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Editor's report

Mary Youngman

Welcome to the latest edition of Imprint. Geoff Oxford after many years of commendable work as editor has now handed over the task to me. On behalf of the group, thank you Geoff.

The YMG continues to be a vibrant group. 2004s indoor meetings have comprised not only the expected interesting and informative talks but also a members' debate session, and an outing to the Yorkshire Museum to view a historic collection of Yorkshire bats. Likewise the fieldwork has included traps, walks and even a boat trip. Special thanks should go to Amy and Ann for organizing all of this for our edification and enjoyment.

Once again this year there is an impressive collection of articles covering a diversity of species to publish. To all of you that have contributed articles and the many excellent photographs – thank you. Of the format I have changed almost nothing, going by the adage 'if its not broke don't fix it'.

Enjoy your reading and I look forward to hearing your comments and suggestions.

Mammal snippets

Compiled by Mary Youngman

Otter found on sofa in Perthshire

In August, Honey an orphaned otter made the newspapers. She was reared with too much human contact - turned her vibrissa up at being returned to the wild, and tried to settle for a sofa in Perthshire instead. But it was not to be. After a train journey southward and a brief stay at Scarborough Sea Life Centre, Honey has now been provided with her own pond and wooden holt (presumably without soft furnishings) somewhere in Yorkshire. It is hoped that eventually she will recover her natural instincts enough to be released into the wild.

Compiled from BBC News and Telegraph websites.

Pine Martens in Yorkshire

Is the pine marten currently present in Yorkshire? The evidence that they probably are keeps on growing.

BBC News recently reported that the Forestry Commission in Yorkshire are surveying for pine martens using feeding tubes to collect hair samples for DNA analysis. It is hoped that this survey will provide conclusive evidence that pine martens currently reside in Yorkshire.

See also in this edition of Imprint, Derek Capes' summary of pine marten records in north east Yorkshire covering the past forty years. Plus in the Yorkshire Naturalist Union Bulletin No 42 2004, Robert Adams reports a recent sighting in Upper Nidderdale of a mammal, that he feels confident was a pine marten.

Could the YMG's first pine marten watching field trip be on the horizon!

See the Vincent Wildlife Trust website www.vwt.org.uk for free downloads of 'Pine marten – new design for a den box' and 'Guidance note on the VWT fur snagging device for pine martens'.

Red squirrels with bone disease

Garriga, Sainsbury and Goodship in *Journal of Wildlife Diseases* 40(3), 2004, reports on a bone assessment study of red squirrels in the United Kingdom. The research was part of a larger study of morbidity and mortality of red squirrels.

They assessed limb bone quality of apparently healthy red squirrels that had died from trauma, a sample from Cumbria (a population with grey squirrel competition) and another sample from the Isle of Wight (a population without grey squirrel competition). Red squirrels are probably predisposed to metabolic bone disease because of the low calcium content and low calcium to phosphorus ratio of their diet. The thinking behind the study was that the additional stress of competition from grey squirrels would increase the prevalence of the bone disease in red squirrels. As it turned out this preliminary study showed that it was the Isle of Wight population that showed bone mass loss. However it seems that metabolic bone disease could be yet one more problem for conservation of red squirrels in the United Kingdom.

A small mammal survey of St Chad's churchyard, Far Headingley, Leeds

Ann Hanson

Introduction

St Chad's church in Far Headingley, grid reference SE274369, has a large churchyard, surrounded by woodland and gardens. St Chad's has recently joined the Wildlife Trusts Living Churchyards project and has a small, but dedicated "green team" who are working hard to manage the churchyard with both people and wildlife in mind. In August 2004 the Yorkshire Mammal Group carried out a small mammal survey to find out which species are present in the churchyard.

Methods

Forty nine Longworth traps were placed in various locations around the churchyard, baited with wheat, peanuts, sunflower seeds and blowfly pupae, and with a ball of hay for bedding.

Trap locations:

1. Garden of Rest – hedge adjacent to woodland (10 traps)
2. Garden of Rest – hedge adjacent to churchyard (14 traps)
3. New churchyard – long grass between grave stones (10 traps)
4. New churchyard – hedge adjacent to gardens (15 traps)

Traps were set on the evening of Friday 20 August and checked on Saturday 21 August from 9.30am onwards. They were reset on the Saturday evening and checked again on Sunday from 9.30am onwards.

Results

Weather: Warm and dry throughout; very wet for previous few days.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
21/8/04				
Garden of Rest (1)	Wood mouse	M	SA	19.0
Garden of Rest (2)	Wood mouse	M	A	25.0
	Wood mouse	F	J	15.0
New churchyard (4)	Wood mouse	M	SA	17.0
	Wood mouse	M	J	11.0
22/8/04				
Garden of Rest (2)	Wood mouse**	?	?	?
	Wood mouse	M	SA	15.0
	Wood mouse	F	A	25.0
New churchyard (4)	Wood mouse	M	SA	17.0
	Wood mouse	M	J	13.0

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

** Escaped during handling.

Discussion and conclusions

The only small mammal species found in the churchyard during this trap was the wood mouse (*Apodemus sylvaticus*). 10 individuals were caught, with a good mixture of adults, subadults and juveniles. They were mostly trapped around the edges of the churchyard and were probably making use of adjacent woodland and gardens.

The churchyard itself has some lovely old hedges and areas of long grass, so other species may well be present but were playing hard to get on this occasion!

Many thanks are due to Suzanne Dalton and her “green team” for helping so enthusiastically with this trap and for all the good work they are doing in the churchyard - I’m sure the mice appreciate it...

The small mammals of Askham Bog

Ann Hanson

Introduction

Askham Bog is a Yorkshire Wildlife Trust reserve lying two miles south-west of York, grid reference SE575481. The bog covers an area of 44.7 hectares and the habitat is a mixture of fen meadow and carr woodland with a network of dykes running across the site.

As well as containing many rare wetland plants and animals, Askham Bog also has a very dedicated team of volunteers who help manage the site. In July 2004 the Yorkshire Mammal Group carried out a small mammal survey to show the volunteers some of the less obvious species down in the bog.



Bank vole.
Photo: Mary Sykes

Methods

Forty nine Longworth traps were placed in a variety of habitats in Near and Middle woods, baited with wheat, peanuts, sunflower seeds and blowfly pupae, and with a ball of hay for bedding.

Trap locations:

1. Wet ditch edge under water dropwort (3 traps)
2. Bog myrtle patch in fen meadow (10 traps)
3. Bog myrtle patch in fen meadow (8 traps)
4. Common reed alongside wet ditch (7 traps)
5. Long grass alongside boardwalk (5 traps)
6. Bramble patch alongside boardwalk (4 traps)
7. Carr woodland (5 traps)
8. Royal fern (2 traps)
9. Common reed/long grass (5 traps)

Traps were set on the evening of Friday 9 July and checked on Saturday 10 July from 9.30am onwards.

