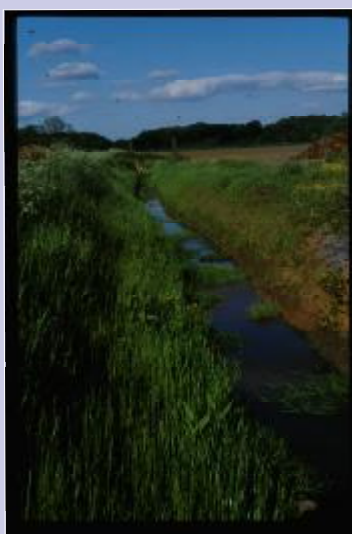


# Water Voles: Information for Landowners



The Water Vole (*Arvicola terrestris*) was once a very common sight on waterways throughout Britain. However, since 1900, various surveys have demonstrated a national decline in the species. It has been estimated that Norfolk Water Voles, have declined by a startling 55% between the years 1989-1997.



## Where do Water Voles Live?

Evidence of Water Voles can be found on rivers, ditches, dykes, streams and ponds. They prefer slow flowing water flanked by earth banks, into which they can easily tunnel and form burrows. They also have a preference for steep sided banks so that they can tunnel upward in the bank if the water level rises. Water Voles also require a large quantity of herbaceous,

emergent and aquatic vegetation for cover.

## What do Water Voles eat?

They are entirely vegetarian and eat a large array of aquatic and bankside plants. Some woody plants such as willow, hawthorn and elder are important for eating during the winter months.

## Threats to Water Voles

Here are a few of the problems which may effect our Norfolk Water Vole populations:

### Degradation or Loss of Habitat

- This may occur where vegetated banks are frequently mowed, strimmed or flailed. Lush fringes are required to provide both cover from predators and a food source throughout the year.
- Ploughing right up to the water channel and spraying vegetation at the river margins will destroy Water Vole habitat. This may result in the fragmentation of habitat and the subsequent isolation of populations. Isolated populations are very prone to extinction.

- Insensitive river engineering, canalisation, reinforcement and maintenance works can destroy habitat.
- Heavy grazing on bankside margins will result in vegetation removal and the collapse of burrows due to excessive trampling. The bankside profile will also become damaged where there is trampling.



Photo by Terry Whittaker

- Increased urbanisation of waterways has resulted in loss of habitat through culverting and unsympathetic reinforcement of banks.

A Local Biodiversity Action Plan (LBAP) has been set up for Norfolk Water Voles. The Water Management Alliance is involved in partnership with other bodies, such as Natural England, the Environment Agency, Norfolk County Council and Norfolk Wildlife Trust, to establish and carry out a series of actions to try to protect this species.



## Persecution

The accidental killing of Water Voles during the control of pest species such as rats, rabbits or moles (eg. Using rodenticides) may be responsible for some population extinctions.

## Water Level Fluctuation

Where water levels fluctuate greatly, water voles will require steep riverbanks or unaffected backwater areas to take refuge during a flood. A lack of a refuge such as this may be the limiting factor on an otherwise ideal site. Voles will become vulnerable to terrestrial predators where ditches or streams dry up due to over-abstraction.

## Pollution

There are many potential contaminants of waterways. However, improved regulation has taken place within the last few years, minimising pollutants such as farm waste entering our watercourses. There may still be a threat to water vole populations directly from herbicides stripping bankside vegetation or insecticides which may pose an unknown effect on the reproductive success of the species.

## Things we can we do to manage and protect Water Voles

- Leave buffer strips around arable land (9m+), thereby protecting bank from erosion and pollution.
- Limit grazing density or consider fencing where water voles occur.
- Cut only one bank per year and leave a fringe of vegetation untouched at the waters edge when

For further information on [Water Vole Conservation](#) or any of the issues mentioned, contact:

Lou Mayer — Environmental Officer  
Email: [lou@wlma.org.uk](mailto:lou@wlma.org.uk)  
Tel: 01553 819600

Caroline Laburn —Assistant Environmental Officer  
Email: [caroline@wlma.org.uk](mailto:caroline@wlma.org.uk)  
Tel: 01553 819600

## Predation

The water vole has always lived in balance with their natural predators. In recent years however, water voles have become particularly vulnerable to predation by American Mink. During the breeding season in particular, female mink hunt intensively and are small enough to enter the vole burrow, taking adults and young. In this way, entire water vole colonies have been eradicated.

## Legal Protection for Water Voles

The Water Vole is protected under Schedule 5, Section 9 (4) of the Wildlife and Countryside Act 1981. Under this Act, it is illegal to :

- Damage destroy or obstruct access to any structure or place which water voles use for shelter or protection.
- Disturb a water Vole whilst it is using such a place.

This means that where water voles are present, developers and landowners who wish to maintain, alter or build on these areas must take reasonable steps to minimise damage to habitat and burrows. This usually involves a Water Vole survey or an environmental assessment of the area.