

RAMSAR INFORMATION SHEET

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Date of designation: 01/10/98

Site reference number 7UK124
1 Compilation date Feb 1999
2 Country UK (England)
3 Name of wetland Dorset Heathlands
4 Site centre location: Latitude: 50 39 00N Longitude: 02 09 33W
5 Altitude Not being submitted
6 Area (ha) 6730.15

7 Overview

Extensive and fragmented, these heathland areas are centred around the estuary of Poole Harbour and are adjacent to the urban conurbation of Bournemouth and Poole. The heathland contains numerous examples of wet heath and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are among the best of their type in lowland Britain. There are also transitions to coastal wetland and fen habitat types. The wetland flora and fauna includes a large assemblage of nationally rare and scarce species, especially invertebrates.

8 Wetland type Inland wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	1.2
M	Rivers / streams / creeks: permanent	0.1
O	Freshwater lakes: permanent	1.7
Tp	Freshwater marshes / pools: permanent	0.3
U	Peatlands (including peat bogs swamps, fens)	7.5
W	Shrub-dominated wetlands	8.9
X	Tree-dominated wetlands	2.3
+	Seasonally flooded agricultural land	0.2
Other	Other	77.8

Xf + Xp

9 Ramsar Criteria 1a, 1d, 2a, 2b
10 Map of the site ✓
11 Compiler Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax : +44(0) 1733 562626 / +44(0) 1733 555948

Xf - 4.3%

Xp - 1.0%

12 Justification of criteria

Ramsar criterion 1a

Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*.

Ramsar criterion 1d

Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*.

Ramsar criterion 2a

Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species.

Ramsar criterion 2b

Has a high species richness and high ecological diversity of wetland habitat types and transitions, and lies in one of the most biologically rich wetland areas of lowland Britain being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.

13 General location

Nearest town/city: Poole

Dorset Heathlands lies adjacent to the coast of central southern England

Administrative Region: Dorset

14 Physical Features

Soil & Geology	acidic, clay, neutral, nutrient-poor, peat, sand, sedimentary
Geomorphology and Landscape	coastal, lowland, slope, valley
Nutrient status	mesotrophic, oligotrophic
pH	acidic, circumneutral, strongly acidic
Salinity	fresh
Soil	mainly mineral, mainly organic
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

Recharge and discharge of groundwater

16 Ecological features

This site contains large areas of dry heath, wet heath and valley mire, and these often occur together in mosaics and zonations of heathland vegetation. Typically the wet heath occupies areas of impeded drainage on the lower valley sides and less steeply sloping ground. The vegetation is mostly of the *Erica tetralix* -*Sphagnum compactum* type, locally characterised by *Drosera* spp and *Rhynchospora* spp. In almost all instances the wet heath gives way to base poor, acid mire vegetation in the valley bottoms. The mires are commonly dominated by *Molinia caerulea*, with scattered areas of the more floristically rich *Rhynchospora alba* habitat

South of Poole Harbour *Erica tetralix* is joined by *Erica ciliaris*, which occurs extensively and often in abundance, growing on moist soils ranging from wet heath to mire situations. Outlying stands of *Erica ciliaris* occur towards the north and west of the site.

In places conditions are influenced by sources of base enriched water, giving rise to rich fens. Several types of vegetation occur, and these include valley mire communities characterised by *Schoenus nigricans* and, where there is livestock grazing, flood plain fen and fen-meadow characterised by *Carex rostrata* or *Molinia caerulea* - *Cirsium dissectum* vegetation. Adjacent to Poole Harbour there is *Cladium mariscus* fen and transitions to intertidal areas of *Phragmites australis* swamp.

17 Noteworthy flora

Nationally important species occurring on the site.

Higher Plants.

Erica ciliaris, *Cicendia filiformis*, *Gentiana pneumonanthe*, *Hammarbya paludosa*, *Illecebrum verticillatum*, *Rhynchospora fusca*, *Deschampsia setacea*, *Elatine hexandra*, *Isoetes echinosporum*, *Pilularia globulifera*, *Lycopodiella inundata*.

Lower Plants.

Sphagnum pulchrum, *Sphagnum recurvum var amblyphyllum*, *Cladopodiella francisci*.