Results

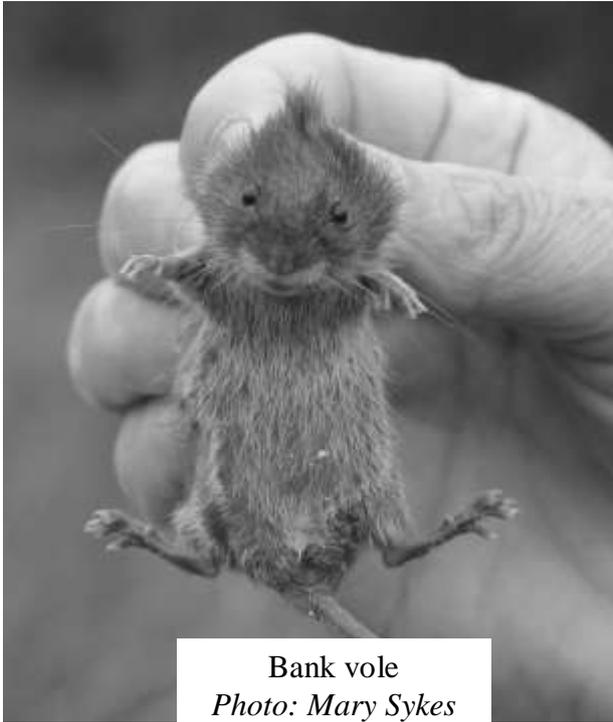
Weather: Dry overnight; sunny, warm morning.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Wet ditch edge (1)	Wood mouse	M	A	19.0
Bog myrtle patch (2)	Bank vole	M	J	12.0
	Bank vole	F	J	11.0
	Bank vole	F	J	9.0
Bog myrtle patch (3)	Bank vole	F	J	12.5
Common reed (4)	Wood mouse	M	A	19.5
	Wood mouse**	?	A	?
	Wood mouse	M	A	27.0
Bramble patch (6)	Common shrew	?	A	12.0
	Bank vole	F	A	19.0
Carr woodland (7)	Bank vole	F	A	23.0

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

** Escaped during handling.

Discussion and conclusions



Three different small mammal species were captured during this trap, including 6 bank voles (*Clethrionomys glareolus*), 4 wood mice (*Apodemus sylvaticus*) and 1 common shrew (*Sorex araneus*).

Animals were captured in several different habitats, with bank voles showing a particular affinity for bog myrtle!

Thanks are due to all Mammal Group and Yorkshire Wildlife Trust volunteers who helped with this trap, with special thanks to

Mary and Denis Sykes for their help and enthusiasm.

A small mammal survey at 18 Acres, Swale Lane, Catterick

Ann Hanson

Introduction

18 Acres is an area of rough grassland and scrub adjacent to the River Swale in Catterick, North Yorkshire, grid reference SE240987. The grassland is species rich and the scrub consists mainly of hawthorn, dog rose and patches of gorse. The area is well used by local children and dog walkers and the Yorkshire Wildlife Trust have been helping the local community to discover which species of plants and animals are present on the site. In order to find out more about the small mammal community of 18 Acres, the Yorkshire Mammal Group were asked to carry out a survey in June 2004.

Methods

Fifty Longworth traps were placed at various locations throughout the site, baited with wheat, peanuts, sunflower seeds and blowfly pupae, and with a ball of hay for bedding.

Trap locations:

1. Gorse bushes in grassland near hedge (10 traps)
2. Overgrown hawthorn hedge (5 traps)
3. Gorse bushes in open grassland (10 traps)
4. Overgrown hawthorn/dog rose hedge (5 traps)
5. Long grass adjacent to overgrown hawthorn hedge (5 traps)
6. Long grass in open area adjacent to a path (10 traps)
7. Hawthorn scrub in open area (5 traps)

Traps were set on the evening of Friday 18 June and checked on Saturday 19 June from 9.30am onwards.

Results

Weather: Dry night; cool, damp morning with sunshine and showers.

Site	Species	Sex M/F*	Age A/SA/J*	Weight (g)
Gorse bushes (1)	Bank vole	M	SA	17.0
	Wood mouse	F	A	28.0
	Wood mouse	F	A	23.0
Hawthorn hedge (2)	Wood mouse**	M	A	?
	Common shrew	?	A	13.0
	Wood mouse	F	A	21.0
Hawthorn hedge (4)	Bank vole	M	SA	14.0
	Common shrew	M	A	11.0
	Wood mouse	F	A	25.0
Long grass (6)	Bank vole	F	SA	15.0
	Wood mouse	M	A	23.0
	Bank vole	F	A	28.0
	Wood mouse	F	A	23.0
	Common shrew	?	A	12.0

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

** Escaped during handling.

Discussion and conclusions

Three different small mammal species were captured during this trap, including 7 wood mice (*Apodemus sylvaticus*), 4 bank voles (*Clethrionomys glareolus*) and 3 common shrews (*Sorex araneus*).

All species seemed to be evenly distributed between areas of grass and scrub. However, it was noticeable that no animals were captured in the two areas with sparse ground cover; gorse patch (3) and hawthorn scrub (7). This demonstrates the importance of ground cover to small mammals in open environments. The overgrown hawthorn and dog rose hedges around the site were obviously important to the small mammal community, although the dense grassy areas were also well used.

Thanks are due to everyone from the Mammal Group, Yorkshire Wildlife Trust and local volunteers who helped with this trap.

Small Mammals of the North York Moors Roadside Verges

James Mortimer

The North York Moors has many roadside verges that are botanically rich, with unusual species including various orchids. In the 1980s the North York Moors National Park Authority carried out a comprehensive survey, the results of which were used to classify each verge according to its quality: red (good), amber (average) or green (poor).

The National Park Authority is now recruiting volunteers to help update the survey information and help with ensuring appropriate verge management. I volunteered to carry out botanical surveys for the verges within Dalby Forest and the surrounding area. Whilst recording the plants I set up some mammal traps on a small sample of the verges in an attempt to find out which mammals are present.

Four road verges were surveyed for mammals using Longworth traps. On each verge five traps were set up, approximately five metres apart. Each trap was baited with blow-fly larvae and a seed mix, with hay for bedding. The survey was carried out for one night only, on 13th June 2004, and the traps collected and checked for mammals the following morning.

Two species of mammal were caught in the traps: field vole (*Microtus agrestis*) and bank vole (*Clethrionomys glareolus*). Table 1 summarises the results.

Verge no.	Grid ref.	Habitat(s)	Frequent plant species (ground flora)	Mammals
50	SE912872	Hedgerow	Bramble, creeping bent, primrose, wood avens	none
51	SE914873	Grassy verge with hedge and dry ditch	Silverweed, wild strawberry, hogweed, bugle	field vole (x1)
153	SE920887	Grassy verge with hedge	Creeping bent, cow parsley, crosswort, meadowsweet	bank vole (x1)
155	SE912912	Broad-leaved woodland	Bramble, herb robert, red campion, wood avens	none

Table 1: Summary of results

The different verges included a range of habitat types, and as such a higher number of mammal species was expected. The broad-leaved woodland habitat of verge 155 would probably be suitable for wood mouse (*Apodemus sylvaticus*), however none were trapped. Also no shrews were caught on any of the verges. The survey only involved one night of trapping, however, therefore the fact that these species were not caught could be due to insufficient trapping effort.

Although it is difficult to draw any conclusions from such a small sample, the results would suggest that field vole and bank vole prefer grassy verges with hedges.

A Compilation of Pine Marten Records from North East Yorkshire, 1964 – 2004.

