

Information Sheet on Ramsar Wetlands (RIS)

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

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

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 02 February 1999

3. Country:

UK (England)

4. Name of the Ramsar site:

Pevensey Levels

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

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

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:

The site supports 68% of vascular plant species in Great Britain that can be described as aquatic. It is probably the best site in Britain for freshwater molluscs, one of the five best sites for aquatic beetles Coleoptera and supports an outstanding assemblage of dragonflies Odonata.

See Sections 21/22 for details of noteworthy species

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	basic, shingle, sand, mud, clay, alluvium, peat, nutrient-poor, sedimentary
Geomorphology and landscape	lowland, coastal, floodplain, shingle bar, open coast (including bay)
Nutrient status	eutrophic, mesotrophic
pH	circumneutral
Salinity	fresh
Soil	mainly mineral
Water permanence	usually permanent, usually seasonal / intermittent
Summary of main climatic features	Annual averages (Eastbourne, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/eastbourne.html) Max. daily temperature: 13.7° C Min. daily temperature: 8.3° C Days of air frost: 15.9 Rainfall: 789.7 mm Hrs. of sunshine: 1848.6

General description of the Physical Features:

No information available

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).

No information available

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, Recharge and discharge of groundwater, Flood water storage / desynchronisation of flood peaks, Maintenance of water quality (removal of nutrients)

19. Wetland types:

Inland wetland, Marine/coastal wetland

Code	Name	% Area
Other	Other	83.4
4	Seasonally flooded agricultural land	14
9	Canals and drainage channels	1.4
6	Reservoirs / barrages / dams	0.9
O	Freshwater lakes: permanent	0.2
E	Sand / shingle shores (including dune systems)	0.1

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.

Pevensey Levels supports a range of important communities of wetland flora and fauna. Various stages of succession are present in the ditches. Floating and submerged aquatic plants such as duckweeds *Lemna* spp., pondweeds *Potamogeton* spp. or water fern *Azolla* spp. represent the pioneer stages. These are followed by larger floating or emergent plants such as frogbit *Hydrocharis morsus-ranae*, bur-reed *Sparganium erectum* and arrow-head *Sagittaria sagittifolia*. Finally, common reed *Phragmites australis* or hawthorn *Crataegus monogyna* becomes dominant. Left undredged, the ditches lose their diversity and varied structure. A rich bankside flora is also present on site. An area of shingle and intertidal muds and sands is another important component of the site. Some flora associated with the shingle is present. For example, yellow horned-poppay *Glaucium flavum* and sea campion *Silene uniflora*.

The site supports outstanding invertebrate populations and is a top site for Mollusca and aquatic Coleoptera. Over 15 species of dragonfly (Odonata) have been recorded, including several scarce species. One of Britain's largest and rarest spiders, the fen raft spider *Dolomedes plantarius* has its stronghold at Pevensey.

The lowland wet grassland supports a variety of bird species. For example, wintering lapwing and snipe. Breeding bird species include sedge warblers, reed warblers which nest in the scrub and reeds in the ditches respectively.

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.**

Althaea officinalis, Ceratophyllum submersum, Crambe maritima, Potamogeton acutifolius, Potamogeton friesii, Potamogeton trichoides, Sium latifolium, Stratiotes aloides

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 Information

Nationally important species occurring on the site.

Invertebrates.

Segmentina nitida, Anisus vorticulus, Valvata macrostoma, Hydrophilus piceus, Gyrinus suffriani, Elmatophilus brevicollis, Bagous puncticollis, Dolomedes plantarius, Atylotus rusticus, Odontomyia ornata, Pherbellia argyra, Psacadina zernyi, Limophalia pictipennis, Tipula marginata, Placobdella costata

Assemblage of International importance

The site supports an appreciable assemblage of rare, vulnerable or endangered species or sub-species of plant or animal. Pevensey Levels is probably one of the best sites in Great Britain for freshwater molluscs, one of the very best sites for aquatic Coleoptera and also supports an outstanding assemblage of Odonata.

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

Livestock grazing

Non-consumptive recreation

Scientific research

Sport fishing

Sport hunting

Tourism

Traditional cultural

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.	+	+
Private	+	+
Public/communal	+	+

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	
Current scientific research	+	
Fishing: recreational/sport	+	+
Arable agriculture (unspecified)	+	+
Permanent arable agriculture	+	+
Permanent pastoral agriculture	+	+
Hay meadows	+	+
Hunting: recreational/sport	+	+
Sewage treatment/disposal	+	+
Flood control	+	
Domestic water supply	+	+

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?
Introduction/invasion of non-native plant species	2		+		+
Pollution – domestic sewage	2			+	+

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For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
 Introduction/invasion of non-native plant species - Floating pennywort *Hydrocotyle ranunculoides*: Strategy being worked up and research conducted into chemical treatment. Effective solution has not yet been found
Crassula Crassula helmsii: Work currently being undertaken (October 2004) to remove *Crassula* by mechanical diggers.

Pollution – domestic sewage - Sewage Treatment Works: Phosphate-stripping has been introduced. Further study of pollution likely under the water company's Asset Management Plan AMP4.

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)	+	
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.

A survey of *Dolomedes plantarius* is shortly to be undertaken, repeating the one done in 1990 (Jones 1990), to monitor its status.

The National Nature Reserve is comprehensively monitored by English Nature and the Sussex Wildlife Trust.

Completed.

Surveys of ditch flora, invertebrates, Odonata, Mollusca and Coleoptera have been carried out, as have routine river corridor surveys. Overwintering and breeding bird surveys have also been done by the RSPB. All these are likely to be repeated from time to time to monitor any changes.

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.

