



### **TREND IN THE PEAK DISTRICT:**

Nationally the water vole is the fastest declining mammal in Britain. Evidence suggests that the species is also declining in the Peak District, although losses appear to be very variable and some areas support thriving populations.

### **ESTIMATED POPULATION IN THE PEAK DISTRICT:**

Not quantified, but significant populations are known from the Etherow-Derwent-Bleaklow Moors, the Eastern Peak District Moors, the River Wye from Topley Pike to the Derwent confluence and locally within the Dove catchment.

### **NATIONAL BAP STATUS:**

Priority Species

### **ASSOCIATED PEAK DISTRICT ACTION PLANS:**

**Habitats:** River Corridor Habitats, Heather Moorland, Blanket Bog, Rush Pasture.

**Species:** White-clawed crayfish.

## INTRODUCTION

The water vole is an agile swimmer living in a complex system of waterside burrows. Favoured habitats include well-vegetated banks of ditches, streams, rivers and ponds, with recent work showing them to be more numerous in upland moorland and moorland fringe habitats than formerly thought. They are herbivores, primarily feeding on lush waterside vegetation, which they also use as cover from their many predators. Water voles live in colonies and are territorial during a breeding season which lasts from March to October. A female may produce two to five litters each of five to eight young. As food supplies diminish during wintertime, they are less active, spending the majority of time underground.

Once common and widespread across Britain, the water vole has suffered a long-term decline in both numbers and distribution since the Industrial Revolution. The decline has accelerated dramatically in the last two decades. The most recent survey by the Vincent Wildlife Trust reports an 89% loss of occupied sites in Britain (predicted to reach 94 % by 2000). Within the Peak District severe declines in the status and distribution of the species have been reported from parts of the White Peak area, in the Dove Catchment and also from the lower reaches of the Etherow and Goyt catchments in the Dark and South West Peak. However, survey work has identified parts of the Peak District as a stronghold. There are viable populations on the Dark Peak moorlands in the head-streams of the Derwent and Etherow, on the Eastern Peak District Moors, along the Wye and its tributaries and on sections of the middle course of the Derwent.

The water vole has limited legal protection through its inclusion on Section 5 of the Wildlife and Countryside Act 1981 (as amended, April 1998) in respect of Schedule 9(4) only. This protects the water vole's places of shelter or protection, but does not protect the water voles themselves.

ADVERSE IMPACTS	Historic	Current
<b>Loss of Habitat</b>		
Direct loss of habitat through drainage.	✓✓	✓
Alteration of stream profiles by in-filling and straightening of channels.	✓✓	✓
Groundwater abstraction and surface water abstraction and water transfer schemes (e.g. Rivers Noe and Ashop).	✓	✓✓
Loss of water to soughs and mineshafts causing low water levels.	✓	✓
Construction of dams and reservoirs flooding traditional water vole habitats, and subsequent draw down making banks unsuitable as habitat.	✓	
<b>Modification of Habitat</b>		
Degradation of bank-side habitat due to inappropriate management including re-profiling, bank support work and vegetation control.	✓	✓✓
Heavy grazing reducing bank-side vegetation which provides food and cover, and causing damage to bank structure.	✓	✓✓
Damage to burrow systems by agricultural machinery.	✓	✓✓
<b>Pollution</b>		
Pollution of watercourses (heavy metals, organic farm and sewage slurry and polychlorinated biphenyls).	✓✓	✓
<b>Predation and Competition</b>		
Increase in predation, especially by American mink and domestic cats.		✓✓
Possible competition with brown rats.		✓✓
<b>Recreation</b>		
Recreational disturbance both directly from dogs etc. and also indirectly by destruction of the bank-side habitat.	✓	✓
<b>Others</b>		
Poisoning from rodenticides.		✓
Fragmentation and isolation of water vole populations.		✓

*An impact* ✓      *Significant impact* ✓✓

## CURRENT ACTION

### Designated Sites

- Water voles are known to occur in at least 8 SSSIs and also within the Derbyshire Dales NNR.

### Sites Owned and Managed by Conservation Organisations

- A number of key water vole sites lie within the ownership of EN, the NT, WTs and the PDNPA.

