

An identification
guide to the small
mammals of Cornwall
and the Isles of Scilly

Celebrating Cornwall's Mammals - from dormice to dolphins!

A Guide to the Small Mammals of Cornwall and the Isles of Scilly

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Illustrations by Jenny King.

Introduction

There are thought to be 11 species of small mammal in Cornwall and the Isles of Scilly, nearly half of the total number of land mammal species found in the county. Small mammals typically do not exceed 130mm from head to body. For the purpose of this guide however we have also included both rats and water voles, not classed as small mammals, but sometimes confused with the smaller mammal species. Small mammals are elusive creatures, many are nocturnal and very shy; as a result they can be difficult to study. Our knowledge and understanding of their distributions across the County, as well as their populations and habitat preferences, is lacking.

The primary purpose, therefore, of producing this guide is to assist in the recognition of the small mammal species (mice, voles, shrews and rats) and to encourage their recording. The guide is divided into seven sections, each one giving clear illustrations of each small mammal, as well as the tracks and signs they leave behind. Descriptions of the key identification features and further details relating to the species in Cornwall and Scilly are given in the accompanying text boxes.

A simple recording form is included with this guide to aid recording. All you have to do is record **what** mammal species you see, **where** and **when** you see them, and **who** you are. Whether you see a Wood Mouse on your bird table, a shrew brought in by your cat, a Hazel nut gnawed by a Dormouse or a Harvest Mouse nest, we would like to know!

The recording form can be photocopied and taken into the field with you. Further copies can be obtained from the Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS) or downloaded from our website www.cornwallwildliferecords.co.uk. All completed recording forms should be sent to ERCCIS (address given below).

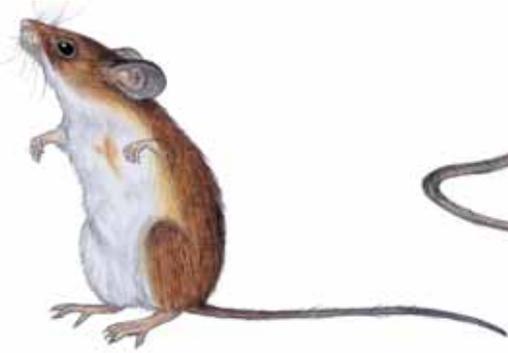
By recording when and where we see our small mammals we can monitor their distributions and gain a greater understanding of their populations and status within the County. This information will enable us to work towards conserving them.

We hope *An identification guide to the small mammals of Cornwall and the Isles of Scilly* will inspire you to find, recognise, record and enjoy the small mammals found throughout Cornwall and the Isles of Scilly.

Alex Howie

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Mice



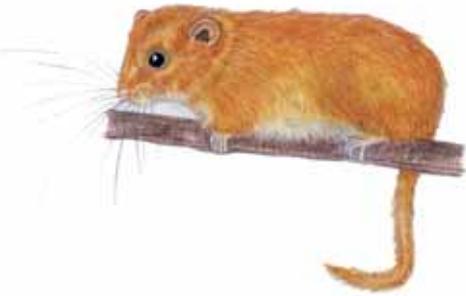
Wood Mouse *Apodemus sylvaticus*
Size: Head-body 48mm - 80mm,
Tail 24-44mm



House Mouse *Mus musculus*
Size: Head-body 72-103mm,
Tail 70-95mm



Harvest Mouse
Micromys minutus
Size: Head-body 50-70mm,
Tail 50-70mm



Dormouse
Muscardinus avellanarius
Size: Head-body
60-90mm, Tail 57-
68mm



Yellow-necked Mouse
Apodemus flavicollis
Size: Head-body 95-
120mm, Tail 77-118mm



