Contents

Chairman's report – 2019

John Ray

Throughout the year there were walks to look for signs of mammals in the East, North and West Ridings of Yorkshire, for example Stamford Bridge, Byland Abbey, Holmfirth, Otley and Pateley Bridge.

In May, members of the Yorkshire Mammal Group enjoyed a private tour of Askham Bryan Wildlife and Conservation Park, then in June enjoyed a visit to the National Trust at Malham to learn about the water vole re-introduction project there.

In the warmer months, small mammal trapping surveys were conducted at places including York Cemetery, Heworth (York), Humber Bridge, Haw Park (Wakefield), Three Hagges Wood (Escrick, also a bat survey), Down to Earth (Hull), Cropton, Ben Rhydding and Tockwith. Traps in several of these locations are conducted annually, allowing us to gauge the species present there, their abundance and changes over time. Thank you to Ann Hanson, Robert Masheder, Jack Whitehead, Gill Sinclair and Barry Wright for organising them, and to the usual suspects, e.g. Mary Youngman, for assisting.

Last summer, in recognition of her devotion to the cause of wildlife conservation, Ann, accompanied by Robert, visited Buckingham Palace to attend a garden party.

To try to encourage a wider understanding and appreciation of our native mammals, the Group were represented on stands demonstrating owl pellet analysis at wildlife days at Scampston Hall, Three Hagges Wood and Dalby Forest. These events are always popular with the younger generation.

Guest speakers in the darker months included Nick Gibbons on Bat Hibernacula, John Drewett on Bats, Detectors and Echolocation, Ed Snell on the Pine Marten Project, Barry Wright on Infra-red Videos of Bats, and somewhat further afield, Maria Taylor on cetaceans around The Falklands. The low attendance numbers at these talks continues to be a concern. Members are encouraged to make the travelling speakers' journeys worthwhile by attending their talks.

The running of the Group could not take place without those who volunteer their time. Thanks to Natasha Hambly for organising speakers and keeping us advised of forthcoming events via our newsletter, circulated by John Drewett, and to Anne Carter for publicising the events through social media. Due to other commitments, Natasha has now stepped down as Secretary. John continued to administer the Group's membership and Robert did likewise for our accounts. We are grateful to the contributors of articles for this *Imprint* and to Andrew Halcro-Johnston for editing it.

Our 2020/2021 season of talks and indoor events should take place in St. Olave's Church Hall, Marygate Lane, York, YO30 7BJ on the second Thursday of the month. Please view the Events page on the website (www.yorkshiremammalgroup.org.uk) for confirmation of events/talks taking place. If members have suggestions for events, topics or speakers, please let someone on the committee know.

[Editor's note - unfortunately due to the Covid pandemic we have been unable to hold any talks and public events since March 2020, however we hope to resume these as soon as restrictions allow.]

An interesting Red Squirrel gift!

Steve Holliday

On 16 March 2018 a family friend from near York, Jo Eltome, presented me with a taxidermy specimen of a Red Squirrel *Sciurus vulgaris* set up in a glass dome, the rather startled looking creature unconvincingly clutching the stub of an old cigar. To be honest, I was a little bemused by the gift but I graciously accepted. On leaving, Jo added that the cigar had belonged to Sir Winston Churchill – my interest was now piqued.

Several emails with Jo followed and further research was undertaken. According to Jo's family folklore the Squirrel had succumbed some time before 1927 by somehow falling down the chimney of her ancestral home at 83/85 Columbus Ravine, Scarborough.

Even by this date the native Red Squirrel was becoming scarce in the Scarborough district. Loss of habitat and mass starvation through widespread deforestation, particularly the removal of mature fruiting Scots

Pines *Pinus sylvestris* during the 1st World War, would have had significant effects. Then there was competition with the more adaptable American Grey Squirrel, introduced at Scampston park near Malton in 1906 (Middleton, 1931), which brought in its wake an epidemic of Squirrel Pox against which the native reds had, and still have, no immunity. The last local Red Squirrels were; one killed on the road at Cloughton Plantation in 1939, one seen on Silpho Moor in 1940 and a small population noticed in Harwood Dale from 1942 to 1945 (Hazelwood, 1946; Rimmington, 1956; Howes, 2014).

Sadly, the specimen has no taxidermy trade label so the craftsman who set it up is unknown. Seven commercial taxidermists operated in the Scarborough district from the late 19th to the mid-20th century (Marshall, 2007) but the most likely practitioners would have been Joseph B. Morlee of 4 Museum Terrace who was in business in 1929 (Marshall, 2007) and more likely, W.J. Clarke (1871-1945) whose Taxidermy, Natural History requisites and Fishing Tackle shop was at 44 Huntriss Row till 1930 (Cole, 2006).

And that cigar stub; there were two possible occasions when Churchillian cigar stubs had been collected in Scarborough by Jo's Great Grandfather Frederick Fisk.

Firstly, according to annotations on a *Yorkshire Post* cutting (hand dated Sept 5th 1970) retained within the glass case, A.B. Eltome (Jo's Grandfather) writes "Churchill's cigar 1929 picked up in the Grand Hall, Scarborough Spa and given to me by Coun. F. Fisk." There is clearly a date error here as Churchill fought the General Election from Epping in 1929 and then visited Canada and the US in August that year (Wikipedia).

Secondly, a combination of family information backed up by research by Scarborough Central Library staff shows that from 9 to 13 October 1952 the Conservative Party held its conference in Scarborough and Churchill as Prime Minister had addressed the event to great acclaim. While in Scarborough, Churchill had also presented a picture at the Town Hall. It was evidently at this event that Alderman F. Fisk had retrieved one of Winston's discarded cigar stubs as a trophy.

Library staff confirmed that Frederick Fisk (1883-1955) had indeed represented Scarborough Town Council being a Councillor of the Weaponess Ward 1928-32 and Alderman 1933-51. With Frederick living with the extended family at 83/85 Columbus Ravine (*Scarborough Evening News* 28.03.1955) this strongly suggests the cigar stub placed with the squirrel in its ornamental glass dome was indeed a Churchillian trophy from his 1952 visit, where no doubt it helped to keep out the moths.

Acknowledgements: I am particularly grateful to Colin Howes for his help on several aspects of this note.

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Where didn't the Hedgehog cross the road?

Ian Bond

Road kill, sad though it always is to see, is an important source of information on mammal distribution. At one time I only recorded a mammal if I thought there was something particularly interesting about it, but for over a decade now I've been noting almost every mammal or mammal sign that I encounter and road kill makes up by far the majority of my records. In most cases I only record the mammal if it is in a location where I haven't recorded that species before. However, if recorded systematically, road kill can also provide useful data on relative abundance and population change.

The Hedgehog is one species where there is a great deal of concern over its apparently declining population, not least due to the impacts of cars and there are questions as to the sorts of places where they are killed on roads. In recent years I have tried to record every single road kill Hedgehog that I see, regardless of whether I have seen one in that location before, to help answer these questions.

In 2019, I recorded a total of 123 road casualty Hedgehogs across the North East, compared to 104 in 2018 and 107 in 2017. I could probably dig out some older spreadsheets and go back a little further still, but regardless of the fact that I rarely travel in the North East outside of the Tees Valley and that my travel habits across those years are quite similar, that is obviously not a standardised sample.

What is a lot more standardised is my daily workplace commute. In late 2015 I started a new job in Kirkleatham which involved a new driving route. Once the "squashed Hedgehog season" started the following spring I noticed that part of the route seemed to have particularly high levels of Hedgehog mortality. Recording all road casualties isn't as easy as it might seem; it's not always obvious whether the dead Hedgehog that you saw on Monday is the same one that you saw the previous Friday and, as dead Hedgehogs tend to persist, it can get confusing. Unfortunately, in 2016 I lost track and couldn't be sure just how many I had counted, so that year's data was lost, at least as far as providing a baseline was concerned. In subsequent years I've become a bit more obsessive and am pretty sure that I avoided the opposing perils of undercounting and double counting.

In 2019, between my doorstep in Darlington and my workplace in Kirkleatham, I counted 57 Hedgehogs as road casualties, compared to 37 in 2018 and 42 in 2017, which averages approximately 46 individuals per year. My commute to work is around 24 miles so that equates to roughly two dead Hedgehogs per mile of road per year, or 1.2 per kilometre. If that was replicated across England's road network then that equates to a lot of dead Hedgehogs, but what I found particularly interesting is that there are big differences in the numbers of Hedgehogs killed on the various sections of road.

