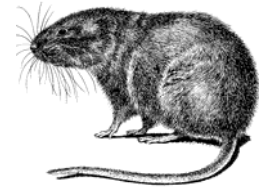


## WATER VOLES



© Natural England

### SUMMARY

- Water Voles (*Arvicola amphibius*) are protected under UK Law.
- Water voles are found in all kinds of habitats, e.g. rivers, canals, ditches, streams and ponds. Their homes are in burrows that they dig in the banks at the water's edge. They have a vegetarian diet feeding mostly on grasses and river bank vegetation, although they also eat seeds, roots and bark.
- Once common and widespread this species has suffered a significant decline in numbers and distribution - 90% decline since 1990. This is due to;
  - Loss/Disturbance of suitable habitat because of - destruction of natural river banks through urban development and reinforcement of banks with metal and concrete, riverside works such as dredging and clearance of bankside vegetation. This removes large amounts of the plants that water voles depend on for food and causes disturbance and degrading of bank-side habitat through increased use by livestock and erosion by boat wash.
  - Pollution of watercourses - Water voles can be affected by poor water quality, both directly through contamination of water bodies with pollutants and indirectly through eutrophication, the build-up of nitrogen levels in water which causes algal blooms and loss of water vole food plants.
  - Predation by mink: American mink can wipe out whole colonies of water voles in a matter of months and have accelerated the rate of decline in the past few decades.
- If you are doing any work that may harm water voles or their breeding site/resting place, it is recommended that you contact the Natural Environment Team, and/or check with DERC<sup>1</sup>, before you carry out any work. A survey may be required.

### Background

#### Legal Protection

Water voles have legal protection under Schedule 5 (Section 9) of the Wildlife and Countryside Act 1981 (as amended). This includes; intentional or reckless damage, destruction or obstruction to access to any structure or place used for shelter or protection, intentional or reckless disturbance to water voles whilst occupying a structure or place used for that purpose and intentional killing, injuring or taking of water voles.

#### Ecology

Water voles have a rounded body up to 30cm in length (including the tail which makes up two thirds of their body length) and weigh up to 350g. They have dark brown, reddish or black silky fur, a short blunt snout, small ears almost hidden by fur and a furry tail.

Water voles excavate extensive burrow systems into the banks of waterways. These have sleeping/nest chambers at various levels in the steepest parts of the bank and usually have underwater entrances to give the animals a secure route for escape if danger threatens. "Lawns" of closely cropped grass, occasionally with piles of chopped food, may surround burrow entrances.

Water voles tend to be active more during the day than at night. Male voles live along ~ 130m of water bank, whilst females have ranges of ~ 70m long. They deposit distinctive green/black, shiny droppings in latrines, which occur throughout and at the edges of their range during the breeding season.

Water voles exhibit a boom/bust strategy - the population crashes by up to 80% over winter and the small surviving population live communally before breeding again in the spring and setting up

individual territories. They usually have three or four litters a year (~ 5 in each litter), depending on the weather. In mild springs the first can be born in March/April but cold conditions may mean delay until May or June. The young are born blind and hairless below ground in a nest, but grow quickly, to be weaned at 14 days. On average, water voles only live about five months in the wild. Their predators are mainly mink and stoats, although herons, barn owls, brown rats and pike are also known to take them.

### Timing

Surveys are best carried out in March – June, as this is when water voles are most active, although they can continue until October. As water voles are rarely seen, surveys should be based on characteristic signs, i.e. droppings, latrines, feeding stations, burrows and footprints. However, after heavy rainfall or high water levels, many of these signs will disappear, so negative surveys undertaken in these conditions should be treated with caution.

The best time to carry out operational works is March/April or September/October as an alternative.

### Work

Consultation with the Environment Agency should be sought before any riverbank/channel management work is carried out. Flood Defence Consent may also be required.

The law recognises that it is sometimes necessary to carry out work that may affect water voles or their habitats. However, legal protection does require that due attention is paid to the presence of water voles and that appropriate actions are taken to safeguard the places they use for shelter/protection and/or breeding. Opportunities for enhancement and restoration of suitable habitat for water voles will need to be considered.

Surveys can normally be carried out without a licence. However, detailed and prolonged examination of known water vole burrows, e.g. using intrusive methods for observation (i.e. endoscope), catching or handling water voles, which may cause disturbance to them will need a licence from Natural England.

If water voles are found on site once work has commenced, work must stop immediately and Natural England or the Natural Environment Team be contacted.

Defences - Wildlife & Countryside Act 1981 (Section 10(3)(c)) – A person is not guilty of an offence under Section 9, if they can show that the act was the incidental result of a lawful operation and could not have been reasonably avoided.

Fines - The maximum penalty for each offence in the Magistrates' Court is a Level 5 (up to **£5000**) and/or six months imprisonment. In addition, items used to commit the offence (e.g. vehicles) may be forfeited.

### Other considerations

Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005) states that 'in taking decisions, local planning authorities should ensure that appropriate weight is attached to .... protected species.....' and the accompanying Circular 06/05 states that 'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

### Definitions

<sup>1</sup> DERC - Dorset Environmental Records Centre – [www.derc.org.uk](http://www.derc.org.uk) – Tel: 01305 225081

For more information please contact: The Natural Environment Team: <a href="mailto:net@dorsetcc.gov.uk">net@dorsetcc.gov.uk</a> or Danny Alder – 07803 238447 or Dr Phil Sterling – 01305 224290. Dorset Wildlife Trust: Dr Rachel Janes or Sarah Williams – Conservation Officers for Rivers & Wetlands – 01305 264620. Environment Agency: Sandie Moors – 01258 483486
--