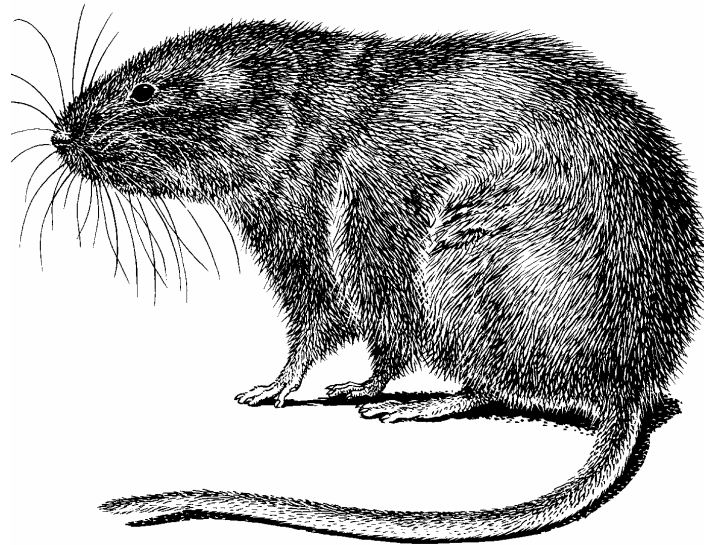




Water Vole (*Arvicola terrestris*)



Water voles are aquatic mammals that feed on bankside and marginal vegetation including grasses, sedges, rushes and reeds. These plants also provide cover to protect them from numerous predators such as mink, otter, barn owl and stoat.

Water voles inhabit the banks of rivers, canals, ditches, pools and marshes. They live in a network of burrows within the banks, having territories along the water's edge marked by the presence of latrines. Breeding occurs from April to August and they can produce up to five litters, each containing three to four young.

1 Objectives and Targets

1.1 Objectives

- A. Maintain existing populations and range of water voles in Shropshire, ensuring no further loss or fragmentation.
- B. Encourage populations to re-colonise sites naturally through changes in management and/or creation of new habitat.
- C. Establish and maintain a comprehensive understanding of water vole distribution, status and ecological requirements in Shropshire through research, survey and monitoring.
- D. Promote communication, education and awareness of the status and needs of the water vole.

1.2 Targets

- Achieve favourable habitat condition for Water Vole by management of 6 sites by 2010.
- Maintain current range of approximately 70 tetrads by 2010
- Survey 20 sites for Water Vole by 2010 – Exceeded due to plan action

2 Current Status

2.1 Importance

The water vole is a priority species for conservation action in the UK Biodiversity Programme.

2.2 Trends

The water vole was formerly common throughout Britain, but studies have shown a considerable decline in recent times. The Vincent Wildlife Trust carried out a national survey in 1989-90 which was repeated in 1996-98. These surveys show that the population has declined by 88% in only seven years. The water vole is Britain's fastest declining mammal. In Shropshire the Water Vole Survey of 1992 conducted by the Wildlife Trust confirmed this widespread disappearance of the species. There is very little recent countywide survey data available for the water vole in Shropshire

2.3 Population and Distribution

Water voles are found throughout Britain, mainly in lowland areas, however they are increasingly being sighted in upland sites and isolated pools. This behaviour is mainly attributable to the American mink.

The species shows a localised distribution in Shropshire due to its sedentary nature. The stronghold in Shropshire is in the north, especially around Whitchurch. There are populations on the River Perry, and on the Newport Canal. Recent surveys have been carried out at Whitchurch (SWT 2002), Fenn's and Whixall Moss (EN 2004) and Prees Branch Canal Nature Reserve (SWT 2005) which all show signs of water vole activity. The number and extent of water voles in Shropshire is unknown. Water vole may well be more widely distributed than we realise but are almost certainly confined in small isolated communities