Table 1 below divides my commute up into different sections of road based on the habitats that dominate each section to a minimum of at least 200m on either side of the road. Apart from a very short section on one side of the A19 which separates it from some housing at Whinney Banks in Middlesbrough, there did not appear to be any barriers to Hedgehogs accessing the roads or crossing from one side to another.

Table 1. Road sections

	Start and finish points	Adjacent habitats	Distance
1	Davison Road – Bishopton Lane NZ297172 – NZ320165	Urban/ suburban	2.25km
2	Bishopton Lane – A66/ A135 Yarm Road junction NZ320165 – NZ430170	Rural – mostly arable	11.5km
3	Yarm Road – A19 NZ430170 – NZ473188	Light industrial/ urban	5km
4	A19 – A174 NZ473188 – NZ468152	Arable fields	4km
5	A174 – Greystones NZ468152 – NZ568193	Suburban	11.5km
6	Greystones – Kirkleatham Lane NZ568193 – NZ590212	Amenity landscaping/ golf course	3km
7	Kirkleatham Lane NZ590212 – NZ591219	Woodland strip/ arable	0.75km
8	Business Park NZ591219 – NZ590225	Amenity landscaping	0.5km

Table 2 below shows the mean of the total number of Hedgehogs killed per kilometre per year, across each section of road over the three years 2017-2019. It also shows the number of Hedgehogs killed on each section of road each year.

The figures for 2016 have been added to show the pattern of road casualties, which fits well with those from subsequent years. Hedgehog casualties were recorded on these sections of road up to the end of August that year and only a very small number, if any, will have been missed prior to that, so the total for that year is estimated to have been in the low thirties.

Table 2. Hedgehog casualties per section of road

	Adjacent habitats	Mean no. HH/km/yr 2017-2019	No. Hedgehogs/ yr			
			2016 incomplete	2017	2018	2019
1	Urban/ suburban	2.1	3	2	2	10
2	Rural – mostly arable	0.4	4	7	4	4
3	Light industrial/ urban	0.6	3	2	1	6
4	Arable fields	0.1	0	0	0	1
5	Suburban	2.3	13	25	23	30
6	Amenity landscaping/ golf course	0.7	1	3	2	1
7	Woodland strip/ arable	4.8	1	3	5	3
8	Amenity landscaping	1.3	1	0	0	2
All		1.2	26	42	37	57

Adjacent habitats are very broad categories; at a smaller scale there is much variation and patches of other habitats occur. For example, Section 2 is almost all arable for some distance north and south of the road, but at the eastern end there is a Community Woodland on the north side and the village of Long Newton is nearby at one point. On Section 6, the small village of Lazenby lies closely adjacent to the north.

Hedgehog casualties are not scattered randomly but tend to occur at certain points such that you can almost predict where they will occur. This is particularly noticeable along the long stretch of arable in Section 2 where they appear to be concentrated at road junctions, underpasses or where there are other blocks of habitat such as woodland. I cannot recall a road casualty Hedgehog where only arable fields lay adjacent to the section

(which, incidentally, contrasts with the situation for Brown Hare road casualties on the A66).

Is this carnage a problem? My instinctive reaction is one of, how can this level of attrition be sustainable? Instinct isn't necessarily instructive though, and if we take the numbers of dead Hedgehogs as a proxy for the number of live ones then there hasn't been a reduction in the four years that I have been counting. In fact, in 2019 there was a substantial increase in those sections running through suburban areas. Of course, four years isn't a long timeframe in which to observe population change, but as far as I am aware there haven't been any major alterations to the environments surrounding these roads in the last 20-30 years. Therefore the amount of Hedgehog habitat will have remained pretty much the same, so habitat change is unlikely to be a factor in this instance. Of course many other confounding factors will be at play, for example differences in weather patterns between years will affect the numbers of Hedgehogs and the distances that they need to roam to meet their needs but their effects aren't simple and will be difficult if not impossible to disentangle.

The level of traffic, which is the issue in focus, will undoubtedly have increased during that same 20-30 year period. Unfortunately due to the lack of Hedgehog data from earlier years it isn't possible to correct for this. It may be that the number of dead Hedgehogs per car was much higher in previous years and that my baseline is an already depressed population but if not then road traffic does not seem to be resulting in a reduction in Hedgehog numbers in the areas surrounding these roads. So did the 57 Hedgehogs that died on my route to work in 2019 represent a growing population or will their deaths diminish the 2020 population.

Unfortunately the loss of the daily commute due to changes in working practices as a result of the Covid-19 pandemic will make a 2020 comparison meaningless. Nevertheless the extreme change in travel patterns resulting in an estimated 60% reduction in road traffic levels does provide an interesting experiment. It might reasonably be predicted that if road traffic is a major contributor to Hedgehog population declines then such a dramatic reduction ought to be reflected in an increase in Hedgehog numbers. We shall have to wait until 2021 to find out.

Visit to Malham Tarn water vole reintroduction

Andrew Halcro-Johnston

On 15th June 2019, members of YMG visited the Malham Estate in the Yorkshire Dales to see at first hand the progress being made to reintroduce water voles to Tarn Fen. The visit was jointly organised with CIEEM (the Chartered Institute of Ecology and Environmental Management) and was well attended with eighteen participants making the trip up to Malham.

Our tour was very capably led by Róisín Black, Ranger with the National Trust, who has been instrumental in designing and delivering the water vole reintroduction project. Róisín had previously given a talk to YMG and this was an opportunity to see the results of the project three years after the initial release of more than 100 individuals.

As we followed the boardwalk around the fen we could clearly see the results of 'ecosystem engineering' by the water voles, which is helping to restore the streams and wider fen habitat to a more naturalised state. We also had an opportunity to discuss some of the challenges around ecological restoration in a sensitive wetland habitat and balancing conservation of the SSSI with ongoing educational needs at the site.

A hare spotted by Malham Tarn… (Ann Hanson)

After lunch at the Field Studies Centre we enjoyed a walk around the Tarn to take in the wildflowers and scenery of the Malham Estate before the weather closed in and we had to beat a retreat back to our cars! Pouring rain aside, it was a very informative and enjoyable day out in the Dales.

Small-mammal survey at Humber Bridge Country Park, August 2019

Jack Whitehead

Background

East Riding of Yorkshire Council asked us to survey the small mammals in the Country Park as many years had elapsed since the last such event. This was to be a public event and was advertised by the Council and the Yorkshire Mammal Group.

Method

Thirty Tube traps and twenty four Longworths were put in place on Wednesday 10th August, loaded with hay and baited with a seed and grain mix, and mealworm pupae; they were then locked open. Habitats used included pond-side vegetation where Water Mint prevailed, leaf litter and log piles and Bramble thickets with Nettle and Willowherb at the edge of rabbit-cropped grassland. The traps were re-baited on Saturday evening, 13th August, with carrot added, and set to catch. Traps were inspected on Sunday 14th August, from 9.30am. An ill-timed downpour adversely affected visitor numbers but as the morning progressed family groups came and went and we were able to show the animals to fascinated children.

Results

SUNDAY 14th August 2019
T = Tube trap, L = Longworth trap

TRAP	SPECIES	WEIGHT	SEX	TRAP	SPECIES	WEIGHT	SEX
T1	Wood Mouse	13 gms	Juv	**T25**	Wood Mouse	Escape	
T2	Wood Mouse	11.5 gms	F	**T28**	Bank Vole	28 gms	M
T3	Wood Mouse	25 gms	F	**T29**	Bank Vole	22 gms	M
T4	Wood Mouse	12 gms	Juv	**T30**	Bank Vole	15 gms	M
T5	Wood Mouse	22 gms	M	**L32**	Bank Vole	21 gms	M
T6	Wood Mouse	22.5 gms	M	**L33**	Wood Mouse	26 gms	F
T7	Wood Mouse	18 gms	F	**L34**	Wood Mouse	17 gms	M
T8	Wood Mouse	20 gms	M	**L35**	Wood Mouse	14.5 gms	M
T9	Wood Mouse	20 gms	M	**L37**	Bank Vole	16 gms	F
T10	Common Shrew	7.5 gms		**L38**	Bank Vole	29 gms	F
T11	Wood Mouse	13.5 gms	M	**L39**	Bank Vole	16 gms	M
T12	Common Shrew	12 gms		**L43**	Wood Mouse	Escape	
T13	Wood Mouse	30 gms	F**	**L46**	Wood Mouse	16 gms	F
T14	Wood Mouse	27 gms	M	**L47**	Common Shrew	8 gms	

T16	Wood Mouse	31 gms	M	**L48**	Bank Vole	20 gms	M
T17	Wood Mouse	18.5 gms	F	**L49**	Wood Mouse	30 gms	M
T19	Wood Mouse	27 gms	F	**L51**	Wood Mouse	22.5 gms	M
T20	Wood Mouse	23 gms	M	**L52**	Wood Mouse	17 gms	F
T21	Bank Vole	29 gms	F	**L53**	Bank Vole	21 gms	M
T22	Bank Vole	22 gms	F	**L54**	Bank Vole	18 gms	M
T23	Wood Mouse	15 gms	M				

****Lactating

Summary

This very well used Country Park on the edge of Hull is home to a good population of Wood Mice and Bank Voles, largely invisible to the crowds who visit. It was good to be able to show some of them off. We caught the same three species as had been recorded earlier: 26 Wood Mice, 12 Bank Voles, three Common Shrews and three slugs; and the trap success rate was a quite high 76%. The weather in the preceding days had been benign, sunny with showers and a temperature range between 22 and 12°C.

