

# Species Fact Sheet: Water Shrew (*Neomys fodiens*)



info@themammalsociety.org  
www.mammal.org.uk  
023 8023 7874

## Quick Facts

**Recognition:** Largest of Britain's shrews. Long pointed snout, small ears, tiny eyes. Fur is short, dense, velvety and jet black on the upper surface of the body, usually greyish white/ yellowish underneath. Most have a tuft of white hairs on ears and white hairs around eyes. Distinctive stiff white hairs on the margins of the feet, and underside of the tail forming a keel.

**Size:** 67-96mm, tail 45-77mm.

**Weight:** 12-18g.

**Life Span:** Short lives lasting no more than about 19 months.



## Distribution & Habitat

The water shrew is found throughout mainland Britain but is probably rather local in northern Scotland. It is present on many of our larger islands, including the Isle of Wight, Anglesey, Arran, Skye and Mull but is absent from Ireland, the Scillies and Channel Islands. It is semi-aquatic and is most often found in habitats close to water, including the banks of streams, rivers, ponds, drainage ditches, reed-beds and fens. It is particularly numerous at water-cress beds. Occasionally it is found far from water in rough grasslands, scrub, woodlands and hedgerows, usually as young are dispersing. They have low populations densities compared with most small mammals.

## General Ecology

### Behaviour

Water shrews inhabit burrows and come out to feed on invertebrates. The water shrew is most unusual amongst mammals in possessing venomous saliva. A mild toxin secreted into the saliva in the mouth helps to stun the prey. Even humans can feel the effects of this if bitten by a water shrew. Even though the shrew's bite rarely punctures the skin, a red rash appears at the site of the bite which is sore to touch. They do not hibernate; they remain active all through the year, diving for aquatic prey even in mid-winter. The fur is denser than in other shrews, efficiently insulating them against cold and wet.

### Diet and Feeding

Their main food source is freshwater shrimps, water skaters and caddis larvae which they obtain by diving and hunting underwater. Occasionally frogs, newts and small fish are eaten. They also feed on many terrestrial invertebrates such as earthworms, snails and beetles.

### Reproduction

Water shrews are generally solitary, each maintaining its own territory, although they frequently live in close proximity to each other in a favoured area of stream-bank. They breed throughout the summer, producing two to three litters, each with 3-15 young, between April and September. Females produce their young in a nest woven from dry grass, usually in a burrow or under a log. After breeding the adults die-off and the young shrews carry the population through the winter before becoming sexually mature the following spring, ready to breed in the summer following their birth.

## Conservation Status

Because water shrews are never very abundant, it is difficult to tell if their populations are under threat. They are still numerous in many sites where long-term studies have been conducted. The likely reasons for any decline in their numbers are habitat loss and water pollution. While they can tolerate a good deal of disturbance from human activities, drainage schemes and river-bank clearance may adversely affect them by altering the water supply, reducing their food supplies, destroying their burrows and the vegetation cover. They are very vulnerable to pollutants and pesticides in the water which they ingest indirectly via their prey and directly through their grooming activities.