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### *John Ray*

In January and February YMG members assisted North Yorkshire Bat Group with bat hibernation surveys at Fountains Abbey.

Throughout the year there were walks in various parts of Yorkshire, e.g. Thornton-le-Dale, Micklefield, Sheriff Hutton, Buckden, Castle Howard Estate, Wensleydale (to see red squirrels, in conjunction with CIEEM), Brimham Rocks and Terrington.

In the warmer months, small mammal trapping surveys were conducted at the University of York, Three Hagges Wood Meadow, Escrick, RSPB Bempton, Cropton Forest, Goosemoor Organics near Wetherby, St Nicks Nature Reserve in York and Tockwith. Thank you to Ann Hanson, Rob Masheder, Jack Whitehead and Barry Wright for organising them.

YMG were represented on stands demonstrating owl pellet analysis at wildlife days at Three Hagges Wood, Escrick, Dalby Forest and Brunswick Organic Nursery, York.

Guest speakers towards the end of the year included David Wembridge of the People's Trust for Endangered Species on Citizen Science Projects, passionate advocate Amy-Jane Beer on the Manifesto for Wildlife and Roisin Black of the National Trust on the Water Vole Reintroduction at Malham Estate.

Thank you to Natasha Hambly for organising speakers and keeping us advised of forthcoming events via our newsletter, to Anne Carter for publicising them through social media, to John Drewett for looking after membership, to Rob for maintaining the accounts, to Ann for organising field activities and to Andrew Halcro-Johnston for editing Imprint.

Our 2019/2020 season of talks will take place in St. Olave's Church Hall, Marygate Lane, York, YO30 7BJ on the second Thursday of the month. As always, members are keenly encouraged to make the travelling speakers' journeys worthwhile by attending their talks.

## Pine martens, red squirrels and dormice – talks and events in 2018

*Andrew Halcro-Johnston*

Along with the usual indoor talks, mammal recording walks and fieldwork, YMG's programme in 2018 included talks and field events that were jointly arranged with other organisations in our region to further the understanding and study of protected mammals in Yorkshire and beyond.

On 29<sup>th</sup> March, approximately 80 people attending a talk on **pine martens** by national expert and author Johnny Birks at York College. The talk was arranged by Yorkshire Wildlife Trust with support from YMG and CIEEM (the Chartered Institute of Ecology and Environmental Management). Johnny provided a fascinating account of how this elusive mammal is recovering in Britain and Ireland after almost becoming extinct; including how its presence was confirmed in the North York Moors in August 2017 by camera trap, the first record in decades, after four years of monitoring by the Yorkshire Pine Marten Project. Copies of Johnny's newly published book on pine martens were snapped up after the talk!



This was followed by a visit on 26<sup>th</sup> May, jointly organised with CIEEM, to the Yorkshire Dales to learn about ongoing conservation work for **red squirrels and dormice** within the managed woodlands of Wensleydale. The visit was hosted by Ian Court of YDNPA, a regular contributor to *Imprint*, who provided a valuable insight into some of the issues of managing native woodland and commercial forestry for the benefit of wildlife, and balancing conservation priorities within the National Park.

The day started with a visit to the Snaizeholme red squirrel viewing trail, which forms part of the Widdale Red Squirrel Reserve near Hawes. This provided an excellent opportunity to see the squirrels up close, and enjoy their antics at a feeding station set up in the woods. This was followed by an indoor session back at the Dales Countryside Museum, where Ian talked about the successful dormouse reintroduction project at Freeholders'

Wood, and recent work to supplement the population. Those who attended agreed that it was a very informative and enjoyable day out.



**Andrew Halcro-Johnston**



**Rob Mashedor**

*Mary Youngman*

This year the Mammal Society conference was held at Exeter University. As I have family in Devon and taking advantage of the discount offered because of the Yorkshire Mammal Group's affiliation with the Mammal Society, I decided to go along on the Saturday as a day delegate.

The talks took place in one of the lecture theatres in the Queen's Building. With about 150 people attending the conference on the Saturday the lecture theatre was completely full, with one or two souls having to briefly sit on the steps until they could locate a free seat.

Paul Chanin, opened the conference. First on the podium was Fiona Matthews, the Mammal Society Chair. She described the methods used and problems encountered during the production of a review of the status of British Mammals and the first ever Red List for British Mammals. Next was a much-appreciated coffee break and the chance to browse the stalls and admire the winning photographs of the Mammal Photographer of the Year competition. More about that later.

Back in the lecture theatre, session 2 was all about pine martens and hedgehogs. Two talks on pine marten, grey squirrel and red squirrel interactions. Followed by a study on the role of stress and personality in pine marten translocations – animals with a bold personality tend to leg it out of the release zone. (I may be over simplifying.)

The hedgehog talks were presented as rapid-fire talks just five minutes in duration. The over-arching theme was the status and conservation of these animals in the urban habitat. Deborah Wright, a Hedgehog Officer from the Warwickshire Wildlife Trust, highlighted that currently there is no legislative obligation to protect or provide habitat for hedgehogs. She described the work done with the community, developers, planners and Local Authorities to make green space hedgehog-friendly.

Break for lunch, which was a very tasty selection of sandwiches, fruit and crisps. The weekend coincided with some unseasonably warm weather, so we were able to enjoy the food al fresco.

Session 3 talks covered a different mustelid – polecats. Lizzie Croose from the Vincent Wildlife Trust, told us about the varying status and population trends of the polecat across its range in Europe. Declining in most countries but increasing in the UK, as here the population is recolonising some of the areas where it was trapped to extinction at the end of the 19<sup>th</sup> century. The second talk was about the secondary exposure of polecats to anticoagulant rodenticides.

The second rapid-fire session covered a diversity of mammals and subjects. Margaret Andrews from Liverpool John Moores University spoke on identifying rhinolophid nursery roosts by using infant bat development calls and adult ultrasound social calls. Allan McDevitt on the potential of environmental DNA metabarcoding for monitoring the distribution and abundance of mammals. Deborah Brady on a south Cumbrian multi species restoration project. Peter Cooper from the Devon Mammal Group, on their harvest mouse project, and finally Peter Pilbeam on 25 years of surveying for otters in Cambridgeshire.

And so, it was all over, unable to stay for the later AGM and Local Groups forum. Just one more chance to visit the stalls, which included amongst others; the Devon Mammal Group with their live harvest mice drawing in the crowds. The natural-appititude.co.uk stall, promoting their new apps ‘Mammal Mapper’ (to record effort-based data from mammal sightings/field signs along a route) ‘BatsCount’ and ‘Ancient Animals’. And the Heslinga Traps stall with their live trap on display.