### New Initiatives

- Water UK and The WTs' 'Otters & Rivers Project' has four Project Officers covering Yorkshire, the North West, the Upper Trent and the Central Trent catchments. Their remit includes water vole conservation, but for funding reasons within the Central Trent area, water vole work is not undertaken within the project.
- DWT has, since 1997, committed considerable resources to water vole conservation work. In 2000, funding was received for this work from various sources including EN.
- Monitoring at selected sites began in 1998, in the Derwent and Etherow catchments (by DWT) and the Upper Dove catchment (by SWT as part of the Upper Trent 'Otters and Rivers' Project).
- The WTs have started providing advice to land owners and managers at a number of key sites for water voles so as to target appropriate conservation action.
- In conjunction with the EA the WTs provide advice on mitigation measures relating to developments.

### Research and Survey

- National distribution surveys have been undertaken by the VWT (1989 - 1990, 1996 - 1998).
- DWT carried out a survey of all the Derbyshire catchments in 1997 - 1999 with the exception of the Dove.
- SWT (as part of the Upper Trent 'Otters and Rivers' Project) carried out a baseline water vole, mink and otter survey of the Dove River catchment in 1997.

### Awareness Raising

- Both nationally and locally there has been widespread media coverage of both the plight of water voles and of relevant surveys. Volunteer recorders have been used and casual records from the public have been incorporated into surveys.
- DWT has produced a number of leaflets for landowners, conservation organisation staff and the public.
- DWT has promoted water vole conservation during a training day for PDNPA staff.

## ACTION PLAN OBJECTIVES AND TARGETS

### National Targets

- Maintain the current distribution and abundance of the species in the UK.
- Ensure that water voles are present throughout their 1970s range by the year 2010.

### A Vision for the Peak District

Threatened by habitat destruction and modification, by competition and predation, water voles show a very divergent picture of success across the Peak District with some streams and rivers supporting apparently thriving populations whilst extinction stalks many others. Survey and monitoring work must be used to target and prioritise the habitat management, advisory and policy work which will prove essential if we are to reverse the local declines and conserve the existing populations. This will only be possible through co-ordinated action involving the public, landowners and conservation agencies and by using every opportunity available. Local objectives need to be set based on an assessment of existing survey and monitoring results, coupled with the experiences of a number of recognised naturalists. The hope is that we can once more see our childhood favourite – 'Ratty' of the 'Wind in the Willows' – in its riverbank home throughout the Peak District.

## OBJECTIVES AND TARGETS

### Objective 1

**Maintain the current distribution and status of the water vole in the Peak District.**

#### Targets

Ensure appropriate management of 50 % of known important sites by the end of 2005. Review and set a new target for 2005 - 2010.

Recruit and maintain a minimum of 40 volunteers to carry out surveys and monitoring from the end of 2003 onwards.

Carry out a minimum of 40 spot check surveys annually at additional, previously un-recorded sites.

### Objective 2

**Take active measures to expand the current distribution.**

#### Target

Assess the potential for restoration of suitable water vole habitat in the proximity of all important sites and implement for at least 25 % of suitable sites by 2005. Review and set a new target for 2005 - 2010.

## Main Factors Likely to Affect Achievement of Targets

### *Land Management*

Reform of Common Agricultural Policy and implementation of the Rural Development Regulation.

Effectiveness of agri-environment and conservation scheme prescriptions.

The inclusion of riparian strips and small river corridor wetlands as priority habitats in the whole holding approach to negotiation of agri-environment and conservation scheme agreements.

Effectiveness of agri-environment and conservation scheme cross compliance.

### *Planning and Regulations*

Planning and licensing policies.

### *Resources and Financial Incentives*

Availability of funding for survey, awareness raising programme and negotiation of conservation agreements.

Adequacy of financial incentives within conservation agreements.

Availability of funding for agri-environment and conservation scheme agreements.

### *Conflicts with Other Conservation Priorities*

Conflicts between the habitat requirements of water voles and other ecological conservation priorities e.g. woodland restoration alongside streams and in cloughs.

Potential conflicts with archaeological and landscape issues particularly in relation to the fencing of intensively managed stream-sides.

### *Gaps in Knowledge*

Lack of knowledge about interactions with brown rats, particularly in relation to the spread of disease, the impact of rodenticides and the possibility of competition.