Derek Capes

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1. Introduction

A casual enquiry to Colin Howes in 2002 concerning pine martens led to a request that I place on record the anecdotal evidence of pine marten sightings from the North York Moors and the surrounding areas, that had come to my attention over the past 25 years or so. Subsequent further investigations have unearthed some earlier records, and a number of more recent claimed sightings up to 2004.

2. Observations

The entries are shown in Tables 1 & 2. They cover a period of approximately 40 years, from the mid 1960's to 2004. Twenty five of the more recent sightings are from witnesses whose observation has been reported to the Vincent Wildlife Trust (VWT) and have been subjected to their standard set of interview questions carried out to provide a measure of confidence which can be attached to the sighting. Those shown in Table 1 have been allocated scores of 7 or more on a scale of 10 for greatest confidence.

A further twenty five sightings are given in Table 2, many of which pre-date the VWT recording interview set up in 1990, and originate from reliable sources, either credible professional countryside workers or experienced amateur field naturalists. Five of this category may be of lower confidence, not so much because of the reliability of the observer, but because of factors relating to the quality of the sighting, ie, conditions of light, shadow, covering undergrowth, rapidity of movement, distance and duration of sighting etc, or that the information source is remote or difficult to check ie from a historical perspective or persons not prepared to divulge further details. Some may be cases of mistaken identity.

The records have been plotted on a map, Figure 1. The solid spots represent high confidence records, the open rings show the remainder, and split spots indicate both categories occurring within the same 2 km square.

The map shows the areas where animals seemingly fitting the description of pine marten have been noted. It can be seen that these observations range over a widespread area of North-East Yorkshire, and that there are some regions from which repeated records are received.

At least six reports in the last six years have been made from the mixed species woodlands near New Marske. Well connected by green corridors and just a few kilometres away, are mixed woodland and extensive conifer plantations near Guisborough. Here, a number of unconfirmed sightings have been reported in the last two or three years. There are reports that someone has set up a feeding station for pine martens in the forest, and that in 2003 a young pine marten was caught in a trap and released back into the forest indicating breeding has occurred. A Guisborough record from a dependable source dated from the mid 70's lends support to there being a continued presence in this area. A common factor of the woodlands near New Marske and Guisborough is that they are near significant areas of population and can be considered as amenity woodlands frequented by dog walkers, hikers, mountain bikers and horse riders, but probably not by organised parties of shooters and associated gamekeeping activity.

Following the well wooded northern perimeter of the North York Moors, the area comprising Ingleby Greenhow and Carlton Bank has a history of claimed sightings of pine marten in the 70's, 80's and 90's. Road casualties and a shot animal have been reported from this area. It was from here too, that the well reported definitive skull of a pine marten originated in 1993.

Silton Forest and the surrounding area has generated a number of reports over the last few years, the most recent two being in 2004.

A further group of five reports over a fifteen year period from 1988 to 2003 originated in the South West region of the National Park around Wass and Oswaldkirk. It was to nearby Duncombe Park that two pairs of pine martens were imported from Ireland in 1934, and from where one male escaped and a family group was unaccounted for.

The wide expanses of Cropton, Dalby and Wykeham Forests in the southern part of the region have also been a source of several claimed sightings over the years under review, and because writer has fewer contacts in the southern part of the area, there may well be more.

3. Discussion

The status of the Pine Marten in North East Yorkshire has been the subject of great interest, speculation and debate.

The records compiled would quite firmly suggest that there is a population of pine martens present in and around the North York Moors. From the distribution of the observations it would seem that there are some areas which generate repeated sightings over periods of time which would cover several generations of pine marten.

The information given offers a fertile field for more work in an attempt to establish further information about this tantalisingly elusive mammal in Yorkshire.

The author would be grateful to hear of any further sightings or any other evidence of pine marten activity in the area and can be contacted at the above address or by telephoning 01642 723325.

Contact should primarily be made with Dr Johnny Birks, Vincent Wildlife Trust, 3 & 4, Bronsil Courtyard, Eastnor, Ledbury, Herefordshire, HR8 1EP.
Tel : 01531 636441

Acknowledgements.

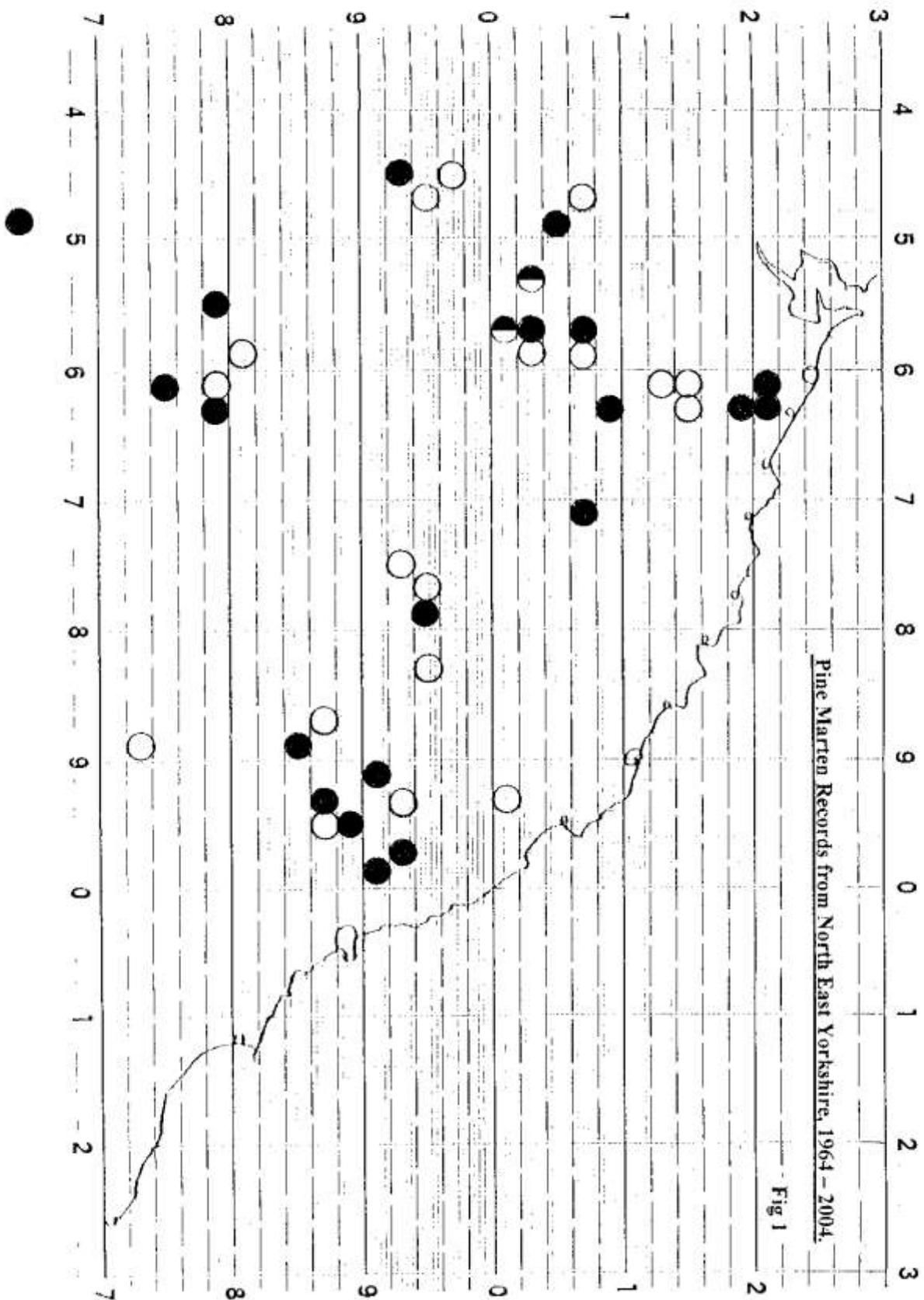
Regrettably, none of these observations are my own. I am grateful to the following who have shared their experiences with me and agreed to their publication, or being of assistance and encouragement; Stanley Bass, Johnny Birks, Ian Bond, Kevin Bulmer, Rona Charles, Terry Coult, Charles Critchley, John Knight, Geoff Oxford, Jonathon Pounder, Gordon Simpson, Brian Walker, Ken Wood, Peter Woodhouse & Gordon Woodroffe.

