

# 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:

The Wash

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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):**

52 56 16 N                      00 17 12 E

**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: King's Lynn

The Wash is located on the east coast of England between the coastal towns of Hunstanton in north Norfolk and Skegness in Lincolnshire.

**Administrative region:** Lincolnshire; Norfolk

**10. Elevation** (average and/or max. & min.) (metres):    **11. Area** (hectares): 62211.66

Min.	-3
Max.	4
Mean	0

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

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

The Wash is the largest estuarine system in Britain. It is fed by the rivers Witham, Welland, Nene and Great Ouse. There are extensive saltmarshes, intertidal banks of sand and mud, shallow waters and deep channels. It is the most important staging post and over-wintering site for migrant wildfowl and wading birds in eastern England. It supports a valuable commercial fishery for shellfish and also an important nursery area for flatfish. It holds one of the North Sea's largest breeding populations of common seal *Phoca vitulina* and some grey seals *Halichoerus grypus*. The sublittoral area supports a number of different marine communities including colonies of the reef-building polychaete worm *Sabellaria spinulosa*.

**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).

**1, 3, 5, 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 1

The Wash is a large shallow bay comprising very extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels.

Ramsar criterion 3

Qualifies because of the inter-relationship between its various components including saltmarshes, intertidal sand and mud flats and the estuarine waters. The saltmarshes and the plankton in the estuarine water provide a primary source of organic material which, together with other organic matter, forms the basis for the high productivity of the estuary.

Ramsar criterion 5

**Assemblages of international importance:**

**Species with peak counts in winter:**

292541 waterfowl (5 year peak mean 1998/99-2002/2003)

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

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

**Species with peak counts in spring/autumn:**

Eurasian oystercatcher , <i>Haematopus ostralegus ostralegus</i> , Europe & NW Africa -wintering	15616 individuals, representing an average of 1.5% of the population (5 year peak mean 1998/9-2002/3)
Grey plover , <i>Pluvialis squatarola</i> , E Atlantic/W Africa -wintering	13129 individuals, representing an average of 5.3% of the population (5 year peak mean 1998/9-2002/3 - spring peak)
Red knot , <i>Calidris canutus islandica</i> , W & Southern Africa (wintering)	68987 individuals, representing an average of 15.3% of the population (5 year peak mean 1998/9-2002/3)
Sanderling , <i>Calidris alba</i> , Eastern Atlantic	3505 individuals, representing an average of 2.8% of the population (5 year peak mean 1998/9-2002/3)
Eurasian curlew , <i>Numenius arquata arquata</i> , N. a. arquata Europe (breeding)	9438 individuals, representing an average of 2.2% of the population (5 year peak mean 1998/9-2002/3)
Common redshank , <i>Tringa totanus totanus</i> ,	6373 individuals, representing an average of 2.5% of the population (5 year peak mean 1998/9-2002/3)
Ruddy turnstone , <i>Arenaria interpres interpres</i> , NE Canada, Greenland/W Europe & NW Africa	888 individuals, representing an average of 1.7% of the GB population (5 year peak mean 1998/9-2002/3)
<b>Species with peak counts in winter:</b>	
Pink-footed goose , <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK	29099 individuals, representing an average of 12.1% of the population (5 year peak mean 1998/9-2002/3)
Dark-bellied brent goose, <i>Branta bernicla bernicla</i> ,	20861 individuals, representing an average of 9.7% of the population (5 year peak mean 1998/9-2002/3)

Common shelduck , <i>Tadorna tadorna</i> , NW Europe	9746 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/9-2002/3)
Northern pintail , <i>Anas acuta</i> , NW Europe	431 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)
Dunlin , <i>Calidris alpina alpina</i> , W Siberia/W Europe	36600 individuals, representing an average of 2.7% of the population (5 year peak mean 1998/9-2002/3)
Bar-tailed godwit , <i>Limosa lapponica lapponica</i> , W Palearctic	16546 individuals, representing an average of 13.7% 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 spring/autumn:**

Ringed plover , <i>Charadrius hiaticula</i> , Europe/Northwest Africa	1500 individuals, representing an average of 2% of the population (5 year peak mean 1998/9-2002/3)
Black-tailed godwit , <i>Limosa limosa islandica</i> , Iceland/W Europe	6849 individuals, representing an average of 19.5% of the population (5 year peak mean 1998/9-2002/3)

**Species with peak counts in winter:**

European golden plover , <i>Pluvialis apricaria apricaria</i> , P. a. altifrons Iceland & Faroes/E Atlantic	22033 individuals, representing an average of 2.3% of the population (5 year peak mean 1998/9-2002/3)
Northern lapwing , <i>Vanellus vanellus</i> , Europe - breeding	46422 individuals, representing an average of 1.3% 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).

