

Your guide to looking for signs of water voles and other riverbank species

Thank you for taking part in our National Water Vole Monitoring Scheme. This is a simple illustrated guide to get you started in looking for water voles.

As with many mammals, it is not always possible to see water voles, even if they are present. Therefore, the best way of looking for them is to keep an eye out for signs they have left behind.

These include their droppings (usually left in piles called latrines), feeding signs/remains and burrows in the bankside (or in certain habitats nests).

Latrines, feeding signs and actual sightings of the animals are all accurate ways of telling us that water voles are living in the area. Burrows can persist for a number of years however, so cannot be used as evidence of current occupation.

Latrines



Images (clockwise from top left): E Thomas, D Tansley, D Tansley, E Kettel

Clockwise from top left: (a) latrine showing trampled and untrampled droppings, (b) untrampled latrine (c) trampled latrine and (d) untrampled droppings

- Latrines are the most distinctive field sign left by water voles
- Droppings are cylindrical with blunt ends, usually 12mm long and 4-5mm wide, resembling a large 'tic tac', colour varies depending on the diet, from greenish through to dark purple/black
- Can be found individually but usually deposited in discrete latrines
- Latrines are used to mark out territories between February and November
- As the droppings themselves are odourless, voles will often rub their hind feet on scent glands they have on their sides and then stamp on the droppings, resulting in some latrines looking trampled or flattened - *if a latrine is at least partially trampled, please record as trampled*
- Trampled latrines are a good indication that breeding is taking place

Similar signs:



Rat droppings

- Often larger, more irregular in size and pointed at one end (see above photo)
- Black to brown (bright green if poison bait has been eaten)
- More often found scattered than in latrines



Field vole droppings

- Much smaller
- Similar in size to a grain of rice (see in comparison to a 2p coin in above photo)

Images D Tansley

Feeding signs



Images (clockwise from top left): D Tansley, D Tansley, E Thomas, D Tansley, E Thomas

Clockwise from top left: (a) a feeding station by the water's edge, (b) a feeding station (c) a large feeding station and (d) a smaller feeding station with a hand to show scale

- Water voles often bring food items to favoured feeding stations along their pathways or on platforms along the water's edge
- Neat piles of chewed lengths of vegetation are left after feeding
- Sections are typically 8cm long and have 45 degree cuts to their ends
- Commonly eaten plants include coarse grasses, reeds, sedges and rushes

Similar signs:



Field vole feeding signs

- The chewed lengths of vegetation will often be from less robust plants (grasses and herbs) and in shorter lengths (see in comparison to a 2p coin in above photo)

Burrows



Images: water vole burrows E Thomas, rat burrows D Tansley

- Water vole burrows appear as a series of holes along the water's edge, some just above or at the water level on steep banks, others can be below the water level
- There can also be burrows occurring further up the bank, up to 3m from the water's edge.
- The holes are typically wider than they are high with a diameter of 4-8cm

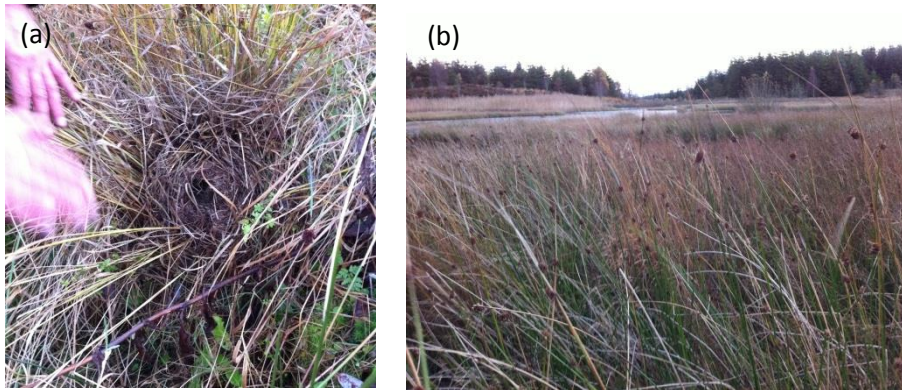
Similar signs:



Rat burrows

- These are of a similar size to water vole burrows
- However, they will often be linked by rat runs along the bank (see above photo) and have piles of excavated soil in front of the entrance
- If you are unsure, look for droppings nearby and see if they are water vole or rat droppings

Nests



(a) a water vole nest and (b) the habitat in which nests can be found

Images (clockwise from top left):
N Al-Fulaij, N Al-Fulaij, D White, D White

- In some areas of fen or rush pasture, water voles make woven nests the size of footballs (about 20cm wide) above ground amongst tussocks
- If your site has fen or rush pasture, keep an eye out for any nests and record them in the burrows section of the recording form