<u>Date</u>	<u>Location</u>	<u>Map Reference</u>
Nov.1993	Ingleby Greenhow	NZ 57 03
Aug.1995	Carlton Bank	NZ 52 03
Jan. 1996	Ingleby Greenhow	NZ 57 06
July 1996	Wykeham Forest	SE 95 89
Aug.1996	Pickering	SE 88 85
May 1997	Bilsdale	NZ 56 00
July 1997	Danby	NZ 71 07
Nov.1997	Kildale	NZ 63 09
Mar.1998	Carlton in Cleveland	NZ 49 05
May 1998	Cropton Forest	SE 79 94
May 1998	Broxa Forest	SE 96 93
Aug.1998	Oswaldkirk	SE 62 82
1999	New Marske	NZ 61 20
Sept 2000	Alne	SE 49 64
Sept.2001	New Marske	NZ 63 20
Dec. 2001	Wass	SE 55 79
July 2002	New Marske	NZ 62 20
May 2003	Gilling	SE 61 75
May 2003	Wykeham Forest	SE 93 87
May 2003	New Marske	NZ 62 20
Aug. 2003	Upleatham	NZ 63 19
Aug. 2003	Upleatham	NZ 63 19
July 2004	Silton Forest	SE 45 93
July 2004	Suffield	SE 98 90
Sept 2004	Dalby Forest	SE 90 90

Probable Sightings of Pine Martens in North East Yorkshire
Table 1

<u>Date</u>	<u>Location</u>	<u>Map Reference</u>
1964-1970	Cropton Forest	SE 75 92
1964-1970	Wykeham Forest	SE 95 86
1972	Ingleby Greenhow	NZ 58 03
1972-1979	Carlton Bank	NZ 52 02
1972-1979	Ingleby Greenhow	NZ 58 03
1972-1979	Winteringham	SE 89 73
1975	Guisborough	NZ 60 13
1975-1980	Carlton Bank	NZ 52 02
1982-1983	Cropton Forest	SE 82 95
1983	Ingleby Greenhow	NZ 58 03
1984-1985	Cropton Forest	SE 76 93
mid 1980's	North of Flask Inn, A171	NZ 92 01
1988	Hambleton Forest	SE 60 80
May 1992	Thimbleby	SE 45 96
July 1993	Dalby Forest	SE 87 87
Sept 1993	Langdale Forest	SE 92 93
Jan 1995	Ampleforth	SE 58 80
May 1996	Hutton Rudby	NZ 46 07
June 1999	Bilsdale	NZ 57 00
Apr.2003	Thimbleby	SE 45 96
May 2003	Cropton Forest	SE 77 94
Summer 2003	Guisborough	NZ 61 14
Summer 2003	Guisborough	NZ 63 14
Jan.2004	Over Silton	SE 46 94
June 2004	Ingleby Greenhow	NZ 59 06

Possible & Probable Sightings of Pine Martens in North East Yorkshire
Table 2



Solid dots represent high confidence records.
 Open rings show remainder of records.
 Split spots indicate both categories occurring within the same 2km square.

The original dormouse re-introduction – update for 2004

Geoff Oxford

The original release of the common dormouse (*Muscardinus avellanarius*) in North Yorkshire took place during summer 1999. A preliminary analysis of the data collected so far from monthly nest-box checks was published last year (Oxford, 2003). It appears that the distributions of litter sizes, the timing of reproduction and the sex ratio were comparable with populations elsewhere. The standard index of population success used for dormice is the number of animals over seven grams found per 50 boxes in the October survey. The North Yorkshire population seemed to be tracking national fluctuations fairly well, as did the mean weight of animals in October. In a few years time it would be worthwhile repeating these analyses.



Dormouse

Photo: Geoff Oxford

Data on the 2004 season are given in Table 1, together with figures for three previous years. The foot and mouth outbreak in 2001 prevented box checks except for October. The number of nests is a rather crude measure because unused mouldy nests are removed and after May and June, when a high proportion of the boxes are colonised by wrens and blue tits, the boxes birds nested are cleared out.

Nevertheless, the annual increase in nests in August and September is an indication that breeding is underway. A proportion of nests at this time are incomplete, as if abandoned in favour of a better site – some may be practice nests built by juveniles of the year.

Table 1. Numbers of nests and dormice found in box checks across four years.

Month	2000		2002		2003		2004	
	No. nests	No. mice						
April	-	-	-	-	12	1	-	-
May	23	5	6	1 + 1D	9	4	8	2
June	20	4	6	2	9	4	9	3
July	17	4	6	9	8	3	9	2
August	24	18 inc.5P	7	5	10	17 inc.5P	12	4
September	27	19 inc.3P	10	14 inc.5P	11	10	18	20 inc.5P
October	33	20	16	10	14	6	17	15

P = pinkies – unfurred young in the nest; D = dead

As in previous years just a handful of animals were recorded up to August and then numbers increase rapidly in September. Seven boxes contained dormice. Four had just one animal in but in two cases these were heavy females with prominent nipples, that may have been about to give birth. One nest contained a mother plus five nestlings with eyes still closed but with grey backs, indicating the growth of fur. The remaining two boxes were full of bouncing juveniles (six and four), but no mothers. These boxes were close to those housing the large single females and it is possible that the latter were the mothers of the juveniles seeking a more peaceful resting place. Young leave the nest at about 30 days of age and are independent at 40 (Corbet & Harris, 1991). The time between the August and September box checks was unfortunately seven weeks so there was plenty of time for litters to be produced and for the young to have dispersed in the interim. The pinkies had dispersed by the time of the October survey three weeks later. The autumn of 2004 provided a plentiful crop of hazelnuts, beech mast, acorns and all manner of berries, so food at least should not be limiting for this year's young. The mean number of dormice weighing seven grams or over per 50 boxes in the October survey is used nationally as an index of population size. Animals below seven grams are considered unlikely to put on enough weight to overwinter successfully. The mean in October 2004 was 5.43, the highest

value since 2000 (note that the total number of boxes has been reduced slightly since 2003). This, plus the bumper nut harvest, suggests there should be a good number of dormice in 2005.