3 Current Factors Affecting the Species

- Predation by mink is thought to be one of the main reasons for the decline of water voles in Shropshire.
- Intensive engineering, bank protection and maintenance works to rivers and canals often damages bankside habitats.
- Development on the floodplains of rivers leads to containment of river channels and loss of riparian habitats.
- Intensive grazing by livestock causes poaching of banks and the destruction of burrows and bankside vegetation.
- Inappropriate, intensive mowing of the bank and vegetation clearance results in water voles being susceptible to predators.
- Lack of management can lead to degradation of the waterside habitat through siltation, drying out or invasion by scrub.
- Fragmentation of the population from habitat loss and degradation may accelerate the rate of local population decline. Isolated groups are more vulnerable to

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environmental change and extinction and survival is enhanced if colonies are connected.

- Excessive fluctuations in water levels due to land drainage or flooding can damage riverbanks and burrows.
- Drought conditions can expose burrows making the water vole more vulnerable to predators.
- Loss of ponds and the degrading of associated habitat through development and farming practices.
- Poisoning by the use of rodenticides is a major threat in urban situations.

4 Current Action

4.1 Policy and Protection

- Water voles are not protected, however since April 1998 they have been included in Schedule 5 (Section 9 (4) only) of the Wildlife and Countryside Act 1981 making it an offence to intentionally or recklessly:
 - damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection
 - disturb water voles whilst they are using such a place.

4.2 Management, Research and Survey

- The Water Vole Habitat Management Handbook has been prepared by English Nature and the Environment Agency and has recently been updated.
- County records are being collected by the Shropshire Wildlife Trust.
- The Wildlife Trusts' national WATCH survey in 1997 recorded sightings throughout the county.
- Recent surveys have been carried out at Whitchurch (SWT 2002), Fenn's and Whixall Moss (EN 2004) and Prees Branch Canal Nature Reserve (SWT 2005) which all show signs of water vole activity
- The Environment Agency takes the requirements of water voles into account in its capital and maintenance works and when carrying out its regulatory function of issuing consents. The promotion of soft bank engineering techniques is particularly beneficial to water voles.
- Landowners need up to date advice on the latest recommended method for the control of mink.

5 Key Habitats

- The fringe of densely vegetated rivers, streams, canals and ditches
- Ponds, lakes and marshes

6 Complementary Plans

UK Water Vole SAP
Shropshire Rivers and Streams HAP
Shropshire Standing Open Water HAP
Shropshire Reedbeds HAP

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7 Action Plan

Habitat / Species	Action code	Action text	Location of action	Start date	End date	Lead	Assisting
Water vole	SHR WAV CA 01	Develop and publish good practice guides for key groups (Landowners and Planning Officers) make available to LAs, riparian owners, managers and advisors by 2010.	Shropshire	2007	2010	SWT	NE, SC, WCWVP
Water vole	SHR WAV CA 03	Establish a BAP working group for Water Vole and meet at least once a year to discuss progress until 2010.	Shropshire	2008	2010	SC	SC-ORS, SWT
Water vole	SHR WAV CP 01	By 2008 create a web site to assist with the identification and recording of Water Voles, Field Voles, Mink and Otter.	Shropshire	2008	2008	SC	WCWVP
Water vole	SHR WAV CP 02	Produce at least one press release outlining the conservation needs of the water vole in Shropshire, tips on identification and a request from local people for sightings of water vole, otter and mink by 2010.	Shropshire	2008	2010	WCWVP	SC, SWT
Water vole	SHR WAV CP 03	Targeted mail-out in Whitchurch area of approximately 200 land owner focussed leaflets by 2008.	Shropshire	2008	2008	WCWVP	SC
Water vole	SHR WAV CP 04	Approach four parish wildlife groups about possible involvement in Water Vole survey and conservation by 2012.	Shropshire	2008	2010	SC-ORS	SC, WCWVP
Water vole	SHR WAV FR 01	Promote uptake of Environmental Stewardship.	Shropshire, North Shropshire District	2006	2010	FWAG,	WCWVP
Water vole	SHR WAV FR 02	Apply to 'Awards for All' for funding for specialist coordination of a volunteer based Water Vole project by 2009.	Shropshire	2008	2009	SWT	SC
Water vole	SHR WAV HC 01	Create 10 ponds suitable for water voles, and within their current range, by 2015	Shropshire	2008	2015	WCWVP, EA	NE, SC, SWT
Water vole	SHR WAV HC 02	Approach two specific landowners regarding habitat enhancement works to benefit water vole including de-culverting works if appropriate	Shropshire	2008	2010	WCWVP	NE

