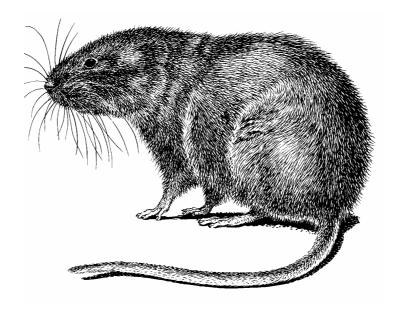


Water Vole (Arvicola terrestris)



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

- 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

7 Action Plan

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

4 Water Vole

Water	SHR	Take the ecological requirements of the species into account when setting	Shropshire	2006	2010	EA	SWT
vole	WAV HS 01	Statutory Water Quality Objectives for areas with significant populations.					
Water	SHR	Encourage appropriate water level management techniques where new	Shropshire	2006	2010	EA	LAs
vole	WAV HS 02	developments affect run off to water courses with potential water vole habitat (SUDS, etc)	·				
Water	SHR	Provide annual reports of all new wetland areas created by EA	Shropshire	2008	On	EA	
vole	WAV ID 01						
Water	SHR	Ensure that the county mammal recorder holds a complete water vole	Shropshire	2008	On	WCWVP	SWT,
vole	WAV ID 02	record for Shropshire					BWB, EA, SMG
Water	SHR	Produce a map showing the potential corridor of water vole sites between	Shropshire	2008	2009	SC	EA, NE,
vole	WAV	the existing populations at Whitchurch and Whixall by 2009.					SC-ORS
	ID 03						SWT, WCWVP
Water	SHR	Ensure that river and canal management work does not adversely affect	Shropshire	2006	2010	EA	BWB, SC,
vole	WAV PL 01	the integrity of water vole populations or riparian habitat until 2010.	·				NE
Water	SHR	Encourage sympathetic riparian management and restoration of riparian	Shropshire	2006	On	EA,	SC,
vole	WAV SM 01	habitat to favour water vole				FWAG, SWT	DEFRA
Water	SHR	Provide up to date advice to landowners on appropriate mink control as a	Shropshire	2006	2010	FWAG	SWT, SC-
vole	WAV SM 02	conservation tool to protect large breeding water vole populations by 2010.					ORS WCWVP
Water	SHR	Consider designation of areas with large, viable breeding populations of	Shropshire	2006	2010	NE, SWT	
vole	WAV	water voles as Wildlife Sites.					
	SP 01						
Water	SHR	Ensure that projects to re-wet or increase water levels on wetlands do not	Shropshire	2006	2010	EA	NE
vole	WAV	harm water vole populations.					
147.1	SP 02		01 1:	0000	0040	O)A/T	NIE
Water vole	SHR	Re-survey in key areas once every five years to monitor changes in	Shropshire	2006	2016	SWT	NE
	WAV SU 01	population size until 2016.					
	30 01						

Water Vole 5

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.

Pdf correct on 17.03.2009