

# RAMSAR INFORMATION SHEET

## FOR WETLANDS OF INTERNATIONAL IMPORTANCE

**Site reference number** 7UK138 Date of designation: 22/07/99  
**1 Compilation date** Feb 1999  
**2 Country** UK (England)  
**3 Name of wetland** Poole Harbour  
**4 Site centre location:** Latitude: 50 40 52 N Longitude: 02 01 34 W  
**5 Altitude** Not being submitted  
**6 Area (ha)** 2439.2

### 7 Overview

Poole Harbour is a bar-built estuary covering an area of nearly 4000 hectares. The Harbour occupies a shallow depression in the acidic, tertiary deposits towards the south western extremity of the Hampshire Basin and has been formed over the last 5000 years by a rise in sea level. The unusual micro tidal regime means that a significant body of water is retained throughout the tidal cycle. The site therefore exhibits many of the characteristics of a lagoon. There are extensive intertidal mudflats supporting internationally important numbers of waterfowl in winter. These are fringed on the landward side by saltmarshes or reedbeds. The river valleys of the lower Frome and Piddle support grazing marsh which is also important for wintering waterfowl. Much of the catchment along the western and southern shores comprises the internationally important Dorset heathlands and there are unusual transitions from saltmarsh to valley mire. The Harbour is separated from Poole Bay by the internationally important Studland dunes and the site includes Littlesea, a large dune slack lake also important for wintering wildfowl.

**8 Wetland type** Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	55
H	Salt marshes	21
Tp	Freshwater marshes / pools: permanent	23
U	Peatlands (including peat bogs swamps, fens)	0.5
4	Seasonally flooded agricultural land	0.5

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

#### Ramsar criterion 1b

The site is the best and largest example of a bar-built estuary with lagoonal characteristics (a natural Harbour) in Britain.

#### Ramsar criterion 2a

The site supports two species of nationally rare plant and one nationally rare alga. There are at least three red data book species of invertebrate.

#### Ramsar criterion 2b

The site includes examples of natural habitat types of community interest - Mediterranean and thermo Atlantic halophilous scrubs, in this case dominated by *Suaeda vera*, as well as calcareous fens with *Cladium mariscus*. Transitions from saltmarsh through to peatland mires are of exceptional conservation importance as few such examples remain in Britain.

**Ramsar criterion 3a**

Internationally important waterfowl assemblage (greater than 20,000 birds)

**Ramsar criterion 3b**

The site supports nationally important populations of breeding waterfowl including Common tern, *Sterna hirundo* and Mediterranean gull *Larus melanocephalus*. Over winter the site also supports a nationally important population of Avocet *Recurvirostra avosetta*

**Ramsar criterion 3c**

Over winter the site regularly supports internationally important populations of: Black-tailed Godwit *Limosa limosa limosa*, Shelduck *Tadorna tadorna*

**13 General location**

Nearest town/city: Poole

Poole Harbour lies on the south coast of England between the town of Poole and the Isle of Purbeck.

**Administrative Region:** Dorset

**14 Physical Features**

Soil & Geology	acidic, clay, mud, peat, sand, sedimentary
Geomorphology and Landscape	cliffs, coastal, estuary, floodplain, intertidal sediments (including sandflat/mudflat), island, lagoon, lowland, subtidal sediments (including sandbank/mudbank), valley
Nutrient status	no information
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 8.5°C. Mean maximum temperature approximately 15.7°C. Mean annual precipitation approximately 766.4mm, with a winter maximum.

**15 Hydrological values**

Maintenance of water quality (removal of nutrients)

**16 Ecological features**

Sub-tidal sediments are mainly fine muds and sands with hard substrate occurring locally in the vicinity of the channels which link the series of basins which make up the Harbour. Associated with the subtidal sands of the central Harbour are species rich communities dominated by beds of the tube worm *Sabella pavanina*. Intertidal areas are again largely fine grain muds although coarser sediments occur in the north east of the Harbour. Much of the middle and lower saltmarsh is dominated by common cord grass *Spartina anglica*. Some retreat of the extent of this plant is now occurring in the Harbour. Smaller areas of more species rich upper saltmarsh also occur including areas dominated by sea-blite *Suaeda vera*. Both tidal, brackish reedbed and fresh water reedbed occur around the fringes of the Harbour. Brackish grazing marshes dominated by creeping bent *Agrostis stolonifera* occur at