Thanks to Bev Hylton of East Yorkshire Council for giving us the opportunity and to Jacob Jackson, who did most of the running. Linda Cooper and Gill Sinclair did the rest.

Mammal survey at 'Down to Earth' site, Hull, September 2019

Gill Sinclair

Background

Down to Earth Hull (https://www.facebook.com/d2ehull/) is a community interest company which operates a site of about an acre within Hull's Manvers Street allotments. To help inform decisions about how the site is managed to support Hull's Biodiversity Action Plan, Down to Earth liaised with Jack Whitehead to do a small mammal trap. This was a public event and was promoted to Down to Earth followers, Transition & Permaculture Hull, the Yorkshire Mammal Group, allotment holders, and various friends and associates.

Method

30 Tube traps and 14 Longworth traps were put in place on Wednesday 11th September, loaded with hay and baited with a seed and grain mix.

They were then locked open. Habitats used included the edge of a scrubby field; alongside and near dead hedges; deciduous woodland; vegetation around old sunken baths; the margins of a small meadow; willows and shrubs around a pond; and one trap in vegetable plot! The traps were re-baited on the evening of Saturday 14th September, with pupae and apple added, and set to catch. Traps were inspected on Sunday 15th September from 9.30am. The event was well attended with several visitors getting hands-on involved in opening the traps and releasing the animals.

Results

Sunday 15th September 2019
T =Tube trap, L = Longworth trap

TRAP	SPECIES	WEIGHT	SEX	TRAP	SPECIES	WEIGHT	SEX
T1	Wood Mouse	11 gms	F	**L33**	Wood Mouse	11 gms	F
T3	Wood Mouse	22 gms	M	**L37**	Wood Mouse	12 gms	M
T9	Wood Mouse	13 gms	M	**L38**	Wood Mouse	14 gms	M
T16	Wood Mouse	19 gms	F	**L41**	Wood Mouse	20 gms	M
T17	Wood Mouse	20 gms	M	**L43**	Wood Mouse	20 gms	M
T23	Wood Mouse	13 gms	M				
T24	Wood Mouse	20 gms	M				
T27	Wood Mouse	12 gms	F				
T30	Wood Mouse	23 gms	F				

Summary

Despite the range of habitats surveyed, only wood mice (and five slugs!) were caught. This is consistent with a survey about 10 years ago by the Yorkshire Wildlife Trust which also trapped only wood mice.

A trail camera was set from Sunday 8th to Sunday 15th September and ‘caught’ foxes, grey squirrels, and at least four resident cats – the latter may have disturbed some traps and caused false drops (seven).

The weather in the preceding days had been light cloud with sunny intervals and little rain, with a temperature range between 22 and 9°C. The trap was run by Jack Whitehead, Gill Sinclair and John Sadler, with much help from the Down to Earth team.

ORCA cetacean monitoring off the Yorkshire Coast

Rosamond Clay

Introduction

ORCA (previously known as organization Cetacea) is a research and education charity based in Portsmouth that conducts cetacean surveys from vessels of opportunity, such as cruise ships and ferries, with a two pronged objective; to collect data on cetacean species in the area and to spread enthusiasm and concern for all marine life to passengers on board. Whilst ORCA operates all around Northern Europe, and increasingly further afield, throughout summer we have surveyors and Wildlife Officers onboard the DFDS route from Amsterdam to Newcastle which passes the Yorkshire coast every other day, at a distance of no more than 20 nautical miles, giving us a great insight into the sea-life off our coast.

Due to the tempestuous nature of the winter North Sea, surveys are limited to the summer months and so from April until the end of September one ORCA wildlife officer is on the DFDS KING Seaways at all times conducting at least two hours of surveying per day. Once a month we also have a team of four volunteer surveyors, either on the King or its sister ship the Princess, who work throughout the daylight hours collecting information that is later used in ORCA's annual report; *the State of European Cetaceans*, freely available online. All data collected notes the weather, sea state and exact GPS location as well as the numbers and species of animals and, importantly, their behaviour when encountering our vessel. This data can be used for population estimates, range and distribution analysis and can also be overlaid with other data such as shipping intensity or plankton concentrations, to make important inferences on the effect of abiotic factors on our cetacean species' behaviour and distribution.

Cetaceans are amongst the most data deficient groups of all animals – surveys are difficult to conduct as they are reliant on good weather and being in the right places at the right time over a vast survey area. They are also expensive – operating and maintaining boats is not cheap and is one of the reasons why ORCA makes use of partnerships amongst operating ferry and cruise companies. With data and knowledge of our seagoing mammals falling significantly behind that of land based animals we are in danger of

losing species through ignorance. By collecting this data, and pinpointing areas most important to our cetaceans, as well as human activities having significant impact on them, we can push for legislation and protection around these areas.

Method

ORCA follows a basic sea surveying method of scanning the sea surface, following the general protocol of 80% looking by eye, and 20% scanning the distance with binoculars. Cameras are used to photograph encounters in order to make positive IDs of species.

Limitations

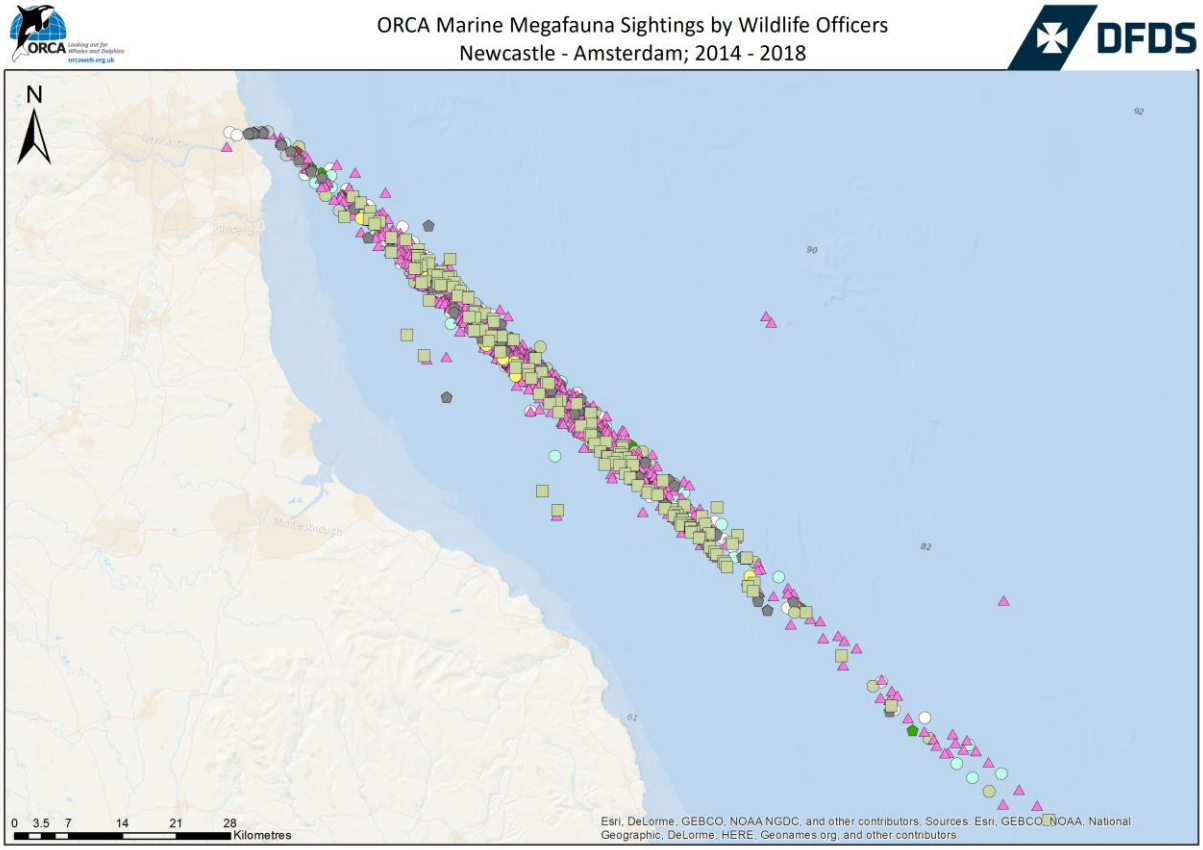
Cetacean surveys are reliant on calm seas; not something always available in the North Sea. For smaller cetaceans such as the harbour porpoise, an animal of less than 1.5m in length that tends not to breach very high out of the water, a sea state of 0-2 is generally considered necessary, making them extremely difficult animals to survey. There is also an element of human error; encounters, particularly those far in the distance, may be missed. However, with this consistent transect being surveyed constantly throughout the six months of summer for the past 12 years, ORCA has built up a large dataset giving reliable insight into the distribution of cetacean species around Yorkshire and beyond.

