Ramsar Information Sheet: 7UK068

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Date of designation 15/12/93

Site reference number 7UK068
1 Compilation date Feb 1999
2 Country UK (England)
3 Name of wetland Medway Estuary and Marshes
4 Site centre location: Latitude: 51 24 02 N  Longitude: 00 40 38 E
5 Altitude Not being submitted
6 Area (ha) 4696.74

7 Overview
A complex of rain fed, brackish, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.

8 Wetland type Marine/coastal wetland

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>% Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Sand / shingle shores (including dune systems)</td>
<td>0</td>
</tr>
<tr>
<td>G</td>
<td>Tidal flats</td>
<td>61.3</td>
</tr>
<tr>
<td>H</td>
<td>Salt marshes</td>
<td>13.6</td>
</tr>
<tr>
<td>M</td>
<td>Rivers / streams / creeks: permanent</td>
<td>1.2</td>
</tr>
<tr>
<td>Tp</td>
<td>Freshwater marshes / pools: permanent</td>
<td>0.4</td>
</tr>
<tr>
<td>4</td>
<td>Seasonally flooded agricultural land</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>9.5</td>
</tr>
</tbody>
</table>

9 Ramsar Criteria 2a, 3a, 3c
10 Map of the site √
11 Compiler Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44(0) 1733 562626 / +44(0) 1733 555948

12 Justification of criteria

Ramsar criterion 2a
The site supports a number of species of rare plants and animals. The site holds several nationally scarce plants, including sea barley Hordeum marinum, curved hard-grass Parapholis incurva, annual beard-grass Polypogon monspeliensis, Borrer's saltmarsh-grass Puccinella fasciculata, slender hare's-tail Buttiellum tenuissimum, sea clover Trifolium squamosum, small goose foot Chenopodium chenopodoides, golden samphire Limosa crinita, perennial grasswort Salicornia perennis and the one flowered grasswort Salicornia pusilla. A total of at least twelve British Red Data Book species of wetland invertebrates have been recorded on the site. These include a ground beetle Polistilus connexus, a fly Cephalops perspicuus, a dancefly Poecilobothrus ducalis, a fly Anagnota collini, a weevil Baris scolopecta, a water beetle Berosus spinosus, a beetle Malachius vulgatus, a rove beetle Philonthus punctus, the ground lackey moth Malacosoma castrensis. a horsefly Atylotus latistriatus, a fly Campsicorum magus, a soldier beetle, Cantharis fusca, and a cranefly Limonius danica. A significant number of non-wetland British Red Data Book species also occur.
Ramsar criterion 3a
Internationally important waterfowl assemblage (greater than 20,000 birds)

Ramsar criterion 3c
Over winter the site regularly supports internationally important populations of: Dark-bellied Brent Goose Branta bernicla bernicla, Dunlin Calidris alpina alpina, Grey Plover Pluvialis squatarola, Knot Calidris canutus, Pintail Anas acuta, Redshank Tringa totanus, Ringed Plover Charadrius hiaticula. Shelduck Tadorna tadorna

13 General location
Nearest town/city: Canterbury
On the north coast of Kent, within the Greater Thames Estuary.

Administrative Region: Kent, Essex

14 Physical Features

<table>
<thead>
<tr>
<th>Soil &amp; Geology</th>
<th>alluvium, mud, shingle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geomorphology and Landscape</td>
<td>coastal, estuary, floodplain, intertidal sediments (including sandflat/mudflat)</td>
</tr>
<tr>
<td>Nutrient status</td>
<td>eutrophic</td>
</tr>
<tr>
<td>pH</td>
<td>circumneutral</td>
</tr>
<tr>
<td>Salinity</td>
<td>brackish / mixosaline, fresh, saline / euhaline</td>
</tr>
<tr>
<td>Soil</td>
<td>no information</td>
</tr>
<tr>
<td>Water permanence</td>
<td>usually permanent, usually seasonal / intermittent</td>
</tr>
<tr>
<td>Summary of main climatic features</td>
<td>Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 11.6°C. Mean maximum temperature approximately 18.3°C. Mean annual precipitation approximately 382.4mm, with a winter maximum.</td>
</tr>
</tbody>
</table>

15 Hydrological values

16 Ecological features
The intertidal flats are of fine, silty sediment. The saltmarsh shows a transition from pioneer communities containing Zostera to high saltmarsh dominated by Atriplex portulacoides. The grazing marsh grassland is mesotrophic and generally species poor. It does, however, contain scattered rarities, mostly annuals characteristic of bare ground. Where the grassland is seasonally inundated and the marshes are brackish the plant communities are intermediate between those of mesotrophic grassland and those of saltmarsh. The grazing marsh ditches contain a range of flora of brackish and fresh water. The aquatic flora is a mosaic of successional stages resulting from periodic clearance of drainage channels. The dominant emergent plants are Phragmites australis and Bolboschoenus maritimus.

