

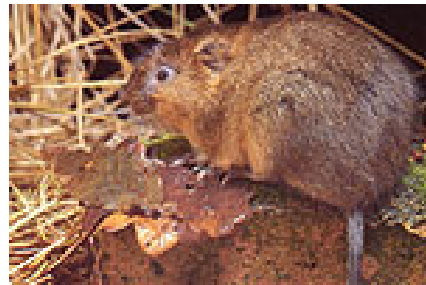
Water voles



Water vole

Water voles are very rare mammals about the size of a small guinea pig. They have dark brown fur, a blunt nose, small ears and a furry tail. They have a dense undercoat of short fur and long outer hair, which keep them warm and dry when they are swimming in the water. They nest in a system of burrows in the banks of a stream where they hide away from herons, owls, pike and mink which would like to eat them.

They could be confused with a brown rat as they are about the same size but water voles have blunter faces and furry ears and tail.



Shelter and safety

Water voles need a slow flowing waterway with permanent water that does not often flood with steep earth banks and plenty of vegetation.



Water vole burrow

They make their burrows in the steep muddy banks with holes that open in the bank, under water and into the surrounding meadow. They make tunnels in the vegetation above ground to get between their holes but they like to stay near water and don't like crossing dry ground.

Food and water



Water vole food pile

They eat waterside plants such as grasses, reeds, sedges and willow shoots on the banks of clean, relatively undisturbed streams and ditches. They also chop up vegetation into short lengths and leave it in piles. The end of the stem is angled at 45 degrees where it has been bitten off. They have been known to eat the very poisonous hemlock water dropwort.



They need to eat 80% of their body weight a day to survive. In winter they eat tree bark and roots that they dig up with their teeth. Sometimes they graze the area outside their burrows so it looks like a lawn. They spend about a quarter of their day outside their burrows feeding, collecting vegetation and patrolling their territory.

Water vole eating willow shoots

Water voles mark their territory with latrines which are piles of droppings. These are the same size as rats but are greenish brown, contain bits of plant and are sweet-smelling. Rat droppings are black, slimy, foul smelling and should not be touched. Water voles leave them on a flat muddy area of the bank or on a raft of vegetation.



Water vole latrine and droppings



Growth and reproduction

They can rear 4 or 5 litters of young a year between March and October in an underground nest made of woven plant material.

In winter they do not hibernate but they become less active. About 70% of water voles die during the winter but the ones that survive breed quickly in the spring and the numbers build up again.

Why are they endangered?

The water vole population has dropped by 90% in the last 20 years. This is the greatest decline of any British mammal this century.



Good water vole habitat

Water voles are endangered because their habitat has been destroyed in many places. Many lowland rivers and streams have become polluted, have concrete banks that have been built to stop flooding and the vegetation has been cut down or trampled and heavily grazed by cattle. Also many wetlands have been drained. These do not provide a suitable habitat.

Mink that have escaped from fur farms are also a problem as they live in similar places and kill the water voles. Mink were introduced from America in the 1950s and were bred on fur farms. Animal rights protesters released some into the wild. In the 1990s fur farms were banned by the government and some farms released their mink populations into the wild. Mink have naturalised very well. They are a problem to water voles because they are able to get inside the burrows and kill off the mother and all the young. Other predators only manage to catch a few.

Water voles are Britain's fastest declining mammal and there are now laws in place to protect them and their habitat.

If water voles are living in an area it indicates that it is a healthy wetland.

Water voles in Sussex

The Manhood Peninsula is one of the last remaining strongholds for water voles in West Sussex. This includes the area around Selsey, Pagham Harbour and Chichester Harbour. They are doing well here because there are plenty of areas of suitable habitat and the numbers of mink are controlled. The other area is on the border with East Sussex. The Wildlife and Wetlands Trust at Arundel is breeding them on the reserve in the hope of being able to reintroduce them back into the Arun Valley. There are small populations of them in other parts of Sussex but they are in danger of dying out because numbers are so small.

Selsey Action for Wildlife volunteers monitor the water vole population on the Manhood Peninsula. They look out for signs such as tracks, droppings and burrows which show where water voles are living.

To find out more facts about water voles, click here
<http://www.bbc.co.uk/nature/wildfacts/factfiles/268.shtml>
<http://www.sussexotters.org/wildlife/watervoles.htm>