The National Nature Reserve Site Managers lead guided walks on the NNRs, and teach students from local Universities and Schools. East Sussex County Council also have programmes for site visits by the general public.

There are a few interpretive panels at Pevensey Castle.

Future activities: There are proposals for a nature trail and further interpretive panels on the less sensitive parts of the NNR. In the long term, an interpretive centre may be set up.

31. Current recreation and tourism:

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

Activities and facilities provided.

Land-based recreation:

Walking (including dog walking) and horse riding occur on the many public footpaths and bridleways. There is a golf course on the south-east corner. The roads within the site are used for recreational cycling. Two fields are used for the flying of radio-controlled model aircraft under time-limited conditions.

Water based recreation:

The Wallers Haven is occasionally used for rowing training by a local school. All the major Havens are used for angling.

Hunting:

There is a beagle pack located on the site which regularly hunts hares. The site is also used for occasional fox hunting and by bloodhounds. Illegal hunting of hare, and taking of eels also go on. A few owners have licences to shoot wildfowl.

Facilities provided.

The coastal area to the South of the Site has caravan parks and is used as a beach resort.

Seasonality.

Mainly during the summer months. Shooting is over winter.

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

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

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

Belden, P (1987) *Pevensey Levels dragonflies*. Nature Conservancy Council, Peterborough

Bratton, JH (ed.) (1991) *British Red Data Books: 3. Invertebrates other than insects*. Joint Nature Conservation Committee, Peterborough

Carr, R (1983) *A survey of the aquatic Coleoptera of the Pevensey Levels*. Nature Conservancy Council, Peterborough

Clark, J & Murdoch, J (1997) Local knowledge and the precarious extension of scientific networks: a reflection on three case studies. *Sociologia Ruralis*, **37**(1), 38-60

- Drake, M (1991) Ephemeroptera and Plecoptera in freshwater and brackish ditch systems on British grazing marshes. *Entomologists Gazette*, **42**, 45-59
- Dulley, AJF (1966) The Level and Port of Pevensey in the Middle Ages. *Sussex Archaeological Collections*, **104**, 26-45
- Environment Agency (1996) *A fisheries management strategy for the Pevensey Levels*. Environment Agency Southern Region
- Glading, PR (1986) *A botanical survey of ditches on the Pevensey Levels*. Nature Conservancy Council, Peterborough
- Hart, C & Douglas, S (1993) Nature conservation and the management of a drainage system habitat. *Proceedings of the ICOLE Conference 1993*
- Hingley, MR (1979) The colonisation of newly-dredged drainage channels on the Pevensey Levels (East Sussex), with special reference to gastropods. *Journal of Conchology*, **30**, 105-122
- Hole, M (1998) Comment – What future in farming for wildlife? A farmer’s view from the Pevensey Levels. *British Wildlife*, **10**(1), 9-11
- Jones, E (1990) *The status of Dolomedes plantarius on Pevensey Levels in August 1990*. Nature Conservancy Council, Peterborough
- Keymer, RJ, Blake, C & Drake, M (1989) *Pevensey Levels - final report: proposed boundary for renotification*. Nature Conservancy Council, Peterborough
- Killeen, IJ (1994) A survey of the freshwater Mollusca of the Pevensey Levels East Sussex *English Nature Research Report*, No **124**, Peterborough
- Lindsey, BI (1993) English Nature’s Pevensey Levels Wildlife Enhancement Scheme. *Sussex Ornithological Newsletter*, No. **125** (Summer 1993)
- Munday, R (1993) *Pevensey Levels ditch survey*. Sussex Wildlife Trust/Environment Agency, Worthing
- National Rivers Authority (1995) *Pevensey Levels biological survey Summer 1994*. National Rivers Authority (S) Science Group
- O’Neil, P & Beebee, TJC (2005) The great silver water beetle in Britain: a cry for help *British Wildlife*, **16**(4), 265-269
- Palmer, M (1984) *A comparison of the flora and invertebrate fauna of watercourses in old pasture and arable land in the Pevensey Levels, Sussex*. Nature Conservancy Council, Peterborough
- Palmer, M (1986) The impact of a change from permanent pasture to cereal farming on the flora and invertebrate fauna of watercourses in the Pevensey Levels, Sussex *Proceedings of the EWRS/AAB Symposium on Aquatic Weeds*
- Ratcliffe, DA (ed.) (1977) *A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain*. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Rowland, S & Burges, D (1993) *Pevensey Levels wintering bird surveys 1993*. RSPB/English Nature/Environment Agency, Shoreham
- Salzmann, LF (1910) The inning of Pevensey Levels. *Sussex Archaeological Collections*, **53**, 30-60
- Shirt, DB (ed.) (1987) *British Red Data Books: 2. Insects*. Nature Conservancy Council, Peterborough
- Steel, C (1976) *The ecology of Pevensey Levels in relation to the drainage system*. Unpublished M.Sc dissertation, University of London
- Stewart, A, Pearman, DA & Preston, CD (eds.) (1994) *Scarce plants in Britain*. Joint Nature Conservation Committee, Peterborough
- Watson, AM & Ormerod, SJ (2004) The distribution of three uncommon freshwater gastropods in the drainage ditches of British grazing marshes. *Biological Conservation*, **118**(4), 455-466
- Wiggington, M (1999) *British Red Data Books. 1. Vascular plants*. 3rd edn. Joint Nature Conservation Committee, Peterborough
- Willis, J (1995) *A contingent valuation study of the Pevensey Levels*. English Nature, Peterborough
- Willis, J, Garrod, GD, Benson, JF & Carter, M (1996) Benefits and costs of the Wildlife Enhancement Scheme: A case study of the Pevensey Levels. *Journal of Environmental Planning and Management*, **39**(3), 387-401

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