17 Noteworthy flora
Nationally important species occurring on the site.

Higher Plants.
Hordeum marinum, Parapholis incurva, Polypogon monspeliensis, Puccinellia fasciculata, Bupleurum tenuissimum, Trifolium squamosum, Chenopodium chenopodioides, Inula cthermoides, Salicornia perennis, Salicornia pusilla.

18 Noteworthy fauna

Birds
Species occurring at levels of international importance (as identified at designation):

Over winter the area regularly supports:

- Dark-bellied Brent Goose, *Branta bernicla bernicla*
  (Western Siberia/Western Europe) 3205 individuals, representing an average of 1.1% of the population (5 year peak mean 1991/92-1995/96)

- Dunlin, *Calidris alpina alpina*
  (Northern Siberia/Europe/Western Africa) 25936 individuals, representing an average of 1.9% of the population (5 year peak mean 1991/92-1995/96)

- Grey Plover, *Pluvialis squatarola*
  (Eastern Atlantic (wintering)) 3406 individuals, representing an average of 2% of the population (5 year peak mean 1991/92-1995/96)

- Knot, *Calidris canutus*
  (Northeastern Canada/Greenland/Iceland/Northwestern Europe) 541 individuals, representing an average of 0.2% of the population (5 year peak mean 1991/92-1995/96)

- Pintail, *Anas acuta*
  (Northwestern Europe) 697 individuals, representing an average of 1.2% of the population (5 year peak mean 1991/92-1995/96)

- Redshank, *Tringa totanus*
  (Eastern Atlantic (wintering)) 3690 individuals, representing an average of 2.1% of the population (5 year peak mean 1991/92-1995/96)

- Ringed Plover, *Charadrius hiaticula*
  (Europe/Northern Africa (wintering)) 768 individuals, representing an average of 1.6% of the population (5 year peak mean 1991/92-1995/96)

- Shelduck, *Tadorna tadorna*
  (Northwestern Europe) 4465 individuals, representing an average of 1.5% of the population (5 year peak mean 1991/92-1995/96)

Species occurring at levels of international importance (as identified post-designation):

Over winter the area regularly supports:

- Black-tailed Godwit, *Limosa limosa islandica*
  (Iceland (breeding)) 957 individuals, representing an average of 1.5% of the population (5 year peak mean 1991/92-1995/96)

Species currently occurring at levels of national importance:

During the breeding season the area regularly supports:

- Avocet, *Recurvirostra avosetta*
  (Western Europe/Western Mediterranean (breeding)) 28 pairs, representing an average of 6.2% of the GB population (5 year mean 1988-1992)

- Common Tern, *Sterna hirundo*
  (Northern/Eastern Europe (breeding)) 77 pairs, representing an average of 0.6% of the GB population (Estimate from count of birds 1994)

- Little Tern, *Sterna albifrons*
  28 pairs, representing an average of 1.2% of the
Over winter the area regularly supports:

Avocet, Recurvirostra avosetta (Western Europe/Western Mediterranean (breeding))
314 individuals, representing an average of 24.7% of the GB population (5 year peak mean 1991/92-1995/96)

Cormorant, Phalacrocorax carbo (Northwestern Europe)
231 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1991/92-1995/96)

Curlew, Numenius arquata (Europe (breeding))
1900 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1991/92-1995/96)

Greenshank, Tringa nebularia (Europe/Western Africa)
10 individuals, representing an average of 2.6% of the GB population (5 year peak mean 1991/92-1995/96)

Little Grebe, Tachybaptus ruficollis (Western Palearctic)
53 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1991/92-1995/96)

Oystercatcher, Haematopus ostralegus (Europe & Northern/Western Africa)
3672 individuals, representing an average of 1% of the GB population (5 year peak mean 1991/92-1995/96)

Spotted Redshank, Tringa erythropus (Europe/Western Africa)
up to 19 individuals, representing an average of 15.8% of the GB population (5 year peak mean 1991/92-1995/96)

Teal, Anas crecca (Northwestern Europe)
1824 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1991/92-1995/96)

Wigeon, Anas penelope (Western Siberia/Northwestern/Northeastern Europe)
4346 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1991/92-1995/96)

Assemblages of international importance:
Over winter the area regularly supports:
6,5496 waterfowl (5 year peak mean 1991/92-1995/96)

Nationally important species occurring on the site.

