

RAMSAR INFORMATION SHEET

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Date of designation: 02/02/99

Site reference number 7UK132

1 **Compilation date** 28/01/99 Feb 1999

2 **Country** UK (England)

3 **Name of wetland** Pevensey Levels

4 **Site centre location:** Latitude: 50 50 30 N Longitude: 00 20 32 E

5 **Altitude** Not being submitted

6 **Area (ha)** 3577.71

7 Overview

Pevensey Levels is one of the largest and least fragmented lowland wet grassland systems in south east England. The low-lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities, including nationally rare and scarce aquatic plants and invertebrates. The site also supports a notable assemblage of breeding and wintering wildfowl. A small area of shingle and intertidal muds and sands is included within the site.

8 **Wetland type** Inland wetland

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

9 **Ramsar Criteria** 2a, 2b

10 **Map of the site** ✓

11 **Compiler** Joint Nature Conservation Committee
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12 Justification of criteria

Ramsar criterion 2a

The site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species.

Ramsar criterion 2b

The site is of special value for maintaining the genetic and ecological diversity of the region. It is probably the best site in Britain for freshwater molluscs, one of the five best sites for aquatic *Coleoptera* and supports an outstanding assemblage of dragonflies *Odonata* spp.

13 General location

Nearest town/city: Eastbourne

Pevensey Levels is located on the Sussex Coast between Eastbourne and Hastings.

Administrative Region:

14 Physical Features

Soil & Geology	alluvium, basic, clay, mud, nutrient-poor, peat, sand, sedimentary, shingle
Geomorphology and Landscape	coastal, floodplain, lowland, open coast (including bay), shingle bar
Nutrient status	eutrophic, mesotrophic
pH	circumneutral
Salinity	fresh
Soil	mainly mineral
Water permanence	usually permanent, usually seasonal / intermittent
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

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)

16 Ecological features

Pevensy 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 frog-bit *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-poppo *Glaucium flavum* and sea campion *Silene uniflora*.

The site supports outstanding invertebrate populations and is a top site for Mollusca and aquatic Coleoptera. Over fifteen 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 Pevensy.

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

17 Noteworthy flora

Nationally important species occurring on the site.

Higher Plants.

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

18 Noteworthy fauna

Nationally important species occurring on the site.

Invertebrates.

Segmentina nitida, *Anisus vorticulus*, *Valvata macrostroma*, *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*.

19 Social and Cultural Values

Aesthetic

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

Archaeological/historical site

Conservation education

Current scientific research

Livestock grazing

Non-consumptive recreation

Sport fishing

Sport hunting

Tourism

Traditional cultural

20 Land tenure/ownership

Ownership category	On-Site	Off-Site
Non-governmental organisation	+	
Local authority, municipality etc.	+	+
Private	+	+
Public/communal	+	+

21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+	+	Large-Scale
Tourism	+	+	Small-Scale
Recreation	+		Small-Scale
Research	+		Small-Scale
Fishing: recreational/sport	+	+	Small-Scale
Arable agriculture (unspecified)	+	+	Small-Scale
Permanent arable agriculture	+	+	Small-Scale
Permanent pastoral agriculture	+	+	Large-Scale
Hay meadows	+	+	Small-Scale
Hunting: recreational/sport	+	+	Small-Scale
Sewage treatment/disposal	+	+	Small-Scale
Flood control	+		Small-Scale
Domestic water supply	+	+	Small-Scale

22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale
Vegetation succession	+	+	Large-Scale
Eutrophication	+	+	Large-Scale
Introduction/invasion of exotic animal species	+	+	Large-Scale
Pollution - domestic sewage	+	+	Large-Scale
Pollution - fertilisers	+	+	Large-Scale
Pollution - pesticides/agricultural runoff	+	+	Large-Scale
General disturbance from human activities	+	+	Large-Scale

23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	
NNR	+	
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 site is used for low level grazing and has been protected by securing agreements under English Nature's Wildlife Enhancement Scheme. This fosters traditional management of the fields and ditches and prohibits the use of chemicals. There is also a trend towards eutrophication caused by fertiliser run-off, particularly from arable areas, and discharges from two sewage treatment works (STWs). Problems of low water levels in dry summers caused by over abstraction are being addressed through EAs review of consents and a Water Level Management Plan. The use of buffer strips in arable areas is under consideration, and the STWs are proposed for significant upgrading under the 1998 review of water company expenditure. Recent years have seen the introduction of a number of alien plant species. These are being controlled by physical removal and the judicious use of herbicides under the direction of the Environment Agency. The majority of the problems relating to vegetation succession in the ditches is addressed through the Wildlife Enhancement Scheme. The functioning of the Site is overseen by a Management Group consisting of Officers from the Environment Agency and English Nature, and representatives from local farmers, wildlife groups and anglers.

25 Current scientific research/survey/monitoring and facilities

Contemporary.

A survey of *Dolomedes plantarius* is shortly to be undertaken, repeating the one done in 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.

26 Current conservation education

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.

27 Current recreation and tourism

Activities and facilities provided.

Land-based recreation: Walking (including dog walking) and horse riding occur on the many public footpaths and bridle ways. There is a golf course on the SE 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.

28 Functional jurisdiction

Department of the Environment, Transport and the Regions

29 Management authority

English Nature

30 Bibliography

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