One aspect of this re-introduced population that has not been addressed before is the spatial distribution of nests and animals since their release. Figure 1 shows an outline of the wood and the locations of the dormouse boxes (squares). The long axis of the wood lies approximately northwest to southeast and there is an altitude difference between the top and bottom, as illustrated, of some 70m. The habitat is therefore on a fairly steep slope (gradient of about 1 in 5) with a south-westerly aspect. The wood is oak-dominated with abundant old coppiced hazel and honeysuckle. The major rides through the wood are shown in Figure 1. Dormice are reluctant to descend to ground level (except to hibernate) and these rides, wide enough for a vehicle to use, could potentially act as a barrier to dormouse movement.

The distributions of boxes containing nests (solid squares) and those without (open squares) during the period May to November 2000, the year after the dormice were introduced, are plotted on Figure 1.

Unfortunately we do not have a map of the locations of the release pens but the composition of the released animals have been reported elsewhere (Oxford, 1999). Suffice it to say that the 12 release pens were fairly widely distributed across the wood in order to avoid conflicts between males. The

wide scattering of nests is probably a result of animals not moving far from their release sites. The equivalent plot for all nests found during 2004 is shown in Figure 2. It is clear that, over time, there are now fewer nests in total and the nests have become much more localised. In particular the peripheral boxes along the upper track seem less attractive than in 2000. For reasons mentioned above, the distribution of nests may be only a crude indication of dormouse distributions because nests may be cleared from boxes and a dry nest could potentially remain in situ for several years.



Torpid dormouse
Photo: Geoff Oxford

Figure 3 indicates the cumulative distribution of dormice locations since the start of the 2000 season (but excluding 2001). The highly favoured boxes are fairly well scattered, as are those used for two of the four years. There is nothing obvious about the well-used boxes in terms of their locations, that might suggest why they are favoured. It could just be a matter of chance. What might be of greater interest are the boxes chosen by pregnant females in which to produce their litters. Figure 4 shows the boxes in which females and young animals have been recorded. Although rather arbitrary, boxes with four or more well-developed juveniles have been included on the figure whereas those with only one or two have not since these might have dispersed together from elsewhere. Boxes favoured for breeding seem to be concentrated within the central part of the wood, rather than on the periphery. The one exception is the box to the bottom right of the figure that has been used for breeding in three separate years. This box is close to the edge of the wood on two sides and is fairly well separated from the other boxes. Again this might be just chance or there might be subtle micro-climatic conditions that make this box attractive.

More sophisticated analyses might be possible once a larger data-set has been gathered. The major frustration of this work is that dormice are not individually marked and so their fates cannot be followed over space and time.

Reference:

- Corbet G. B. & Harris, S. (1991) *The Handbook of British Mammals*. 3rd. edn. Blackwell Scientific Publications, Oxford.
- Oxford G. (1999) Dormice in Yorkshire – the return of the native. *Imprint*, **26**: 9-12.
- Oxford G. (2003) Yorkshire dormouse update, 2003. *Imprint*, **30**: 24-28.

Legends to figures:

Figure 1.

Distribution of dormouse nests in May to November 2000. The edges of the wood are shown as solid lines and paths and tracks as dotted lines. The scale bar at the bottom left is approximately 100m. For more details see text. Open squares = boxes without nests during the season; solid squares = boxes with nests. Note that a line of 10 boxes that ran up from the gap in the distribution on the upper path was removed in June 2003. These boxes never had dormouse nests in and are not shown on any of the maps.

Figure 2.

As for Figure 1 but for the period May to October, 2004.

Figure 3.

The cumulative distribution of locations in which dormice were recorded since the start of the 2000 season (but excluding 2001). Small black squares contained mice in one year, medium-sized squares contained mice in two years and large squares had mice in three years.

Figure 4.

The cumulative distribution of locations in there was evidence for breeding since the start of the 2000 season (but excluding 2001). Small black squares contained breeding mice in one year, and large squares in two years.

Figure 1.

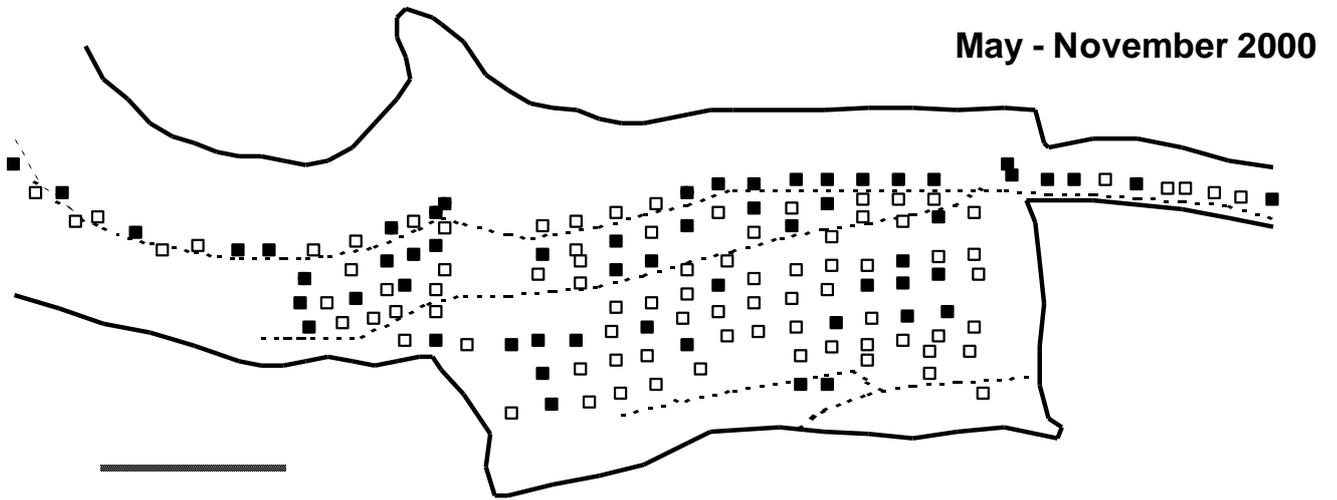


Figure 2.

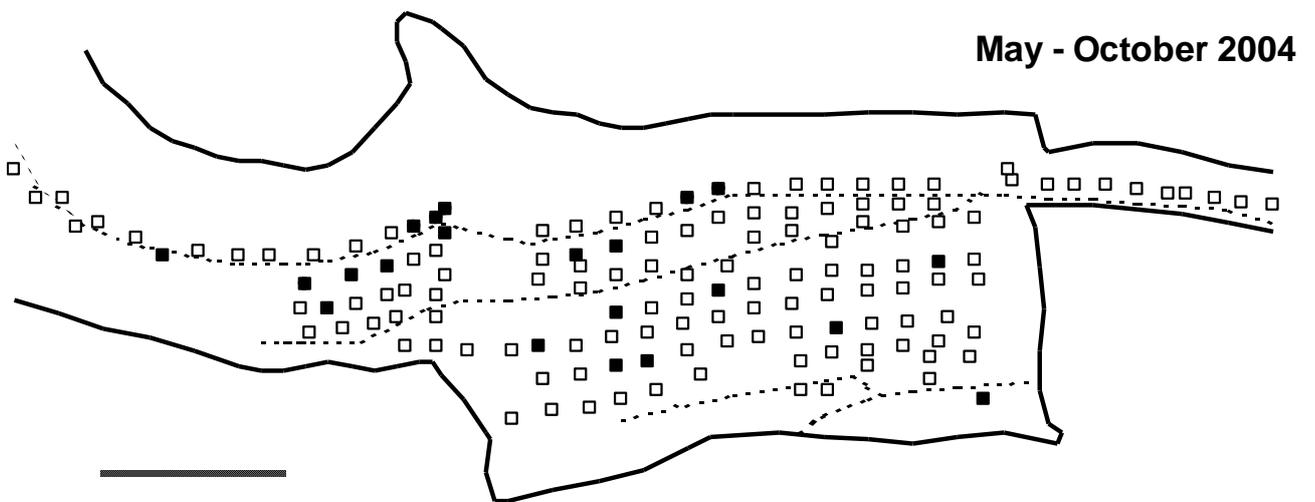


Figure 3.