The Mammal Photographer of the Year photos were all stunning. The winner this year was James West with ‘Common Dolphin in Flight’, a photo of a dolphin completely out of water reflected in a calm sea.

Sunday’s programme looked to be equally informative and entertaining. To pick out a few things that I really wished I could have stayed for – Naomi Sykes from Nottingham University on ‘Archaeological perspectives on wild mammals management, conservation and re-wilding’, there was a talk on the beavers in Scotland and Cornwall Wildlife Trust was running a workshop ‘Living with Beavers’. However, thanks to my brother, on Sunday morning I did get to see a genuine beaver gnawed log in the River Otter.

# Small-mammal survey at Bempton RSPB reserve, August 2018

*Jack Whitehead*

## Background

Following the success of the previous event in 2017, RSPB Bempton held another Bioblitz on Saturday 25<sup>th</sup> August 2018 and Yorkshire Mammal Group was invited to take part. Being close by, and having a supply of live traps, the Filey team (few in number, but full of enthusiasm) offered to cover the event. The event was advertised by the RSPB and the Yorkshire Mammal Group and proved most popular; the decision to give us a marquee close to the Visitor Centre delivered a constant stream of visitors.

## Method

Thirty Tube traps and fourteen Longworths were put in place on Wednesday 22<sup>nd</sup> August, loaded with hay and baited with a seed and grain mix, mealworm pupae and raw carrot; they were left locked open. Habitats used included rough pond-side vegetation, hedgerows, ungrazed grassland and newly planted woodland. The traps were re-baited on Friday evening, 24<sup>th</sup> August, and set to catch. Traps were inspected on Saturday 25<sup>th</sup> August, from 9am. A keen group of adults and children helped to process and record the catch, after which everything was cleaned and removed.

## Results

### SATURDAY 25<sup>th</sup> August 2018

TRAP	SPECIES	SEX	WEIGHT
T4	Wood Mouse	M	18 gms
T8	Wood Mouse	M	23 gms
T12	Common Shrew		12.5 gms
T13	Wood Mouse	M	22 gms
T14	Wood Mouse	M	14 gms
T15	Common Shrew		8 gms
T17	Wood Mouse	M	19 gms
T18	Wood Mouse	F	9 gms
T19	Bank Vole	M	17 gms
T21	Common Shrew		8 gms
T23	Wood Mouse	M	16.5 gms
T28	Water Shrew		12.5 gms
L37	Bank Vole	M	15 gms
L39	Bank Vole	M	17 gms

T = Tube trap L = Longworth trap

## Summary

In most respects the results this year were in line with previous traps at this location, the glaring exception being the number of Bank Voles trapped. Twenty three were caught in 2017, this year there were three; trap positions this year perhaps leaned more towards grassland but other factors were similar: the weather was fine and the same bait was used in the traps. Perhaps it's worth recording that the worst drought in years had only just eased.

Thanks to Gill Sinclair and Linda Cooper without whom we may have had to cancel.

## York University Mammal Challenge

*Ann Hanson*

## Introduction

Students at York University took part in the Mammal Society University Mammal Challenge (UMAC) between 1<sup>st</sup> January and 31<sup>st</sup> May 2018. The purpose of UMAC is to collect as many mammal records as possible within the university campus plus a 500m buffer zone using methods such as line transects, hunting for field signs, live trapping small mammals, bat surveys, footprint tunnels and camera trapping. The students contacted YMG for assistance with live trapping and bat surveys and we gladly agreed to help out.

## Methods

Fifty Longworth traps were placed in a variety of habitats around York University West Campus, baited with wheat, peanuts, sunflower seeds, carrots and blowfly pupae, with a ball of hay for bedding.

Trap locations:

1. Outgrown hedge and ditch adjacent to Walmgate Stray - SE61805044 (20 traps).
2. Log pile in woodland adjacent to Walmgate Stray - SE61865013 (5 traps).

3. Ditch banks adjacent to Low Moor - SE61945002 (5 traps).
4. Woodland adjacent to Dam Pond – SE61965015 (5 traps).
5. Woodland adjacent to The Retreat – SE61815073 (10 traps).
6. Grassy banks adjacent to underpass – SE61915083 (5 traps).

Traps were set on the evening of Friday 18<sup>th</sup> May and checked on Saturday 19<sup>th</sup> May from 9.30am onwards.

In addition, a general bat survey of the campus was carried out on the evening of Friday 18<sup>th</sup> May using several heterodyne and frequency division bat detectors.

## Results

Summary of small mammals captured on York University West Campus May 2018.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Wood mouse	0	4	0	3	3	0
Bank vole	0	0	3	0	2	0
Common shrew	0	0	0	0	1	0
Brown rat	1	0	0	0	0	0

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

Bats recorded on the Friday evening around the campus included six common pipistrelles (*Pipistrellus pipistrellus*), one soprano pipistrelle (*Pipistrellus pygmaeus*) and one noctule (*Nyctalus noctula*).

## Discussion and conclusions

Four species of small mammal were caught on York University West Campus, including wood mouse (*Apodemus sylvaticus*), bank vole (*Myodes glareolus*), common shrew (*Sorex araneus*) and brown rat (*Rattus norvegicus*). Wood mice were the most numerous species captured, followed by bank voles, with just one common shrew and one juvenile brown rat. The brown rat was very interesting as this species is generally neophobic (neophobia is a fear of anything new in the environment) and rarely captured in Longworth traps. Wood mice, bank voles and common shrews are all relatively common in semi-urban situations as long as there is enough ground cover and food to sustain them.

The three bat species recorded on the campus included common pipistrelle, soprano pipistrelle and noctule, all of which are relatively common in the York area.

Other interesting mammal records obtained by the York University students included some excellent footage of a sprainting otter (*Lutra lutra*) on a wildlife camera under a bridge over a small stream running from the campus lake down to Walmgate Stray and a roe deer (*Capreolus capreolus*) on the stray adjacent to the university campus. Rabbit (*Oryctolagus cuniculus*), grey squirrel (*Sciurus carolinensis*), fox (*Vulpes vulpes*) and hedgehog (*Erinaceus europaeus*) were also recorded across the campus during the mammal challenge.

Thanks to Charles Cunningham and the student team at York University for their help with and enthusiasm for small mammal trapping and bat detecting and to several members of YMG for their invaluable assistance with the Longworth trapping.