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Water vole	SHR WAV HS 01	Take the ecological requirements of the species into account when setting Statutory Water Quality Objectives for areas with significant populations.	Shropshire	2006	2010	EA	SWT
Water vole	SHR WAV HS 02	Encourage appropriate water level management techniques where new developments affect run off to water courses with potential water vole habitat (SUDS, etc)	Shropshire	2006	2010	EA	LAs
Water vole	SHR WAV ID 01	Provide annual reports of all new wetland areas created by EA	Shropshire	2008	On	EA	
Water vole	SHR WAV ID 02	Ensure that the county mammal recorder holds a complete water vole record for Shropshire	Shropshire	2008	On	WCWVP	SWT, BWB, EA, SMG
Water vole	SHR WAV ID 03	Produce a map showing the potential corridor of water vole sites between the existing populations at Whitchurch and Whixall by 2009.	Shropshire	2008	2009	SC	EA, NE, SC-ORS SWT, WCWVP
Water vole	SHR WAV PL 01	Ensure that river and canal management work does not adversely affect the integrity of water vole populations or riparian habitat until 2010.	Shropshire	2006	2010	EA	BWB, SC, NE
Water vole	SHR WAV SM 01	Encourage sympathetic riparian management and restoration of riparian habitat to favour water vole	Shropshire	2006	On	EA, FWAG, SWT	SC, DEFRA
Water vole	SHR WAV SM 02	Provide up to date advice to landowners on appropriate mink control as a conservation tool to protect large breeding water vole populations by 2010.	Shropshire	2006	2010	FWAG	SWT, SC- ORS WCWVP
Water vole	SHR WAV SP 01	Consider designation of areas with large, viable breeding populations of water voles as Wildlife Sites.	Shropshire	2006	2010	NE, SWT	
Water vole	SHR WAV SP 02	Ensure that projects to re-wet or increase water levels on wetlands do not harm water vole populations.	Shropshire	2006	2010	EA	NE
Water vole	SHR WAV SU 01	Re-survey in key areas once every five years to monitor changes in population size until 2016.	Shropshire	2006	2016	SWT	NE

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Water vole	SHR WAV SU 02	Survey all potential Water Vole habitat that can be accessed between Whitchurch and Whixall (including areas in Wales) by 2010	Shropshire	2008	2010	WCWVP	SC, EA, SMG, SWT
Water vole	SHR WAV SU 03	Carry out 1 survey of Mink per year between Whitchurch and Whixall until 2010.	Shropshire	2008	2010	WCWVP	SC, EA, SMG, SWT
Water vole	SHR WAV SU 04	Carry out one survey of Water Voles outside the core Whitchurch area by 2010	Shropshire	2008	2010	SC-ORS	SC, SMG, SWT

Key to organisations

BWB	British Waterways Board
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
FWAG	Farming and Wildlife Advisory Group
IDB	Internal Drainage Board
NE	Natural England
NT	National Trust
SC	Shropshire Council
SC-ORS	Shropshire Council Outdoor Recreation Service
SWT	Shropshire Wildlife Trust
WCWVP	Whitchurch Community Water Vole Project
SMG	Shropshire Mammal Group

Plan Author: Clive Dean, Countryside & Conservation Team (now SC Outdoor Recreation Service).

Plan last revised: April 2008 by Fran Lancaster, Biodiversity Support Officer, Shropshire Council.

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