environmental significance

Conservation dependant on maintaining or extending current farming practice.

Areas at risk from changes in farming practices.

A distinct area of environmental interest.

Tier 1: Permanent Grassland Basic Tier

Maintain grassland
Maintain ditches
Maintain willows
Do not improve
drainage
Fertiliser 3cwt/acre
£125/ha
Herbicide
restrictions



Tier 1A Extensive Permanent Grassland To Maintain and Enhance Botanically Diverse Fields

As for Tier 1+:

Cutting restrictions

Machinery

restrictions

Fertiliser 1cwt/acre

max.

Grazing restrictions

Herbicide restrictions

£200/ha



Tier 2: Permanent Wet Grassland

Wet grassland habitat good flora
and breeding wader potential

As for Tier 1+:

Cutting restrictions

Machinery
restrictions

Fertiliser 1cwt/acre
max.

Grazing restrictions

Herbicide restrictions

Higher water levels

£225/ha



Tier 3: Raised Water Level Areas Enhanced Breeding and Over Wintering Wildfowl Habitat

1400 hectares

**Winter splash
flooding**

Summer higher penning

Cutting restrictions 8 July

Grazing restrictions

Mechanical restrictions

No fertiliser

Low yields

£435 per hectare



Somerset Levels and Moors Environmentally Sensitive Area

Tier	Description	Rate (£/ha)
● 1	Permanent grassland	£125
● 1A	Extensive Permanent grassland	£200
● 2	Wet Permanent Grassland	£225
● 3	Permanent Grassland, raised water levels	£430
●	Buffer strip supplement	£110
●	All year Penning supplement on peat soils	£18
●	Raised water level area supplement	£80
●	Public access tier	£350

Achievements

**66% of eligible ESA area
now under agreement:**

Tier 1	12766 ha
Tier 2	2990 ha
Tier 1A	870 ha
Tier 3	1226 ha

Total cost about £3 million/year

Environmental Stewardship

**“look after your land
and you will be rewarded”**

- Replaces ESA scheme
- Available nationally
- Basic entry level for grass land £30/ha
- Basic Organic entry level £60/ha
- Higher level based on Farm environment plans
 - Payment depends on options chosen
 - Flexible, farm specific agreements
 - Entry discretionary - based on “points” system.

Somerset Local Initiatives

- Levels and Moors Partnership
- Parrett Catchment Project

Levels and Moors Partnership (LAMP)

Working through Parish Councils and with local communities, the Partnership aims to promote good management of the Levels and Moors and the enjoyment and celebration of this unique working landscape by local communities and visitors

Formed in 1995, the Partnership works through the provision of advice, support and funding to individual and groups of Parish Councils, rural businesses and associations.

Levels And Moors Partnership (LAMP)

The Levels and Moors Partnership has a rural focus and aims to assist all villagers, businesses and land managers with:

- the recognition of the Levels and Moors as a distinct 'Cultural Landscape';
- the wise management of land, water and environmental assets
- maximising the environmental and social performance of government funding for farming, conservation and heritage work - encouraging co-ordination under a common vision;
- promoting 'Levels and Moors' products and services through local branding and marketing initiatives;
- supporting local communities and businesses in their efforts to develop 'green tourism' initiatives
- enabling local communities to influence policies and decisions which affect their well-being, local economy and environment.

Parrett Catchment Project

- Driven by County Council, but embracing local groups.
- Main aim is management of the water resources, through integrated land management.
- Big issue is the management of the upper catchment, and the problems of flood control and soil erosion.

Conclusions

- Long history of conflict - now largely quiescent.
- Competing aims and objectives
- Current status supported by agri-environmental payments
- development of local influence/decision making
- Economic costs high - are they sustainable?