

# Information Sheet on Ramsar Wetlands (RIS)

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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## 1. Name and address of the compiler of this form:

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Designation date

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Site Reference Number

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## 2. Date this sheet was completed/updated:

Designated: 30 March 1988

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## 3. Country:

UK (England)

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## 4. Name of the Ramsar site:

Pagham Harbour

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## 5. Designation of new Ramsar site or update of existing site:

**This RIS is for:** Updated information on an existing Ramsar site

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## 6. For RIS updates only, changes to the site since its designation or earlier update:

### a) Site boundary and area:

\*\* Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

### b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

**7. Map of site included:**

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

**8. Geographical coordinates (latitude/longitude):**

50 45 48 N                      00 45 38 W

**9. General location:**

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Chichester

10 km south-east of Chichester.

**Administrative region:** West Sussex

**10. Elevation (average and/or max. & min.) (metres):    11. Area (hectares): 636.68**

Min.	-1
Max.	5
Mean	1

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Pagham Harbour comprises an extensive central area of saltmarsh and tidal mudflats with surrounding habitats including lagoons, shingle, open water, reed swamp and wet permanent grassland.

The intertidal mudflats are rich in invertebrate and algae, and provide important feeding areas for birds. The lower saltmarsh is dominated by common cord-grass but also includes patches of glasswort. At higher levels sea-purslane is abundant. The area supports internationally important numbers of wintering pintail and nationally important numbers of dark-bellied brent goose, grey plover and black-tailed godwit.

**13. Ramsar Criteria:**

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

**6**

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Ramsar criterion 6 – species/populations occurring at levels of international importance.**

**Qualifying Species/populations (as identified at designation):**

**Species with peak counts in winter:**

Dark-bellied brent goose, *Branta bernicla bernicla*, 2512 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3)

**Species/populations identified subsequent to designation for possible future consideration under criterion 6.**

**Species with peak counts in winter:**

Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe, 377 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See [www.bto.org/survey/webs/webs-alerts-index.htm](http://www.bto.org/survey/webs/webs-alerts-index.htm).

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:**

Atlantic

**b) biogeographic regionalisation scheme** (include reference citation):

Council Directive 92/43/EEC

**16. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	neutral, shingle, sand, mud, clay, alluvium, nutrient-rich, sedimentary, gravel
Geomorphology and landscape	lowland, coastal, floodplain, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), open coast (including bay), enclosed coast (including embayment), estuary, islands, lagoon, pools
Nutrient status	mesotrophic
pH	circumneutral
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent

Summary of main climatic features	Annual averages (Bognor Regis, 1971–2000) ( <a href="http://www.metoffice.com/climate/uk/averages/19712000/sites/bognor_regis.html">www.metoffice.com/climate/uk/averages/19712000/sites/bognor_regis.html</a> ) Max. daily temperature: 13.7° C Min. daily temperature: 7.7° C Days of air frost: 24.0 Rainfall: 717.4 mm Hrs. of sunshine: 1902.9
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**General description of the Physical Features:**

Pagham Harbour is an estuarine basin that comprises an extensive central area of saltmarsh and intertidal mudflats, surrounded by lagoons, shingle, open water, reed swamp and wet permanent grassland.

**17. Physical features of the catchment area:**

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Pagham Harbour is an estuarine basin that comprises an extensive central area of saltmarsh and intertidal mudflats, surrounded by lagoons, shingle, open water, reed swamp and wet permanent grassland.

**18. Hydrological values:**

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces, Sediment trapping

**19. Wetland types:**

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	33.3
Other	Other	31
E	Sand / shingle shores (including dune systems)	20.1
H	Salt marshes	5.2
F	Estuarine waters	3.3
J	Coastal brackish / saline lagoons	2.4
Sp	Saline / brackish marshes: permanent	2.2
Tp	Freshwater marshes / pools: permanent	0.8
W	Shrub-dominated wetlands	0.6
A	Shallow marine waters	0.6
M	Rivers / streams / creeks: permanent	0.3
9	Canals and drainage channels	0.2

**20. General ecological features:**

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

This site comprises an extensive central area of saltmarsh and tidal mudflats with surrounding habitats including shingles, open water, reed swamp and wet permanent grassland. Pagham Harbour is of national importance for wintering, wildfowl and waders and also for breeding birds both within the Harbour and the surrounding grazing pasture. The site supports nationally important communities of plants and invertebrates.

Ecosystem services

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**21. Noteworthy flora:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

**Nationally important species occurring on the site.****Higher Plants.***Petrorhagia nanteuillii*

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**22. Noteworthy fauna:**

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

**Birds****Species currently occurring at levels of national importance:****Species with peak counts in spring/autumn:**

Little egret , <i>Egretta garzetta</i> , West Mediterranean	60 individuals, representing an average of 3.6% of the GB population (5 year peak mean 1998/9-2002/3)
Whimbrel , <i>Numenius phaeopus</i> , Europe/Western Africa	104 individuals, representing an average of 3.4% of the GB population (5 year peak mean 1998/9-2002/3 - spring peak)
Common greenshank , <i>Tringa nebularia</i> , Europe/W Africa	20 individuals, representing an average of 3.3% of the GB population (5 year peak mean 1998/9-2002/3)