**Young rat trapped at York University (Rob Mashedor)**

## Appendix I

**Table of results:** small mammal survey on York University West Campus, May 2018.

Weather: Warm and dry.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Hedgerow (Site 1)	Brown rat**	M	J	?
Log pile (Site 2)	Wood mouse	M	SA	26.0
Log pile (Site 2)	Wood mouse	M	A	28.0
Log pile (Site 2)	Wood mouse	F	SA	18.0
Log pile (Site 2)	Wood mouse	F	A	24.0
Ditch banks (Site 3)	Bank vole	F	SA	20.0
Ditch banks (Site 3)	Bank vole	F	SA	20.0
Ditch banks (Site 3)	Bank vole	M	A	26.0
Wood by pond (Site 4)	Wood mouse	M	A	30.0
Wood by pond (Site 4)	Wood mouse	F	A	29.0
Wood by pond (Site 4)	Wood mouse	M	A	23.0
Woodland (Site 5)	Wood mouse	F	SA	24.0
Woodland (Site 5)	Common shrew	?	A	14.0
Woodland (Site 5)	Bank vole	M	SA	20.0
Woodland (Site 5)	Bank vole	F	SA	21.0
Woodland (Site 5)	Wood mouse	M	SA	21.0
Woodland (Site 5)	Wood mouse	F	SA	21.0

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

\*\* Not weighed in order to avoid being savaged! [*Ed. - very sensible!*]

## York Solar System Greenway Wildlife Discovery Day

*Ann Hanson*

### Introduction

As part of a Wildlife Discovery Day organised by Sustrans and Brunswick Organic Nursery, YMG carried out a small mammal Longworth trapping session and led a bat walk along the Solar System Greenway cycleway in Bishopthorpe.

## Methods

Twenty-five Longworth traps were placed in a variety of habitats along the cycleway, baited with wheat, peanuts, sunflower seeds, carrots and blowfly pupae, with a ball of hay for bedding.

Trap locations:

1. Long vegetation adjacent to houses with brambles, nettles and *Rosa rugosa* – SE59124722 (10 traps).
2. Long grass adjacent to wheat field – SE59154717 (5 traps).
3. Long vegetation adjacent to wheat field with brambles and convolvulus – SE59214710 (5 traps).
4. Long vegetation adjacent to gardens with grass, *Rosa rugosa* and rowan trees – SE59334698 (5 traps).

Traps were set on the evening of Friday 20<sup>th</sup> July and checked on Saturday 21<sup>st</sup> July from 9.30am onwards.

In addition, a bat walk was carried out between 9pm and 11pm on Saturday 21<sup>st</sup> July using several heterodyne and frequency division bat detectors.

## Results

Summary of small mammals captured along the York Solar System Greenway, July 2018.

	Site 1	Site 2	Site 3	Site 4
Wood mouse	0	0	0	1
Common shrew	0	0	1	0

In addition, a dead juvenile field vole was recorded on the cycleway near Site 3.

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

The evening bat survey recorded several common pipistrelles (*Pipistrellus pipistrellus*) and noctules (*Nyctalus noctula*) mainly foraging over the River Ouse at Naburn Bridge and over adjacent wet woodland. Grid ref. SE59794647.



**Common shrew  
(Rob Masheder)**

## Discussion and conclusions

Only two small mammals were captured along the Solar System Greenway, including a wood mouse (*Apodemus sylvaticus*) and a common shrew (*Sorex araneus*). A dead juvenile field vole (*Microtus agrestis*) was also recorded on the cycleway. The habitat alongside the cycleway is suitable for small mammals and provides a green corridor through Bishopthorpe and the surrounding farmland.

The common pipistrelles and noctules recorded during the evening bat walk are both fairly common species in the York area.

Thanks are due to Danny Morris and Phil Taylor for their help with the surveys and also to Rob Masheder and Mary Youngman of YMG for their able assistance.

## Appendix I

**Table of results:** small mammal survey on York Solar System Greenway, July 2018.

Weather: Hot and dry.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Brambles adjacent to wheat field (3)	Common shrew	?	A	7.0
Long grass adjacent to gardens (4)	Wood mouse	F	SA	20.0

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

# Small mammal survey at Three Haggas Wood, Escrick, 2018, with a review of the first 5 years

*Ann Hanson*

## **Introduction**

A fifth annual survey was carried out by YMG in August 2018 as part of a long term study on changes in small mammal populations at Three Haggas Wood, a recently created wood-meadow, located at Escrick Park Estate, near York (grid ref. SE626395).

See Imprint 41 (2014), Imprint 42 (2015), Imprint 43 (2016) and Imprint 44 (2017) for the results of previous surveys on the site.

This report also presents a review of the small mammal survey results over the last 5 years.

## **Methods**

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

Trap locations were the same as in previous years (see map in **Appendix I**):

1. Coup 12 (downy birch and alder), cut late 2017/early 2018 with dense re-growth beneath the young trees (10 traps).  
Grid ref. SE6279939456 to SE6776939422
2. MG4 meadow, recently cut for hay with very little re-growth (10 traps).  
Grid ref. SE6273839477 to SE6269639464
3. Coup 9 (oak, hazel and wild orchard), cut late 2017/early 2018 with substantial re-growth (10 traps).  
Grid ref. SE6275039502 to SE6273439541
4. Coup 6 (oak, hazel, wych elm), cut late 2017/early 2018 with substantial re-growth (10 traps).  
Grid ref. SE6267239586 to SE6265239623

5. Pond edge. Pond constructed spring 2014. Water level low. Area around pond recently cut for hay. Un-cut vegetation at bank top, 1m wide (10 traps).

Grid ref. SE6268139929 to SE6269439938

Traps were set on the evening of Friday 3<sup>rd</sup> August and checked on Saturday 4<sup>th</sup> August from 9.30am onwards. Traps were re-set on the Saturday evening and checked on Sunday 5<sup>th</sup> August from 9.30am onwards.

## Results

Summary of small mammals captured at Three Haggas Wood, Escrick, August 2018.