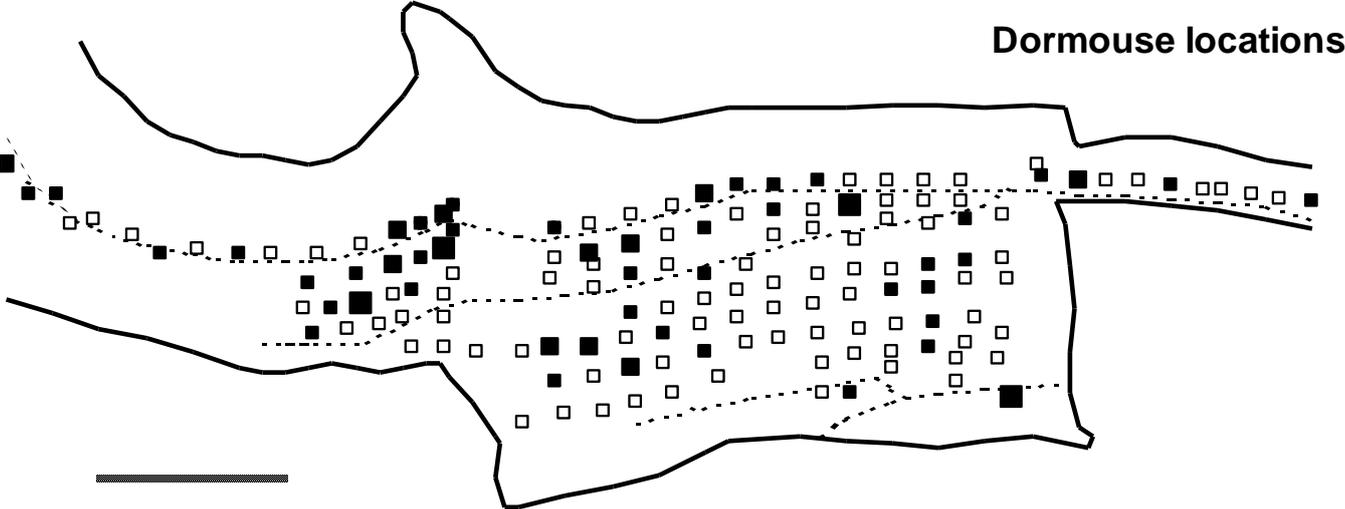
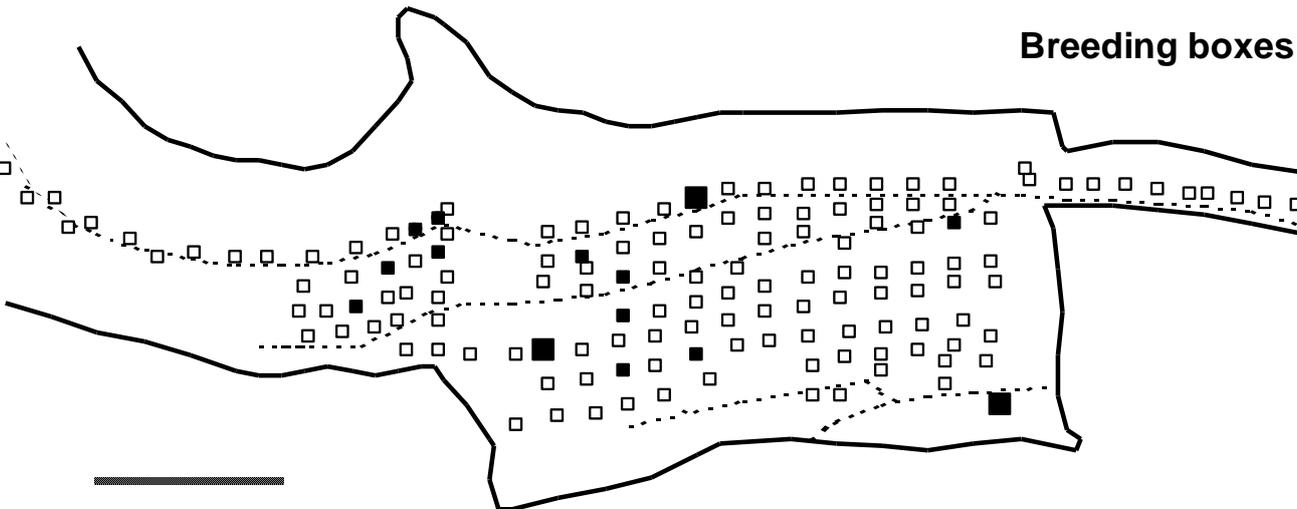


Figure 4.



A furry tale – the 2004 Yorkshire dormouse reintroduction

Amy-Jane Beer

On a wet weekend in March a small band of volunteers spent a day scouring many acres of mixed woodland near Ripon for signs that dormice might be present. In particular we were looking for hazelnuts bearing the tell-tale smooth-edged hole that's a sure sign of dormouse feeding activity. In truth we were hoping not to find any – certainly it would have been exciting, since dormice are generally thought to have gone extinct in Yorkshire some time in the second half of the last century. There remains a chance that somewhere a vestigial population is hanging on, but if we'd happened on any evidence of this, it would have inserted a large spanner in the works of a large and complicated operation.

For a little over 10 years, conservationists from Royal Holloway University of London and the Mammals Trust UK have been coordinating an ambitious programme of reintroductions, aiming to restore hazel dormice to parts of their former range. This latest attempt is the second in Yorkshire – regular readers of *Imprint* will have been following the fortunes of the first reintroduce population near Helmsley, being monitored by YMGs Geoff Oxford.



Erecting nestboxes
Photo: © Amy-Jane Beer

The new site incorporates two large woodlands that form part of the same large estate. Both woods contain extensive areas of coppiced hazel and elm, along with beech, sycamore, holly, birch and assorted conifers. The ground cover varies, but bramble, bracken, dog's mercury and bluebells are all plentiful. The area was visited in 2003 by consultant conservationist Don MacPherson, who has been heavily involved with the programme for many years. Don judged that the wood was an ideal

candidate for a dormouse reintroduction on the grounds of its large size, its mixture of suitable trees and shrubs and the willingness of the conservation-minded landowner to incorporate the needs of dormice into his future management practices. The last important requirement was a local volunteer force to help prepare for and conduct the release, and monitor the population indefinitely. That is where YMG came in.