Keyworth and in the lower Frome and Piddle valleys there is fresh water grazing marsh. The marshes north of the River Piddle have particularly complex vegetation being influenced both by the nutrient poor acidic water originating in the valley mire at Morden and the nutrient rich water of the river Piddle. Low sandy cliffs and slopes occur at the edge of the harbour and the heathland beyond is included in the Dorset Heathland Ramsar site. The large mesotrophic dune slack lake called Littlesea, on the Studland peninsula, is included in both the heathland Ramsar site and Poole Harbour Ramsar site for different interests.

## 17 Noteworthy flora

### Nationally important species occurring on the site.

#### Higher Plants.

*Scorzonera humilis*, *Potamogeton acutifolius*, *Alopecurus bulbosus*, *Oenanthe silaifolia*, *Myocurus minimus*, *Suaeda vera*, *Zostera angustifolia*, *Zostera noltii*, *Isoetes echinospora* and *Elatine hexandra*.

## 18 Noteworthy fauna

### Birds

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

##### Over winter the area regularly supports:

Black-tailed Godwit, <i>Limosa limosa limosa</i> (Western Europe/W Africa)	1576 individuals, representing an average of 2.4% of the population (5 year peak mean 1992/93-1996/97)
Shelduck, <i>Tadorna tadorna</i> (Northwestern Europe)	3569 individuals, representing an average of 1.2% of the population (4 year peak mean 1993/4-1996/7)

#### Species currently occurring at levels of national importance:

##### During the breeding season the area regularly supports:

Common Tern, <i>Sterna hirundo</i> (Northern/Eastern Europe (breeding))	155 pairs, representing an average of 1.3% of the GB population (5 year mean 1993-1997)
Mediterranean Gull, <i>Larus melanocephalus</i>	5 pairs, representing an average of at least 22.7% of the GB population (5 year mean 1993-1997)

##### Over winter the area regularly supports:

Avocet, <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean (breeding))	459 individuals, representing an average of 36.1% of the GB population (5 year peak mean 1992/93-1996/97)
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#### Assemblages of international importance:

##### Over winter the area regularly supports:

25091 waterfowl (5 year peak mean 1991/92-1995/96)

### Nationally important species occurring on the site.

#### Invertebrates.

*Saldula setulosa*, *Piesma quadratum* and *Limonia bezzii*.

## 19 Social and Cultural Values

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Conservation education  
 Current scientific research  
 Fisheries production  
 Livestock grazing  
 Non-consumptive recreation  
 Sport fishing  
 Sport hunting  
 Tourism  
 Traditional cultural  
 Transportation/navigation

## 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	+	+	Large-Scale
Research	+	+	Small-Scale
Collection of non-timber natural products: (unspecified)	+		Small-Scale
Commercial forestry		+	Small-Scale
Fishing: commercial	+		Small-Scale
Fishing: recreational/sport	+		Small-Scale
Marine/saltwater aquaculture	+		Small-Scale
Gathering of shellfish	+	+	Large-Scale
Bait collection	+	+	Large-Scale
Grazing (unspecified)	+		Large-Scale
Permanent pastoral agriculture	+		Large-Scale
Hunting: recreational/sport	+		Small-Scale
Sewage treatment/disposal	+	+	Large-Scale
Harbour/port	+		Large-Scale
Oil/gas exploration	+	+	Small-Scale
Oil/gas production		+	Large-Scale
Transport route	+	+	Small-Scale
Urban development		+	Large-Scale
Military activities	+	+	Small-Scale

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

Activity	On-Site	Off-Site	Scale
Drainage/reclamation: (unspecified)	+		Small-Scale
Dredging	+	+	Small-Scale
Introduction/invasion of exotic animal species	+	+	Small-Scale
Introduction/invasion of exotic plant species	+		Small-Scale
Pollution - domestic sewage	+	+	Small-Scale

Pollution - industrial waste	+	+	Small-Scale
Recreational/tourism disturbance (unspecified)	+	+	Small-Scale
Disturbance from transport/roads		+	Small-Scale
Transport infrastructure development	+		Small-Scale
Unspecified development: urban use		+	Small-Scale

