

# **Small mammal and bat surveys at Raikes Road Burial Ground, Skipton**

## **Introduction**

Raikes Road Burial Ground is located on the outskirts of Skipton in North Yorkshire (Grid ref. SD987520). The burial ground was in use between 1846 and 1876, with burials including Rudyard Kipling's grandparents, the father of one of the founders of M & S, and a veteran of the Battle of Waterloo, amongst others. After it closed, the burial ground remained undisturbed behind its boundary walls for over a century and became a haven for wildlife. More recently, a volunteer group, the Friends of Raikes Road Burial Ground, have started work with the help of Skipton Town Council restoring the burial ground and looking into both the people buried there and the wildlife using the site. YMG were asked to carry out small mammal and bat surveys of the burial ground so that wildlife can be taken into account during management decisions. In addition, the local RSPB Wildlife Explorers joined us to help with the mammal survey.

## **Small mammal survey**

### **Methods**

Fifty Longworth traps were placed in a variety of habitats within the burial ground, baited with wheat, peanuts, sunflower seeds, carrots and blowfly pupae, with a ball of hay for bedding.

Trap locations:

1. Long grass between gravestones in the centre of the site (10 traps).
2. Fairly open habitat around a small wall near the north-west boundary of the site (12 traps).
3. Long grass between gravestones in the north-west corner of the site (8 traps).
4. Beneath mature trees alongside the south-west boundary wall adjacent to Raikes Road (5 traps).
5. Long grass under trees in the centre of the site (10 traps).
6. Under a dead tree and in a brash pile against the north-east boundary wall (5 traps).

Traps were set on the evening of Saturday 12<sup>th</sup> July and checked on Sunday 13<sup>th</sup> July from 10am onwards.

## Results

Summary of small mammals captured at Raikes Road Burial Ground, Skipton, July 2014.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Bank vole	0	0	1	0	1	2
Field vole	1	0	2	1	2	0
Common shrew	2	0	3	1	0	0
Water shrew	0	0	0	0	2	0

Appendix I shows a comprehensive table of results for this trap.

## Discussion and conclusions

Four species of small mammal were caught at Raikes Road Burial Ground, including bank vole (*Myodes glareolus*), field vole (*Microtus agrestis*), common shrew (*Sorex araneus*) and water shrew (*Neomys fodiens*). The three most commonly captured species in areas with a good ground cover of long, tussocky grass (Sites 1, 3, 4 and 5) were field vole, common shrew and bank vole. Only bank voles were caught under the dead tree and in the brash pile against the north-east boundary wall (Site 6) and no small mammals were caught at Site 2, an area with very little ground cover. The two juvenile water shrews caught at Site 5 were of special interest, as the nearest water is Springs Canal which is located about 200m to the south-east of the burial ground. However, there is a boggy area within the cemetery, probably caused by blocked land drains, which may provide suitable invertebrate prey for water shrews. In addition, juvenile water shrews are often found well away from water during the summer months when they are dispersing from their parents' territory. More surprising is the lack of wood mice (*Apodemus sylvaticus*) in the traps, as the habitat in the burial ground is suitable and a wood mouse was seen running into the brash pile when the traps were being checked. However, wood mice tend to be mainly nocturnal and the heavy overnight rain may have stopped them from exploring the traps, whereas the other species that were caught tend

to be active during the day as well as at night. Other mammal signs located in the burial ground included a fox (*Vulpes vulpes*) scat and rabbit (*Oryctolagus cuniculus*) burrows.

The survey results show how valuable the long, un-managed, tussocky grass habitat within the burial ground is for small mammals and areas of this habitat should be retained wherever possible. These areas should remain un-cut unless scrub starts to encroach. If cutting is required it should be carried out in late summer, and on a rotation to ensure that enough long grass remains each winter to provide a refuge for small mammals and invertebrates. The boggy patch in the burial ground should be retained if possible and would be a suitable area to plant with native wild flowers such as snake's head fritillary (*Fritillaria meleagris*), cuckoo flower (*Cardamine pratensis*) and ragged robin (*Lychnis flos-cuculi*).

## Bat survey

### Methods

Two experienced bat surveyors with heterodyne and frequency division bat detectors surveyed the burial ground for bat activity on 23<sup>rd</sup> August 2014 from 8pm to 9.45pm (sunset was at 8.19pm). The weather was warm and dry with a slight breeze and there was a plentiful supply of midges under the trees in the cemetery.

### Results

Bat activity at Raikes Road Burial Ground, Skipton, August 2014.

<b>Time</b>	<b>Species</b>	<b>Activity</b>
8.25pm	Soprano pipistrelle	Commuting from the north-west, possibly from a nearby roost, and foraging in the burial ground.
8.50pm	Common pipistrelle	Commuting from the south-west and foraging in the burial ground.
8.54pm	Noctule	Commuting over the burial ground from the south-west.
9.19pm	Brown long-eared	Foraging under mature trees near the north-east boundary.

## Discussion and conclusions

Although no bat roosts were located in the burial ground during this one off survey, the site does contain several mature trees with potential for roosting bats and care should be taken when carrying out management work on the trees. Both common pipistrelles (*Pipistrellus pipistrellus*) and soprano pipistrelles (*Pipistrellus pygmaeus*) were recorded commuting to the burial ground to feed under the trees. In addition, a single noctule bat (*Nyctalus noctula*) commuted across the site and a brown long-eared bat (*Plecotus auritus*) was recorded feeding under mature trees near the north-east boundary. The site is obviously used for foraging by several species of bats and the erection of some bat boxes on the mature trees within the burial ground may result in roosting bats. The Bat Conservation Trust website has details of bat boxes and where to site them. See [http://www.bats.org.uk/pages/bat\\_boxes.html](http://www.bats.org.uk/pages/bat_boxes.html)

Thanks are due to Les Chandler of Skipton Town Council and the Friends of Raikes Road Burial Ground for inviting us to Skipton, and to the RSPB Wildlife Explorers for helping with the mammal survey. Many thanks to Rob Masheder for helping with both the mammal survey and the bat survey, and thanks to Les and Chris for the excellent fish and chips!

## Appendix I

**Table of results:** small mammal survey at Raikes Road Burial Ground, Skipton, July 2014.

Weather: Heavy rain overnight; warm, dry, cloudy morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Long grass (1)	Field vole	F	A	32.0
Long grass (1)	Common shrew	?	A	8.0
Long grass (1)	Common shrew	?	A	8.0
Long grass (3)	Common shrew	?	A	9.0
Long grass (3)	Bank vole	M	A	25.0
Long grass (3)	Common shrew**	?	A	?
Long grass (3)	Common shrew	?	A	10.0
Long grass (3)	Field vole	F	A	35.0
Long grass (3)	Field vole	M	SA	25.0
Mature trees (4)	Common shrew	?	A	9.0
Mature trees (4)	Field vole	M	SA	24.0
Long grass/trees (5)	Water shrew	?	J	12.0
Long grass/trees (5)	Water shrew	?	J	12.0
Long grass/trees (5)	Field vole	F	A	33.0
Long grass/trees (5)	Field vole	M	A	34.0
Long grass/trees (5)	Bank vole	F	SA	16.0
Dead tree/brash (6)	Bank vole	M	J	13.0
Dead tree/brash (6)	Bank vole	F	SA	18.0

\* M = male; F = female; A = adult; SA = subadult; J = juvenile

\*\*Escaped during handling