Illustrations are not to scale

	Wood Mouse	House Mouse	Harvest Mouse	Dormouse	Yellow-necked Mouse
Distinguishing features	Large ears, eyes and hind feet, long tail, small yellowish stripe/mark on chest	Large ears, smaller eyes compared to Wood Mouse, pointy nose, greasy fur, musky scent	Smallest of the mice, blunt muzzle, hairy ears - relatively small	Short muzzle, prominent eyes, long black whiskers, very furry tail	Bigger than Wood Mouse, yellowish collar across chest, large eyes ears and hind feet
Colour	Red/brown on top, grey/white underside yellow/orange streak on chest between forelegs	Grey/brown on top and underside, greasy fur	Golden brown top, white underside	Orange/brown on top, pale buff underside	Red/brown on top, pale grey underside, yellow/brown band across the chest
Tail	< 75% of head and body length, black fur on the top, pale below	70-95% of head-body length, brown/pink all over, scaly with some fur, ringed	Prehensile tail, black/pink all over, with some fur, tip of tail prehensile	Slightly shorter than head-body length, very furry	Equal to head-body length, black fur on the top
Habitat	Woodland, gardens, farmland, grassland, scrub, sand dunes	Gardens, farmland, farm buildings, hedgerows	Field margins, cereal farmland, long grass and hay meadows, hedgerows, reedbeds	Woodland/coppiced woodland, hedgerows, scrub	Woodland, gardens, hedgerows
Active	Mainly nocturnal	Mainly nocturnal	Mainly nocturnal	Nocturnal, hibernates Oct/Nov - April	Nocturnal
	Common	Common	Nationally under - recorded	Nationally rare	Very unlikely to be seen in Cornwall

Voles

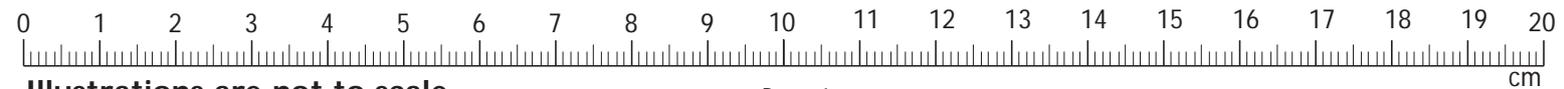
Water Vole *Arvicola terrestris*
Size: Head-body 120-235mm, Tail 40-146mm
Comparatively larger



Field Vole *Microtus agrestis*
Size: Head-body 90-115mm, Tail 18-49mm
Less obvious ears



Bank Vole *Clethrionomys glareolus*
Size: Head-body 90-110mm, Tail 36-72mm
More obvious ears



Illustrations are not to scale

	Bank Vole	Field Vole	Water Vole
Distinguishing features	Reddish fur colour, larger ears and eyes and longer tail than Field Vole	Greyish fur colour, shaggier fur than Bank Vole, greyish fur colour, smaller ears, very short tail	Blunt muzzle, very small ears and shorter tail compared to a rat, makes a 'plop' noise as enters water
Colour	Red/brown, grey on flanks	Dark grey/brown on top, grey underside, paws and neck, shabby coat	Dark brown
Tail	50% of head-body length, fur dark on top, white on underside	30% of head/body length, pale brown fur all over	55-77% of head-body length, slightly furry
Habitat	Woodland, gardens, farmland, grassland, scrub, hedgerows, banks	Open woodland, scrub, grassland, farmland, road verges, sand dunes	Fresh water, steep river banks with good vegetation cover
Active	Day and night	Day and night	Day and night
	Common	Common	Very unlikely to be seen in Cornwall

Shrews



Common Shrew *Sorex araneus*
Size: Head-body 48-80mm, Tail 24-44mm



Pygmy Shrew *Sorex minutus*
Size: Head-body 40-60mm, Tail 32-46mm



Water Shrew *Neomys fodiens*
Size: Head-body 67-96mm, Tail 45-77mm



White-toothed Shrew *Crocidura suaveolens*
Size: Head-body 50-82mm, Tail 24-44mm



Illustrations are not to scale

	Common Shrew	Pygmy Shrew	Water Shrew	White-toothed Shrew
Distinguishing features	Dark velvety hair, tail shorter than body length, three tone coat, red tips to teeth	Smallest of our shrews, long hairy tail, two tone coat, domed head, red tips to teeth	Largest of our shrews, black and white coat, mainly aquatic, red tips to teeth	White teeth, prominent ears compared to the other three species
Colour	Three tone - dark brown back, paler sides, grey/white underside	Brown back, pale underside	Black on top, white underside	Red/brown on top, yellowish underside
Tail	50% of head/body length, young have furry tails, adults have a few stiff hairs underneath and bald on top	65-70% of head/body length, proportionally longer, thicker and hairier than the other shrew species	Slightly shorter than head-body length, prominent keel of stiff white silvery hairs on underside used for swimming	Hairy
Habitat	Woodland, gardens, farmland, grassland, scrub, road verges	Woodland edge, gardens, farmland, grassland, heath land, sand dunes	Generally close to water, muddy river banks	All habitats on the Isles of Scilly, especially heath land and seashore
Active	Mainly nocturnal	Day and night	Nocturnal	Mainly nocturnal
	Common	Desperately under-recorded	Under-recorded	Found on the Isles of Scilly, not in Cornwall