### 23 Conservation measures taken

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

### 24 Conservation measures proposed but not yet implemented

see below

#### Site vulnerability and management statement

Poole Harbour has been impacted by the growth of an urban conurbation along its north shore, together with associated infrastructure, and by development of a commercial port, marinas and moorings. In recent years, further encroachment by development has been almost halted by changes in national and local policy. Most of Poole Harbour falls under the authority of Poole Harbour Commissioners and management policies have been in place since 1987. Recreation pressures on the site are being addressed by an Aquatic Management (Zoning) Plan. Dredging to provide navigation may impact on intertidal habitat and will be addressed through national policy requirements on sustainable coastal management. There is recent evidence that Manilla clam is becoming naturalised within the Harbour following small scale commercial introduction and any potential problems will be examined by the steering group. Die back of *Spartina anglica* is also affecting the site and has been monitored by the Institute of Terrestrial Ecology.

Several sewage treatment plants discharge into the Harbour and the effect of these on water quality is monitored by the Environment Agency. Wytch Farm oilfield has facilities within the site; their maintenance and any risks from oil spills are dealt with according to agreed method statements and oil spill contingency plans. Recent studies have addressed the effects of bait digging in the Harbour which has local impacts. Most of the wildfowling in the Harbour is under control of the Dorset Wildfowling Association and is regulated by a management plan that identifies non shooting areas. The impact of drainage on grazing marshes is being addressed through Water level Management Plans.

### 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.

Invertebrates (marine): surveys of subtidal ecology have been carried by P.Dyrynda beginning in the 1980s.

Bait harvesting: Report into impact of bait harvesting (1995) followed by report into bait dragging (1996).

#### Miscellaneous.

Poole Harbour science and monitoring group is being established to investigate various issues, particularly those which may arise as a result of the Aquatic Management Plan.

## **26 Current conservation education**

There are a number of facilities for bird watching with permanent bird hides and other visitor facilities at Arne, Studland, Brownsea Island and Upton Country Park. Conservation education is also taken forward at these sites through guided walks and school visits.

## **27 Current recreation and tourism**

### Infra structure developments

There are a number of marinas and boat havens along the northern shore of the Harbour. There are also some 2000 swinging moorings within the site. Most of the north shore of the site is urbanised and there is a caravan site adjacent to the Harbour at Rockley Sands.

### Terrestrial and intertidal based recreation

The site is not heavily used for bathing and beach recreation. There are numerous accesses for bird watching along the northern shore. Public access on the quiet southern shore is limited to Studland National Nature Reserve and a controlled access at Arne RSPB Reserve. There is also easy public access along the River Frome at Wareham allowing good viewing of birds on the grazing marsh. Bait collection and fishing. At a few places along the shoreline where there is good access the site is well used for bait digging and angling. The eastern part of the site is a bass nursery area.

### Water sport recreation

Poole Harbour is heavily used for water sports recreation with sailing and other boating the most frequent activities. Water skiing, jet skiing, wind surfing, canoeing and angling also occur and are most frequent during the summer. The Zoning plan is attempting to address conflicts between users and other interests and has directed certain uses to areas where impacts on nature conservation are thought to be minimal.

A 'Navigate with nature' project, funded by the Department of the Environment, promoted best practice amongst Harbour users to reduce water pollution and disturbance to wildlife.

### Wildfowling

All wildfowling on the intertidal areas is under the control of the Dorset Wildfowling Association. Private estates also shoot on their own land - ie on saltmarsh above high water - but much of the shoreline above MWH is controlled by conservation organisations.

