

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: 07 November 1991

3. Country:

UK (Wales)

4. Name of the Ramsar site:

Llyn Idwal

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):

53 06 55 N 04 01 29 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: Bangor

Llyn Idwal lies 17.5 km SSE of Bangor in the Snowdonia mountains of north Wales.

Administrative region: Gwynedd

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 13.51

Min. 378

Max. 380

Mean 378

12. General overview of the site:

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

A relatively shallow oligotrophic lake, with a species-rich flora with nearly all species typical of such waters in Britain being represented. These include six-stamened waterwort *Elatine hexandra*, pillwort *Pilularia globulifera* and awlwort *Subularia aquatica*. There are small areas of emergent vegetation. Biologically it is a relatively rich lake.

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

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

A small, shallow, oligotrophic corrie lake. The semi-circular rock basin (or cwm) containing the lake is one of the finest examples in Snowdonia.

Ramsar criterion 2

Species-rich plant community, including almost all of the species typical of oligotrophic waters in Britain. Notable species include *Elatine hexandra* and *Subularia aquatica* (both nationally scarce) and *Pilularia globulifera* (vulnerable at a European level).

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, basic, sand, mud, nutrient-poor, igneous, peat, gravel, pebble, cobble, boulder
Geomorphology and landscape	upland, island, hilly, crags/ledges, cliffs, basins
Nutrient status	oligotrophic
pH	circumneutral
Salinity	fresh
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Colwyn Bay, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/colwyn_bay.html) Max. daily temperature: 13.3° C Min. daily temperature: 6.9° C Days of air frost: 22.5 Rainfall: 788.1 mm Hrs. of sunshine: 1499.1

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).

Llyn Idwal has a small but precipitous catchment with relatively large areas of heathland and base-rich bare rock. The chemistry of the water is indicative of nutrient-poor conditions but Idwal exhibits relatively high alkalinity and pH values. The conservation importance of the site lies

primarily in the representation of a nutrient-poor mountain lake system and a macrophyte assemblage which includes a number of rare species.

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
O	Freshwater lakes: permanent	100

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.

Submerged aquatic flora in an oligotrophic lake associated with base-poor conditions. *Pilularia globulifera*, *Subularia aquatica*, *Littorella uniflora*, *Isoetes lacustris*, *Lobelia dortmanna* and *Sparganium angustifolium* are all present.

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.

Elatine hexandra, *Subularia aquatica*, *Pilularia globulifera*.

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

None reported

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
- Non-consumptive recreation

Sport fishing
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)	+	

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Recreation		+
Current scientific research	+	+
Fishing: recreational/sport	+	
Grazing (unspecified)		+

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?

No factors reported	NA				

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)	+	
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.

Miscellaneous.

Palaeolimnological assessment of effects of acid deposition (BSc dissertation) (ref.?).

Study of recent environmental change in selected standing waters in Wales (Bennion 1996; Bennion *et al.* 1997).

Ecology and conservation history of Llyn Idwal & Cwellyn (Duigan *et al.* 1998).

Survey for *Luronium natans* in 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.

Site is provided with interpretive material and educational groups often use the surrounding land for geology, geography and biology studies. Limited guided walks given by CCW/NT/SNP wardens/staff.

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.

Most activities are walkers on the surrounding land. Very few people use the site itself - a few anglers (seldom seen now) and one or two brave people in the summer for swimming in the lake.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Countryside Division, Welsh Assembly Government, Cathays Park, Cardiff, CF1 3NQ

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 Safeguard Officer, International Designations, Countryside Council for Wales, Maes-y-Ffynnon, Penrhosgarnedd, Bangor, Gwynedd, LL57 2DW

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

- Bassett, DE (ed.) (1986) National Nature Reserves in Wales: a systematic survey. 7. Cwm Idwal NNR, Gwynedd. *Nature in Wales*, NS,3(1/2) (1984), 79-90
- Bennion, H (ed.) (1996) A study of recent environmental change within selected standing waters in Wales. *CCW Contract Science*, No. 130
- Bennion, H, Allott, TEH, Appleby, PG, Hunt, M, Oliver, E & Patrick, ST (1997) A study of recent environmental change within selected standing waters proposed as Special Areas of Conservation (SAC) in Wales – Llyn Idwal, Llyn Cwellyn and Llyn Safadden (Llangorse Lake) Phase II. *CCW Contract Science*, No. 187
- Duigan, CA, Allott, TEH, Monteith, DT, Patrick, ST, Lancaster, J & Seda, JM (1998) The ecology and conservation of Llyn Idwal and Llyn Cwellyn (Snowdonia National Park, north Wales, UK) – two lakes proposed as special areas of conservation in Europe. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 8(3), 325-360
www3.interscience.wiley.com/cgi-bin/abstract/10006549/ABSTRACT
- Jones, PS, Stevens, DP, Blackstock, TH, Burrows, CR & Howe, EA (eds.) (2003) *Priority habitats of Wales: a technical guide*. Countryside Council for Wales, Bangor
- Radford, GL (2005) Monitoring vegetation change in the Eryri SAC. Fifth repeat survey and final report for Cwm Idwal. *CCW Contract Science Report*, No. 702
- 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.)
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