Limited knowledge with regard to the ecology of water voles, particularly the dispersal of juveniles and non-territorial adults.

### *Invasive Species*

The spread of mink.

### *Pollution and Climate Change*

Climate change.

## ACTIONS

Key to the achievement of the proposed targets are actions relating to:

- increasing our knowledge about the distribution and status of water voles so that conservation initiatives can be targeted and prioritised (Actions WV1 and 3 - 6);
- negotiations to secure appropriate land management (WV33 - 37);
- awareness-raising and training measures (WV21 - 29);
- considering reviews of agri-environment and conservation schemes to ensure adequate financial incentive and appropriate management prescriptions to safeguard water vole habitat (WV32);
- direct action by conservation organisations, public bodies and utilities alongside canal and river banks (WV38, WV39 and WV41), and
- control of the expanding mink population (WV14 - 16).

ACTIONS	TIMESCALE	LEAD AGENCY & Partners
<b>DATA COLLATION AND SURVEY</b>		
<b>Data Collation</b>		
WV1 Collate existing information on water voles. (Objective 1)	2001	WTs/EA/EN PDNPA LAs/LRCs Voluntary Sector
WV2 Compile a register of water vole sites based on a GIS system, including level of importance (including 'Wildlife Site' status), condition, constituent habitats, Natural Area and conservation status, and initiate a programme for regular updating. (Objective 1)	2001 onwards	WTs/EA/EN/PDNPA
<b>Survey</b>		
WV3 Carry out water vole and water vole habitat surveys for catchments where existing information is inadequate. (Objective 1)	2001/2002	WTs/EA
WV4 Complete surveys of historical sites within all Peak District catchments. (Objective 1)	2001/2002	WTs/EA
WV5 Continue to elicit records from members of the public and angling clubs. Carry out surveys of all newly identified sites for water voles incorporating habitat assessments. (Objective 1)	2001 onwards	WTs/PDNPA/EA
WV6 Carry out annual spot check surveys at additional sites with the aim of identifying 'new' unrecorded evidence of water vole populations. (Objective 1)	2001 onwards	WTs/NT/EA
WV7 Recruit, train and co-ordinate voluntary surveyors to undertake surveys and monitoring of important sites. (Objective 1)	2001 onwards	WTs/EA

## EVALUATING THE IMPORTANCE AND CONDITION OF SITES

### Evaluating Importance and Identifying Key Sites

- WV8 Agree methodology for the evaluation of water vole sites, including:
- \*Definition of 'important' with regard to water vole sites
  - \*Identification of 'Wildlife Sites'
  - \*The identification of suitable sites for expansion of existing populations
  - \*The identification of suitable sites for re-introduction taking into account the importance of populations

capable of expansion, sites which are of strategic importance to each catchment, and the need to link isolated populations. (Objectives 1 and 2) 2001 **ABAPG**

**Defining Favourable Condition**

WV9 Agree definitions of favourable condition for the complete range of water vole sites in the Peak District. (Objectives 1 and 2) 2001 **ABAPG**

WV10 Agree guidelines for the range of appropriate management needed to achieve favourable condition on conservation, restoration and re-creation sites including a consideration of landscape and archaeological impacts. (Objectives 1 and 2) 2001 **ABAPG**

**RESEARCH**

WV11 Initiate, support and encourage research projects on relevant topics of water vole ecology in the Peak District area. In particular, prioritise research into potential limiting factors for water voles in a local, regional and national context. (Objectives 1 and 2) 2001 onwards **EA/WTs/EN**

WV12 Incorporate the results of research into conservation action where appropriate. (Objectives 1 and 2) 2001 onwards **ABAPG**

**PUBLIC ACCESS**

WV13 Agree and implement both general and site specific approaches to the management of access to important water vole sites that enables public enjoyment of the environment but prevents significant damage to banksides and disturbance to water vole populations. (Objective 1) 2001 onwards **EA/PDLAF** (joint leads)/NT/EN/PDNPA

**INVASIVE SPECIES**

WV14 Continue to monitor the distribution of mink in the Peak District and identify where mink could be having an impact on water vole populations. (Objective 1) 2001 onwards **WTs/EA/EN/NT**  
**ABAPG**