Invertebrates.
Polystichus connexus, Cephalops perspicus, Peocilobothrus ducalis, Anagnosta collini, Baris scolopecia, Berosus spinosus, Malachius vulnatus, Philonthus punctus, Malacostoma castrensis, Atylotus latistriatus, Campsicumenus magius, Cantharis fusca, Limonius danica.

19 Social and Cultural Values
Aesthetic
Archaeological/historical site
Conservation education
Current scientific research
Fisheries production  
Livestock grazing  
Non-consumptive recreation  
Sport fishing  
Sport hunting

**20 Land tenure/ownership**

<table>
<thead>
<tr>
<th>Ownership category</th>
<th>On-Site</th>
<th>Off-Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-governmental organisation</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Local authority, municipality etc.</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>National/Crown estate</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

**21 Current land use**

<table>
<thead>
<tr>
<th>Activity</th>
<th>On-Site</th>
<th>Off-Site</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature conservation</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Tourism</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Recreation</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Research</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Fishing: commercial</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Fishing: recreational/sport</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Gathering of shellfish</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Bait collection</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Permanent arable agriculture</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Livestock watering hole/pond</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Grazing (unspecific)</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Hay meadows</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Hunting: commercial</td>
<td>+</td>
<td></td>
<td>Small-Scale</td>
</tr>
<tr>
<td>Hunting: recreational/sport</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Industrial water supply</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Industry</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Sewage treatment/disposal</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Harbour/port</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Flood control</td>
<td>+</td>
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<td>Large-Scale</td>
</tr>
<tr>
<td>Transport route</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Urban development</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Military activities</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
</tbody>
</table>

**22 Adverse factors affecting the ecological character of the site**

<table>
<thead>
<tr>
<th>Activity</th>
<th>On-Site</th>
<th>Off-Site</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage/reclamation for industry</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Dredging</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Erosion</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Recreational/tourism disturbance (unspecific)</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
<tr>
<td>Transport infrastructure development</td>
<td>+</td>
<td></td>
<td>Large-Scale</td>
</tr>
</tbody>
</table>

**23 Conservation measures taken**

<table>
<thead>
<tr>
<th>Conservation measure</th>
<th>On-site</th>
<th>Off-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSSI</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>SPA</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>
24 Conservation measures proposed but not yet implemented
see below

Site vulnerability and management statement
There is evidence of rapid erosion of intertidal habitat within the site due to natural processes and the effects of sea defences and clay extraction. Research on mudflat recharge using dredging spoil is being investigated as a means of countering the erosion.
The intertidal area is also vulnerable to disturbance from water borne recreation. This is being addressed as part of an estuary management plan.
The terrestrial part of the site depends on appropriate grazing and management of water. The availability of livestock may be affected by policy on BSE and there will be a need to investigate how this may be addressed through management agreements. The effects of abstraction on the availability of water through abstraction for other land uses and drainage for arable cultivation will be addressed through the consent review process under the Habitats Regulations. Pressures from proposed transport and industrial developments are being addressed through the planning system and under the provisions of the Habitat Regulations.

25 Current scientific research/survey/monitoring and facilities

Fauna.
Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

Habitat.
ENSIS monitoring.
Experimental mudflat recharge using dredging spoil.
MNCR littoral and sublittoral survey.

26 Current conservation education

27 Current recreation and tourism
Activities, Facilities provided and Seasonality.
Yachting, angling, wildfowling, jet skiing, waterskiing, birdwatching. Disturbance from these activities is a current issue but is addressed through negotiation relating to activities consented within the SSSI and information dissemination.

28 Functional jurisdiction
Department of the Environment, Transport and the Regions

29 Management authority
English Nature

30 Bibliography


Reference should also be made to Country Agencies Management Plans for sites that are within National Nature Reserves.