**Species with peak counts in winter:**

Slavonian grebe , <i>Podiceps auritus</i> , Northwest Europe	14 individuals, representing an average of 1.9% of the GB population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas acuta</i> , NW Europe	462 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	704 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Spotted redshank , <i>Tringa erythropus</i> , Europe/W Africa	5 individuals, representing an average of 3.6% of the GB population (5 year peak mean 1998/9-2002/3)

**Species Information****Nationally important species occurring on the site.****Invertebrates.***Nematostella vectensis*

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**23. Social and cultural values:**

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

- Aesthetic
- Aquatic vegetation (e.g. reeds, willows, seaweed)
- Archaeological/historical site
- Environmental education/ interpretation

Fisheries production  
 Livestock grazing  
 Non-consumptive recreation  
 Scientific research  
 Sport fishing  
 Sport hunting  
 Tourism

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

**24. Land tenure/ownership:**

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.	+	+
National/Crown Estate	+	+
Private	+	+

**25. Current land (including water) use:**

Activity	On-site	Off-site
Nature conservation	+	
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Bait collection	+	+
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Livestock watering hole/pond	+	+
Permanent pastoral agriculture	+	+
Hunting: recreational/sport	+	+
Sewage treatment/disposal	+	+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Transport route		+

Urban development		+
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**26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:**

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
No factors reported	NA				

For category 2 factors only.  
 What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

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Is the site subject to adverse ecological change? NO

**27. Conservation measures taken:**

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	
Site management statement/plan implemented	+	

**b) Describe any other current management practices:**

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

**28. Conservation measures proposed but not yet implemented:**

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

**29. Current scientific research and facilities:**

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

**Contemporary.**

**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.

**Completed.**

**Environment, Flora and Fauna.**

Extensive research and surveys into tidal regimes, sediment movement and the distribution of all major animal and plant groups has been carried out in Pagham Harbour.

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**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

There is an interpretative centre for the Local Nature Reserve.

A full time Education Officer is employed, the programme being particularly directed at schoolchildren.

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**31. Current recreation and tourism:**

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

**Activities, Facilities provided and Seasonality.**

Land based recreation:

Walking including dog walking - all year.

Bird watching - all year.

Sea bathing - mostly summer.

Wildfowling: Only in agreed areas - 1 September to 20 February

Adjacent seasonal caravan parks - mainly summer.

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**32. Jurisdiction:**

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,  
European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol,  
BS1 6EB

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**33. Management authority:**

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House,  
Northminster Road, Peterborough, PE1 1UA, UK

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**34. Bibliographical references:**

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

**Site-relevant references**

Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP & Davidson, NC & Buck, AL (eds.) (1998) *Coasts and seas of the United Kingdom. Region 8 Sussex: Rye Bay to Chichester Harbour*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)

Buck, AL (ed.) (1997) *An inventory of UK estuaries. Volume 6. Southern England*. Joint Nature Conservation Committee, Peterborough



- Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes*. Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)
- Covey, R (1998) Chapter 7. Eastern Channel (Folkestone to Durlston Head) (MNCR Sector 7). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 199-218. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995-96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Fojt, W (1985) *The saltmarsh survey of Great Britain. Sussex county report*. Unpublished, Nature Conservancy Council
- Holder, CS & Woolven, SC (1990) Sand dune survey of Great Britain. Site report No. 79. Pagham Beach Dune, West Sussex, 1990. *Nature Conservancy Council, CSD report*, No. **1111**
- Irving, R (1994) *Report of the West Sussex Seasearch Project. 1992-1993: Chichester Harbour to Littlehampton*. West Sussex Seasearch Project, Coldwaltham
- James, CM (1987) Pagham Harbour. In: *Birds in Sussex 1962 - 1987*, 14-18. Sussex Ornithological Society
- May, VJ & Hansom, JD (eds.) (2003) *Coastal geomorphology of Great Britain*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 28)
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) *Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992-93 to 1998-99*. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999-2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.  
[www.wwt.org.uk/publications/default.asp?PubID=14](http://www.wwt.org.uk/publications/default.asp?PubID=14)
- Pagham Harbour Project (in prep.) *Pagham Harbour Management Plan*. West Sussex County Council, Chichester
- Rayner, RW (ed.) (1975) *The natural history of Pagham Harbour*. Bognor Regis Natural Science Society
- Robinson, AWH (1995) The harbour entrances of Poole, Christchurch and Pagham. *Geographical Journal*, **121**(1), 33-50
- Shedder, M & Shedder, A (1989) Lagoon survey of the south coast, Dorset to East Sussex, 1989. Final report. *Nature Conservancy Council, CSD Report*, No. **1116**
- Sneddon, P & Randall, RE (1994) *Coastal vegetated shingle structures of Great Britain: Appendix 3. Shingle sites in England*. Joint Nature Conservation Committee, Peterborough
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)  
[www.jncc.gov.uk/UKSPA/default.htm](http://www.jncc.gov.uk/UKSPA/default.htm)
- West Sussex County Council (1987) *A guide to Pagham Harbour Nature Reserve*. West Sussex County Council, Chichester
- Wood, C (ed.) (1984) Sussex sublittoral survey. Selsey Bill to Beachy Head. *Nature Conservancy Council, CSD Report*, No. **527**

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