Our initial visits to the wood revealed signs of plentiful wood mice, bank voles and rabbits but no dormice. Over subsequent months volunteers also recorded roe deer, hedgehog, brown hare, common shrew and pygmy shrew. Non-mammal sightings worthy of note included goshawk, kestrel, tawny owl, lapwing and common toad. The dearth of squirrel signs was not a surprise – they along with stoats, weasels, foxes and crows and anything else that might adversely affect pheasant stocks are controlled by the gamekeeper.



Putting up release cage
Photo: © Amy-Jane Beer

Once we were as confident as we could be that the site had no native dormice, the project was able to move on. Because of the large size of the wood, this was to be a double release, involving 60 animals instead of the usual 30. A date for their arrival was set, giving us around two months to complete the daunting task of installing 30 release cages and 400 nest boxes around the wood. An appeal for help brought in 30 volunteers, including members of YMG, local students and an enthusiastic conservation working party from Nidderdale. It's true to say that those first days were a learning experience. But the job was begun, and we learned from mistakes made early on.

In the ensuing weeks, a few stalwart volunteers made dozens of visits to the site, and by early June, we had a system for locating, numbering and mapping boxes that will make future monitoring much easier.

The release cages are large wire mesh boxes with a flap down door in the front and a section of plastic gutter pipe fixed to a horizontal feeding platform near the top. These 'feeding tubes' have their own small door, though which

feed hoppers made from recycled plastic mineral water bottles can be restocked. The cages were secured to large coppiced hazels at chest height.

The release itself took place on 14th June. Sixty dormice were supplied by breeders around the south including Paignton Zoo, Whipnade Wild Animal Park and London Zoo and had spent the last few weeks undergoing rigorous health checks and being fitted with subcutaneous identity chips. The animals arrived in their own next boxes, sealed with tape while they were in transit. The boxed dormice were placed in mixed sex pairs in the release cages and their boxes were unsealed. Each cage was stocked with a mixture of apples, grapes, peanuts, sunflower seeds and rich tea biscuits and water in a drip bottle attached to the side of the cage. The cages were filled with freshly cut hazel branches for climbing and further branches were laid on top of the cage to screen the contents from predatory eyes above. 28 cages were used for the release because two had been lost. So, while 24 pairs of mice had cages to themselves, four cages became home to a rodent *ménage a trois*.

Then began a gruelling summer of feeding rounds. In the early days, while volunteers struggled to navigate from cage to cage and were waylaid by the antics of their enchanting occupants the rounds were taking three hours or more to complete. But as we learned the route (turn left at the fallen birch tree, right past the big foxglove, and so on), things picked up. The summer was extremely wet, and I think all the regular volunteers are convinced their feeding days were unaccountably wetter than others!

Daily feeding rounds took place for the first fortnight, then reduced to every other day. After two and a half weeks, the dormice were given their first taste of real freedom, when Ann Hanson armed with stepladder and wire cutters spent two evenings opening two-inch 'escape hatches' in the top of each cage, and bidding each mouse a fond farewell. We couldn't help



Dormouse in release cage
Photo: © Amy-Jane Beer

wondering if we would ever see them again. In climbing the ladder to open one cage, Ann discovered the partially dismembered body of a young hare on the roof. It seems some large bird of prey, probably a goshawk, was using the cage as a dining table. It was difficult not to imagine such a predator viewing

the naïve inhabitants below as a tasty hors d'oeuvres, but we comforted ourselves with the thought that goshawks hunt mainly by day while dormice, by and large, are nocturnal.

The naivety of captive bred animals is a concern in any reintroduction programme. Certainly, in the early days, our dormice appeared not to be perturbed by the approach of humans and often calmly in plain view while we restocked the feed. One individual in particular, who became known as Fatty, was particularly bold. More often than not, Fatty would remain determinedly in the feeding tube until tipped out when the hopper was removed. She would then sit on the feeding platform while the hopper was refilled and replaced. It didn't take much to imagine an impatiently tapping foot and a small voice complaining of the slow service. As soon as the new food arrived, she'd be back in the tube, tucking in. Fatty was distinctive but just because of her ample proportions, but because of her unusually short, thick tail. We hope her dauntlessness won't be her undoing.

Not surprisingly, once the cages were open, sightings of the dormice declined. But many cages continued to be used as a base, and the food continued to disappear. By late July feeding rounds were reduced to one every three days. It became fairly obvious that dormice were not the only animals to be benefiting from the regular meals service. We had heard that



Weighing dormouse.
Photo: © Amy-Jane Beer

volunteers on previous releases reported that dormice tended to eat the flesh of grapes and leave the skins. I'm not convinced by this. We found plenty of cleaned out grape skins, but these were often crawling with wasps – it seems more likely they were responsible. As time went on a new pattern emerged. When the dormice were in residence, the feeding tubes were usually full of husks – apparently most feeding took place *in situ*. Once the cages were open, food began to disappear wholesale. This trend became more marked as time went on and by mid September many hoppers were being cleaned out completely

between feeding rounds. It's possible the dormice were carrying their food off to newly found locations

elsewhere, but perhaps more likely that we were supplying a booming export racket run by local wood mice – a species renowned for its caching behaviour.

With sightings down to one or two a week, and signs that other wildlife was taking the food meant for dormice it was hard to know how things were going. So it was with anxious hopes rather than confident expectations that we embarked on the first official nest box check in mid September. Once again we were guided and supervised by Don MacPherson. The check would give us the first real measure of how things were going. Would we find any dormice at all? Would we find any youngsters?

We didn't have long to wait. The fourth box we checked contained a nest. With the entrance hole securely blocked with a yellow duster, the box was taken down from the tree and we gathered around expectantly. Don opened the lid and wriggled a finger into the loosely woven bundle of leave an shredded bark. "It's warm...there's someone home." Don transferred the box to a large clear plastic sack and began gently pulling out the nest.

Immediately, a dormouse emerged, leaping from the box and into the bag. Then another. Don reached in further. "I can feel more...there are babies." And out they came, in an urgent scramble – four lively youngsters, fully furred and active, miniature versions of their parents. By now the bag was jumping with life. Don reached into the nest again to make sure the entire litter was



Bag of babies

Photo: © Amy-Jane Beer

out and paused, looking surprised. He could feel something else in there but this time it wasn't another furry juvenile. He teased open the nest and we all peered in – bunched together at the bottom were five dark pink, hairless, squirming jelly babies. Two litters in one nest, eleven dormice in one box. Three hundred and ninety odd boxes still to check. I was already doing the maths and suddenly it seems as though it might be a very long weekend.

But it was impossible not to be excited by such an emphatic scotching of our worst fears so early in the day. Clearly, at least some of the released dormice had survived, and it seemed, were bent on establishing a dynasty as soon as was dormously possible.

The tiny quintuplets were quickly tucked back into the nest, and the two adults and four active juveniles were sexed and weighed. The adults were scanned for microchips but oddly, neither registered. Certainly they were too old to have been born in the wood since June – it seemed there might be a problem with the chips.

We spent the next two days checking every nest box in the wood. Perhaps fortunately, other dormice we found were singletons, pairs or in more conventionally sized families.

All in all we recorded 61 individuals. A net gain of one, but given that many of the original 60 will have chosen natural nest sites rather than boxes, it seems safe to assume that there are many more out there. Of the dormice we recorded, 16 were adults (only three of which bore readable chips) and 19 were pink young – probably born too late to survive the winter. The rest were juveniles close to independence. It remains to be seen how this first generation of re-established natives cope with their first winter, but we'll be there to check on them again in the spring and of course, we'll let you know what we find.

