

A simple key to small mammal skulls found in owl pellets in Bedfordshire

The number in brackets after the question number refers to the question number that led you to that point. (Refer to the photographs for general appearance if in doubt.)

1	Gap between incisors and molars or no holes between A continuous row of holes or teeth (see photos)	2(rodents) 9(insectivores)
2(1)	Zigzag molars	3
	Nobly molars	5
	Molars with faint parallel cross ridges	8
3(2)	Molar tooth row length 9mm or more	Water vole
	Molar tooth row length 6mm or less	4
4(3)	Paired root to molars, 2 inner loops on 2 nd upper molar*	Bank vole
	Open single root to molars, 3 inner loops on 2 nd upper molar	Field Vole
5(2)	Notch in upper incisor	House mouse
	No such notch	6
6(5)	skull length less than 2cm, very fragile (molar tooth row length less than 3mm)	Harvest mouse
	Larger skull or longer molar tooth row	7
7(6)	Molar tooth row length 7mm or more	Brown Rat
	Molar tooth row length 3 to 5mm	Wood or Yellow-necked mouse**
8(2)***	Skull total length under 2.5cm	Hazel dormouse
	Larger Skull	Edible dormouse
9(1)	Large obvious canine (and no large holes in underside of skull)	12
	No such canine (and two large holes in underside of skull)	10
10(9)	4 small teeth (or sockets) between incisors and molars****	Water Shrew
	5 such teeth (or sockets)	11
11(10)	Tiny skull, upper tooth row less than 7mm	Pygmy Shrew
	Upper tooth row greater than 7mm	Common Shrew
12(9)	Canine with two roots (or two sockets)	Mole
	Canine with one root (or one socket)	Other species (probably Weasel)

This is a very simple key and there are a number of other species of small mammal that occur in other parts of Great Britain. Finding any of these in an owl pellet from Bedfordshire is very unlikely and any species not fitting into the above key or proving hard to identify should either be referred to a more complete key or the County Mammal Recorder or another competent person for verification.

*The rear end of the pallet of the two **voles** is distinctively shaped, straight across in the **Bank Vole** and with a central projection in the **Field Vole**

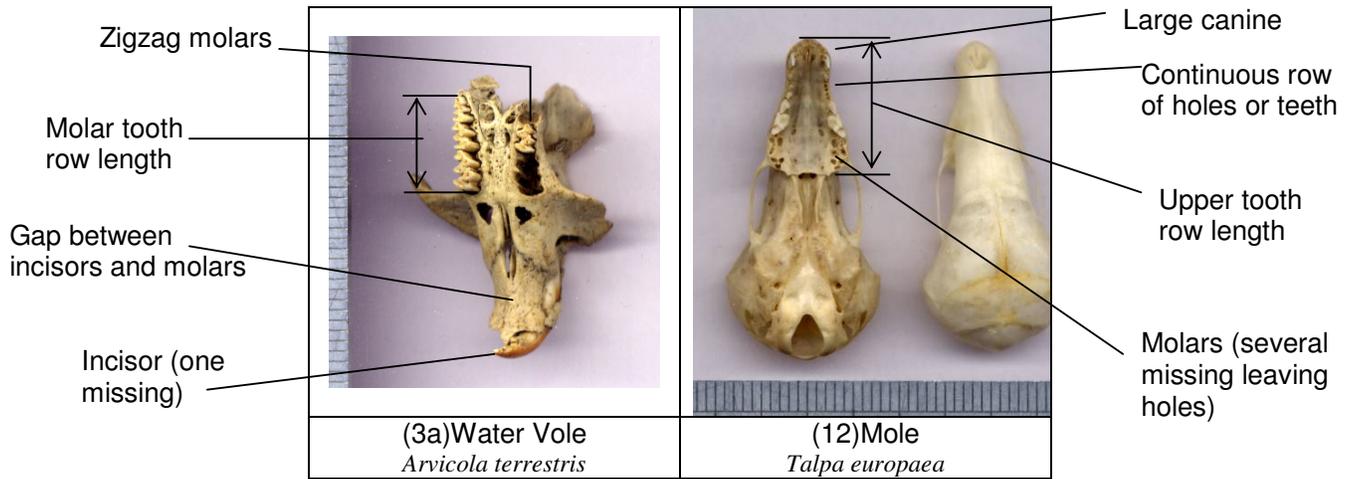
Telling the difference between **Wood mouse and **Yellow-necked mouse** is difficult, unless it is from a known Yellow-necked mouse area assume it is a Wood mouse or refer your specimen as above.

***The larger **Edible dormouse** may be found in parts of south Bedfordshire but is even more unlikely to turn up in an owl pellet than the Hazel dormouse and any suspected specimen should be referred as above.

****The **Water Shrew** has two pits or depressions on the underside of the skull at the front of the brain case that are not found in the other British shrews (see photographs), this is a diagnostic characteristic.

**Photographic reference guide to small mammal skulls
from Bedfordshire Owl Pellets.**

Illustration of some features mentioned in the key



Insectivores in Bedfordshire Owl Pellets

(No gap between incisors and molars (check teeth aren't missing leaving small holes))



Large holes

No large holes

Note small depression here



Rodents in Bedfordshire Owl Pellets

Voles (Gap between incisors and molars, molars with Zigzag surface)

		
<p>(4a)Bank Vole <i>Clethrionomys glareolus</i></p>	<p>(4b)Field Vole <i>Microtus agrestis</i></p>	<p>(3a)Water Vole <i>Arvicola terrestris</i></p>

Mice and rats (gap between incisors and molars, molars nobly or ridged)

		
<p>(7b)Wood Mouse <i>Apodemus sylvaticus</i></p>	<p>(7b)Yellow-necked Mouse <i>Apodemus flavicollis</i></p>	<p>(6a)Harvest Mouse <i>Micromys minutus</i></p>
		
<p>(5a)House Mouse <i>Mus domesticus</i></p>	<p>(7a)Brown Rat <i>Rattus norvegicus</i></p>	<p>(8)Hazel dormouse <i>Muscardinus avellanarius</i></p>

All scale bars in mm (Photos not quite to same scale)