Historic Results

The results table and map below show data collected in waters around the North East and Yorkshire.

Cetacean sightings from the DFDS King Seaways Wildlife Officers 2014-2018, northern North Sea. (All sightings seen within the area North of 53 latitude, and South of the Mouth of Tyne.)

Harbour Porpoise	1845
White-beaked Dolphin	1169
Bottlenose Dolphin	60
Minke Whale	156
Common Dolphin	30
Atlantic White Sided Dolphin	6
Unidentified Cetaceans	369



Results in the 2019 Season so far

For the season as thus far, from March 27th to the day of writing, June 22nd, we have had several lost survey days due to unusually stormy summer weather. However, that aside, our wildlife officers (who live on the ship through summer) have made over 250 sightings throughout the journeys with by far the highest concentration of sightings being on the transect line beginning at Flamborough head and moving North. In this area we commonly encounter white-beaked dolphins, bottlenose dolphins, harbour porpoise and minke whale.

Conclusions

It is well known that the Yorkshire coast is vital to multiple species of seabirds, with Flamborough Head and Bempton cliffs being two of the most important sites for declining species such as the puffin, kittiwake and fulmar. However, it is less well known that the productive waters around Yorkshire are also vital to many cetacean groups as well. This data collected by ORCA shows the extent of use by multiple groups. The peaks in the summer, with many encounters including calves, indicate the area as important for raising young.

To ensure the future of Yorkshire's cetacean species, just like in all other marine spaces, we must protect the areas they already use. To find those areas, we need to collect data. It is also becoming clear that we need more robust policing of those areas already protected as currently there is little evidence that laws against certain activities within Marine Protected Areas are being properly enforced. Hopefully by spreading the word about the richness of life in our coastal waters we can engage the public and create a demand for better protection of their homes.

York Cemetery Bioblitz

Ann Hanson

Introduction

YMG were invited by Liam Taylor of the Beautiful Burial Ground Project to carry out a small mammal survey as part of York Cemetery Bioblitz on 28th to 29th May 2019. Grid ref. SE610508

The Cemetery covers about 9.6 hectares and contains large areas of unmown long grass, several hedges, an orchard and a few bramble patches providing excellent habitat for small mammals.

Methods

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

Trap locations:

1. Long grass around old gravestones near the chapel (10 traps).
2. Bramble and nettle patch near the chapel (10 traps).
3. Bramble patch along avenue of trees (5 traps).
4. Long grass on approach to orchard (5 traps).
5. Beech hedge near orchard (5 traps).
6. Open area with long grass beyond orchard (15 traps).

Traps were set on the evening of Tuesday 28th May and checked on Wednesday 29th May from 9.30am onwards.

Results

Summary of small mammals captured at York Cemetery, May 2019.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Wood mouse	0	2	0	0	2	0

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

Discussion and conclusions

Wood mouse (*Apodmus sylvaticus*) was the only species of small mammal caught in York Cemetery – two individuals in the brambles and nettles near the chapel and another two under the beech hedge near the orchard. A range of sexes and ages were caught, indicating a breeding population is present. The month of May is quite early in the season for a small mammal survey and it may be that other species were present but in smaller numbers at this time of the year. The available habitats are certainly suitable for voles and shrews as well.

Photo: Liam Taylor

Thanks to Rob Masheder and Mary Youngman of YMG for help with the trap and to Liam Taylor and the volunteers for their help and enthusiasm.

Appendix I

Table of results: small mammal survey at York Cemetery, May 2019.

Weather: Heavy rain previous day, dry overnight, sunny and cool morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Bramble/nettle (site 2)	Wood mouse	M	SA	17.0
	Wood mouse**	M	A	?
Beech hedge (site 5)	Wood mouse	F	A	25.0
	Wood mouse**	?	SA	?

* M = male; F = female; A= adult; SA = subadult; J = juvenile
** Escaped during handling

Heworth Holme Bioblitz

Ann Hanson

Introduction

Heworth Holme is part of network of green spaces forming a wildlife corridor along Tang Hall Beck through the centre of York. Grid ref. SE621525. The area is protected from development by regular winter flooding and is managed for wildlife by St Nicks Environment Centre and local volunteers. YMG were invited by St Nicks to carry out a small mammal survey as part of Heworth Holme Bioblitz on 6th to 7th June 2019. A bat survey was also carried out on the evening of 6th June.

The green space at Heworth Holme covers about 1.8 hectares and contains a large area of rough grass with mature trees and shrubs along the site boundaries and Tang Hall Beck.

Methods

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

Trap locations:

1. Long grass adjacent to Tang Hall Beck, containing cocksfoot, reed canary grass, thistles and nettles (30 traps).
2. Trees and shrubs along the site boundary (sycamore, ash, hawthorn and hazel) with long grass beneath (cocksfoot, cow parsley, nettles and cleavers) (10 traps).

Traps were set on the evening of Thursday 6th June and checked on Friday 7th June from 9.30am onwards.

The bat survey on the evening of 6th June was carried out using heterodyne and frequency division bat detectors from 15 minutes before sunset to one hour after sunset.

Results

Summary of small mammals captured at Heworth Holme, June 2019.

	Site 1	Site 2
Wood mouse	0	4

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

Bat species detected on the evening of 6th June included common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*).

Discussion and conclusions

Wood mouse (*Apodmus sylvaticus*) was the only species of small mammal caught at Heworth Holme with all individuals being caught along the site boundary in long grass beneath mature trees and scrub.

A range of sexes and ages were caught, indicating a breeding population is present. The available habitat is also suitable for voles and shrews but none were captured on this occasion.

Two common species of pipistrelle bats were recorded feeding over the site on the evening of 6th June. Roosts of both species have been recorded extensively across the city.

Thanks to Rob Masheder of YMG for help with setting the traps and the bat survey and to St Nicks and their volunteers for their help with checking the traps.

Appendix I

Table of results: small mammal survey at Heworth Holme, June 2019.

Weather: Showers overnight. Warm, dry morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Trees/shrubs/long grass (site 2)	Wood mouse	M	SA	21.0
	Wood mouse	F	SA	18.0
	Wood mouse	M	A	28.0
	Wood mouse	M	SA	21.0

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

Meanwood Park small mammal survey

Ann Hanson

Introduction

Meanwood Park is a large area of green space within the city of Leeds, comprising mature woodland and abandoned fields bordered by mature hedges, with Meanwood Beck flowing through the site. Grid ref. SE280373. The area is managed by Leeds City Council and YMG were asked to carry out a small mammal survey at Meanwoodside as part of the activities arranged by David Preston, the Countryside Ranger, for his team of volunteers.

Methods

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

Trap locations:

1. Long grass under trees (18 traps).
2. Long vegetation along Meanwood Beck with hogweed, nettle and cleavers (13 traps).
3. Mature woodland adjacent to a wetland area (7 traps).
4. Mature oak/holly woodland (12 traps).

