# LAMPREYS

#### Action Plan Scope:

This Action Plan covers sea lamprey (*Petromyzon marinus*), river lamprey (*Lampetra fluviatilis*) and brook lamprey (*Lampetra planeri*)

## 1. CURRENT STATUS

#### 1.1 Legislation and priority status

International Habitats Directive<sup>a</sup> (Annexes II ALL, Annex V - river lamprey)

Bern Convention (Appendix III)

UK and Wales Habitat Regulations (Schedule 3 - river lamprey)

SoCC°

Gwynedd None known

# 1.2 Status in Wales and beyond

All three species are described as widespread and common in Britain - but endangered (river lamprey) and vulnerable (brook and sea lampreys) in Europe<sup>d</sup>.

#### 1.3 Status in Gwynedde

No significant survey work has been carried out in Gwynedd, where all three species are known to be present. Known populations include:

- Sea lamprey River Seiont (adults), Mawddach estuary, Dyfi.
- River lamprey Gwyrfai (lower to middle reaches), no details available.
- Brook lamprey Gwyrfai, Seiont, Llyfni, no details available.

# 2. FACTORS AFFECTING THIS SPECIES IN GWYNEDD

- Water pollution, including diffuse agricultural runoff of insecticides, nitrates, and farm wastes; point source pollution including sewage discharge, drainage from mines and from quarries; - effects are both direct (toxic effects) and indirect (deoxygenation of water through eutrophication).
- Silt eroded from surrounding areas (as a result of management practices in the river catchment, for example overgrazing, afforestation) can smother important breeding habitats.
- River works can cause habitat degradation (especially important where spawning sites are affected) or pose barriers for returning fish (e.g. weirs or estuarial barrages).



 $<sup>^{\</sup>rm a}$  Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

<sup>&</sup>lt;sup>b</sup> European Conservation (Natural Habitats) Regulations 1994

<sup>&</sup>lt;sup>c</sup> UK Species of Conservation Concern List

d Biodiversity - A Species Audit for Wales.

<sup>&</sup>lt;sup>e</sup> Within this document the term "Gwynedd" refers to areas outside the Snowdonia National Park area, except where specified otherwise

f See also associated HAPs for more general factors affecting this species habitats

# LAMPREYS

#### 3. ASSOCIATED GWYNEDD SAPS / HAPS

Mudflats, Coastal and floodplain grazing marsh, River corridors, Lakes, ponds and ditches

Otter, Water vole, Salmonids, Freshwater pearl mussel, Floating water plantain, Pillwort.

# 4. CURRENT ACTION IN GWYNEDD

#### 4.1 Site and habitat protection

• Lampreys may occur in areas of habitat identified as potential Wildlife Sites, or designated as SSSI, candidate SAC or SPA. The presence of sea lamprey is included within the rationale for designation of the Mawddach Estuary SSSI (notified 1998).

#### 4.2 Management and programmes of action

- Some populations will have benefited from fish passes and diversion tunnels built for other species.
- Draft action plans have been produced for the three species as a basis for future conservation measures.
- A bilingual information leaflet (Lampreys a conservation message), contains information on lampreys and associated conservation issues, and encourages the public to report incidental catches and observations to Environment Agency Wales.
- Gwynedd Sustainable Angling Initiative is using Objective 1 funding to enhance the habitat of some of Gwynedd's river catchments of importance for fisheries.
- The UK wide Water for Wildlife project (formerly Otters and Rivers Project), is run by the Wildlife Trusts, and aims to carry out conservation work with local communities in riverside and wetland habitats. There is currently a Wales manager, who will be joined in the near future by a North Wales project officer.
- As part of the Clean Rivers Project (Keep Wales Tidy), there are currently five River Care groups in Gwynedd (outside Snowdonia National Park).
- Local Sea Fisheries bylaws

#### 4.3 Survey, research and monitoring

• General quality assessments are carried out every five years by Environment Agency Wales which determine the water quality and invertebrate fauna of all major waterways.

#### 5. ACTION PLAN OBJECTIVES

- 1. To establish the current status and distribution in Gwynedd of the three native species of lamprey.
- 2. To protect, maintain and enhance existing lamprey populations and associated habitats, in particular spawning and nursery grounds.
- 3. To increase awareness among anglers and other recreational users of river corridors, estuaries and lakes of conservation issues related to lampreys.
- 4. To use lampreys as flagship species to raise awareness of the importance of appropriate management of their associated habitats.

# **LAMPREYS**

# 6. PROPOSED ACTIONS

Code	Action	Partner(s) <sup>9</sup>
Policy and legislation		
1	Use planning conditions to ensure developments in sensitive locations are	GC, Relevant
	compatible with lamprey conservation	partners
	TARGET/TIMESCALE: Ongoing	
2	Include conservation actions for lampreys within all relevant EAWplans to be	EAW
	published in future	
	Target/TIMESCALE: Ongoing	
3	Ensure that relevant EAW plans are put in place for SSSI's where lampreys are	CCW, EAW
	known to be present	
	TARGE/TIMESCALE: To be set	
Species / habitat management and protection		
4	Where fish passes are present, ensure their maintenance and protection from	EAW, CCW
	possible upstream problems, including abstraction	
	TARGET/TIMESCALE: Ongoing	
5	Consider the provision of additional fish passes depending on the results of	EAW, CCW
	future surveys	
	TARGET: Ongoing	
Advisory		
	None	
Survey, research and monitoring		
6	Where appropriate and feasible, assist with the development of survey	EAW, CCW,
	techniques to determine juvenile populations for each species separately	CEH, UWB
	TARGET: Ongoing	
7	Organise a baseline survey of lamprey species within Gwynedd	EAW, CCW
	TARGET/TIMESCALE: To be set	
8	From the results of the baseline survey, and from records submitted by anglers	EAW, CCW,
	and others of incidental catches and sightings, identify future needs for survey	GC
	and protection of key areas	
	Target/TIMESCALE: To be set	
Communications and publicity		
9	Raise awareness, among anglers and other recreational users of relevant	EAW, GC,
	habitats, of the conservation issues associated with lampreys, in partialar the	KWT
	problems associated with their use as live or dead bait, and encourage the	
	reporting of incidental lamprey catches and sightings, through circulation of the	
	leaflet "Lampreys - a conservation message" among all angling clubs, River Care	
	groups, and Water sports centres in Gwynedd.	
	TARGET/TIMESCALE: circulate leaflets, amended to include local EAW contact	
	details, by 2005	

<sup>9</sup> Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

# 7 PARTNERS & OPPORTUNITIES

## 7.1 Overall Lead Partner for SAP

Environment Agency Wales (EAW)

## 7.2 Key partners

Centre for Ecology and Hydrology (CEH)

Countryside Council for Wales (CCW)

Gwynedd Council (GC)

Keep Wales Tidy (KWT)

University of Wales Bangor (UWB)

## 7.3 Opportunities

Recreational users, anglers, Clean Rivers Project Groups

# 8 ACKNOWLEDGEMENTS

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## 9. ABBREVIATIONS

BAP: Biodiversity Action Plan, HAP: Habitat Action Plan, SAC: Special Area of Conservation, SAP: Species Action Plan, SPA: Special Protection Area, SSSI: Site of Special Scientific Interest

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