

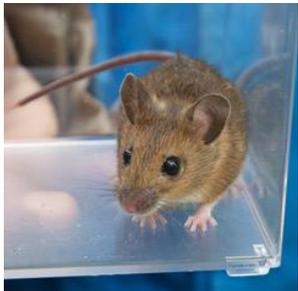
Small Mammal Surveys on Langdyke Countryside Trust Reserves



Bank Vole - *Picture: Duncan Kirkwood*

Introduction

Over the past three years or so we have carried out small mammal surveys on a number of the Trust reserves. 'Small' mammals are loosely defined, but for the purposes of this article they refer to those terrestrial mammals that are generally caught in Longworth traps in the UK, and include:

<p>Wood Mouse (<i>Apodemus sylvaticus</i>)</p> 	<p>Head and body 8-11cm</p>	<p>Common; found almost anywhere (including buildings) <i>Picture: Martin Parsons</i></p>
<p>Yellow-necked Mouse (<i>Apodemus flavicollis</i>)</p>	<p>8-13cm</p>	<p>Uncommon; mature woodland</p>
<p>House Mouse (<i>Mus domesticus</i>)</p>	<p>8-10cm</p>	<p>Uncommon; usually close to buildings</p>
<p>Harvest Mouse</p>	<p>5-8cm</p>	<p>Uncommon; reedbeds and ditches</p>

<i>(Micromys minutus)</i>		
Common Shrew <i>(Sorex araneus)</i>	6-8cm	Common; areas with ground cover
Pygmy Shrew <i>(Sorex minutus)</i>	4-6.5cm	Common; areas with ground cover
Water Shrew <i>(Neomys fodiens)</i>	7-10cm	Uncommon; wetland areas <i>Picture: Malcolm Holley</i>
		
Field Vole <i>(Microtus agrestis)</i>	9-15cm	Common; rough grassland
Bank Vole <i>(Myodes glareolus)</i>	8-12cm	Common; hedgerow and woodland <i>Picture: Malcolm Holley</i>
		

Weasels (*Mustela nivalis*) occasionally enter Longworth traps.



Longworth and Tube Trap

Methodology

In general, for each survey we have set between 40 and 50 traps on an evening, and checked them 12, 24, and 36 hours later. Traps were only set when the temperature was not expected to be outside the range of 5C – 25C. We have a licence from Natural England which authorises us to capture shrews; to prevent unnecessary shrew mortalities we are required to ensure there is sufficient food in the traps and that the traps are checked at least once every 12 hours. For this reason we only trap between April and September when there is 12 hours of usable daylight.

The traps were provisioned with mixed seed (as generally available for bird feeders) and casters (blowfly larvae), and a small handful of dried hay. The seed provides food for mice and voles, and the casters for shrews (though mice and voles will also eat them). The latter is important as shrews need to eat around their body-weight in food per day, and if not provided with sufficient food they will die in the traps.

At each 12 hour interval each closed trap is opened, and each animal is:

- Identified
- Weighed
- Marked (by clipping a small amount of hair from the rump) – this allows us to establish whether an animal is 'new' or a recapture of an animal caught in an earlier session
- Sexed
- Assessed as to age and breeding condition

Animals are then released at the location at which they were caught.

A daytime session (ie traps checked in the evening) will normally provide a catch rate of 12-15%; because small mammals are in general more active at night, a morning check will normally result in a higher catch-rate of 25% or more. Obviously suitability of habitat has a large effect on the catch-rate, as does the season, - small mammal population levels are at their highest in late summer.

Results

Date	Location	Wood Mouse	Water Shrew	Common Shrew	Pygmy Shrew	Field Vole	Bank Vole
Aug 2016	Swaddywell Pit	8	0	4	2	1	1
Aug 2017	Etton Maxey	2	1	6	3	5	0
Aug 2017	Swaddywell Meadow	5	0	11	0	2	10
Aug 2017	Swaddywell Pit	3	2	20	2	3	8
Aug 2018	Bainton Heath	8	0	4	4	2	8
Aug 2018	Etton High Meadow	25	0	13	4	0	1
Sep 2018	Vergette Meadow	41	1	8	0	0	1

The Water Shrew records for Etton Maxey and Swaddywell in August 2017 were the first we know of for North Cambridgeshire.

One interesting point is the lack of Field Vole captures. They can be 'trap-shy', but we usually capture some animals where they are present.

Other Mammals on LCT Reserves

We are currently acting as mammal recorders for LCT, and have recorded the following mammal species in the last three years or so:

Species	Bainton Heath	Barnack Hills and Holes	Etton High Meadow	Etton Maxey	Swaddywe I Pit	Torpe	Vergette Wood Meadow
Fallow Deer	Y						
Chinese Muntjac	Y				Y		
Fox		Y		Y	Y		
Stoat				Y			
Hedgehog					Y		
Water Shrew				Y	Y		Y
Common Shrew	Y		Y	Y	Y		Y
Pygmy Shrew	Y		Y	Y	Y		
Mole	Y	Y			Y		
Brown Hare			Y	Y	Y		
Rabbit	Y	Y	Y	Y	Y		
Water Vole				Y			
Field Vole	Y			Y	Y		
Bank Vole	Y		Y		Y		Y
Wood Mouse	Y		Y	Y	Y		Y
Harvest Mouse				Y			
Grey Squirrel	Y	Y		Y	Y		

There are undoubtedly more mammal species on the Langdyke reserves – if you have direct evidence of any mammals on the reserves please forward details them to us (species, date, location (reserve and grid reference if possible)) at Lons57@gmail.com.

Steve and Liz Lonsdale