

**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  
Species:  
S1095 - *Petromyzon marinus* - Sea lamprey**

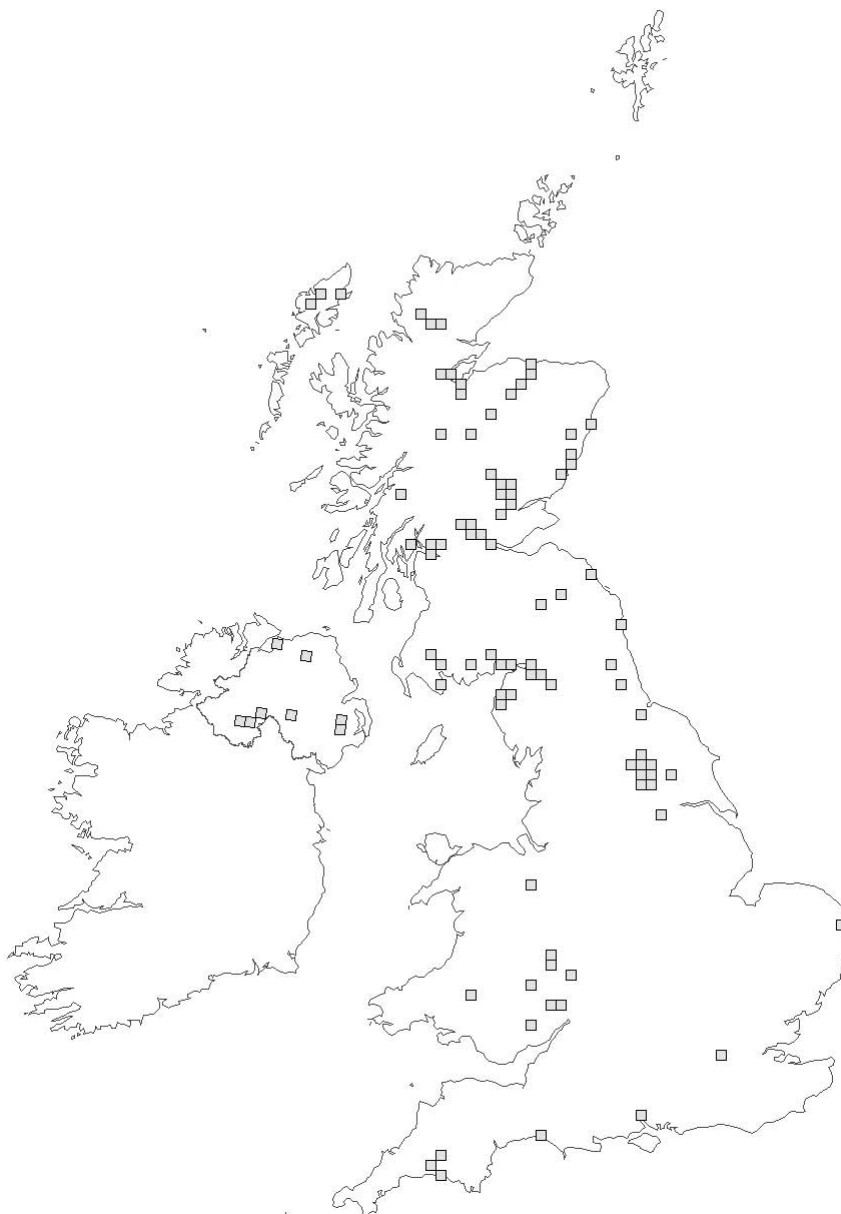
The information in this assessment corresponds to the "species fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

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**Species Name: *Petromyzon marinus***

<b>1. National level</b>	
Species Code	S1095
Member State	United Kingdom
Biogeographic regions concerned within the Member state	ATL
1.1 Range map	 A map of the United Kingdom showing the distribution of <i>Petromyzon marinus</i> . The map includes the main islands of Great Britain and Ireland, as well as the Channel Islands and the Shetland Islands. Shaded areas indicate the range of the species, which is primarily concentrated in the Scottish Highlands and the Scottish Islands, with smaller shaded areas in the English Lake District and the Pennines. Small squares are scattered across the map, likely representing specific collection sites or localities.

