

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:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

--	--	--	--	--	--

Site Reference Number

2. Date this sheet was completed/updated:

Designated: 28 November 1985

3. Country:

UK (England)

4. Name of the Ramsar site:

Leighton Moss

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):

54 10 03 N 02 47 31 W

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: Lancaster

Leighton Moss lies between Warton and Silverdale on the eastern edge of Morecambe Bay.

Administrative region: Lancashire

10. Elevation (average and/or max. & min.) (metres): **11. Area (hectares):** 128.61

Min. 5

Max. 5

Mean 5

12. General overview of the site:

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

Leighton Moss is the largest reedbed in north-west England and is situated on the eastern edge of Morecambe Bay in Lancashire. Large areas of open water are surrounded by extensive reedbeds in which areas of willow scrub and mixed fen vegetation also occur. A typical and varied fen flora has developed in part, whilst the reedbed shows all stages of seral transition from open water through to woodland.

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

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

An example of large reedbed habitat characteristic of the biogeographical region. The reedbeds are of particular importance as a northern outpost for breeding populations of great bittern *Botaurus stellaris*, Eurasian marsh harrier *Circus aeruginosus* and bearded tit *Panurus biarmicus*.

Ramsar criterion 3

The site supports a range of breeding birds including great bittern *Botaurus stellaris*, Eurasian marsh harrier *Circus aeruginosus* and bearded tit *Panurus biarmicus*.

Species occurring in nationally important numbers outside the breeding season include northern shoveler *Anas clypeata* and water rail *Rallus aquaticus*

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, clay, peat, nutrient-rich, sedimentary, limestone
Geomorphology and landscape	lowland, coastal, floodplain
Nutrient status	mesotrophic
pH	alkaline
Salinity	fresh
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Blackpool, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/blackpool.html) Max. daily temperature: 12.9° C Min. daily temperature: 6.4° C Days of air frost: 40.3 Rainfall: 871.3 mm Hrs. of sunshine: 1540.3

General description of the Physical Features:

Leighton Moss is the largest reedbed in this region. It was originally a peatbog and was pump-drained and cultivated during the early 1900s and then allowed to revert to reedbed between the First and Second World Wars. As well as reedbeds, there are extensive areas of open water, large areas of tussock-sedge *Carex* spp. and transitional communities through fen to willow *Salix* spp. scrub and woodland. A typical and varied fen flora has developed in part, whilst the reedbed shows all stages of serial transition from open water through to woodland.

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).

Base-rich water flows into the marsh from the surrounding limestone hills.

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:

Inland wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	73.7
O	Freshwater lakes: permanent	16.8
W	Shrub-dominated wetlands	9.5

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.

No ecological features described on this site.

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.*

None reported

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:

Eurasian marsh harrier , *Circus aeruginosus*, 2 pairs, representing an average of 1.3% of the Europe GB population (Source period not collated)

Species with peak counts in spring/autumn:

Northern shoveler , *Anas clypeata*, NW & C Europe 166 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Water rail , *Rallus aquaticus*, Europe 14 individuals, representing an average of 3.1% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Mammals.*Lutra lutra***Invertebrates.***Sphserophoria loewi, Photedes captiuncula***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)

Environmental education/ interpretation

Non-consumptive recreation

Scientific research

Tourism

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)	+	+
Private	+	

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	
Commercial forestry		+
Cutting of vegetation (small-scale/subsistence)		+
Grazing (unspecified)		+
Rough or shifting grazing		+

Permanent pastoral agriculture		+
Transport route		+
Non-urbanised settlements		+

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?
Sedimentation/siltation	1	Natural processes causing sedimentation. This results in increased turbidity and loss of aquatic flora and subsequently decreased quality of bittern habitat.	+	+	+
Pollution – pesticides/agricultural runoff	2	Slurry from adjacent dairy farm and inorganic compounds from other agricultural sources.		+	+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?
 Pollution – pesticides/agricultural runoff - The cut off drains on adjacent farmland will be renovated. Additional measures to reduce diffuse agricultural pollution include those to be implemented under the Water Framework Directive and new incentives under changes to the Common Agricultural Policy through the Single Farm Payment Scheme and Environmental Stewardship Scheme, including adherence to “Codes of Good Agricultural Practice.”

Is the site subject to adverse ecological change? YES

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)	+	+
Special Protection Area (SPA)	+	
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.

Fauna.

Numbers of migratory birds and wildfowl and waders are monitored annually as part of the national Irish Wetland Birds Survey (I-WEBS) organised by the IWC Birdwatch Ireland, the National Parks and Wildlife Service (Ireland) and the Wildfowl and Wetlands Trust.

Considerable amounts of research continues to be undertaken by the RSPB on bittern and bearded tit feeding/breeding ecology, in addition to reedbed management.

Invertebrate data is collected by volunteers and specialist on a regular basis.

Environment.

Daily weather records, water level and water quality monitoring is undertaken by RSPB wardening staff.

Visitor usage and visitor numbers are monitored on a daily basis at this extremely popular and well visited RSPB bird reserve.

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 Royal Society for the Protection of Birds employs a number of warden-teachers who undertake environmental educational work and escort large numbers of school parties around Leighton Moss throughout most of the year. Various educational programmes are also run for adults and a series of public guided walks have become popular in more recent years. The RSPB has excellent visitor and school room facilities as part of its interpretative centre on the reserve.

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.

The RSPB employs a number of warden-teachers who undertake environmental educational work and escort large numbers of school parties around Leighton Moss throughout most of the year. Various educational programmes are also run for adults and a series of public guided walks have become popular in more recent years.

The RSPB has excellent visitor and school room facilities as part of its interpretative centre on the reserve.

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

Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge

Gray, LC (1980) *Environmental bibliography of north-west England (vice-counties 59, 60, 69 and 70) 1850–1979*. University of Lancaster Library, Lancaster (Library Occasional Paper, No. 10)

Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge.
www.wwt.org.uk/publications/default.asp?PubID=14

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.)

Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.)
www.jncc.gov.uk/UKSPA/default.htm

Wilson, J (n.d. [~1989]) *Leighton Moss and Morecambe Bay Reserve. The first twenty-five years 1964–1988*. Royal Society for the Protection of Birds

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org