Rats



Black Rat *Rattus rattus*
Size: Head-body 150-240mm, Tail 115-260mm



Brown Rat / Common Rat *Rattus norvegicus*
Size: Head-body 214-290mm, Tail 170-230mm



Illustrations are not to scale

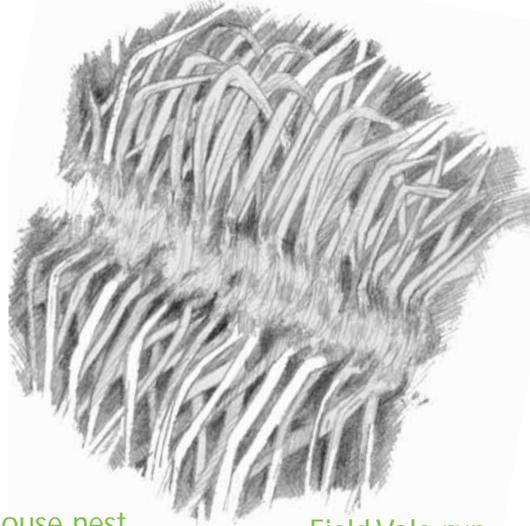
	Brown Rat	Black Rat
Distinguishing features	Large relatively hairless ears, silent as enters water	Very pointed nose, black colour, large hairless ears, not found in water
Colour	Grey/brown, shabby coat	Black, glossy fur
Tail	80-100% of head body length, hairless with darker skin on top, thicker than Black Rat, scaly	100-130% of head-body length, hairless and thinner than tail of Brown Rat
Habitat	Generally where there are people and food supplies, field margins, farms, watercourses	Near buildings, ships, particularly in ports.
Active	Mainly nocturnal	Nocturnal
	Common	Very unlikely to be seen in Cornwall

Nests

More commonly found nests



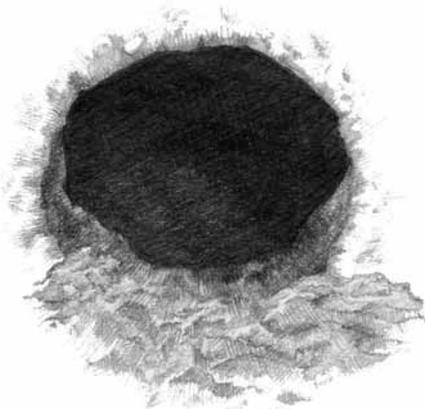
Harvest Mouse nest



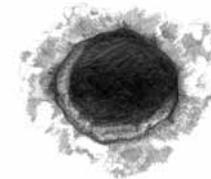
Field Vole run



Dormouse nest



Rat burrow
6-8cm diameter
Note: large spoil heap
at entrance. Burrows
connected by network
of runs



Bank vole burrow
Note: <3cm diameter
Food collected near entrance

	Dormouse	Bank Vole	Field Vole	Wood Mouse	Harvest Mouse
Where to find nest	Hedge, deciduous woodland, hedgerow, dense coppice (esp. Hazel) and scrub. Sometimes make use of old bird nests	Woodland, scrub, banks, hedges, underground, in logs or in tree roots	Grasslands, at base of grass tussocks, open woodland, damp ground, young forestry plantations	Nests often underground, woodland, arable land, Bramble and Bracken scrub, gardens, dunes	Grass tussocks, dense vegetation - cereals, herbs, Brambles, rushes, hay meadows, reedbeds
Material	Tightly woven out of stripped Honeysuckle. Rarely moss and leaves	Woodland: feathers, moss, leaves. Grassland: moss, grass	Finely shredded grass	Leaves, moss, shredded grass	Grass
Size	About 10cm diameter, 15cm diameter if breeding nest	Ball shaped	Spherical	Usually underground but will nest in bird and Dormouse boxes. Can have several chambers	Up to 10cm, larger in winter and less spherical
Height above ground	Usually 5m+. Sometimes lower if in shrub layer or hedge	Ground level/ under ground	Tussock height, <1m	Underground	30-60cm
Entrance	Lacks an obvious entrance	Obvious exit/ entrance hole. Many entrances and nest chambers	Several	One	One

Feeding remains



Squirrel

Smooth split in two from top to bottom by adult, more of a jagged split by juveniles.