Similar signs:



(a) a harvest mouse nest in amongst vegetation and (b) a harvest mouse nest being held demonstrating how much smaller they are than water vole nests

Harvest mice nests

- These are much smaller than water vole nests
- Non-breeding nests are about 5cm wide
- Breeding nests are a bit bigger at 10cm

Sightings



Images (clockwise): water voles Jessica Evans, Erni shutterstock.com, brown rat Giedrius Shutterstock.com

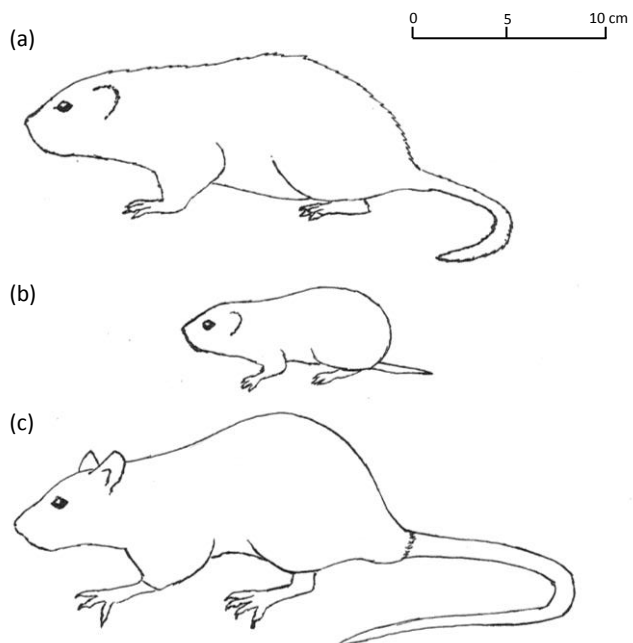
- Water voles are the largest of the British voles, weighing up to 350g and being 14-22cm long (not including the tail)
- They have a short, rounded body, blunt muzzle and small ears that are often almost entirely hidden in their thick fur
- Their tails are about 2/3 of their body length and furry

Similar species:



Brown rat

- Both species swim, dive and jump well.
- However, rats are quite significantly larger, with adults weighing around 500g and being 20-28cm long (not including the tail)
- Rats also have a much more pointed muzzle, pronounced often pink coloured ears and their tail can be the same length as their body and is scaly and hairless



By E Thomas

Diagram to show the relative sizes of a (a) water vole, (b) field vole and (c) brown rat

As part of the survey we would also like you to record mink and otter signs so we can gain an insight into the distribution of these two species at the survey sites.

American mink field signs



Images (clockwise from top left): Dmytro Pylypenko shutterstock.com, E. Kettle, D. Tansley, D. Tansley

Clockwise from top left: (a) an American mink showing the distinctive white patch under the chin, (b) mink scat with a ruler to demonstrate scale, (c) mink footprints with a 2p coin to show scale, (d) another example of mink scat

- American mink are a medium-sized member of the weasel family.
- They are non-native and predate water voles.
- They are generally dark brown, with a distinctive white patch on the bottom of the chin
- Mink mark their territories using distinctive scats. Mink scat has an unpleasant rancid odour and usually contains mammal hair or feathers.
- Mink tracks usually follow the soft edge of a water body and are easy to spot.
- They have five toes which radiate from a crescent-shaped central pad which can be clearly seen in soft mud, while on harder surfaces often only four toes imprints are left. A large male may leave prints up to 35mm long and 35mm wide, whereas the footprints of females and juveniles usually measure 28mm long by 25mm wide.

Mink Rafts



- Mink rafts are used to both detect the presence and absence of mink on waterways and control their numbers.
- They were designed by the Game and Wildlife Conservation Trust (GWCT) – to find out more visit: www.gwct.org.uk/wildlife/research/mammals/american-mink/the-gwct-mink-raft/

Otter field signs



Images (clockwise from top left): E Thomas, D Tansley, E Kettel, D Tansley, D Tansley

Clockwise from top left: (a) an otter showing the creamy chest and brown back, (b) otter spraint on a fallen log, (c) otter footprint with a ruler for scale (d) otter spraint, showing bleaching of the grass from constant use, with a 2p coin for scale (e) otter spraint with a 10p coin for scale

- Otters are around the size of a fox but with much shorter legs, a brown back and creamy coloured chest and belly.
- Otter spraints can usually be found on prominent objects e.g. on top of fallen logs, on stones in the river or on the bank or on tree roots. Spraints have a musty fishy smell – often likened to jasmine tea! – and usually contain fish bones and scales.
- Otter tracks are larger than those of mink – about the size of those of a spaniel-sized dog, though they often show five claws (whereas dogs only have four).