Traps were set on the evening of Tuesday 9th July and checked on Wednesday 10th July from 9.30am onwards.

Results

Summary of small mammals captured at Meanwood Park, July 2019.

	Site 1	Site 2	Site 3	Site 4
Wood mouse	1	5	3	4
Bank vole	2	2	0	0

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

Discussion and conclusions

Two species of small mammal were caught in Meanwood Park, including wood mouse (*Apodmus sylvaticus*) and bank vole (*Myodes glareolus*). Wood mice were caught at all four trap sites, with lesser numbers of bank voles at sites 1 and 2 in long grass and long vegetation. Sites 3 and 4 had much less ground cover, so were suitable for nocturnal wood mice, with the more diurnal bank voles preferring dense vegetation for cover. The wood mice had a good age structure with adults, subadults, juveniles and a couple of pregnant females being captured, demonstrating a healthy breeding populations. Mole hills (*Talpa europaea*) were also recorded on the site and a grey squirrel (*Sciurus carolinensis*) was caught red handed (pawed?) vandalising three of the Longworth traps at site 3!

Thanks to Rob Masheder of YMG and David Preston the Countryside Ranger for help with setting the traps and to Meanwood Park volunteers for their help with checking the traps.

Appendix I

Table of results: small mammal survey at Meanwood Park, July 2019.

Weather: Light rain overnight. Warm, dry morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Long grass (site 1)	Wood mouse	F	A	23.0
	Bank vole	M	A	24.0
	Bank vole	M	A	29.0
Long vegetation along beck (site 2)	Wood mouse	F	A	23.0
	Wood mouse	M	SA	18.0
	Wood mouse	M	A	23.0
	Bank vole	F	SA	17.0
	Wood mouse**	?	?	?
	Bank vole	F	A	22.0
	Wood mouse	M	A	22.0
Woodland adjacent to wetland (site 3)	Wood mouse	F	J	14.0
	Wood mouse	F	A	29.0
	Wood mouse	M	A	29.0
Mature oak/holly woodland (site 4)	Wood mouse	M	A	20.0
	Wood mouse	F	A	26.0
	Wood mouse	M	A	25.0
	Wood mouse	F	J	12.0

* M = male; F = female; A= adult; SA = subadult; J = juvenile
** Escaped during handling

Small mammal survey at Haw Park, Wakefield

Ann Hanson

Introduction

Anglers Country Park is located near Ryhill in Wakefield District, West Yorkshire. Grid ref. SE375154. A local group of conservation volunteers, Friends of Haw Park Wood and Wintersett Reservoir help with management of the Country Park and asked if YMG could carry out a small mammal survey for volunteers and members of the public. The Country Park is a lovely mix of habitats including, woodland, wetland, reedbed, species-rich grassland, hedgerows and Anglers Park Lake.

Methods

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

Trap locations:

1. Common reed within woodland with traps placed under a wooden boardwalk (5 traps).
2. Semi-mature woodland with traps in bramble patches along a grassy path edge (10 traps).
3. Semi-mature woodland with brambles and long grass (10 traps).
4. Species-rich grassland (10 traps).
5. Edge of Anglers Park Lake with bulrush, common reed and meadowsweet (10 traps).
6. Mature hawthorn hedge next to visitors centre (5 traps).

Traps were set on the evening of Friday 19th July and checked on Saturday 20th July from 9.30am onwards.

Results

Summary of small mammals captured at Anglers Country Park, July 2019.

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

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

Discussion and conclusions

Four species of small mammal were caught at Anglers Country Park, including wood mouse (*Apodmus sylvaticus*), bank vole (*Myodes glareolus*), field vole (*Microtus agrestis*) and common shrew (*Sorex araneus)*. Wood mice and bank voles were the most numerous species captured across the site and at most of the trap locations. Two common shrews were caught in the woodland and on the lake edge, and a single field vole was caught also along the lake edge. Only a single bank vole was caught in the species-rich grassland at site 4. This area is managed by annual cutting and the sward is still fairly open, although it may become more attractive to species such as field voles as the sward develops and becomes denser.

The wood mice and bank voles in the Country Park had a good age structure with adults, subadults and juveniles being captured, demonstrating healthy breeding populations.

Thanks to Rob Masheder of YMG for help with the trap and to Friends of Haw Park Wood and Wintersett Reservoir for their help and enthusiasm.

Photos: Rob Masheder

Appendix I

Table of results: small mammal survey at Anglers Country Park, July 2019. Weather: Rain overnight. Overcast and warm morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Reedbed/woodland (site 1)	Wood mouse	F	J	13.0
	Bank vole	M	SA	19.0
	Wood mouse	F	A	27.0
	Bank vole	F	A	23.0
Woodland/brambles (site 2)	Bank vole	F	A	23.0
	Wood mouse	M	A	26.0
	Bank vole	M	SA	19.0
	Bank vole	M	SA	19.0
	Bank vole	M	SA	17.0
	Wood mouse	M	J	14.0
	Bank vole	M	A	26.0
Woodland/brambles & long grass (site 3)	Bank vole	F	A	21.0
	Bank vole	M	A	23.0
	Wood mouse	F	A	26.0
	Bank vole	M	A	21.0
	Common shrew	?	A	9.0
Species-rich grassland (site 4)	Bank vole	F	A	21.0
Lake edge (site 5)	Wood mouse	M	A	18.0
	Wood mouse**	?	?	?
	Field vole	F	SA	21.0
	Wood mouse	M	SA	21.0
	Common shrew	?	A	9.0
	Wood mouse	F	J	11.0
Hawthorn hedge (site 6)	Wood mouse	F	A	24.0
	Bank vole	F	SA	22.0
	Wood mouse	F	A	35.0
	Bank vole	M	SA	20.0
	Bank vole	F	A	29.0

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

** Escaped during handling

Small mammal survey at Three Hagges Wood-Meadow, 2019

Ann Hanson

Introduction

A sixth annual survey was carried out by YMG in August 2019 as part of a long term study on changes in small mammal populations at Three Hagges Wood-Meadow, located at Escrick Park Estate, near York (grid ref. SE626395).

See Imprint 41 (2014), Imprint 42 (2015), Imprint 43 (2016), Imprint 44 (2017) and Imprint 45 (2018) for the results of previous surveys on the site. For more information on the wood-meadow and the Wood Meadow Trust visit https://www.woodmeadowtrust.org.uk/

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), uncut with fairly dense ground flora beneath young trees, canopy closing (10 traps).
   Grid ref. SE6279939456 to SE6776939422
2. MG4 meadow, cut for hay on 6th July with very little grass re-growth but plenty of wild flowers (10 traps).
   Grid ref. SE6273839477 to SE6269639464
3. Coup 9 (oak, hazel and wild orchard), uncut with dense grass and wild flowers, still fairly open (10 traps).
   Grid ref. SE6275039502 to SE6273439541
4. Coup 6 (oak, hazel, wych elm), uncut with dense grass and wild flowers (black knapweed especially abundant), still fairly open (10 traps).
   Grid ref. SE6267239586 to SE6265239623

5. Pond edge. Pond constructed spring 2014. Water level low. Area around pond cut for hay 6th July. Un-cut vegetation at bank top, 1m wide (10 traps).
   Grid ref. SE6268139929 to SE6269439938

Traps were set on the evening of Friday 2nd August and checked on Saturday 3rd August from 9.30am onwards. Traps were re-set on the Saturday evening and checked on Sunday 4th August from 9.30am onwards.

Results

Summary of small mammals captured at Three Hagges Wood-Meadow, Escrick, August 2019.