## **28 Functional jurisdiction**

Department of the Environment, Transport and the Regions

## **29 Management authority**

English Nature

## **30 Bibliography**

- Anon. 1995. *Biodiversity: the UK Steering Group report. Volume 2: action plans*. London, HMSO.
- Barne, J.H., Robson, C.F., Kaznowska, S.S., Doody, J.P., Davidson, N.C., & Buck, A.L. eds. 1996-1998. *Coasts and seas of the United Kingdom. Regions 1-17*. Peterborough Joint Nature Conservation Committee.
- Batten, L.A., Bibby, C.J., Elliott, G.D., & Porter, R.F., eds. 1990. *Red Data birds in Britain: action for rare, threatened and important species*. London, T & A. D. Poyser.
- Signal, E., Curtis, D., & Matthews, J. 1988. Islay: land types, bird habitats and nature conservation. Part 1. Land types and birds on Islay. *CSD Reports*, No. 809, Part 1.
- Bratton, J.H., ed. 1991. *British Red Data Books: 3. Invertebrates other than insects*. Peterborough, Joint Nature Conservation Committee.
- Brown, A.E., Burn, A.J., Hopkins, J.J., & Way, S.F., eds. 1997. *The Habitats Directive: selection of Special Areas of Conservation in the UK. JNCC Reports*, No. 270. Peterborough, Joint Nature Conservation Committee.
- Buck, A.L. 1993, 1996, 1997. *An inventory of UK estuaries. Volume 2-7*. Peterborough, Joint Nature Conservation Committee.

- Chandler, T.J., & Gregory, S., eds. 1976. *The climate of the British Isles*. London, Longman.
- Cranswick, P.A., Waters, R.J., Musgrove, A.J. & Politt, M.S. 1997. *The Wetland Bird Survey 1995-96: wildfowl and wader counts*. Slimbridge, British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee.
- Dargie, T.C.D. 1993. *Sand dune vegetation survey of Great Britain: a national inventory. Part 2. Scotland*. Peterborough, Joint Nature Conservation Committee.
- Department of the Environment. 1995. *Biodiversity: The UK Steering Group Report. Volume 1: Meeting the Rio Challenge*. London, HMSO.
- Department of the Environment, Transport and the Regions. 1998. *UK National Report to the 7th Meeting of the Conference of the Contracting Parties*. Peterborough, Joint Nature Conservation Committee.
- Doody, J.P., Johnston, C., & Smith, B. 1993. *Directory of the North Sea coastal margin*. Peterborough, Joint Nature Conservation Committee
- Drury Hunt, I. & MacGuire, F., eds. 1996. *High and Dry: The impacts of over-abstraction of water on wildlife*. Biodiversity Challenge. Sandy, RSPB.
- English Nature. *Natural Areas; Nature Conservation in Context version 1.1*. CD-ROM. English Nature, Peterborough.
- English Nature. 1996. *Impact of Water Abstraction on Wetland SSSIs*. English Nature Freshwater Series Number 4. Peterborough, English Nature.
- Perring, F.H., & Farrell, L. 1983. *British Red Data Books: 1. Vascular plants*. Nettleham, Lincoln, Royal Society for Nature Conservation.
- Pritchard, D.E., Housden, S.D., Mudge, G.P., Galbraith, C.A. & Pienkowski, M.W., eds. 1992. *Important Bird Areas in the United Kingdom including the Channel Islands and the Isle of Man*. Sandy, Royal Society for the Protection of Birds.
- Ratcliffe, D.A., ed. 1977. *A nature conservation review: volumes 1 & 2*. Cambridge, Cambridge University Press.
- Rodwell, J.S., ed. 1991. *British plant communities. Volume 2. Mires and heaths*. Cambridge, Cambridge University Press.
- Rodwell, J.S., ed. 1995. *British plant communities. Volume 4. Aquatic communities, swamps and tall-herb fens*. Cambridge, Cambridge University Press.
- Rose, P.M. & Scott, D.A. 1997. *Waterfowl Population Estimates Second edition*. Wageningen, Wetlands International.
- Royal Society for the Protection of Birds. 1998. *Land for Life*. Sandy, Royal Society for the Protection of Birds.
- Shirt, D.B., ed. 1987. *British Red Data Books: 2. Insects*. Peterborough, Nature Conservancy Council.
- Stewart, A., Pearman, D.A., & Preston, C.D., eds. 1994. *Scarce plants in Britain*. Peterborough, Joint Nature Conservation Committee.
- Stroud, D.A., Mudge, G.P. and Pienkowski, M. W., eds. 1990. *Protecting Internationally Important Bird Sites*. Peterborough, Nature Conservancy Council.
- Reference should also be made to Country Agencies Management Plans for sites that are within National Nature Reserves.

