

WATER VOLE

Arvicola terrestris

Water vole Colonies are normally associated with riparian habitats with dense vegetation and slow flowing or still fresh water and with soil allowing easy digging, from sea level to over 900m. Tunnel systems with nest chambers are accessed by vertical or angled holes 40-80mm diameter dug in suitable substrate, usually within two metres of water but this can extend to five metres. They generally connect to the water, below or just above the water level. Surface paths or runs in deep vegetation connect to feeding stations or grazed lawns in the form of platforms at the waters edge or slightly enlarged, flattened areas in runs away from the waters edge. Also there may be footprints, typically showing four toes with front claws forming a forward facing star shape and hind feet with five toes with the outer claws being splayed; these may be seen in suitable substrate. Both black and brown coloured animals are found throughout Scotland but in the North-West Highlands they are predominantly black.

Food

A variety of plants associated with riparian habitats are eaten, including grasses, reed, rush and sedge blades together with stems of herbaceous plants. Remains of these stems or blades of varying lengths show a characteristic angled cut at 45°.

Faeces

These are often in groups and when fresh are pale green around 8 - 12mm in length and 3-4mm diameter. They can be confused with field vole dung, which is much smaller, especially in diameter.

Breeding

In Scotland an average of three litters with up to six young in each litter are born from May to August. Those born earlier may disperse at around four months but later born may remain close to the natal area.

Home ranges

These generally extend linearly along banks of waterways, where both males and females scent mark at well used latrine sites. Scent marking is achieved by scratching flank glands with their hind feet, known as drumming, this forms typical flattened areas in runs and forms part of their olfactory communication. Splash diving creates a characteristic audible 'plop' which may alert other voles to danger. Ranges are smaller during winter than those found during the breeding season.

LEGAL STATUS

Water voles have received limited protection since 1998 under Schedule 5 of the Wildlife and Countryside Act 1981, as amended (Nature Conservation (Scotland) Act 2004) Chapter 6. Section 9(4) Subject to the provisions of this Part, if any person intentionally or recklessly -

- (a) damages or destroys, or obstructs access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; or
- (b) disturbs any such animal while it is occupying a structure or place which it uses for that purpose, he shall be guilty of an offence. Water voles are also listed as a priority species for conservation under the SNH Species Action Framework.

Predation

American mink *Neovison vison* are known to predate water vole colonies. The voles are highly susceptible, especially to female mink that can follow them in to their burrows.