	Site 1		Site 2		Site 3		Site 4		Site 5	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
Wood mouse	4	3	0	0	0	0	0	1	0	0
Bank vole	0	1	0	0	0	0	0	0	0	0
Field vole	3	1	0	0	3	8	2	3	3	3
Common shrew	0	1	0	0	0	1	2	0	1	3
Water shrew	0	0	0	0	0	0	0	0	0	0
Pygmy shrew	0	0	0	0	0	0	0	0	0	0

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

Discussion and conclusions

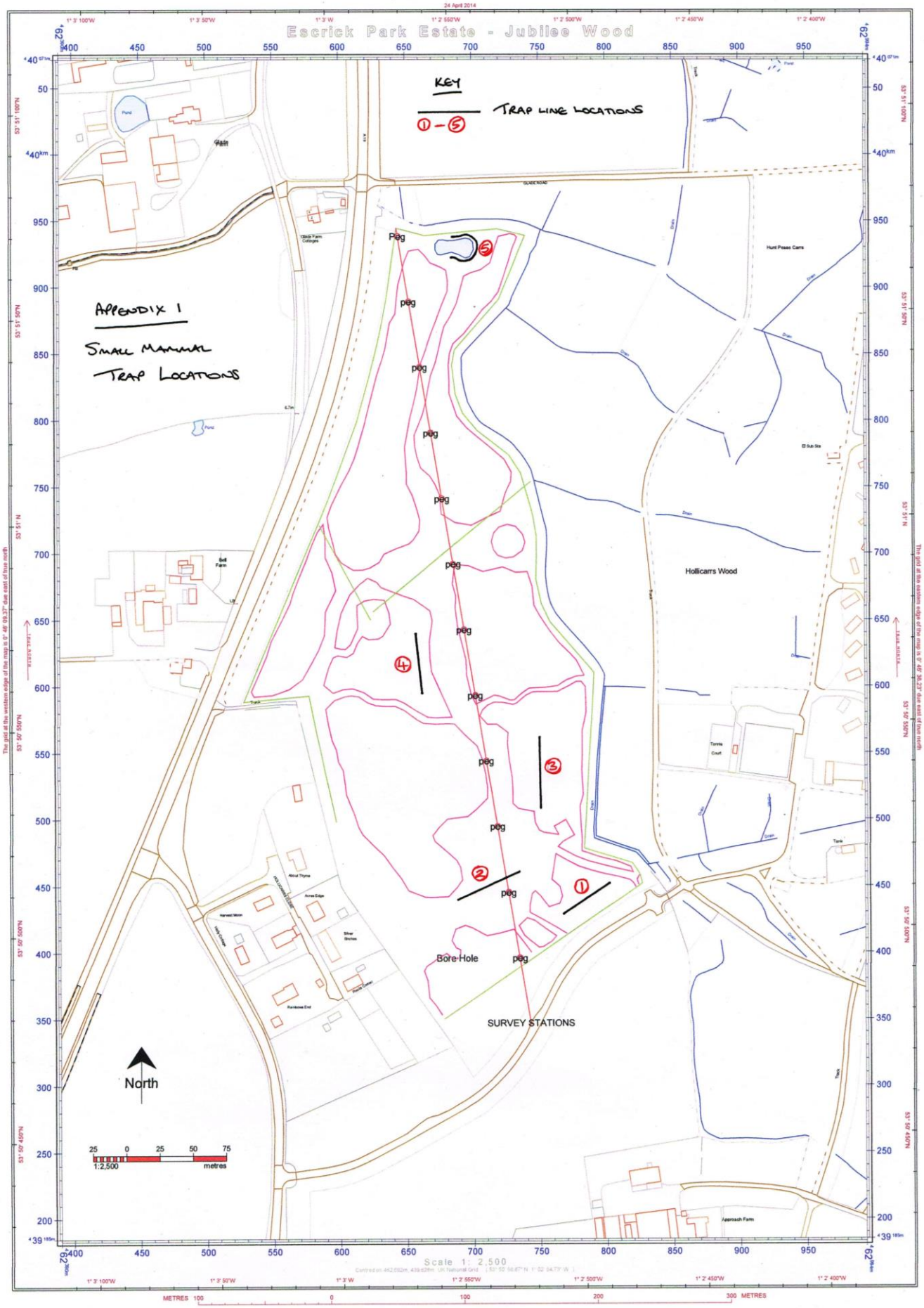
Four species of small mammal were caught at Three Hagges Wood-Meadow, Escrick, in 2019, including wood mouse (*Apodmus sylvaticus*), field vole (*Microtus agrestis*), common shrew (*Sorex araneus*) and bank vole (*Myodes glareolus*). Field voles were once again the most numerous small mammals, with good numbers of common shrews, a few wood mice and a single bank vole. The dense grass at Site 3 is still providing especially good habitat for field voles with wood mice mainly being captured at Site 1 where the tree canopy is closing and the ground flora is becoming less dense. The single bank vole was also captured at Site 1. Field voles and common shrews are well distributed across the site being caught at all trapping locations apart from Site 2 which had recently been cut for hay. The species captured show a good range of ages indicating healthy breeding populations.

A bat survey of Three Hagges Wood-Meadow was carried out on the evening of Saturday 3rd August 2019, using heterodyne and frequency division bat detectors. The weather was dry and warm and several common pipistrelles (*Pipistrellus pipistrellus*) and soprano pipistrelles (*Pipistrellus pygmaeus*) were recorded foraging around the edges of the site. A noctule bat (*Nyctalus noctula*) was also recorded flying over the wood-meadow.

Additional mammal records in the wood-meadow this year included molehills (*Talpa europaea*).

Thanks are due to the Wood Meadow Trust for inviting us to take part in the project. Thanks also to Rob Masheder, Mary Youngman, and other YMG volunteers for helping with the surveys this year and to everyone who came and joined in on both mornings.

Appendix I


Escrick Park Estate - Jubilee Wood
KEY
TRAP LINE LOCATIONS
①-⑤
APPENDIX 1
SMALL MAMMAL
TRAP LOCATIONS
Peg
peg
Hollicarrs Wood
Bore Hole
SURVEY STATIONS
North
25 0 25 50 75
1:2,500
metres
Scale 1: 2,500
METRES 100 0 100 200 300 METRES

Appendix II

Table of results: small mammal survey at Three Hagges Wood-Meadow, Escrick, August 2019.

Weather: Hot, dry and sunny throughout.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
03/08/2019				
Coup 12 (Site 1)	Wood mouse	M	J	10.0
Coup 12 (Site 1)	Wood mouse	M	A	27.0
Coup 12 (Site 1)	Wood mouse	F	A	30.0
Coup 12 (Site 1)	Field vole	M	A	33.0
Coup 12 (Site 1)	Field vole	F	A	22.0
Coup 12 (Site 1)	Wood mouse	M	J	12.0
Coup 12 (Site 1)	Field vole**			
Coup 9 (Site 3)	Field vole**			
Coup 9 (Site 3)	Field vole	M	A	36.0
Coup 9 (Site 3)	Field vole	F	J	11.0
Coup 6 (Site 4)	Common shrew	?	A	9.0
Coup 6 (Site 4)	Field vole	M	A	26.0
Coup 6 (Site 4)	Field vole	M	J	15.0
Coup 6 (Site 4)	Common shrew	?	A	9.0
Pond edge (Site 5)	Field vole	M	A	31.0
Pond edge (Site 5)	Field vole	F	A	23.0
Pond edge (Site 5)	Field vole	M	A	20.0
Pond edge (Site 5)	Common shrew	?	A	9.0
04/08/2019				
Coup 12 (Site 1)	Common shrew	?	A	8.0
Coup 12 (Site 1)	Bank vole	M	A	21.0
Coup 12 (Site 1)	Field vole	M	A	36.0
Coup 12 (Site 1)	Wood mouse	F	A	31.0
Coup 12 (Site 1)	Wood mouse**	M	A	?
Coup 12 (Site 1)	Wood mouse	F	J	11.0
Coup 9 (Site 3)	Field vole	F	A	23.0
Coup 9 (Site 3)	Field vole	F	A	26.0
Coup 9 (Site 3)	Common shrew	F	A	9.0
Coup 9 (Site 3)	Field vole	M	A	36.0
Coup 9 (Site 3)	Field vole	M	SA	20.0
Coup 9 (Site 3)	Field vole	M	J	14.0

Coup 9 (Site 3)	Field vole	M	J	15.0
Coup 9 (Site 3)	Field vole	F	J	14.0
Coup 9 (Site 3)	Field vole	M	A	36.0
Coup 6 (Site 4)	Field vole	F	J	15.0
Coup 6 (Site 4)	Wood mouse	M	A	25.0
Coup 6 (Site 4)	Field vole	M	SA	19.0
Coup 6 (Site 4)	Field vole	M	SA	25.0
Pond edge (Site 5)	Field vole	F	SA	18.0
Pond edge (Site 5)	Field vole	F	SA	17.0
Pond edge (Site 5)	Common shrew	?	A	13.0
Pond edge (Site 5)	Field vole	M	SA	22.0
Pond edge (Site 5)	Common shrew	?	A	10.0
Pond edge (Site 5)	Common shrew	?	SA	7.0

* M = male; F = female; A= adult; SA = subadult; J = juvenile
** Escaped during handling

Second 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. This second survey was carried out in September 2019 about 5 months after a pair of beavers had arrived and produced a couple of kits. 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 of the valley.

