

SPECIES ACTION PLAN : Water Vole (*Arvicola terrestris*)

Associated Species Action Plans	1. Current Status
Amphibians	The water vole is found in riparian habitat throughout mainland Britain. However the species has suffered a catastrophic decline in the latter part of this century. A survey carried out by the Mammal Society (1989-90) showed that it had disappeared from 94% of the sites where it had occurred earlier this century.
Floating water plantain	This decline has been most rapid in the last 30 years and has accelerated through the 1980's and 90's.
Great crested newt	Population estimates, based on extrapolations from latrine counts, are calculated as 1,200,000 over-wintering individuals.
Native black poplar (proposed)	A survey conducted by the Wildlife Trust for Birmingham and the Black Country (1997) indicated that population decline in urban areas might not be as dramatic as elsewhere. The conurbation appears to provide a stronghold for the water vole.
White-clawed crayfish	

Associated Habitat Action Plans	However, data held by EcoRecord indicate a fragmented population.
Canals	2. Current factors affecting species
Eutrophic urban pools	<ul style="list-style-type: none">• Habitat degradation and loss.
Rivers and streams	<ul style="list-style-type: none">• River engineering, bank protection and maintenance works , which result in loss of habitat and site degradation.

- Canal bank protection such as hard edging or sheet piling, which leads to destruction of habitat.
- Lack of appropriate riparian management, which results in replacement of suitable vegetation with dense scrub on the bank.
- Silting up and drying of wetland.
- Population fragmentation. Localised populations become more vulnerable to environment change. Colonies isolated from other populations are vulnerable to extinction. Stretches of a watercourse or canal without bankside vegetation effectively act as a barrier to free movement. These colonies are trapped and habitat degradation within their local area denies them feeding and breeding opportunities.

- Adverse events such as pollution incidents can lead to further losses in a local population. The variable reproductive capacity of water voles affect the capacity of the species to recover from such adverse events. Insufficient interaction between colonies may weaken the genetic pool.
- Predation. In Birmingham and the Black Country the most active predators are domestic cats, red foxes, brown rats, stoats, weasels, herons, owls and pike. The American Mink is uncommon in urban areas.
- Pollution. Poisoning by rodenticides is a particular threat in urban areas. Contaminants affecting water voles include organochlorine pesticides, PCBs heavy metals, and organic pollution from agriculture and sewage.
- Fluctuations of water levels. Access by water voles to food, cover and burrows along river banks and in pools is affected by fluctuations in water levels.

3. Current Action

3.1 Legal status

Since April 1998 the water vole has received legal protection through its inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 in respect of Section 9 (A) only. This section of the Act protects the water vole's places of shelter or protection but does not protect the voles themselves. Legal protection makes it an offence to intentionally:

- damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection;
- disturb water voles while they are using such a place.

As a protected species the water vole is covered by the requirements of PPG9, Nature Conservation, which states that the presence of a protected species is a material consideration when considering a planning application.

3.2 Management, research and guidance

Water Vole Conservation Handbook. By Rob Strachan 1998.

A research project on water voles was undertaken in 1997 by Elaine Richmond at the Wildlife Trust for Birmingham and the Black Country. This involved detailed survey of habitat in the area and provides a database for future review and implementation.

4. Action Plan objectives and targets

Objective	Target
1. Increase knowledge of the status, distribution and ecology of water voles in the sub region.	Ongoing
2. Restore water vole populations to a sustainable level by protecting, maintaining and enhancing the features required by the species.	Ongoing
3. Raise awareness of water voles conservation issues.	Ongoing

5. Proposed action with partners to meet objectives

ACTION	POTENTIAL DELIVERERS		YEAR							Meets objective number
	Lead	Partner	2001	2002	2003	2004	2005	2006	2011	
5.1 Policy and legislation										
Seek the inclusion of effective measures which protect water voles and their habitats in the preparation of Unitary Development Plans and other policy documents.	LAs	EN WT EA	As Unitary Development Plans and other policy documents are prepared.							2
Seek the inclusion of effective measures which protect water voles and their habitats in the preparation of Local Environment Agency Plans and other policy documents.	EA	LA's EN WT	As LEAPs and other policy documents are prepared.							2
5.2 Site / species management and protection										
Identify sites used by water voles and ensure that the information is made available to LPAs so that sites can be protected and managed.	WT	LCG LA's ER, EN EA	•	•	•					2
Review and implement the recommendations set out in Elaine Richmond's 1997 water vole survey.	WT	LCG LA's ER, EN EA	•							1,2
Enhance habitat through the restoration of bankside vegetation to link fragmented populations. Restore degraded habitat.	EA/ BW/ ST	LCG LA's ER, EN	•	•	•	•	•	•	•	2

ACTION	POTENTIAL DELIVERERS		YEAR							Meets objective number
	Lead	Partner	2001	2002	2003	2004	2005	2006	2011	
5.3 Advisory										
Raise awareness of water voles and encourage a sympathetic proactive response to their conservation and management.	EA, BW, ST, WT	LCG LA's ER, EN	•	•	•	•	•	•	•	3
5.4 Future research and monitoring										
Carry out survey work to monitor population changes to establish conservation changes.	EA WT							•	•	1
5.5 Communications and publicity										
See 5.3										
5.6 Links to other Action Plans										
This Biodiversity Action Plan has strong links with: Canals; Rivers and streams; Wetlands; Eutrophic urban pools	EA	ST, BW LA's	•	•	•	•	•	•	•	1, 2, 3

6. Co-ordination and Review

This Biodiversity Action Plan will be implemented over 10 years with a first review after 5 years. A group will be set up to co-ordinate implementation and to report to the Biodiversity Action Plan Steering Group. This group will meet at a minimum on a yearly basis.

Review will be carried out in conjunction with related Habitat and Species Action Plans as appropriate and will consist of measuring achievement of targets. The group will, with the support of the Steering Group, develop and implement appropriate monitoring methods, which will inform the review process.

The Action Plan will be revised and updated in the light of review results and any relevant changes in circumstances and / or additional information which becomes available during the review period.

In line with national guidance, the Steering Group will report to the UK Biodiversity Steering Group.