

**European Community Directive
on the Conservation of Natural Habitats
and of Wild Fauna and Flora
(92/43/EEC)**

**Second Report by the United Kingdom under
Article 17
on the implementation of the Directive
from January 2001 to December 2006**

**Conservation status assessment for
Habitat:**

**H3140 - Hard oligo-mesotrophic waters with
benthic vegetation of *Chara* spp.**

The information in this assessment corresponds to the "habitat fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

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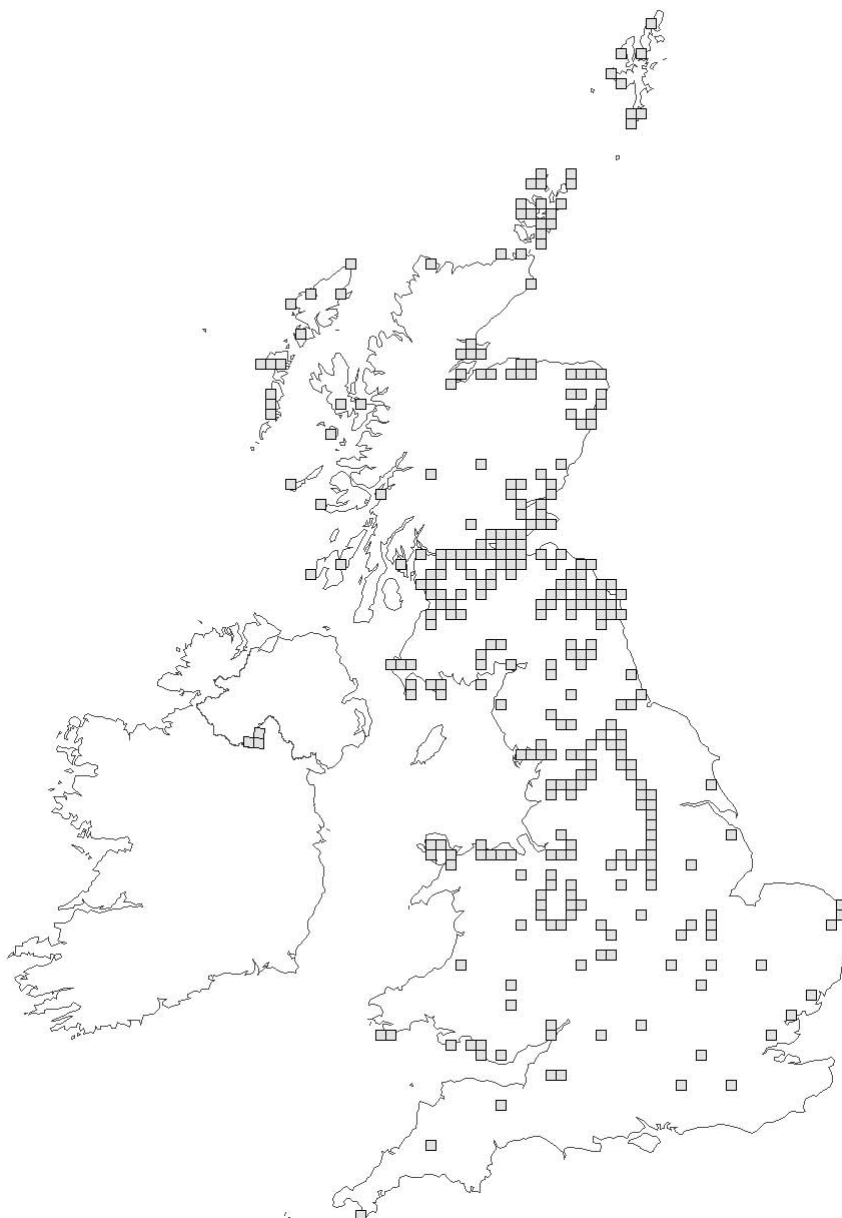
Habitat Name: Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.

1. National level

| | |
|---|-------|
| Habitat Code | H3140 |
| Member State | UK |
| Biogeographic regions concerned within the MS | ATL |



1.2 Habitat distribution map



2. Biogeographic level

2.1 Biogeographic region or marine region

ATL

2.2 Published sources and/or websites

BURGESS A, GOLDSMITH B, HATTON-ELLIS T. 2006. Site Condition Assessments of Welsh SAC and SSSI Standing Water Features. CCW Contract Science Report 705. Bangor, CCW.

CARVALHO L, MABERLY S, MAY L, REYNOLDS C, HUGHES M et al. 2005. Risk Assessment Methodology for Determining Nutrient Impacts in Surface Water Bodies. Rep. SC020029/SR, Environment Agency, Bristol

DAVIDSON T, BENNION H, YANG H, APPLEBY P, LUCKES S. 2002. Investigation of environmental change at the Bosherton Lakes, Pembrokeshire. CCW Contract Science Report 496.. Bangor, Countryside Council for Wales (CCW).

DAVIDSON T, APPLEBY PG. 2003. The Environmental History of Kenfig Pool. CCW Contract Science Report 561. Bangor, Countryside Council for Wales (CCW).