See Sections 21/22 for details of noteworthy species

Details of bird species occurring at levels of National importance are given in Section 22

**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	cobble, gravel, biogenic reef, neutral, shingle, sand, mud, clay, nutrient-rich, sedimentary, limestone
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Geomorphology and landscape	lowland, coastal, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), enclosed coast (including embayment), estuary, lagoon
Nutrient status	eutrophic
pH	circumneutral
Salinity	saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Marham, 1971–2000) ( <a href="http://www.metoffice.com/climate/uk/averages/19712000/sites/marham.html">www.metoffice.com/climate/uk/averages/19712000/sites/marham.html</a> ) Max. daily temperature: 13.8° C Min. daily temperature: 5.7° C Days of air frost: 51.9 Rainfall: 621.3 mm Hrs. of sunshine: 1536.6

**General description of the Physical Features:**

The Wash is the largest estuarine system in the UK. It is fed by the rivers Witham, Welland, Nene and Great Ouse that drain much of the east Midlands of England. The Wash comprises very extensive saltmarshes, major intertidal banks of sand and mud, shallow waters and deep channels. The eastern end of the site includes low chalk cliffs at Hunstanton.

To the north, the coastal habitats of The Wash are continuous with Gibraltar Point, whilst to the east The Wash adjoins the North Norfolk Coast.

**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).

The Wash is the largest estuarine system in the UK. It is fed by the rivers Witham, Welland, Nene and Great Ouse that drain much of the east Midlands of England. The Wash comprises very extensive saltmarshes, major intertidal banks of sand and mud, shallow waters and deep channels. The eastern end of the site includes low chalk cliffs at Hunstanton.

To the north, the coastal habitats of The Wash are continuous with Gibraltar Point, whilst to the east The Wash adjoins the North Norfolk Coast.

**18. Hydrological values:**

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

No special values known

**19. Wetland types:**

Marine/coastal wetland

Code	Name	% Area
A	Shallow marine waters	51.7
G	Tidal flats	41
H	Salt marshes	7.2
E	Sand / shingle shores (including dune systems)	0.03
J	Coastal brackish / saline lagoons	0.03

**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.

The intertidal flats of the Wash form one of the largest intertidal areas in Britain and these are predominantly sandy. The flats support high concentrations of marine worms and shellfish. There is an abundant growth of algae and high concentrations of marine invertebrates which provides a food source for over 300,000 wintering wildfowl and supports an important fishery and seal colony. Extensive saltmarshes fringe the bay but much of the older and botanically more diverse saltmarsh has been lost due to a long history of land-claim. Higher level marshes are characterised by *Elytrigia atherica*, *Atriplex portulacoides*, *Suaeda maritima* and *Limonium vulgare*. Where the saltmarsh has been grazed by cattle and wildfowl, there may be extensive lawns of *Puccinellia* spp. Abundant *Aster tripolium* occurs at lower levels whilst *Salicornia* spp. and *Spartina anglica* are the principal colonising species.

Ecosystem services

**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.

*Salicornia* spp.

**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 regularly supported during the breeding season:**

Lesser black-backed gull , <i>Larus fuscus graellsii</i> , W Europe/Mediterranean/W Africa	1378 apparently occupied nests, representing an average of 1.2% of the GB population (Seabird 2000 Census)
Common tern , <i>Sterna hirundo hirundo</i> , N & E Europe	152 pairs, representing an average of 1.4% of the GB population (Count as at 1993)
Little tern , <i>Sterna albifrons albifrons</i> , W Europe	33 pairs, representing an average of 1.6% of the GB population (5 year mean 1992-1996)

**Species with peak counts in spring/autumn:**

Great cormorant , <i>Phalacrocorax carbo carbo</i> , NW Europe	367 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9-2002/3)
Pied avocet , <i>Recurvirostra avosetta</i> , Europe/Northwest Africa	422 individuals, representing an average of 12.4% of the GB population (5 year peak mean 1998/9-2002/3)
Ruff , <i>Philomachus pugnax</i> , Europe/W Africa	25 individuals, representing an average of 3.5% of the GB population (5 year peak mean 1998/9-2002/3)
Whimbrel , <i>Numenius phaeopus</i> , Europe/Western Africa	191 individuals, representing an average of 6.3% of the GB population (5 year peak mean 1998/9-2002/3)