	Site 1		Site 2		Site 3		Site 4		Site 5	
	Sat	Sun								
Wood mouse	0	2	0	0	0	0	0	0	0	0
Bank vole	0	0	0	0	0	0	0	0	0	0
Field vole	3	4	0	0	3	7	3	0	2	1
Common shrew	2	1	0	0	0	0	0	2	1	2
Water shrew	0	0	0	0	0	0	0	0	0	0
Pygmy shrew	0	0	0	0	0	0	0	1	0	0

**Appendix II** shows a comprehensive table of results for this trap.

## Discussion and conclusions

Four species of small mammal were caught at Three Haggas Wood, Escrick, in 2018, including wood mouse (*Apodemus sylvaticus*), field vole (*Microtus agrestis*), common shrew (*Sorex araneus*) and the first record of a pygmy shrew (*Sorex minutus*) on the site. Field voles were once again the most numerous small mammals in 2018, with good numbers of common shrews, just two wood mice and a single pygmy shrew. Animals were once again captured at all locations with dense vegetation providing cover and food, with no animals being captured at Site 2 which had been recently cut for hay. The very dense grass at Site 3 is providing especially good habitat for field voles.

A bat survey of Three Haggas Wood was carried out on the evening of Saturday 4<sup>th</sup> August 2018, using heterodyne and frequency division bat detectors. The weather was dry and warm and several common pipistrelles

(*Pipistrellus pipistrellus*) were recorded foraging around the edges of the site. The bat boxes placed on trees in adjacent Hollicarrs Wood were also monitored but no bats emerged, although common pipistrelles were recorded foraging beneath trees in the woodland.

It should be noted that reptiles are no longer being monitored on the site by YMG from 2018 although a sub-adult grass snake (*Natrix natrix*) was recorded under an old reptile refuge near to the pond on 5<sup>th</sup> August.

Thanks are due to the Hagge Woods Trust for inviting us to take part in the project. Thanks also to Rob Masheder, Mary Youngman, Amelia Airey and Charles Cunningham of YMG for helping with the surveys this year and to everyone who came and joined in on both mornings.

### **Review of small mammal surveys from 2014 to 2018**

Summary of maximum numbers by species 2014 to 2018.

Species	2014	2015	2016	2017	2018
Wood mouse	9	2	2	3	2
Bank vole	10	0	0	0	0
Field vole	7	2	18	19	12
Common shrew	3	1	7	8	5
Water shrew	1	0	0	0	0
Pygmy shrew	0	0	0	0	1

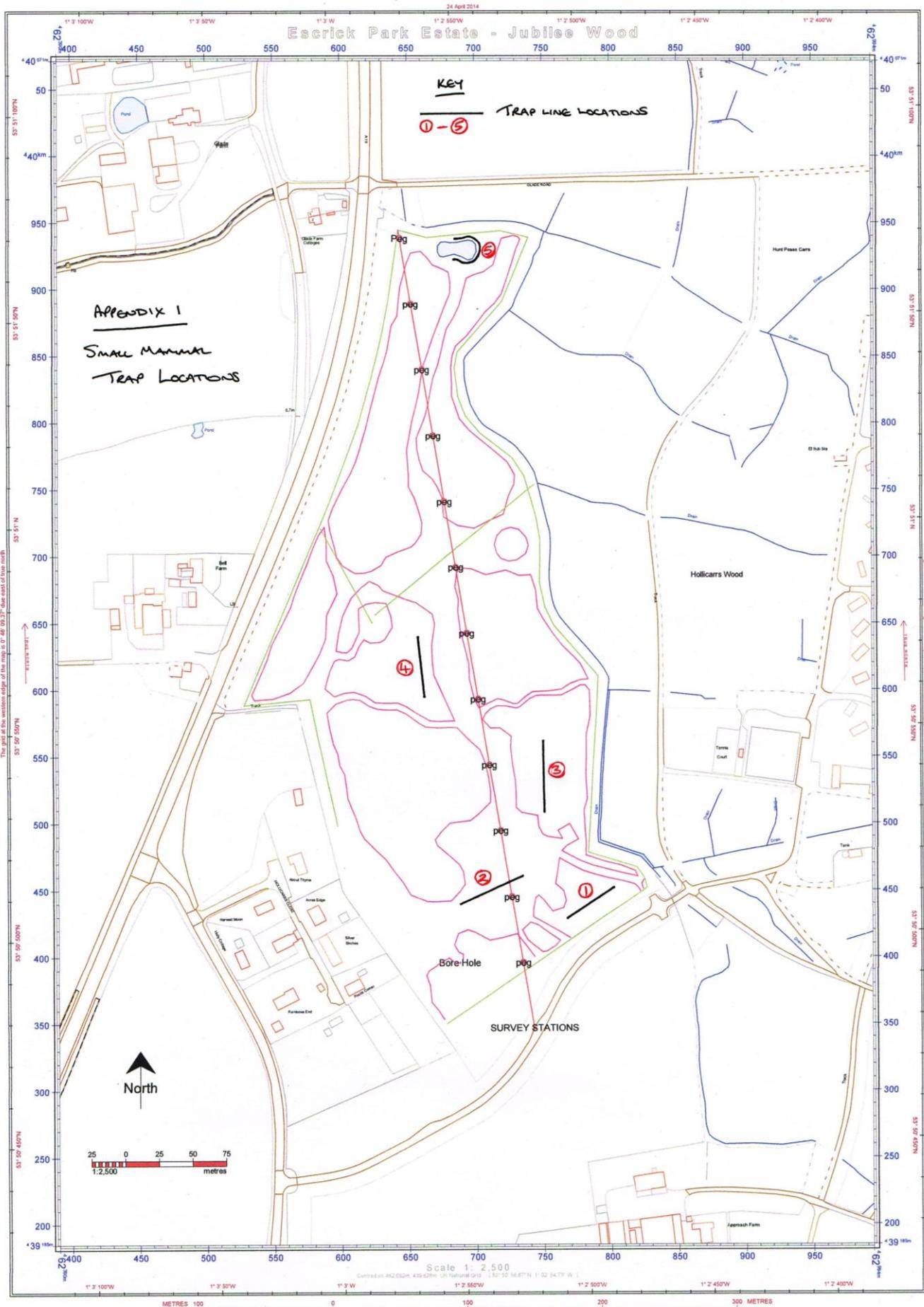
In terms of species diversity the site got off to a good start with five different species being recorded in 2014, these being wood mouse (*Apodemus sylvaticus*), bank vole (*Myodes glareolus*), field vole (*Microtus agrestis*), common shrew (*Sorex araneus*) and water shrew (*Neomys fodiens*). It was noted that omnivores (wood mouse and bank vole) were the most abundant species, with herbivores (field vole) also relatively abundant, and carnivores (common shrew and water shrew) less abundant. This was probably because, although the vegetation cover was already well developed on the site, invertebrate populations were still in the process of colonising the newly available habitats. The various species of small mammals will have colonised the former arable field from the surrounding mature woodland, field edges and ditches, with wood mice and bank voles especially entering the site from the adjacent woodland. In addition, 2014 was a peak year for field vole populations, reflected by the early colonisation of the site by this species.