DAVIDSON TA, SAYER CD, PERROW MR, TOMLINSON ML. 2003. Representation of fish communities by scale sub-fossils in shallow lakes: implications for inferring percid-cyprinid shifts. *Journal of Palaeolimnology*, 30, 441-449.

DAVIDSON TA, SAYER CD, BENNION H, DAVID C, ROSE N, WADE MP. 2005. A 250 year comparison of historical, macrofossil and pollen records of aquatic plants in a shallow lake. *Freshwater Biology*, 50, 1671-1686.

DUIGAN C, KOVACH W, PALMER M. 2006. *Vegetation Communities of British Lakes: a revised classification*. Peterborough, Joint Nature Conservation Committee (JNCC).

ENGLISH NATURE. 2001. *Lowland Calcareous Grassland: a scarce and special resource*. A5 booklet

HUGHES M, HORNBY DD, BENNION H, KERNAN M, HILTON J et al. 2004. The development of a GIS-based inventory of standing waters in Great Britain together with a risk-based prioritisation protocol. *Water, Air and Soil Pollution: Focus* 4:73-84

JAMES C, FISHER J, RUSSELL V, COLLINGS S, MOSS B. 2005. Nitrate availability and hydrophyte species richness in shallow lakes. *Freshwater Biology*, 50, 1049-1063.

JOINT NATURE CONSERVATION COMMITTEE (JNCC) 2005. *Common Standards Guidance for Standing Waters*. JNCC, Peterborough.

MOOIJ WM, HULSMANN, S, DOMIS LND, NOLET BA, BODELIER PLE et al. 2005. The impact of climate change on lakes in the Netherlands: a review. *Aquatic Ecology* 39(4):381-400

PALMER, M, ROY, DB 2002. An estimate of the extent of dystrophic, oligotrophic, mesotrophic and eutrophic standing fresh water in Great Britain. JNCC Report No. 317. JNCC, Peterborough.

STEWART NF. 2004. *Important Stonewort Areas of the United Kingdom*. Salisbury, Plantlife International.

UK TECHNICAL ADVISORY GROUP (UKTAG) 2004. *Guidance on Typology for Lakes for the UK*. Available via the internet at www.wfduk.org

WOLFE-MURPHY, SA, LAWRIE, EW, SMITH, SJ & GIBSON, CE 1992. *Northern Ireland Lakes Survey*. Unpublished report to Northern Ireland Department of Environment, Belfast

ZHAO Y, SAYER CD, BIRKS HH, HUGHES M, PEGLAR SM. 2006. Spatial representation of aquatic vegetation by macrofossils and pollen in a small and shallow lake. *Journal of Palaeolimnology*, 35, 335-350.

Map data sources

JNCC International Designations Database. Joint Nature Conservation Committee

2.3 Range of the habitat within the Biogeographic or marine region

| | |
|--|--------|
| 2.3.1 Surface area of range in square km | 113952 |
|--|--------|

| | |
|---|---|
| 2.3.2 Date of range determination | 05/2007 |
| 2.3.3 Quality of data concerning range | Moderate |
| 2.3.4 Range trend | Stable (=) |
| 2.3.5 Range trend magnitude in % | Not applicable |
| 2.3.6 Range trend period | 1994-2006 |
| 2.3.7 Reasons for reported trend | Not applicable |
| 2.4 Area covered by habitat type within the range in the biogeographical region concerned. | |
| 2.4.1 Surface area of the habitat type (sq km) | 58.8 |
| 2.4.2 Date of area estimation | 05/2007 |
| 2.4.3 Method used for area estimation | 3 - Ground based survey |
| 2.4.4 Quality of data on area | Moderate |
| 2.4.5 Area trend | unknown (X) |
| 2.4.6 Area trend magnitude in % | Not applicable |
| 2.4.7 Area trend period | 1994-2006 |
| 2.4.8 Reasons for reported trend | Not applicable |
| 2.4.9 Justification of % thresholds for trends (optional) | Not applicable |
| 2.4.10 Main pressures | 421 - disposal of household waste; 701 - water pollution; 702 - air pollution; 930 - Submersion; |
| 2.4.11 Threats | 421 - disposal of household waste; 701 - water pollution; 702 - air pollution; 900 - Erosion; 930 - Submersion; 952 - eutrophication; |
| Complementary information | |
| 2.5.1 Favourable reference range (sq km) | 95656 |
| 2.5.2 Favourable reference area (sq km) | Unknown |
| 2.5.3 Typical species | none listed |
| 2.5.4 Typical species assessment | Not applicable |
| 2.5.5 Other relevant information | |
| 2.6 Conclusions (assessment of conservation status at end of reporting period) | |
| (2.3) Range | (FV) - Favourable |
| (2.4) Area | (XX) - Unknown |
| (2.5) Specific structures and functions (incl. typical species) | (U2-) - Bad and deteriorating |
| Future prospects | (U1-) - Inadequate and deteriorating |
| Overall assessment | (U2-) - Bad and deteriorating |