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. First pond edge with willow scrub and emergent vegetation – SE77509073 (20 traps).
   NB: This pond was very silted up in 2018 but due to the beaver activity was holding a considerable amount of water in September 2019.
2. Second pond edge with willow scrub and emergent vegetation – SE77439068 (20 traps).
   NB: This pond was holding water in both 2018 and 2019.
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 13th September and checked on Saturday 14th September from 9.30am onwards. The traps were re-set on the Saturday evening and checked and lifted on Sunday 15th September from 9.30am onwards.

Beaver dam (Rob Masheder)

Beaver tree felling (Rob Masheder)

Results

Summary of small mammals captured at Keldy Ponds, Cropton Forest, September 2019.

	Site 1		Site 2		Site 3		Site 4		Site 5	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
Wood mouse	2	2	1	1	0	2	1	0	1	3
Bank vole	0	1	2	3	1	2	0	0	0	0
Common shrew	0	0	1	1	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 were molehills (*Talpa europaea*), grey squirrels (*Sciurus carolinensis*), roe deer (*Capreolus capreolus*) and an adult beaver (*Castor fiber*) in the first pond on the Sunday morning. Otter (*Lutra lutra*) signs were not as obvious along the stream as they were in 2018 but wildlife trail cameras on the site have recorded plenty of evidence of otters still using the stream.

Discussion and conclusions

The site has changed considerably since the baseline trap in September 2018, especially in the area around the ponds as this is the main area being used by the beaver family. The first pond was heavily silted up in 2018 but

due to extensive beaver activity, including building a new dam between the two ponds, this pond is now holding water again. The beavers have also considerably modified the habitat around the first pond by felling young and semi-mature trees.

Three species of small mammals were trapped across the site in 2019, mainly wood mice (*Apodmus sylvaticus*) and bank voles (*Myodes glareolus*), with a single common shrew (*Sorex araneus*) next to the second pond. Numbers of wood mice and bank voles captured in 2019 are similar to captures in 2018, with one notable difference being that wood mouse numbers around the first pond are slightly lower than in 2018. This could be due to the disturbance caused by beaver activity in this area, although the numbers are too low to confirm this. Interestingly, the common shrew appeared to be living in the artificial beaver lodge built on the edge of the second pond. The beavers themselves unfortunately ignored the artificial lodge and built their own accommodation soon after being released onto the site. Animals were once again 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 in areas with little ground cover, with bank voles being more prevalent in areas with more cover.

Thanks to Cash Bashforth of the Forestry Commission for inviting YMG to undertake the survey and to her colleague Keith McSweeny for help with the trapping sessions in 2019. Thanks also to Rob Masheder, Anne and Tony Carter, Mary Youngman, Charles Cunningham and Melanie Smith for their invaluable help and enthusiasm over the weekend.

Beaver deceiver (Rob Masheder)

Appendix I

Table of results: small mammal survey at Keldy Ponds, Cropton Forest, September 2019.

Weather: sunny, cool and dry on Saturday and overcast, warm and dry on Sunday.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
14/09/2019				
1 – first pond edge	Wood mouse	M	A	26.0
	Wood mouse	M	A	23.0
2 – second pond edge	Bank vole	M	J	12.0
	Common shrew	?	A	8.0
	Bank vole	F	J	13.0
	Wood mouse	F	A	24.0
3 – deciduous trees	Bank vole	M	A	23.0
4 – clear fell	Wood mouse	M	J	14.0
5 – mature conifer trees	Wood mouse	F	J	15.0
15/09/2019				
1 – first pond edge	Wood mouse	M	A	21.0
	Bank vole	F	A	17.0
	Wood mouse	F	A	26.0
2 – second pond edge	Bank vole	F	J	13.0
	Bank vole	F	J	14.0
	Common shrew	?	A	8.0
	Bank vole	F	J	13.0
	Wood mouse	M	A	25.0
3 – mature conifer trees	Wood mouse	M	J	14.0
	Wood mouse	F	SA	17.0
3 – deciduous trees	Bank vole	F	J	14.0
	Bank vole	M	A	21.0
5 – mature conifer trees	Wood mouse	F	SA	16.0
	Wood mouse	F	J	15.0
	Wood mouse	M	A	23.0

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

Small mammal survey at Ben Rhydding Gravel Pits LNR, Ilkley

Ann Hanson

Introduction

Ben Rhydding Gravel Pits is a lovely Local Nature Reserve located alongside the River Wharfe just outside Ilkley. Grid ref. SE144478. The site is owned by Bradford Council and managed by a small group of volunteers from Wharfedale Naturalists Society. YMG were invited to carry out a small mammal survey on the reserve in October 2019. Habitats on the reserve include woodland, ponds, wetlands and species-rich grassland with an amazing display of orchids in June every year. For more information on the reserve visit http://www.benrhydding-naturereserve.org/

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. North Lawn bramble patch (10 traps).
2. Reed canary-grass and hard rush (6 traps).
3. Wet woodland with willow, ferns and brash piles (10 traps).
4. Wet grassland with reed canary-grass and rush clumps (10 traps).
5. Wet ditch with meadowsweet and raspberry on banks (4 traps).
6. Fishing pond with yellow iris on edges (5 traps).
7. Fishing pond with yellow iris and willow on edges (5 traps).

Traps were set on the evening of Friday 11th October and checked on Saturday 12th October from 9.30am onwards.

Results

Summary of small mammals captured at Ben Rhydding Gravel Pits LNR, October 2019.

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

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

Discussion and conclusions

Four species of small mammals were captured at Ben Rhydding Gravel Pits LNR, including wood mice (*Apodmus sylvaticus*), bank voles (*Myodes glareolus*), field voles (*Microtus agrestis*) and common shrews (*Sorex araneus*). Wood mice and bank voles were distributed across the reserve and were caught at all sites apart from sites 2 and 7. Two field voles and two common shrews were caught in the bramble patch (site 1) and the wet grassland (site 4). The best site for both numbers of small mammals and species diversity was the bramble patch on the edge of the North Lawn (site 1), showing the importance of such habitat for small mammals. The wood mice and bank voles showed a good range of sexes and ages, indicating healthy breeding populations on the reserve. Other mammals recorded on the day included rabbits (*Oryctolagus cuniculus*).

Thanks to Rob Masheder, Mary Youngman, Jane Levy, Maria Taylor and Alex Howe for help with the trap and to Steve Parkes and the volunteers at Ben Rhydding Gravel Pits for their help and enthusiasm.

Appendix I

Table of results: small mammal survey at Ben Rhydding Gravel Pits LNR, October 2019.

Weather: Heavy rain previous days. Warm with light showers during survey.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Bramble patch (site 1)	Common shrew	?	SA	7.0
Bramble patch (site 1)	Wood mouse	M	J	10.0
Bramble patch (site 1)	Wood mouse**			

Bramble patch (site 1)	Bank vole	M	A	18.0
Bramble patch (site 1)	Wood mouse	M	SA	15.0
Bramble patch (site 1)	Wood mouse	M	J	12.0
Bramble patch (site 1)	Field vole	F	A	22.0
Wet woodland (site 3)	Bank vole	F	SA	18.0
Wet woodland (site 3)	Wood mouse	M	SA	17.0
Wet woodland (site 3)	Wood mouse**			
Wet woodland (site 3)	Wood mouse**			
Wet woodland (site 3)	Bank vole	F	J	13.0
Wet grassland (site 4)	Wood mouse	M	J	14.0
Wet grassland (site 4)	Bank vole	F	SA	16.0
Wet grassland (site 4)	Common shrew	?	A	8.0
Wet grassland (site 4)	Field vole	F	A	20.0
Wet grassland (site 4)	Bank vole	F	SA	16.0
Wet ditch (site 5)	Wood mouse	M	A	25.0
Wet ditch (site 5)	Bank vole	F	SA	18.0
Wet ditch (site 5)	Wood mouse	F	SA	19.0
Wet ditch (site 5)	Bank vole	F	SA	18.0
Fishing pond (site 6)	Wood mouse	M	A	22.0
Fishing pond (site 6)	Bank vole**			
Fishing pond (site 6)	Bank vole	M	J	14.0
Fishing pond (site 6)	Wood mouse	F	A	21.0

* M = male; F = female; A= adult; SA = subadult; J = juvenile
** Escaped during handling

A small mammal survey at Gallows Hill Nature Area, Otley, West Yorkshire

Ann Hanson

Introduction

Gallows Hill Nature Area covers about 5.6 hectares of land adjacent to the River Wharfe in Otley (grid ref. SE213460). The site is an ex-Yorkshire Water sewage treatment works, now owned by Otley Town Council and managed by a group of volunteers, the Friends of Gallows Hill. The volunteers have planted hundreds of native species, broadleaved trees across the site as well as a community orchard and forest garden. The site is still high in nutrients due to the past history of sewage sludge, so nettles

tend to be the dominant ground flora. However, the volunteers have done a fantastic job and large areas of the site now also have dense tussocky grass. The site also boasts a large pond with a good range of native wetland plants and breeding frogs and toads, as well as two more recently created ponds. For more information on Gallows Hill Nature Area visit http://gallowshill.org.uk/

YMG last surveyed the site in September 2016 and were invited to carry out another small mammal survey with the local volunteers in October 2019.