Common greenshank , <i>Tringa nebularia</i> , Europe/W Africa	376 individuals, representing an average of 62.9% of the GB population (5 year peak mean 1998/9- 2002/3)
Lesser black-backed gull , <i>Larus fuscus graellsii</i> ,	1993 individuals, representing an average of 3.2% of the GB population (5 year peak mean 1998/9- 2002/3)
<b>Species with peak counts in winter:</b>	
Red-throated diver , <i>Gavia stellata</i> , NW Europe	55 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9- 2002/3)
Bean goose , <i>Anser fabalis fabalis</i> , NW Europe - wintering	7 individuals, representing an average of 1.7% of the GB population (Source period not collated)
Greater white-fronted goose , <i>Anser albifrons albifrons</i> , NW Europe	100 individuals, representing an average of 1.7% of the GB population (Source period not collated)
Common eider , <i>Somateria mollissima mollissima</i> , NW Europe	1109 individuals, representing an average of 1.5% of the GB population (5 year peak mean 1998/9- 2002/3)
Black (common) scoter , <i>Melanitta nigra nigra</i> ,	1190 individuals, representing an average of 2.3% of the GB population (5 year peak mean 1998/9- 2002/3)
Spotted redshank , <i>Tringa erythropus</i> , Europe/W Africa	54 individuals, representing an average of 39.7% of the GB population (5 year peak mean 1998/9- 2002/3)
Black-headed gull , <i>Larus ridibundus</i> , N & C Europe	31403 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)

### Species Information

#### Species occurring at levels of international importance.

#### Mammals.

*Phoca vitulina*

### 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.

- Fisheries production
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport hunting
- Transportation/navigation

**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	+	+
Public/communal	+	+
Other	+	+

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

Activity	On-site	Off-site
Nature conservation	+	
Recreation	+	
Current scientific research	+	
Fishing: (unspecified)	+	
Fishing: commercial	+	+
Marine/saltwater aquaculture	+	
Gathering of shellfish	+	
Bait collection	+	
Arable agriculture (unspecified)		+
Permanent arable agriculture		+
Grazing (unspecified)	+	
Rough or shifting grazing	+	
Hunting: recreational/sport	+	+
Harbour/port	+	+
Flood control	+	+
Irrigation (incl. agricultural water supply)		+
Transport route	+	
Domestic water supply		+
Urban development		+
Non-urbanised settlements		+
Military activities	+	

**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?

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)	+	
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Management agreement	+	
Site management statement/plan implemented	+	
Other	+	+
Special Area of Conservation (SAC)	+	

**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.

#### **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.

Bird Studies by the Wash Wader Ringing Group.

Waterfowl and invertebrate ecology studies by the Centre for Ecology and Hydrology.

Seal population studies by the Sea Mammal Research Unit.

Annual monitoring of shellfish stocks by Eastern Sea Fisheries Joint Committee.

#### **Environment.**

Sediment types and distribution, processes, erosion, tides and currents have been studied by a variety of institutions and are expected to continue.

The shoreline and water quality is routinely monitored by the Environment Agency.

Land-Ocean Interaction Study by the Natural Environment Research Council (1992-98).

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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 are two field centres. Lincolnshire County Council run the Freiston field centre and

Lincolnshire Wildlife Trust run the Gibraltar Point Field Station.

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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 is chiefly limited to wildfowling, bird watching and walking along the sea banks around two-thirds of the site. The Peter Scott Walk between the outlets of the Rivers Nene and Great Ouse, has been promoted by the local authorities. Some access points to the shore have also been improved by local authorities. Snettisham Bird Reserve provides facilities for bird watching. Traditional beach recreational activities occur between Hunstanton and Snettisham.

Facilities for pleasure craft are limited to some mud berths and stage moorings on the tidal rivers and at the ports of Kings Lynn and Boston. The principal locations for sailing boats are found at the Skegness Yacht Club at Wainfleet and Snettisham Beach Sailing Club and Hunstanton.

Other water sports including windsurfing, water-skiing and power boats occur mainly at Hunstanton and Heacham on the Norfolk shore. Zoning of watercraft is managed by the local authority.

Recreational activities are subject to the Wash Estuary Management Plan but are not generally seen as detrimental to the site.

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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

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- Goss-Custard, JD, Jones, RE & Newbury, PE (1977) The ecology of the Wash I. Distribution and diet of wading birds (Charadrii). *Journal of Applied Ecology*, 14, 681-687
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