

# RAMSAR INFORMATION SHEET

## FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Date of designation: 04/10/96

**Site reference number** 7UK102  
**1 Compilation date** Feb 1999  
**2 Country** UK (England)  
**3 Name of wetland** Foulness (Mid-Essex Coast Phase 5)  
**4 Site centre location:** Latitude: 51 34 25 N Longitude: 00 55 17 E  
**5 Altitude** Not being submitted  
**6 Area (ha)** 10932.95

### 7 Overview

Foulness is part of an open coast estuarine system comprising grazing marsh, saltmarsh, intertidal mudflats and sandflats which support nationally rare and nationally scarce plants, and nationally and internationally important populations of breeding, migratory and wintering waterfowl.

**8 Wetland type** Man-made wetland, Marine/coastal wetland

Code	Name	% Area
B	Marine beds (eg. sea grass beds)	2.7
E	Sand / shingle shores (including dune systems)	0.1
G	Tidal flats	89.5
H	Salt marshes	2.1
Q	Saline / brackish lakes: permanent	0.5
Ts	Freshwater marshes / pools: seasonal / intermittent	3.7
Other	Other	1.4

**9 Ramsar Criteria** 1a, 2a, 2b, 3a, 3c  
**10 Map of the site** ✓  
**11 Compiler** Joint Nature Conservation Committee  
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### 12 Justification of criteria

#### Ramsar criterion 1a

This site qualifies by virtue of the extent and diversity of saltmarsh habitat present. This and four other sites in the Mid-Essex Coast Ramsar site complex, include a total of 3,237 ha, that represent 70% of the saltmarsh habitat in Essex and 7% of the total area of saltmarsh in Britain.

#### Ramsar criterion 2a

The site supports a number of nationally-rare and nationally-scarce plant species, and British Red Data Book invertebrates.

#### Ramsar criterion 2b

The site contains extensive saltmarsh habitat, with areas supporting full and representative sequences of saltmarsh plant communities covering the range of variation in Britain.

#### 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: Bar-tailed Godwit *Limosa lapponica*, Dark-bellied Brent Goose *Branta bernicla bernicla*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Oystercatcher *Haematopus ostralegus*, Redshank *Tringa totanus*

### 13 General location

Nearest town/city: Southend-on-Sea

Foulness is an open coast system at the wide northern mouth of the Thames estuary.

**Administrative Region:** Essex

### 14 Physical Features

Soil & Geology	clay, gravel, mud, nutrient-rich, sand, sedimentary, shingle
Geomorphology and Landscape	coastal, estuary, floodplain, intertidal sediments (including sandflat/mudflat), lowland, open coast (including bay), subtidal sediments (including sandbank/mudbank)
Nutrient status	eutrophic
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	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.

### 15 Hydrological values

Shoreline stabilisation and dissipation of erosive forces. Sediment trapping

### 16 Ecological features

The main habitat types of this site are:

mudflats, sandflats, saltmarsh, brackish water lagoon, freshwater, grazing marsh.

Pioneer saltmarsh communities with *Spartina maritima*, *Salicornia perennis* and *Suaeda vera*, Mature saltmarsh communities with *Atriplex pedunculata*. Species-rich perennial saltmarsh and drift-like communities with *Suaeda vera*, Eelgrass *Zostera* beds. Brackish water vegetation dominated by *Bolboschoenus maritimus*. Grazing marsh with *Alopecurus geniculatus*, *Hordeum secalinum* and fescues.

### 17 Noteworthy flora

**Nationally important species occurring on the site.**

#### Higher Plants.

*Atriplex pedunculata*, *Cynodon dactylon*, *Bupleurum tenuissimum*, *Carex divisa*, *Hordeum marinum*, *Inula crithmoides*, *Limonium humile*, *Parapholis incurva*, *Poa bulbosa*, *Polypogon monspeliensis*, *Puccinellia fasciculata*, *Puccinellia rupestris*, *Ruppia cirrhosa*, *Salicornia pusilla*, *Spartina maritima*, *Suaeda vera*, *Trifolium squamosum*, *Trifolium suffocatum*, *Vulpia fasciculata*, *Zostera angustifolia*, *Zostera noltii*.

### 18 Noteworthy fauna

#### Birds

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

**Over winter the area regularly supports:**

Bar-tailed Godwit, <i>Limosa lapponica</i> (Western Palearctic (wintering))	7639 individuals, representing an average of 6.6% of the population (5 year peak mean 1991/92-1995/96)
Dark-bellied Brent Goose, <i>Branta bernicla bernicla</i> (Western Siberia/Western Europe)	13075 individuals, representing an average of 4.4% of the population (5 year peak mean 1991/92-1995/96)
Grey Plover, <i>Pluvialis squatarola</i> (Eastern Atlantic (wintering))	4209 individuals, representing an average of 2.5% of the population (5 year peak mean 1991/92-1995/96)
Knot, <i>Calidris canutus</i> (Northeastern Canada/Greenland/Iceland/Northwestern Europe)	40429 individuals, representing an average of 11.7% of the population (5 year peak mean 1991/92-1995/96)
Oystercatcher, <i>Haematopus ostralegus</i> (Europe & Northern/Western Africa)	11756 individuals, representing an average of 1.3% of the population (5 year peak mean 1991/92-1995/96)
Redshank, <i>Tringa totanus</i> (Eastern Atlantic (wintering))	1369 individuals, representing an average of 0.8% 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, <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean (breeding))	26 pairs, representing an average of 5.8% of the GB population (5 year mean 1987-1991)
Common Tern, <i>Sterna hirundo</i> (Northern/Eastern Europe (breeding))	220 pairs, representing an average of 1.8% of the GB population (Count as at 1996)
Little Tern, <i>Sterna albifrons</i> (Eastern Atlantic (breeding))	24 pairs, representing an average of at least 1% of the GB population (5 year mean 1992-1996)
Sandwich Tern, <i>Sterna sandvicensis</i> (Western Europe/Western Africa)	320 pairs, representing an average of 2.3% of the GB population (5 year mean 1992-1996)