18 Noteworthy fauna

Birds

Species currently occurring at levels of national importance:

During the breeding season the area regularly supports:

Dartford Warbler, <i>Sylvia undata</i>	418 pairs, representing an average of at least 26.1% of the GB population (Three count mean 1991-2 & 1994)
Nightjar, <i>Caprimulgus europaeus</i>	436 pairs, representing an average of at least 12.8% of the GB population (Two year mean 1991-1992)
Woodlark, <i>Lullula arborea</i>	41 pairs, representing an average of at least 6.8% of the GB population (Three count mean 1991-2 & 1994)

Over winter the area regularly supports:

Hen Harrier, <i>Circus cyaneus</i>	20 individuals, representing an average of 2.7% of the GB population (Count as at 1991/2)
Merlin, <i>Falco columbarius</i>	15 individuals, representing an average of 1.2% of the GB population (Count as at 1991/2)

Species occurring at levels of international importance.

Invertebrates.

Coenagrion mercuriale.

Nationally important species occurring on the site.

Invertebrates.

Bidessus unistriatus, *Buckleria paludum*, *Chrysops sepulchralis*, *Crambus silvella*, *Cryptocephalus biguttatus*, *Cyclophora pendularia*, *Donacia bicolora*, *Eristalis crytarum*, *Formica transcaucasia*, *Graphoderus cinereus*, *Graptodytes flavipes*, *Heliothis maritima*, *Hydroporus cantabricus*, *Libellula fulva*, *Longitarsus nigerrimus*, *Nabis brevis*, *Pachybrachius luridus*, *Parhelophilus consimilis*, *Phragmataecia castaneae*, *Plecocera tricincta*, *Sphaerophoria loewi*, *Stenoptilia graphodactyla*, *Stenus kiesenwetteri*, *Stethophyma grossum*, *Tipula marginata*, *Zora armillata*, *Sedina buettneri*.

19 Social and Cultural Values

Aesthetic
Archaeological/historical site
Conservation education
Current scientific research
Livestock grazing
Non-consumptive recreation

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	+	+	Large-Scale
Collection of non-timber natural products: (unspecified)	+		Small-Scale
Commercial forestry	+	+	Small-Scale
Rough or shifting grazing	+		Large-Scale
Permanent pastoral agriculture	+	+	Small-Scale
Hunting: recreational/sport	+	+	Small-Scale
Industry		+	Small-Scale
Sewage treatment/disposal		+	Large-Scale
Harbour/port		+	Large-Scale
Flood control		+	Small-Scale
Mineral exploration	+	+	Small-Scale
Mining	+	+	Small-Scale
Oil/gas exploration		+	Large-Scale
Oil/gas production	+	+	Small-Scale
Transport route	+	+	Small-Scale
Domestic water supply		+	Small-Scale
Urban development		+	Large-Scale
Non-urbanised settlements		+	Large-Scale
Military activities	+	+	Large-Scale

22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale
Commercial scale forest exploitation	+	+	Large-Scale
Habitat burning	+		Large-Scale
Vegetation succession	+		Large-Scale
Introduction/invasion of exotic plant species	+	+	Large-Scale
Pollution - unspecified	+		Large-Scale
Recreational/tourism disturbance (unspecified)	+		Large-Scale
Mining exploitation/exploration	+		Large-Scale

23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	+
NNR	+	+
SPA	+	+
Candidate SAC	+	+
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

The Dorset Heathlands have become a fragmented heathland area through extensive losses to agriculture, forestry and urban development. In recent years these land use changes have been almost halted through changes in national and local policy. However, the scale of previous fragmentation and development has left a number of adverse pressures and many heaths in or near urban areas suffer recreational use pressure and a high incidence of wildfires, and are sometimes also disturbed by infrastructure works.

The heaths are affected by several old mineral extraction permissions, some still active. These will require review under the Habitats Regulations to ensure no adverse effect on integrity. Agreement has already been reached on drawing back the possible working of some permissions. In and around the urban areas there are now well established initiatives to manage and contain recreation uses, and to more effectively control the occurrence and spread of fires. At two old waste sites within the Heathlands leachate pollution has occurred. This has been addressed through re-capping.