WV15 In collaboration with landowners and fisheries managers set up a mink trapping programme in these areas where this is considered to be a practical option. (Objective 1) 2001 onwards **ABAPG/MAFF**(joint leads)

WV16 Ensure, in collaboration with landowners and fisheries managers, that data on mink distribution is forwarded to local record centres. (Objective 1) 2001 onwards **EA/EN/LRC**

WV17 Discuss appropriate methods of rat control with the environmental health authority. (Objective 1) 2001 **EA/EHA** (joint leads)

WV18 Consider the need for rat control at key water vole sites. (Objective 1) 2001 **ABAPG**

**MONITORING**

WV19 Agree methodology for and implement effective monitoring of water vole sites. Ensure that the results of the process are collated and used to update relevant registers. (Objective 1) 2001 onwards **WTs/NT/EA/EN PDNPA**

WV20 Integrate both positive and negative sites from the VWT national survey into the monitoring programme. (Objective 1) 2001 **WTs/EA/EN**

## AWARENESS RAISING

WV21	Share information on the importance and management needs of important conservation and restoration sites with landowners/managers, including feedback from surveys. (Objectives 1 and 2)	2001 onwards	WTs/PDNPA/NT/EA EN
WV22	Make local guidance widely available for landowners and managers and conservation organisation staff on appropriate riparian and watercourse management. (Objectives 1 and 2)	2001	EA/WTs/EN/PDNPA FWAG
WV23	Raise awareness of legislation covering water vole habitat amongst relevant agencies, organisations and the general public through appropriate means. (Objective 1)	2001 onwards	EA/EN/PDNPA/WTs
WV24	Raise awareness of the need for water vole protection amongst agencies that are exempted from the current legislation. (Objective 1)	2001 onwards	EA/EN/PDNPA/WTs
WV25	Ensure Peak District wide awareness of water voles amongst landowners/managers and the general public by: *Distribution of a leaflet with a return slip for people to record current and historical records *Using local media to raise the profile of the species (Objective 1 and 2)	2001	ABAPG
WV26	Raise awareness through appropriate means amongst Environmental Health & Pest Control Officers about water vole conservation, rat poison and its harmful effects on water voles. (Objective 1 and 2)	2001	EA
WV27	Facilitate a meeting with all involved volunteers throughout the Peak District to ensure a co-ordinated approach to survey and monitoring and to encourage sharing of information and techniques. (Objective 1)	2003	ABAPG
WV28	Include opportunities for disseminating information and advice on water voles within the proposed Peak District Biodiversity web-site. (Objectives 1 and 2)	2002	ABAPG
WV29	Arrange training days to increase awareness with regard to water vole ecology and management needs, amongst conservation organisation staff, volunteers and land managers, and to promote proactive targeting of important sites for conservation action. (Objectives 1 and 2)	2001 onwards	WTs/MAFF/FWAG/NT EA/EN/PDNPA Volunteers/River bailiffs

## CONSERVATION ACTION AND INCENTIVES

### Designations

WV30	Consider water vole key sites in any programme of acquisition/lease/management of nature reserves including NNRs and LNRs. (Objectives 1 and 2)	2001 onwards	EN/LAs (joint leads) PDNPA/WTs/ RSPB/NT
WV31	Support efforts to give full protection to water voles under the Wildlife & Countryside Act. (Objective 1)	2001 onwards	EA/EN/WTs

### Grant Schemes

WV32	Consider recommending a review of agri-environment and conservation schemes to ensure that: *Targeting at local, regional and national levels gives adequate priority to the water vole habitat *Management prescriptions for the maintenance, restoration and creation of wetlands (including ponds, ditches and back channels), wildlife headlands and		
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buffers are reviewed in the light of water vole conservation needs  
 \*Payments for small areas, wetlands, buffers and wildlife headlands are introduced/reviewed in the light of water vole conservation needs.  
 (Objectives 1 and 2)

2001 onwards **MAFF/PDNPA/EN**  
 ABAPG/WEG

**Negotiation and Review of Agreements**

WV33 Include water vole conservation measures in management plans and/or negotiated agreements within relevant NNRs and SSSIs. (Objectives 1 and 2)

2001 onwards **EN**

WV34 Negotiate appropriate agreements with landowners and managers of important water vole sites outside SSSIs and existing agreements, targeting their management and sites for possible expansion. (Objective 1 and 2)