## 1.2 Distribution map



## 2. Biogeographic level

### 2.1 Biogeographic region

ATL

### 2.2 Published sources and/or websites

APEM. 2004. Assessment of sea lamprey distribution and abundance in the River Spey: Phase II. Scottish Natural Heritage Commissioned Report No. 027.

APEM. 2005. Lamprey survey of the Rivers Tywi, Teifi and Cleddau. Review of consents report no. 7 for Environment Agency and Countryside Council for Wales.

Bellflask Ecological Survey Team (BEST). 2005. Survey of adult sea lamprey spawning and habitat availability in the Rivers Ure, Swale, Wharfe, Nidd and Derwent. Report for ALSF, English Nature and The Environment Agency.

Centre for Environment Fisheries and Aquatic Science (CEFAS) and Environment Agency. 2006. Annual assessment of salmon stocks and

fisheries in England and Wales, 2005. Environment Agency, Cardiff.

DAVIES, CE, SHELLEY, J, HARDING, PT, MCLEAN, IFG, GARDINER, R AND PEIRSON, G (eds.). 2004. Freshwater fishes in Britain. The species and their distribution. Harley Books, Colchester.

Ecological Research Associates (ERA). 2005. A national lamprey survey of Scotland. Report for Scottish Natural Heritage, Clydebank.

HARVEY J AND COWX I. 2003. Monitoring the River, Brook and Sea Lamprey, *Lampetra fluviatilis*, *L. planeri* and *Petromyzon marinus*. Conserving Natura 2000 Rivers Monitoring Series No. 5, English Nature, Peterborough.

[http://www.english-nature.org.uk/lifeinukrivers/publications/lamprey\\_monitoring.pdf](http://www.english-nature.org.uk/lifeinukrivers/publications/lamprey_monitoring.pdf)

HARVEY, JP, NUNN, AD AND COWX, I. 2006. Survey of larval lamprey (ammocoetes and transformers) in the Yorkshire Ouse and Derwent catchments, 2004. Report to the Environment Agency (Dales Area).

LAUGHTON, R. AND BURNS, S. 2003. Assessment of sea lamprey distribution and abundance in the River Spey: Phase III. Scottish Natural Heritage Commissioned Report No. 043.

MAITLAND, PS. 1980. Review of the ecology of lampreys in northern Europe. Canadian Journal of Fisheries and Aquatic Sciences. 37, 1944-1952.

MAITLAND, PS. 2000. Guide to Freshwater Fish of Britain and Europe. Hamlyn, London.

MAITLAND, PS. 2003. Ecology of the River, Brook and Sea Lamprey. Conserving Natura 2000 Rivers, Ecology Series No. 5. English Nature, Peterborough.

<http://www.english-nature.org.uk/LIFEinUKRivers/publications/lamprey.pdf>

MAITLAND, PS AND CAMPBELL, RN. 1992. Freshwater Fishes of the British Isles. Harper Collins, London.

MCLEOD, CR, YEO, M, BROWN, AE, BURN, AJ, HOPKINS, JJ, AND WAY, SF (eds.). 2007 The Habitats Directive: selection of Special Areas of Conservation in the UK. 2nd edn. Joint Nature Conservation Committee, Peterborough [www.jncc.gov.uk/SACselection](http://www.jncc.gov.uk/SACselection).

#### Map Data Sources

##### GB records:

Biological Records Centre - Database for the Atlas of Freshwater Fishes (1637-2003) (via NBN Gateway).

