1. CURRENT STATUS

1.1 Legislation and priority status

International None known

UK and Wales Wildlife and Countryside Act (Schedule 5)a

The Wild Mammals Protection Act 1996

UK BAP Priority Welsh 574 list^b

Gwynedd Snowdonia BAP

1.2 Status in Wales and beyond

The water vole^c is believed to be Britain's fastest declining mammal. Once common and widespread the species has declined significantly both in distribution and population over the last 100 years. A study in 1990 suggested that water voles had disappeared from 67% of previously occupied sites since 1900. This figure may now be over 90%. In 1995 a total British pre-breeding population was estimated at approximately 1,170,000 individuals. Water voles have been recorded in all counties in Wales but detailed knowledge of distribution and status remains limited. It is estimated that within Wales there is a pre-breeding population of around 40,000.

1.3 Status in Gwynedd

Recent surveys suggest that water voles are likely to be widespread throughout Gwynedd, especially in wetland and floodplain areas, and that the Llŷn Peninsula could possibly be a stronghold for water voles in Wales. This has been attributed to the relatively low level of mink sightings recorded in this area, although an increasing number of mink signs are being recorded.

The distribution of water vole sites within Gwynedd is not fully known. Sites have been identified on the Ogwen catchment, the Llyfni, Dwyfach and the Glaslyn flood plain, and on the Llŷn Peninsula within the Soch, Rhyd-hir, Erch and Penrhos river catchments. Water vole populations also occur within Snowdonia National Park including some river catchments that cross the Park boundary into Gwynedd.

^c Arvicola terrestris



a Section 9 only

^b Welsh Assembly Government, Going Wild in Wales - List of Species and Habitats of Principal Importance for the Conservation of Biological Diversity. Crown Copyright 2003.

2. FACTORS AFFECTING THIS SPECIES IN GWYNEDD

- Loss or degradation of riverbank, floodplain and ditch habitats, due to intensive engineering and bank protection / maintenance work, development for housing, industry, and / or recreational use, severe mowing / strimming, heavy grazing pressure, heavy shading by trees and shrubs and lack of appropriate ditch management
- Habitat fragmentation, leaving small isolated populations which are very fragile and restricting population expansion, as there are no suitable sites nearby for new recruits to establish their own territories
- Alteration of water levels -through land drainage, flood control, abstraction of water, and as a
 potential result of climate change, increased periods of flooding and / or increased
 occurrences of drought
- Increased levels of predation, particularly by North American mink Mustella vison, which is exacerbated by habitat degradation and fragmentation. Predation by cats is also a problem, especially in more "urban fringe" areas.
- Displacement by the brown rat, Rattus norvegicus.
- Poisoning (by rodenticides intended for brown rats) and pollution, notably from insecticides and / or farm waste)

3. ASSOCIATED GWYNEDD SAPS / HAPS

Coastal and floodplain grazing marsh, River corridors, Rhos pasture, Wetlands

Otter, Lampreys, Salmonids, Freshwater pearl mussel

4. CURRENT ACTION IN GWYNEDD

4.1 Site and habitat protection

- Where EIA's are required for proposed developments (e.g. for road building schemes), these include surveys for protected species including water voles. Where found to be present mitigation measures may be required. Environment Agency Wales also undertakes water vole surveys as part of EIA assessments for all internal works.
- Water voles may occur in areas of Gwynedd identified as potential Wildlife Sites, or designated as SSSI, candidate SAC or SPA.

4.2 Management and programmes of action

- Through North West Wales Riparian Mammals Group a riparian mammals project is being undertaken jointly between Gwynedd Council, Environment Agency Wales, Snowdonia National Park Authority, Menter Môn and North Wales Wildlife Trust which will include habitat enhancement work. The Gwynedd pilot area is the Glaslyn catchment, where work commenced in Spring 2003, and there is the potential for expansion of the project into further catchments in future.
- Environment Agency Wales Glaslyn marshes Water Level Management Plan includes management prescriptions for water vole.
- A water vole awareness-raising poster and recording form have been produced alongside an information leaflet for farmers and landowners.

 $^{^{\}rm d}$ See also associated HAPs for more general factors affecting this species' habitats

- 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.
- Water vole is one of the species eligible for funding from Countryside Council for Wales Species Challenge Fund.

4.3 Survey, research and monitoring

- Water vole survey training days for volunteers were organised by Gwynedd Council in 1999 and 2000, and a number of sites were surveyed, particularly on the Llŷn Peninsula.
- The riparian mammals project (see 4.2 above) includes surveys for otters, water vole and mink
- A database of water vole records is maintained by Menter Môn. Information from this and other databases is included in the Wales Water Vole Group database.
- A strategy for Water Voles in Wales is being drawn up by the Wales Water Vole Group and volunteer surveys are being co-ordinated by LBAP officers throughout Wales, including Gwynedd.

5. ACTION PLAN OBJECTIVES

- 1. To establish the current status and distribution of water vole in Gwynedd.
- 2. To protect, maintain and enhance existing water vole colonies and related habitats.
- 3. To restore and enhance other suitable sites including corridor habitat in order to link up water vole colonies and increase water vole population and distribution.
- 4. To use the water vole as a flagship species to raise awareness of the importance of appropriate management of its associated habitats.