Methods

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

Trap locations:

1. Semi-mature, native, broadleaved woodland with nettle ground flora (10 traps).
2. Long grass and nettles (10 traps).
3. New pond edges (10 traps).
4. Large existing pond edge with established wetland plants (10 traps).
5. Semi-mature, broadleaved woodland and hazel coppice (10 traps).

Traps were set on the evening of Saturday 12th October and checked on Sunday 13th October from 9.30am onwards.

Results

Summary of small mammals captured at Gallows Hill Nature Area.

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

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

Discussion and conclusions

Three different species of small mammal were caught in a variety of habitats at Gallows Hill, mainly wood mice (*Apodmus sylvaticus*) and bank voles (*Myodes glareolus*) with just a single common shrew (*Sorex araneus*). Wood mice and bank voles were caught across the site at locations with good ground cover. Only wood mice were caught at site 5 which had less ground cover than any of the other trapping sites and suited this mainly nocturnal species. Most of the individuals captured were sub-adult or juvenile, with just one adult wood mouse and an adult common shrew. This indicates the end of a successful breeding season and many of the young animals will over-winter to breed next year.

Thanks are due to Rob Masheder and Kay Richardson of YMG and Jackie Smith, Clare Cashon and Phillip Tennyson of the Friends of Gallows Hill for helping with this trap.

Appendix I

Table of results: small mammal survey at Gallows Hill, Otley, October 2019.

Weather: Warm with light rain throughout.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Woodland (site 1)	Wood mouse	M	SA	23.0
Woodland (site 1)	Bank vole	F	SA	17.0
Woodland (site 1)	Bank vole	F	J	15.0
Woodland (site 1)	Bank vole	M	SA	19.0
Woodland (site 1)	Bank vole	M	SA	20.0
Woodland (site 1)	Bank vole	F	SA	17.0
Woodland (site 1)	Bank vole	F	SA	17.0
Woodland (site 1)	Bank vole	M	SA	17.0
Long grass (site 2)	Common shrew	?	A	10.0
Long grass (site 2)	Bank vole	F	SA	17.0
Long grass (site 2)	Bank vole	F	SA	17.0
New pond (site 3)	Bank vole	F	SA	18.0
New pond (site 3)	Wood mouse**			
New pond (site 3)	Wood mouse	F	SA	16.0
New pond (site 3)	Wood mouse	M	J	15.0

New pond (site 3)	Wood mouse	M	SA	20.0
Old pond (site 4)	Bank vole	F	SA	20.0
Old pond (site 4)	Wood mouse	F	SA	16.0
Old pond (site 4)	Wood mouse	M	SA	17.0
Old pond (site 4)	Wood mouse	F	SA	16.0
Old pond (site 4)	Wood mouse	F	J	12.0
Old pond (site 4)	Bank vole	F	SA	16.0
Coppice (site 5)	Wood mouse	F	SA	20.0
Coppice (site 5)	Wood mouse	F	SA	17.0
Coppice (site 5)	Wood mouse	F	SA	17.0
Coppice (site 5)	Wood mouse	F	A	26.0
Coppice (site 5)	Wood mouse	F	J	10.0

* M = male; F = female; A= adult; SA = subadult; J = juvenile
** Escaped during handling

"By rivers and reservoirs" – a report of YMG mammal recording walks 2019

Ann Hanson & Rob Masheder

The first walk of the year was along the **River Derwent from Stamford Bridge on 20th January**. Our first record was molehills in fields next to the bridge on the edge of town before heading south along the west bank of the river. A bit further along the river we found some rabbit droppings, the sharp smell of a fox and half a fish (cause of death unknown). The foxy smell was again evident opposite Low Catton, followed by more molehills and rabbit droppings near Long Lane. A little further on we found a badger sett in the edge of a field and on reaching Kexby we turned and walked back to Stamford Bridge. Last record of the day was a good one in the form of some otter spraint under the road bridge in Stamford Bridge. We rewarded our efforts with a visit to the Balloon Tree Farm Shop Café for tea and cake!

17th February found us heading for Byland Abbey in North Yorkshire where the first record was again molehills in the road verge. Heading northwards we located rabbit burrows and fur in the edge of Abbey Bank Wood and a sad row of dead moles hanging on a wire fence. In a field near the village of Wass we found a fox scat on a molehill (perfectly normal behaviour for foxes) and the woodland at Abbey Bank Noddle yielded yet

more molehills, some roe deer slots, more fox scat, a dead rabbit and a badger latrine – rich pickings indeed. Walking along Blind Side Gill we recorded more roe deer tracks and molehills, with more of the same on the path to Cam Farm, along with several badger latrines in the field edge. Cutting back through Cockerdale Wood we found molehills, roe deer tracks and field vole feeding signs in some tussocky grass near Cockerdale Farm. Heading back towards the abbey we recorded more badger latrines in the woodland edge near Scawling Farm, swiftly followed by a large badger sett with several active holes. Satisfied with the days' recording we paid a visit to Ampleforth Abbey tea room before heading for home.

Holmfirth in deepest West Yorkshire was our destination on 24th March where, after parking next to Brownhill Reservoir and crossing the dam, we recorded molehills in the fields near Holme village. Yet more molehills were noted in the fields near Digley Reservoir before we crossed the dam between Bilberry and Digley reservoirs and walked round to Holmbridge. Walking back through the fields to Brownhill Reservoir we recorded rabbit burrows in the woodland near Moss Edge and more molehills and rabbit burrows at Crow Hill. The day was a bit short on mammal records but it was a lovely walk and a quick trip to Holmfirth Vineyard tea shop rounded the day off nicely.

Brownhill Reservoir, Holmfirth (Andrew Halcro-Johnston)

Our next walk took us to **Lindley Wood Reservoir near Otley on 28th April**. First records were as ever molehills near Lindley Bridge, followed by a walk alongside the reservoir, then more molehills at Norwood Bottom, Sword Point, Wood Top Farm and Buttoner House Farm. At last near Lindley Wood Farm we found some rabbit droppings to break the mole monopoly, with more molehills and rabbit droppings at the aptly named Lindley Warren. Last records of the day were two live rabbits as we walked back down to Lindley Bridge.

After a busy summer of small mammal surveys we managed one last walk from **Pateley Bridge on 15th December** on a snowy, sunny, winter's day. Heading west away from town we found some molehills at Eagle Hall, then joining the Nidderdale Way we recorded more molehills and some rabbit tracks at Hillend. Heading north to Throstle Nest we found molehills and evidence of deer browsing on young trees in the woodland. Cutting the walk a bit short due to the weather we walked back to Pateley Bridge and finished the day and the year with a trip to the excellent Toft Gate Barn Café for some well-earned nourishment.

A snowy Nidderdale (Rob Masheder)

Two and four legged YMG members (Andrew Halcro-Johnston)

Thanks as always to everyone who joined in with mammal recording walks in 2019, especially the snowy but beautiful day in December!

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

Photos of the beaver release at Cropton Forest

Peter Richman

Pete has sent in these photos from the beaver release at Cropton Forest near Pickering on 17th April 2019. The BBC were there filming the release as were members of Cath Bashforth's team from Forestry Commission England, who are responsible for this five-year trial reintroduction project.

Also present were Flamingo Land staff who had carried out veterinary checks on the beavers while at the zoo, after having been brought down from Scotland where they were captured.