2015 showed a marked reduction in numbers and species diversity with only wood mouse, field vole and common shrew being captured, all in low numbers. This could partly be explained by the crash in the field vole population following the peak in 2014.

The same three species have been captured in 2016, 2017 and 2018, with the addition of a single pygmy shrew in 2018. Due to the dense grass cover now present on several areas of the site, field vole numbers are consistently high and the absence of bank voles is probably due to them being displaced by the larger field voles. Numbers of common shrews have also increased over the past three years probably due to the increased food supply as invertebrate numbers and species diversity increase on the site. Wood mice are still present but in low numbers as the surrounding mature woodland will provide good habitat with less competition for this mainly nocturnal species. It should be noted that field voles and common shrews, being herbivorous and carnivorous respectively, do not compete for food, whereas the omnivorous wood mice compete with both of the former species. This could explain the increasing dominance of field voles and common shrews on the site.

In conclusion, small mammals colonised the wood meadow from surrounding habitats very quickly and appear to have reached a fairly stable state within the first few years. The wood meadow is now providing excellent habitat for both field voles and common shrews with the former in turn providing food for a range of predators including owls, hawks, herons(!), grass snakes and stoats, all of which have been recorded on the site. It will be interesting to see how the small mammal populations respond in the future as trees become more dominant on parts of the site.

# Appendix I



## Appendix II

**Table of results:** small mammal survey at Three Hagges Wood, Escrick, August 2018.

Weather: Hot, dry and sunny throughout.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
<b>04/08/2018</b>				
Coup 12 (Site 1)	Field vole	M	SA	18.0
Coup 12 (Site 1)	Field vole	M	J	13.0
Coup 12 (Site 1)	Common shrew	?	A	7.5
Coup 12 (Site 1)	Common shrew	?	SA	6.5
Coup 12 (Site 1)	Field vole	F	SA	18.5
Coup 9 (Site 3)	Field vole	F	A	29.5
Coup 9 (Site 3)	Field vole	F	A	31.5
Coup 9 (Site 3)	Field vole	F	SA	22.5
Coup 6 (Site 4)	Field vole	M	A	24.5
Coup 6 (Site 4)	Field vole	F	A	26.5
Coup 6 (Site 4)	Field vole	F	SA	18.0
Pond edge (Site 5)	Common shrew	?	A	7.5
Pond edge (Site 5)	Field vole	M	A	25.5
Pond edge (Site 5)	Field vole	M	J	11.5
<b>05/08/2018</b>				
Coup 12 (Site 1)	Wood mouse	F	SA	22.5
Coup 12 (Site 1)	Field vole	M	SA	18.5
Coup 12 (Site 1)	Field vole	F	SA	19.0
Coup 12 (Site 1)	Field vole	F	A	25.5
Coup 12 (Site 1)	Wood mouse	F	A	31.5
Coup 12 (Site 1)	Common shrew	?	A	7.5
Coup 12 (Site 1)	Field vole	M	SA	18.5
Coup 9 (Site 3)	Field vole	F	A	29.5
Coup 9 (Site 3)	Field vole	M	A	22.0
Coup 9 (Site 3)	Field vole	F	SA	17.0
Coup 9 (Site 3)	Field vole	M	A	21.5
Coup 9 (Site 3)	Field vole	F	SA	18.5
Coup 9 (Site 3)	Field vole	M	A	22.5
Coup 9 (Site 3)	Field vole	M	A	22.5
Coup 6 (Site 4)	Common shrew +			
Coup 6 (Site 4)	Common shrew	?	SA	6.0

Coup 6 (Site 4)	Pygmy shrew	?	A	3.0
Pond edge (Site 5)	Field vole	M	A	25.5
Pond edge (Site 5)	Common shrew	?	A	7.5
Pond edge (Site 5)	Common shrew	?	SA	6.5

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

+ Dead in trap

## Baseline Survey of Small Mammals at the Cropton Forest Beaver Reintroduction Site

*Ann Hanson*

### Introduction

The Forestry Commission are carrying out an enclosed beaver reintroduction at Keldy Ponds in Cropton Forest and YMG were asked to monitor the effects on small mammal populations at the site over the course of the project. A baseline survey was carried out in September 2018 before the beavers were introduced to the site. The site is a steep sided wooded valley with mainly mature conifers and some deciduous trees. Sutherland Beck flows through the site and there are two historic ponds at the eastern end, one of which was holding water whilst the other was silted up with very little open water.

### Methods

One hundred Longworth traps were placed in a variety of habitats across the site, baited with wheat, peanuts, sunflower seeds, carrots and blowfly pupae, with a ball of hay for bedding.

Trap locations:

1. Silted up pond edge with willow scrub and emergent vegetation – SE77509073 (20 traps).
2. Pond edge with willow scrub and emergent vegetation – SE77439068 (20 traps).
3. Mature conifer trees with very sparse ground cover to south of stream (10 traps) and deciduous trees with good ground cover to north of stream (10 traps) – SE77169058.

4. Area of recent clear fell with young birch regeneration and dense ground cover – SE76999049 (20 traps).
5. Mature conifer trees with very sparse ground cover – SE76979052 (20 traps).

Traps were set on the evening of Friday 14<sup>th</sup> September and checked on Saturday 15<sup>th</sup> September from 9.30am onwards. The traps were re-set on the Saturday evening and checked and lifted on Sunday 16<sup>th</sup> September from 9.30am onwards.

## Results

Summary of small mammals captured at Keldy Ponds, Cropton Forest, September 2018.

	Site 1		Site 2		Site 3		Site 4		Site 5	
	Sat	Sun								
Wood mouse	1	6	0	3	1	5	0	0	0	1
Bank vole	0	0	0	1	0	1	0	1	0	0
Field vole	1	0	0	0	0	0	0	0	0	0

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

Other mammals and their signs recorded on the site are as follows:

- Common pipistrelle (*Pipistrellus pipistrellus*) foraging at trap site 4 on Saturday evening – SE76999049.
- Roe deer (*Capreolus capreolus*) filmed on a wildlife trail camera on Saturday night – SE77159058.
- The smell of a fox (*Vulpes vulpes*) near trap site 3 on Sunday morning – SE77229059.
- Otter spraint at 3 locations along Sutherland Beck on Saturday afternoon – SE77159058; SE77029053; SE76949048.