6. PROPOSED ACTIONS

Code	Action	Partner(s) ^e
Policy o	and legislation	
1	Use planning conditions to ensure developments in sensitive locations are compatible with water vole conservation, especially those to be carried out in riverside locations or within other associated habitats TARGET/TIMESCALE: Ongoing	GC, Relevant partners
2	Include conservation actions for water voles within all relevant EAW Plans to be published in the future TARGET/TIMESCALE: Ongoing	EAW
3	Consider designating suitable sites of importance for water vole as Wildlife Sites TARGET/TIMESCALE: Start process of designation, By 2005	GC, Afon Dwyryd Otter Partnership, CCW, EAW, NWWT, Water for Wildlife
Species	/ habitat management and protection	
4	Identify key catchments and areas within catchments with the potential to form water vole strongholds, using Phase One habitat data, and the results of previous surveys. TARGET/TIMESCALE: By 2005	GC , CCW, EAW, NWWT
5	Continue and expand the riparian mammals project currently underway by sourcing additional grant aid, as part of a biodiversity grant scheme, which would include grants for appropriate management of known and potential water vole habitat, taking into account the needs of associated LBAP species and habitats TARGET/TIMESCALE: By 2005	GC, Relevant partners
6	Target management appropriate for water voles to the areas identified above. TARGET/TIMESCALE: Ongoing	EAW, CCW, GC, NWWT
7	Carry out mink control in accordance with animal welfare guidelines in localities where predation by mink is an immediate threat to water vole populations, especially within key catchment areas TARGET/TIMESCALE: As and when required, Ongoing	EAW, Menter Môn
8	Ensure that the potential presence and management requirements of water voles are considered within any relevant management plans or grant schemes (including NWMPs, WGS, Tir Gofal, ESA) by consultation with EAW biodiversity staff TARGET: Ongoing	EAW, CCW, DEPC, FC, GC
Advisor		
9	Provide advice and regular training on water vole conservation issues to development control officers, highways engineers, staff of EAW, including promoting future training events organised by Roads and Otters Steering Group. TARGET/TIMESCALE: To be set, Ongoing	GC, EAW, CCW
10	Provide advice on water voles and habitat management to landowners and land managers TARGET/TIMESCALE: Ongoing	EAW, FWAG Cymru, GC, NWWT, Water for Wildlife
Survey	research and monitoring	
11	Maintain water vole database. TARGET/TIMESCALE: Ongoing	Menter Môn
12	Organise regular surveys for water vole presence and breeding within Gwynedd, and the presence of mink, in partnership with local groups and volunteers, including local angling societies and River Care groups and those carrying out similar surveys in Snowdonia National Park and adjacent areas. Ensure that surveys are integrated within any Welsh / UK survey programmes TARGET/TIMESCALE: To be set, Ongoing	GC, EAW, KWT, NWWT, Water for Wildlife

 $^{\rm e}$ Lead partner for this action is indicated by bold typeface, see section 7.2 for explanation of abbreviations

Comm	Communications and publicity		
13	Distribute the information leaflet - The Water Vole Story - to landowners and managers at local events and shows. TARGET/TIMESCALE: Ongoing	GC, FWAG Cymru	
14	Raise awareness among landowners and managers of the legal protection afforded to this species, and of the potential impact on water voles of ditch management, rat control and of cats, through publishing articles in relevant publications and giving talks to relevant groups (e.g. publications and local meetings of farming unions) TARGET/TIMESCALE: Ongoing	GC, CCW, DEPC, FWAG Cymru, NWWT, Water for Wildlife	
15	Encourage the recording of water vole sightings by the general public, to be passed to Menter Môn for collation through submission of press releases to local newspapers on an annual basis, and the provision of detailed advice on request TARGET/TIMESCALE: Orgoing	GC, EAW, NWWT	

7 PARTNERS & OPPORTUNITIES

7.1 Overall lead partner for SAP

Environment Agency Wales (EAW)

7.2 Key partners

Afon Dwyryd Otter Partnership

Countryside Council for Wales (CCW)

Department for Environment, Planning and Countryside (Welsh Assembly Government) (DEPC)

Forestry Commission (FC)

Farming and Wildlife Advisory Group Cymru (FWAG Cymru)

Gwynedd Council (GC)

Keep Wales Tidy (KWT)

Menter Môn

North Wales Wildlife Trust (NWWT)

Water for Wildlife

7.3 Opportunities

 $Volunteers, \ students, \ anglers, \ local \ otter \ partnerships \ / \ groups, \ farming \ unions, \ landowners \ and \ managers, \ Clean \ Rivers \ Project \ groups$

8. ACKNOWLEDGEMENTS

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9. ABBREVIATIONS

BAP: Biodiversity Action Plan, EIA: Environmental Impact Assessment, ESA: Environmentally Sensitive Area, HAP: Habitat Action Plan, LBAP: Local Biodiversity Action Plan, NWMP: Native Woodland Management Plan, SAC: Special Area of Conservation, SAP: Species Action Plan, SPA: Special Protection Area, SSSI: Site of Special Scientific Interest, WGS: Woodland Grant Scheme

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