

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: 01 October 1998

3. Country:

UK (England)

4. Name of the Ramsar site:

Dorset Heathlands

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:

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 39 00N 02 09 33W

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: Poole

Dorset Heathlands lies adjacent to the coast of central southern England

Administrative region: Dorset

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 6730.15

Min.	1
Max.	72
Mean	27

12. General overview of the site:

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

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.

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, 2, 3

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

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

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

Ramsar criterion 2

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

Ramsar criterion 3

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.

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	acidic, neutral, sand, clay, peat, nutrient-poor, sedimentary
Geomorphology and landscape	lowland, coastal, valley, slope
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	Annual averages (Everton, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/everton.html) Max. daily temperature: 14.0° C Min. daily temperature: 7.0° C Days of air frost: 32.5 Rainfall: 763.7 mm Hrs. of sunshine: 1750.7

General description of the Physical Features:

The Dorset Heathlands cover an extensive complex of heathland sites at the western edge of the Hampshire Basin in southern England. The area is centred around the large estuary of Poole Harbour and lies in close proximity to the urban conurbation of Bournemouth and Poole. Past losses of the heathland (an estimated 75% during the 20th century to development, agriculture and afforestation) have left the remaining heaths in a highly fragmented state. Despite this decline and fragmentation, the heaths show a high degree of ecological cohesion. They contain large areas of dry heath, wet heath and acid valley mire, all habitats that are restricted to the Atlantic fringe of Europe. The examples of the Dorset Heathlands are among the best of their type in the UK. There are also transitions to coastal wetlands and floodplain fen habitats.

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).

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18. Hydrological values:

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

Recharge and discharge of groundwater

19. Wetland types:

Inland wetland

Code	Name	% Area
Other	Other	77.8
W	Shrub-dominated wetlands	8.9
U	Peatlands (including peat bogs swamps, fens)	7.5
O	Freshwater lakes: permanent	1.7
Xf	Freshwater, tree-dominated wetlands	1.3
E	Sand / shingle shores (including dune systems)	1.2
Xp	Forested peatland	1
Tp	Freshwater marshes / pools: permanent	0.3
4	Seasonally flooded agricultural land	0.2
M	Rivers / streams / creeks: permanent	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.

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.

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.

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

Lower Plants.

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

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:

Dartford warbler , <i>Sylvia undata</i> , Europe	418 pairs, representing an average of 26.1% of the GB population (Three count mean 1991-2 & 1994)
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Species with peak counts in winter:

Hen harrier, <i>Circus cyaneus</i> , Europe	20 individuals, representing an average of 2.6% of the GB population (Count as at 1991/2)
Merlin , <i>Falco columbarius</i> , Europe	15 individuals, representing an average of 1% of the GB population (Count as at 1991/2)

Species Information

Species occurring at levels of international importance.

Invertebrates.

Coenagrion mercuriale.

Nationally important species occurring on the site.

Invertebrates.

Bidessus unistiatus, Buckleria paludum, Chrysops sepulchralis, Crambus silvella, Cryptocephalus biguttatus, Cyclophora pendularia, Donacia bicolora, Eristalis cryptarum, Formica candida (=transkaucaasia), 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 kiesewetteri, Stethophyma grossum, Tipula marginata, Zora armillata, Sedina buettneri.

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
- Archaeological/historical site
- Environmental education/ interpretation
- Livestock grazing
- Non-consumptive recreation
- Scientific research

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	+	+

Collection of non-timber natural products: (unspecified)	+	
Commercial forestry	+	+
Rough or shifting grazing	+	
Permanent pastoral agriculture	+	+
Hunting: recreational/sport	+	+
Industry		+
Sewage treatment/disposal		+
Harbour/port		+
Flood control		+
Mineral exploration (excl. hydrocarbons)	+	+
Mining/quarrying	+	+
Oil/gas exploration		+
Oil/gas production	+	+
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?
Acid rain	1	Modelling by the relevant air quality authority indicates that the average or minimum deposition from airborne SO _x and NO _x exceed the maximum critical load for acidity on at least part of the site.	+	+	
Pollution – unspecified	1		+	+	+

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	+	
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.

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 (Centre for Ecology and Hydrology and Freshwater Biological Association).

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; Hill & Edwards 2003; Edwards & Pearman 2004).

Fauna.

Individual species: invertebrates. Survey of *Coenagrion mercuriale* sites (Winsland 1994; Brash 2001a, 2001b); ecology and habitat requirements of *C. mercuriale* (Purse 2002); occurrence of rare species in the site (Cox 1994; Booth 1998; North 1998; Warne 2001); ecology and habitat requirements of rare species in the site (North 2000; Cheeseman *et al.* 2001).

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; Webb 1997; Kirby & Tantrum 1999).

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).

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.

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.

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, 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, in particular through funding under the European Commission LIFE programme.

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.

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

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