In addition, 8 water vole rafts were placed on the ponds on Sunday 16<sup>th</sup> September and left in place until 24<sup>th</sup> November. The rafts contained no signs of water vole droppings when they were checked and removed from the site.

## **Discussion and conclusions**

Three species of small mammal were caught at Keldy Ponds, including wood mouse (*Apodemus sylvaticus*), bank vole (*Myodes glareolus*) and field vole (*Microtus agrestis*). The first night of trapping revealed a very low catch of two wood mice and a single field vole. The second night had a much better catch of fifteen wood mice and three bank voles. Animals were captured at all 5 trap sites with a mix of juveniles, sub-adults and adults typical of this time of the year. Wood mice dominated the catch possibly due to the lack of ground cover in the predominantly coniferous woodland.

Thanks to Cash Bashforth of the Forestry Commission for inviting YMG to undertake the survey and for help with the trapping sessions. Thanks also to Rob Masheder, Amelia Airey, Charles Cunningham and Anne and Tony Carter for their invaluable help and enthusiasm over the weekend.

## Appendix I

**Table of results:** small mammal survey at Keldy Ponds, Cropton Forest, September 2018.

Weather: overcast, warm and dry. Rain overnight Friday and Saturday.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
<b>15/09/2018</b>				
1 – silted up pond edge	Wood mouse	F	J	14.5
	Field vole	F	SA	19.0
3 – mature conifer trees	Wood mouse	M	A	22.5
<b>16/09/2018</b>				
1 – silted up pond edge	Wood mouse	F	SA	15.5
	Wood mouse	M	J	15.0
	Wood mouse	M	J	14.0
	Wood mouse	F	J	14.0
	Wood mouse	M	SA	22.0
	Wood mouse	F	J	15.0
2 – pond edge	Bank vole	F	A	21.5
	Wood mouse	F	A	31.0
	Wood mouse	M	J	14.0
	Wood mouse	F	J	14.0
3 – mature conifer trees and deciduous trees	Wood mouse	M	A	24.5
	Bank vole	M	SA	16.5
	Wood mouse	M	SA	19.0
	Wood mouse	F	J	14.5
	Wood mouse	M	J	9.0
	Wood mouse	M	SA	18.0
4 – clear fell	Bank vole	M	A	22.0
5 – mature conifer trees	Wood mouse	F	A	22.5

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

# Goosemoor Nature Reserve small mammal survey

*Ann Hanson*

## **Introduction**

Goosemoor Nature Reserve is located on Warfield Lane, Cowthorpe, near Wetherby. Grid ref. SE428520. The reserve is owned by Goosemoor Organic Farm and managed by a very enthusiastic group of local volunteers. The reserve is a lovely mixture of ponds, fen, rough grass and wet woodland, although at the time of the mammal survey the main pond had been cleaned out and due to the exceptionally dry summer had yet to fill up again!

## **Methods**

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

Trap locations:

1. Dry ditch with adjacent outgrown hawthorn hedge (16 traps).
2. Rough grass and brambles (9 traps).
3. Wet willow woodland (6 traps).
4. Fen with great willowherb and bittersweet (8 traps).
5. Damp ditch with reedmace, great willowherb and bittersweet (6 traps).
6. Large (dry) pond edge with reedmace and bittersweet (3 traps).
7. Log pile near tool store (2 traps).

Traps were set on the evening of Saturday 29<sup>th</sup> September and checked on Sunday 30<sup>th</sup> September from 9.30am onwards.

## Results

Summary of small mammals captured at Goosemoor Nature Reserve, September 2018.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
Wood mouse	9	1	5	0	3	0	0
Bank vole	2	1	1	6	2	1	1
Common shrew	0	1	0	0	0	0	0

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

## Discussion and conclusions

Three species of small mammal were caught at Goosemoor Nature Reserve, including wood mouse (*Apodemus sylvaticus*), bank vole (*Myodes glareolus*) and common shrew (*Sorex araneus*). Wood mice and bank voles were the most numerous species captured across the reserve, with just one common shrew in an area of rough grass and bramble. The wood mice and bank voles had a good age structure with adults, subadults and juveniles being captured, demonstrating healthy breeding populations of small mammals on the reserve. Although less common species such as water shrew (*Neomys fodiens*) and harvest mouse (*Micromys minutus*) were not captured on this occasion the reserve has excellent habitat for both species.

Thanks to Rob Masheder, Kate Wright and Mary Youngman of YMG for help with the trap and to Jacqui Marsden and the reserve volunteers for their help, enthusiasm and excellent cake! Thanks too to Arnold Warneken for allowing us to survey this lovely reserve.



**Trapping at Goosemoor  
Nature Reserve, Cowthorpe  
(Rob Masheder)**

## Appendix I

**Table of results:** small mammal survey at Goosemoor Nature Reserve, September 2018.

Weather: Overcast and cool.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Dry ditch (site 1)	Wood mouse	F	SA	16.5
	Wood mouse	F	J	15.0
	Wood mouse	M	A	22.0
	Bank vole	F	J	10.0
	Wood mouse**	?	A	?
	Wood mouse	F	J	13.5
	Wood mouse	F	J	15.5
	Wood mouse	F	J	15.5
	Bank vole	M	SA	14.0
	Wood mouse	F	J	15.0
	Wood mouse	F	J	15.0
Rough grass (site 2)	Wood mouse	F	SA	17.0
	Common shrew	?	A	9.0
	Bank vole	M	SA	15.5
Wet woodland (site 3)	Wood mouse	M	A	20.0
	Wood mouse	F	SA	15.0
	Bank vole	F	A	22.0
	Wood mouse	F	J	14.0
	Wood mouse	M	SA	20.0
	Wood mouse	M	J	12.0
Fen (site 4)	Bank vole	F	A	21.5
	Bank vole	F	A	20.5
	Bank vole	M	A	21.5
	Bank vole	M	SA	18.0
	Bank vole	F	SA	16.5
	Bank vole	F	A	26.5
Damp ditch (site 5)	Wood mouse**	?	?	?
	Bank vole	M	SA	15.0
	Wood mouse	F	J	11.0
	Bank vole	F	SA	18.5
	Wood mouse	M	A	21.5
Dry pond edge (site 6)	Bank vole	F	SA	18.0

Log pile (site 7)	Bank vole	F	SA	17.0
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\* M = male; F = female; A= adult; SA = subadult; J = juvenile

\*\* Escaped during handling

## Small mammal survey at St Nicks Nature Reserve, York

*Ann Hanson*

### Introduction

St Nicks Nature Reserve and Environment Centre are located at Foss Islands near the centre of York. Grid ref. SE616516. A Discover Nature Eco-Therapy Group meets regularly on the reserve and carried out a small mammal survey in the autumn of 2018 with the help of YMG.