**Over winter the area regularly supports:**

Avocet, <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean (breeding))	100 individuals, representing an average of 7.9% of the GB population (5 year peak mean 1991/92-1995/96)
Black-tailed Godwit, <i>Limosa limosa islandica</i> (Iceland (breeding))	79 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1991/92-1995/96)
Curlew, <i>Numenius arquata</i> (Europe (breeding))	2127 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1991/92-1995/96)

	1995/96)
Dunlin, <i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa)	9529 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1991/92-1995/96)
Golden Plover, <i>Pluvialis apricaria</i> (Northwestern Europe (breeding))	3359 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1991/92-1995/96)
Greenshank, <i>Tringa nebularia</i> (Europe/Western Africa)	14 individuals, representing an average of 3.7% of the GB population (5 year peak mean 1991/92-1995/96)
Hen Harrier, <i>Circus cyaneus</i>	up to 19 individuals, representing an average of 2.5% of the GB population (5 year mean 1987/8-1991/2)
Little Grebe, <i>Tachybaptus ruficollis</i> (Western Palearctic)	52 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1991/92-1995/96)
Shelduck, <i>Tadorna tadorna</i> (Northwestern Europe)	1024 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1991/92-1995/96)
Spotted Redshank, <i>Tringa erythropus</i> (Europe/Western Africa)	3 individuals, representing an average of 2.5% of the GB population (5 year peak mean 1991/92-1995/96)

**Assemblages of international importance:**

**Over winter the area regularly supports:**

107999 waterfowl (5 year peak mean 1991/92-1995/96)

**Nationally important species occurring on the site.**

Invertebrates.

*Lestes dryas, Aethes margarotana, Malacosoma castrensis, Hybomitra expollicata, Lejops vittata, Poecilobothrus ducalis, Stratiomys longicornis, Parydroptera disco-myzina, Paragus albifrons, Tachys scutellaris, Berosus spinosus, Gammarus insensibilis.*

**19 Social and Cultural Values**

- Aesthetic
- Archaeological/historical site
- Fisheries production
- Livestock grazing

**20 Land tenure/ownership**

Ownership category	On-Site	Off-Site
Non-governmental organisation	+	+
Local authority, municipality etc.		+
National/Crown estate	+	+
Private	+	

**21 Current land use**

Activity	On-Site	Off-Site	Scale
Nature conservation	+	+	Large-Scale
Tourism		+	Small-Scale
Recreation		+	Small-Scale
Research		+	Small-Scale
Fishing: commercial	+	+	Large-Scale
Fishing: recreational/sport		+	Small-Scale
Bait collection		+	Small-Scale
Arable agriculture (unspecified)	+	+	Large-Scale
Grazing (unspecified)	+	+	Small-Scale
Hunting: recreational/sport	+	+	Small-Scale
Flood control	+	+	Large-Scale
Mineral exploration		+	Large-Scale
Transport route	+	+	Small-Scale
Urban development		+	Large-Scale
Non-urbanised settlements	+	+	Small-Scale
Military activities	+		Large-Scale

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

Activity	On-Site	Off-Site	Scale
Erosion	+	+	Large-Scale
Persistent drought	+		Large-Scale
Pollution - pesticides/agricultural runoff		+	Large-Scale

## 23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	+
NNR		+
SPA	+	+
Land owned by a NGO for nature conservation		+
Management agreement	+	
Site management statement/plan implemented	+	

## 24 Conservation measures proposed but not yet implemented see below

### Site vulnerability and management statement

Much of the area is owned by the Ministry of Defence and is not, therefore, subject to development pressures or public disturbance. Offshore aggregate dredging and seismic surveys, which could possibly adversely affect the Maplin sands, will be addressed through the Essex Estuaries Marine Special Area of Conservation (SAC) management scheme, of which Foulness is part.

Natural processes are adversely affecting the southeast coastline and saltmarshes are being eroding. Maintenance of the integrity of the intertidal and saltmarsh habitats of the Mid-Essex Coast Ramsar sites as a whole is being addressed by soft sea defence measures, managed retreat and foreshore recharge.

The Cockle beds on the Maplin Sands support internationally important numbers of wading birds: the Kent and Essex Sea Fisheries Committee control the cockle fishery through regulatory orders. The site includes areas of grazing marsh and ditches. These areas are low lying, protected by sea walls and surrounded by areas of arable land. The main ditches that run through these marshes are saline and are fed from sea water which floods in through sluices. The combination of lower rainfall and improved drainage to facilitate arable production means that the grazing marshes are becoming too dry. The rainfall has been too low in recent years to enable maintenance of the waterlevels by selectively

damming ditches. To offset this the main ditch is deliberately fed with sea water to keep it topped up. This operation has increased in frequency in the past 8-10 years.

## **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.

### **Flora.**

Reintroduction of *Atriplex pedunculata* as part of the English Nature Species Recovery Programme.

## **26 Current conservation education**

None

## **27 Current recreation and tourism**

### **Activities, Facilities provided and Seasonality.**

There is no significant regular use of the site for recreation or tourism.

## **28 Functional jurisdiction**

Department of the Environment, Transport and the Regions

## **29 Management authority**

English Nature

## **30 Bibliography**

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