2001 onwards MAFF/PDNPA/FWAG

WV35 Review management of important water vole sites in existing conservation agreements, outside of SSSIs. Where necessary agree revised management regimes with owners/managers to ensure that favourable condition is being maintained or restored. (Objectives 1 and 2)

2002 - 2005 MAFF/NT/WTs/PDNPA  
 FWAG

WV36 Review whole holding agreements which include unprotected important water vole sites. Consider the opportunities for amending the agreement to incorporate their safeguard and enhancement. (Objective 1 and 2)

2002-2010 MAFF/NT/WTs/PDNPA  
 FWAG

WV37 Ensure all agreement negotiations consider the existing water vole population and the potential for water vole conservation and expansion on the whole holding, including:  
 \*safeguard of all existing water vole sites  
 \*restoration of degraded riparian habitat  
 \*the potential for re-creation of valuable riparian habitat, bringing surrounding land into appropriate management where possible. (Objectives 1 and 2)

2001 onwards **MAFF/PDNPA/FWAG**

**Direct Action**

WV38 On land owned by public or conservation bodies, ensure that:  
 \*Management maintains, and where possible, enhances the water vole habitat  
 \*Consideration is given to the restoration and creation of water vole habitats. (Objectives 1 and 2)

2001 onwards PDNPA/LAs/FC/WTs /NT  
 EN

WV39 Ensure that water vole conservation measures are put in place in river valley initiatives, e.g. Bakewell Biodiversity Project. (Objective 1 and 2)

2001 onwards **EA/WTs/EN/PDNPA**

WV40 Ensure that LEAPs include appropriate reference to the safeguard and enhancement of water vole populations. (Objectives 1 and 2)

2001 onwards **EA**

WV41 Continue/initiate water vole conservation and enhancement measures along river and canal corridors where appropriate. (Objectives 1 and 2)

2001 onwards **EA/BW(joint leads)/EN**  
 PDNPA/WCs/NT/WTs

## REGULATION

### Planning

WV42	Ensure all planning applications are adequately assessed in relation to their impact on water vole sites, that loss or damage to these is avoided and that opportunities for the enhancement or creation of appropriate water vole habitats is considered in relevant planning decisions. (Objective 1, 2, 3 and 4)	2001 onwards	LA <sup>s</sup> /EA(joint leads) WTs/PDNPA/EN
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### Licensing

WV43	Ensure that legislation covering water vole habitat is enforced. (Objective 1)	2001 onwards	EA/WTs/EN/PDNPA LAs
WV44	Ensure all works which affect rivers, streams and canals, in areas important for water voles, are assessed beforehand and licensed if appropriate. (Objective 1)	2001 onwards	EA/EN/DETR
WV45	Ensure populations of water voles are monitored before and after all works which affect sites with important populations. (Objective 1)	2001 onwards	EA/EN

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## RESOURCES

It is envisaged that the majority of the actions proposed will be carried out by the relevant organisations using current resources, although this may well necessitate careful targeting and prioritisation. These include:

- continuing investment by landowners and managers in managing their land sympathetically for wildlife;
- the 'Otters and Rivers' projects currently being implemented by the WTs with sponsorship from STW and the EA;
- water vole conservation work currently being implemented by DWT with funding from various sources including EN;
- the EA's review of water quantity with respect to the cSAC;
- the EA's annual programme of maintenance work on main rivers and commitment to the consideration of conservation issues;
- EN's programme of reviewing SSSI management and its grant and management agreement schemes;
- MAFF's Countryside Stewardship and Environmentally Sensitive Area schemes;
- the PDNPA's advisory and grants service for landowners/managers and its rolling programme of special conservation projects;
- FWAG and the WTs' advisory services;
- surveys and monitoring carried out by volunteers;
- continuing management of water vole habitat in the ownership of conservation organisations, public bodies (EN, NT, WTs, LAs, PDNPA, FC), WCs and BW.

Focused species work within the WTs' 'Otters and Rivers Project', or its successor, and continued funding for DWT's water vole work, will be essential.

### Additional resources are likely to be required to:

- provide adequate financial incentives for the conservation and restoration management of water vole habitats (2001 onwards);
- aid in the production of the proposed registers (2001 onwards).