### Methods

Twenty-five Longworth traps were placed in a variety of habitats around the reserve, baited with wheat, peanuts, sunflower seeds, carrots and blowfly pupae, with a ball of hay for bedding.

Trap locations:

1. Woodland edge near the stone circle with brambles and long grass (7 traps).
2. A more open area of long grass and brambles (18 traps).

Traps were set on the evening of Monday 22<sup>nd</sup> October and checked on Tuesday 23<sup>rd</sup> October from 9.30am onwards.

### Results

Summary of small mammals captured at St Nicks Nature Reserve, October 2018.

	Site 1	Site 2
Wood mouse	3	5

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

## Discussion and conclusions

Wood mice (*Apodmus sylvaticus*) was the only species captured at St Nicks on this occasion, mainly juveniles with one adult male and one subadult male. The juveniles were both male and female showing that the wood mice on the reserve had enjoyed an excellent breeding season over the long, hot summer of 2018!

Thanks are due to Rob Masheder for helping to set the traps and to Phil Taylor and the St Nicks Eco-Therapy Group for their mouse juggling skills and enthusiasm.

## Appendix I

**Table of results:** small mammal survey at St Nicks Nature Reserve, October 2018.

Weather: Warm, dry and sunny.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Site 1	Wood mouse	M	J	14.5
	Wood mouse	M	J	15.5
	Wood mouse	F	J	7.0
Site 2	Wood mouse	M	A	23.5
	Wood mouse	F	J	13.0
	Wood mouse**	?	?	?
	Wood mouse	M	SA	17.0
	Wood mouse	F	J	14.5

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

\*\* Escaped during handling

## “Let’s go all the way” – a report of YMG mammal recording walks 2018

*Ann Hanson & Rob Masheder*

The first walk of the year was from **Thornton Dale on the edge of the North York Moors on 12<sup>th</sup> January**. Heading north out of the village the first records were of molehills in grassland adjacent to Dalby Beck, beside the track to Ellerburn and in fields near Low Farm, Ellerburn. Otter spraint was located next to Dalby Beck at Ellerburn and on stone steps leading into the beck at Old Ellers Cottage, with a possible otter print in mud near the trout farm... Rabbit burrows and droppings were also recorded near the trout farm with a dead rabbit in a field near Ellers Wood. Inside Ellers Wood we found roe deer slots on the track, followed by badger footprints on the path up Thornton Dale. Other notable records along Thornton Dale included field vole feeding remains in tussocky grass and a Gruffalo (first record for YMG!). Further up the dale towards Low Dalby we located otter spraint on a log in Dalby Beck and some molehills. Last records of the day were molehills near High Paper Mill Farm as we headed back to Thornton Dale village.



**A new mammal record for YMG (Ann Hanson)**

**February 18<sup>th</sup>** found us walking through the fields and woods from **Micklefield in West Yorkshire**. First records were molehills in fields near the village, followed by rabbit droppings and fox scat near the bridge over the A1(M). On the track towards Highroyds Wood we recorded field vole feeding signs in tussocky grass, along with more molehills and fox scat. Within Highroyds Wood we found further signs of rabbit activity and molehills, with some bank vole nibbled hazel nuts and grey squirrel eaten pine cones. Emerging on to Highfield Lane we recorded both roe deer and badger tracks, then further molehills and rabbit droppings in fields next to Newthorpe Beck. Heading back towards Micklefield we noted some final molehills in a field at Brookfield House.

**Snowy Sheriff Hutton in North Yorkshire was our walk location on 17<sup>th</sup> March.** A bracing day with a mixture of bright sunshine and occasional blizzards! First records were molehills and rabbit droppings and digging in front of the castle, followed by the strong smell of a fox at the back of the castle and a probable badger sett with two holes in the bank of the moat. Following the Ebor Way to the north-east of the village we recorded more molehills and another scent of fox near New House Farm. Crossing The Sykes on the Ebor Way we noted molehills, roe deer slots and a brown rat hole. Badger footprints were spotted at the southern edge of Stittenham Wood and a roe deer bounced off into the wood. A last set of molehills were recorded at the northern end of Stittenham Wood before the weather closed in and we retreated to a very cosy tea shop in Sheriff Hutton.

**A trip to Buckden in Wharfedale on 22<sup>nd</sup> April** got off to an excellent start when we recorded otter spraint and another mustelid scat (possibly mink) under the road bridge over the River Wharfe just outside the village. Molehills were recorded in grassland near the village, at Scar House near Hubberholme and in fields above Hubberholme Wood, along with rabbit burrows at the last location. Last records of the day were once again molehills in fields at Cray before we headed back to Buckden for a well-earned cup of tea.

**An evening visit to Bulmer Hag Wood on the Castle Howard Estate on 8<sup>th</sup> May** started with some badger claw marks on a dead log and roe deer slots on a muddy track. This was quickly followed by a badger sett and several snuffle holes, some grey squirrel eaten pine cones and a live roe deer running off into the wood. Heading out into the fields at Scugdale we recorded rabbit digging and then had an excellent view of two badgers (one adult and one very young one) emerging from a sett in a hedge bottom. Finally, walking back towards Bulmer village we recorded plenty of molehills and a fox scat.

After a summer break, **18<sup>th</sup> November** found us at **Brimham Rocks near Summerbridge**. We recorded molehills and rabbit droppings and burrows just outside the visitors' centre, with further evidence of rabbits as we walked across the site. Walking northwards from Brimham Rocks we recorded molehills at North Pasture and molehills and a grey squirrel on a drystone wall at High North Pasture Farm. Yet more molehills were noted at Knoxstone Crag, followed by some roe deer droppings and molehills in the woods near Mill House. Heading back towards Brimham Rocks via

Smelthouses we recorded two roe deer in the woods and then it was back to the visitors' centre for a hot chocolate.