Dormouse

Tooth/chisel marks on the surface, smooth, scraped out inner ring



Wood Mouse

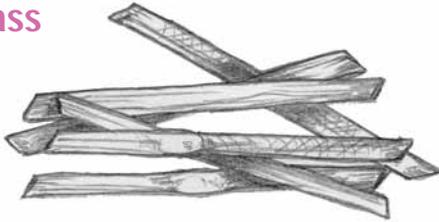
Tooth/chisel marks on the surface and inner edge of hole



Bank Vole

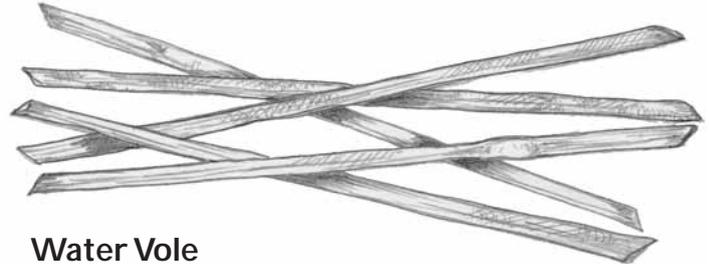
No gnaw marks on surface, tooth/chisel marks on inner edge of hole

Chewed grass



Field Vole

2-3cm long
Piles of chewed grass stems found amongst runs in long grass
Cut at 45°
Often found next to droppings



Water Vole

10cm long
Piles of chewed grass, reed or pith from rushes
Cut at 45°
Found near watercourses

Droppings and footprints



House Mouse

6mm long, 2mm thick
Strong, musky smell
Like all mice droppings they are very hard when dry and do not crumble (unlike bat droppings which do crumble)



Field Vole

6-7mm long, 2-3mm thick
Odourless
Cylindrical, found in small piles along runs, fibrous



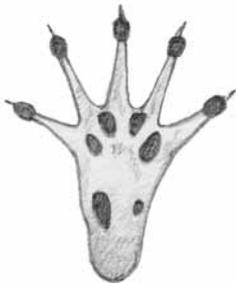
Brown Rat

15-20mm long, 5-6mm thick
Foul smelling
Tapered/pointed at one end, black/brown



Water Vole

8-12mm long, 4-5mm thick
Odourless
Cylindrical, green, deposited in latrine sites



Brown Rat

Hind foot: 3.3cm long, 2.8cm wide, 5 toes
Fore foot: 1.8cm long, 2.5cm wide, 4 toes



Black Rat

Hind foot: 2.1cm long, 2cm wide, 5 toes
Fore foot: 1.5cm long, 1.7cm wide, 4 toes



Illustrations are not to scale

Further information

Cornwall Mammal Group c/o Cornwall Wildlife Trust
Five Acres, Allet, Truro, TR4 9DJ (01872) 273939
Web-site: www.cornwallwildlifetrust.org.uk

Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS)
c/o Cornwall Wildlife Trust
Web-site: www.ercis.co.uk

Mammals Trust UK
15 Cloisters House, 8 Battersea Park Rd, London, SW8 4BG
(0207) 498 5262, web-site: www.mtuk.org

The Mammal Society
2B, Inworth Street, London, SW11 3EP (0207) 3502200
Web-site: www.mammal.org.uk

Further reading

A Guide to British mammal tracks and signs (2001)
S. Bullion, Field Studies Council.

Animal Tracks and Signs (2001)
P. Bang, and P. Dahlstrom, Oxford.

A Handbook for Biological Recorders (2000)
CISFBR and ERCCIS

Collins Field Guide to Mammals (1993)
D. Macdonald, and P. Barrett, Collins, London.

How to Find and Identify Mammals (2003)
G. Sargent and P. Morris, The Mammal Society.

Mice and voles (1993)
J. Flowerdew, Whittet Books