The decline in use for traditional agriculture has resulted in a successional trend to scrub and woodland together with invasion by conifer and introduced scrub species, especially Rhododendron. Financial support schemes and management initiatives, which aid the removal of scrub and encourage the re-establishment of traditional management in the form of extensive grazing, now cover much of the heath area. About 43% of the site is now held as NNR's, LNR's and non-statutory nature reserves. Fragmentation has increased edge and patch size effects on the heathland ecology. This is being addressed through re-creation projects to expand and link heath fragments by removing areas of conifer plantation and converting some agricultural land back to heathland.

25 Current scientific research/survey/monitoring and facilities

Contemporary.

Habitat.

Condition monitoring from ground: regular aerial photography; periodic review of extent and distribution from ground survey.

Fauna.

Surveys of heath areas for rare and scarce species, especially invertebrates.

Flora.

Monitoring response of vegetation composition to management, especially scrub clearance and extensive livestock grazing.

Habitat re-creation, monitoring colonisation by heath vegetation on land converted from forestry and agriculture.

Miscellaneous.

There are two research stations bordering the site (Institute of Terrestrial Ecology and Institute of Freshwater Ecology).

Completed.

Habitat.

Historical changes in extent (Moore, 1962; Webb, 1990); vegetation types and distribution in the site (Cox, 1994).

Flora.

Individual species: plants. Historical changes in occurrence (Byfield & Pearman, 1996); occurrence of rare and scarce species in the site (Edwards, 1997; Chapman, 1975; Cox, 1994).

Fauna.

Individual species: invertebrates. Survey of *Coenagrion mercuriale* sites (Winsland, 1994); occurrence of rare species in the site (Cox, 1994).

Habitat.

Habitat fragmentation. Effects on vegetational diversity and invertebrate fauna (Webb, 1989; Webb & Rose, 1994; Webb & Vermaat, 1990).

Habitat conditions. Environmental and management characteristics of wet heath and mire (Shaw & Wheeler, 1990); acidification (Bisset & Farmer, 1993); bog pool acidity and nutrient status (Schwagerl, 1996); wildfires (Bibby, 1976; Bullock & Webb, 1995).

Habitat re-creation. Identification of areas of greatest potential and ecological benefit (Rose & Webb, 1995; Veitch et al. 1994).

Misellaneous.

Public attitudes. Attitudes of people to heathland (English Nature, 1998).

26 Current conservation education

Visitor attractions: Two visitor centres serve the heaths close to the urban area and a third is planned. Conservation organisations and local authority countryside services offer a well publicised programme of events throughout the year, including guided walks, nature identification and management tasks. In summer there is a 'heathland week' with special events such as a heathland fair and traditional craft demonstrations.

Formal Education: Local authorities and several schools regularly use their local heaths for wildlife and cultural education. A computer programme on local heathland ecology has been developed by and for infant schools. There are three field study centres near the site offering educational courses. The heaths attract many project assignments from schools and further education students.

Interpretation: Large parts of the site are well provided with signs and, in places, interpretation panels. There are also many nature reserve leaflets, some self guided trail leaflets and booklets on the heathland.

27 Current recreation and tourism

Activities, Facilities provided and Seasonality.

Land-based recreation:

Walking, dog -walking, horse riding, birdwatching, jogging and child play occurs on many parts of the site throughout the year. Locally on some heaths, mainly those in and near the urban area, the level of use is high and can have detrimental effects on habitats and species. There is an ongoing programme of managing these recreational pressures through management plans and educational work implemented by nature conservation organisations and local authority countryside services.

The urban fringe heaths attract unauthorised motor bike and mountain bike scrambling throughout the year. An ongoing programme of access control, police action and wardening has reduced motor bike scrambling to a few remaining localities and is continuing to target regular problem localities for mountain bike scrambling.

There are several caravan and camping sites adjacent to parts of the heathland, used mainly during summer. The disposal of waste water from some sites may be a source of poor water quality locally and consents for these discharges are to be reviewed by the Environment Agency.

At Studland very large numbers of visitors are attracted to the beach and dunes, especially during high summer. Wetland behind the coast is little impacted.

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.

Bignal, 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.