**The bearded sheep of Brimham Rocks (Rob Masheder)**

**16<sup>th</sup> December** took us to **Terrington in the Howardian Hills** where heading north out of the village on New Road we recorded rabbit digging and droppings. Molehills on the verge near Low Water and Rose Cottage Farm were followed by two roe deer bouncing away in Swinsey Carr wood. A dead rabbit on the road near Moor House Farm and molehills at Aireyholme Farm were recorded, followed by molehills and rabbit burrows on Fryton Moor near Howthorpe Farm. Following the Ebor Way back towards Terrington we found some otter spraint on a log in Wath Beck at Huskit Hill, with molehills, rabbit burrows and roe deer slots nearby. Field vole runs and feeding signs were recorded in tussocky grass south of Huskit Hill and the last records of 2018 were rabbit burrows just to the north of Terrington. The village also boasts an exceedingly good tea shop...

Thanks as always to everyone who joined in with mammal recording walks in 2018. We hope you had as much fun as we did!

Ann Hanson (Expedition Leader) and Rob Masheder (Navigator)

# A summary of dormouse monitoring at Freeholders' Wood, Aysgarth in 2018

*Ian Court*

*Wildlife Conservation Officer, Yorkshire Dales National Park Authority*

people's  
trust for  
endangered  
species



**YORKSHIRE DALES**  
National Park Authority

## **Introduction**

Following a reintroduction of 35 captive bred Hazel Dormouse *Muscardinus avellanarius* into Freeholders' Wood, Aysgarth in 2008, annual monitoring work has been undertaken by Yorkshire Dales National Park Authority staff and volunteers.



Photo: © Ian Court YDNPA

## **Methodology**

The monitoring work was undertaken in accordance with the National Dormouse Monitoring Programme (NDMP) survey guidelines (PTES, 2011), with licensed fieldworkers checking nest boxes once each month from May to October. The numbers of boxes that contained distinctive Dormouse nests but where no Dormice were present were also recorded.

Where a Dormouse was found, the sex, weight, breeding condition and whether the animal was active or in torpor were also recorded. The Dormice were also aged as an adult (i.e. an animal that has survived at least one winter) by the orange-brown colour of the fur, or as a juvenile (i.e. independent young in their first year with a weight of >10g) with more brownish fur than an adult. The number of young were counted, weighed where appropriate, and classed as “pink” (no fur), “grey” (grey fur and eyes still closed) or “eyes open” (grey-brown fur and eyes open).

**Results**

The number of Dormice found in Freeholders’ Wood in 2018 is shown in Table 1.

**Table 1. The survey dates, number of boxes checked and the number of Dormice found in Freeholders’ Wood in 2018.**

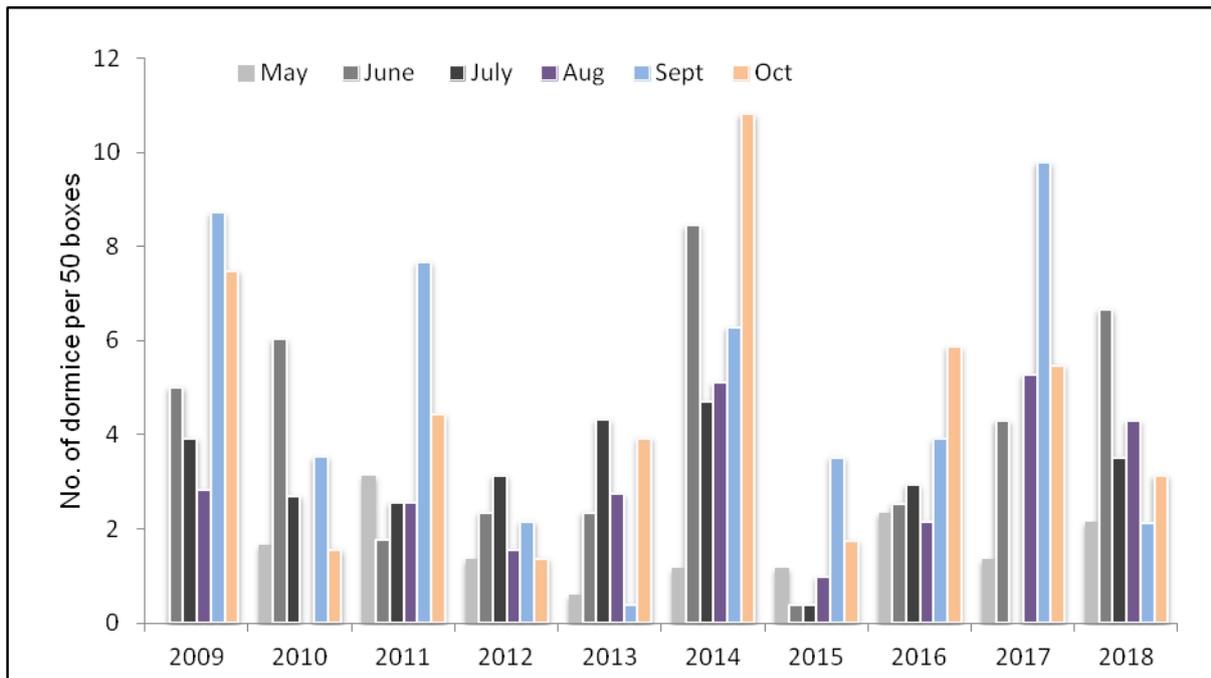
Survey date	Total no. of dormice	No. of empty nests	No. of boxes checked	No. Dormice per 50 boxes checked
21/05/2018	11	2	255	2.16
20/06/2018	34	7	255	6.67
18/07/2018	18	12	255	3.53
22/08/2018	22	20	255	4.31
19/09/2018	8	19	189	2.12
17/10/2018	16	19	255	3.14



Photo: © Ian Court YDNPA

A comparison of Dormice numbers per 50 boxes checked annually between 2008 and 2018, is shown in Figure 1.

**Figure 1. The number of Dormice found during monitoring work between 2009 and 2018.**



## Discussion

Over-winter survival was relatively good, with the third highest number of dormice per 50 boxes found during the May visit. It was a good breeding season with five litters of “pinks” found in June, resulting in the second highest number of Dormice found per 50 boxes for the month. There were further litters of “pinks” including one in July and three in August. Despite the good breeding season, the number of Dormice found on the September and October monitoring dates was disappointing, being much lower than anticipated.

Further monitoring work was, once again, undertaken at a supplementary reintroduction site near Freeholders’ Wood, with a report in preparation. In addition, work continued on the Wensleydale Dormouse Project, a landscape scale project that is aiming to create a contiguous network of appropriately managed woodland and hedgerow habitat in the mid-Wensleydale area to facilitate the expansion of the Dormouse population from the two successful reintroduction sites.

## References

PTES (2011). National Dormouse Monitoring Programme Survey Guidelines and Recording Forms 2011. London.