##### Northern Ireland records:

Jackson, D.L. and McLeod, C.R. (eds.). 2000. Report 312 - Handbook on the

	UK status of EC Habitats Directive interest features: provisional data on the UK distribution and extent of Annex I habitats and the UK distribution and population size of Annex II species. Revised 2002. Peterborough: Joint Nature Conservation Committee. Available online at: <a href="http://www.jncc.gov.uk/page-2447">http://www.jncc.gov.uk/page-2447</a>			
<b>2.3 Range of species in the biogeographic region or marine region</b>				
2.3.1 Surface range of the species (sq km)	24987			
2.3.2 Date of range determination	1990-2003			
2.3.3 Quality of data concerning range	Moderate			
2.3.4 Range trend	Increasing (+)			
2.3.5 Range trend magnitude (%)	Unknown			
2.3.6 Range trend period	1994-2006			
2.3.7 Reasons for reported trend	3 - Direct human influence; 4 - Indirect anthropo or zoogenic influence;			
<b>2.4 Population</b>				
2.4.1 Population size estimation	Minimum	Unknown	Maximum	Unknown
	Units			
2.4.2 Date of population estimation	05/2007			
2.4.3 Method used for population estimation	1 - Based on expert opinion			
2.4.4 Quality of population data	Poor			
2.4.5 Population trend	Unknown (X)			
2.4.6 Population trend magnitude (%)	Not applicable			
2.4.7 Population trend period	2001-2006			
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	221 - bait digging; 300 - Sand and gravel extraction; 420 - Discharges; 701 - water pollution; 811 - management of aquatic and bank vegetation for drainage purposes; 820 - Removal of sediments (mud...); 830 - Canalisation; 850 - Modification of hydrographic functioning, general; 852 - modifying structures of inland water courses; 853 - management of water levels; 951 - drying out / accumulation of organic material; 952 - eutrophication; 953 - acidification;			
2.4.11 Threats	221 - bait digging; 300 - Sand and gravel extraction; 420 - Discharges; 701 - water pollution; 811 - management of aquatic and bank vegetation for drainage purposes; 820 - Removal of sediments (mud...); 830 - Canalisation; 850 - Modification of hydrographic functioning, general; 852 - modifying structures of inland water courses; 853 - management of water levels; 951 - drying out / accumulation of organic material; 952 - eutrophication; 953 - acidification;			
<b>2.5 Habitat for the species in the biogeographic region or marine region</b>				
2.5 Habitats for the species	Clean well-oxygenated river gravels for spawning with suitable nearby hiding places.			

	Good water quality, and slower flowing nursery areas of sandy silt for juveniles. The adult stage migrates to, and feeds in, the sea. Therefore they also require a clear migration route from the sea to their spawning grounds, with suitable river flows and no barriers. Relatively little is known about the marine habitats occupied by <i>P. marinus</i> nor is it certain which fish are the main prey species (Maitland, 2003).
2.5.2 Area estimation (sq km)	Unknown
2.5.3 Date of estimation	05/2007
2.5.4 Quality of data	Poor
2.5.5 Trend of the habitat	Increasing (+)
2.5.6 Trend period	2002-2006
2.5.7 Reasons for reported trend	3 - Direct human influence;
<b>2.6 Future prospects</b>	
2.6 Future prospects for the species	Poor prospects_Species likely to struggle unless conditions change
<b>2.7 Complementary information</b>	
2.7.1 Favourable reference range (sq km)	24987
2.7.2 Favourable reference population	
2.7.3 Suitable Habitat for the species	Unknown
2.7.4 Other relevant information	
<b>2.8 Conclusions</b> <i>(assessment of conservation status at end of reporting period)</i>	
(2.3) Range	(FV) - Favourable
(2.4) Population	(XX) - Unknown
(2.5) Habitat for the species	(U1+) - Inadequate but improving
(2.6) Future prospects	(U1+) - Inadequate but improving
Overall assessment	(U1+) - Inadequate but improving