To get involved with monitoring the reintroduced dormouse population, please get in touch with Amy or Ann (contact details at the back of this magazine)

If you'd like to learn more about dormice, I recommend the latest publication in the Whittet Natural History Series "Dormice" by Dr Pat Morris. The book retails at £9.99 and is available from good bookshops or through the Mammal Society and the Mammals Trust UK.

A Survey of Bat Activity in York

James Mortimer

Introduction

Bats are commonly seen flitting around the historic city of York, though their presence probably goes unnoticed by many of the residents. In recent years, eight out of Britain's sixteen species of bat have been recorded in the York area: 45kHz or common pipistrelle (*Pipistrellus pipistrellus*), 55kHz or soprano pipistrelle (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), whiskered bat (*Myotis mystacinus*), brandt's bat (*Myotis brandtii*), daubenton's bat (*Myotis daubentonii*), natterer's bat (*Myotis nattereri*) and brown long-eared bat (*Plecotus auritus*) (Delany, 1985; Richardson, 2000).

The pipistrelle is frequently seen feeding in Britain's city parks and suburban areas, and female nursery colonies are often found in modern houses (Wardhaugh, 1995). Several of the other species are also found roosting in buildings: brown long-eared, whiskered, brandt's and natterer's bats often roost in older houses or churches (Wardhaugh, 1995). Daubenton's bats fly low over open water and pick their insect prey from the water surface, and are often found roosting in bridges. Although the noctule nearly always roosts in holes in trees, there is a well-known colony at Clifton Bridge, York (Drewett, 2003; pers. obs.).

Bats use a sophisticated system known as echolocation to find their way around and hunt insect prey. Bursts of sound are sent out and the returning echoes are analysed in order to build a picture of the surrounding environment. When homing in on prey, the frequency of echolocation calls increases dramatically, which is often described as a feeding buzz. Most British bats echolocate at around 40-60kHz, although some as low as 20kHz (e.g. noctule) and others at higher frequencies.

This survey attempts to identify which species are found in flight within the city itself and determine where the 'hotspots' for bat activity are. It also attempts to provide some answers to what relation, if any, this activity has to habitat.

Methods

The city of York was divided into 1km squares (51 in total). For each square a route was walked after sunset, of a distance averaging 2km (the actual length depended on roads or footpaths available). Bat activity was monitored using a Bat Box III heterodyne bat detector tuned to 45kHz. Approximately every 250 metres the bat detector was tuned up and down through the full frequency range. When one or more bats were detected the position was marked on the map along with the species (if identified) and a note on habitat and whether or not feeding buzzes were heard. Each 1km square was surveyed once, in suitable weather (mild temperature, low wind speed and no rain), between late March and the end of August 2004.

Results

Four species were identified during the survey: 45kHz pipistrelle, 55kHz pipistrelle, noctule and daubenton's. The 45kHz pipistrelle was by far the most often recorded. Some bats were not able to be identified, or could only be identified to genus. Several bats of the genus *Myotis* were recorded and a few bats of unknown species were seen but no signal picked up by the bat detector. Figure 1 shows the locations of the various species recorded.

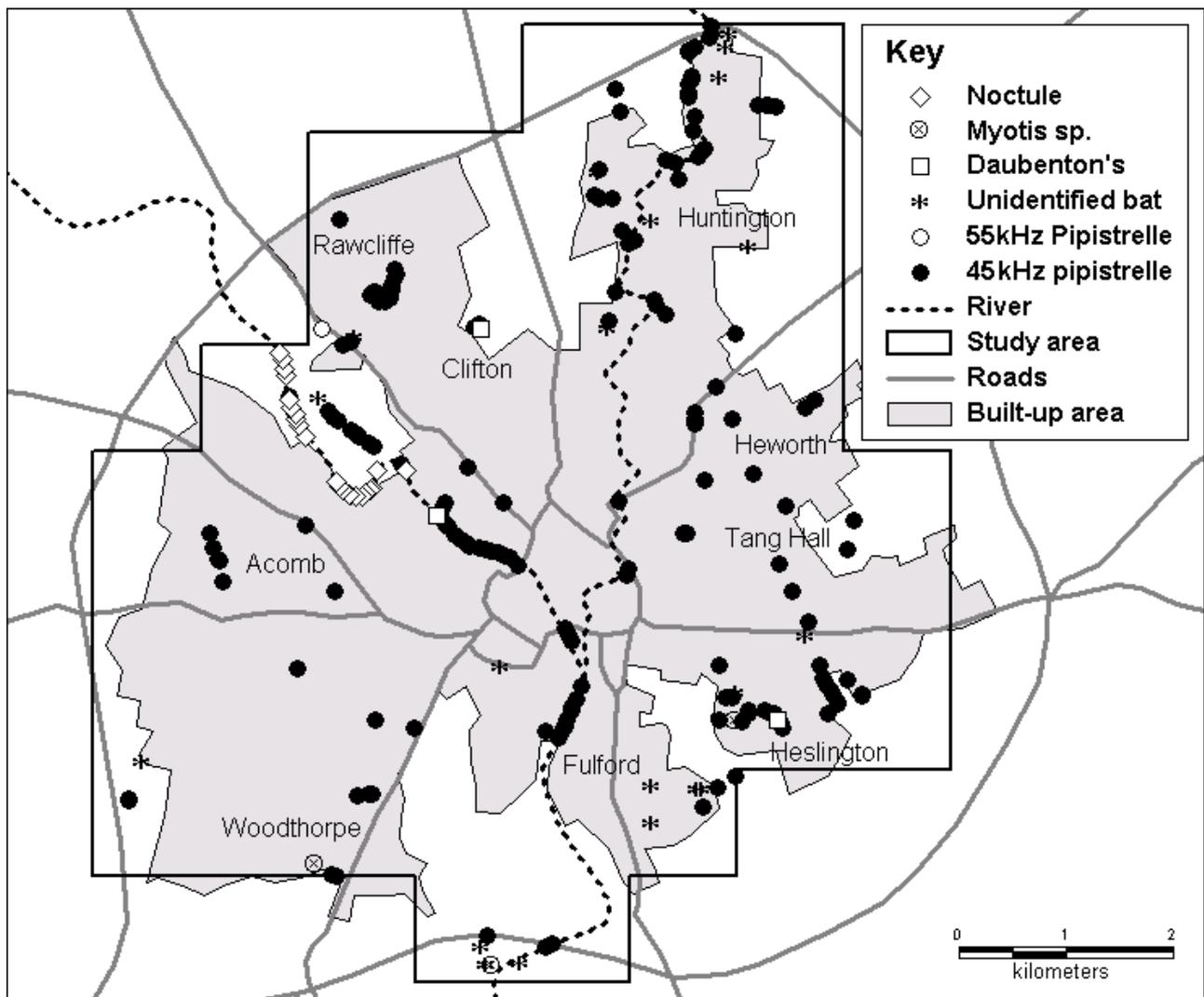


Figure 1: distribution of bat species

Figure 2 shows the total number of locations at which one or more bats were recorded for each 1km square, divided into the following categories: none, low (1-5), medium (6-10) and high (>10). Any squares that fall into the 'high' category are considered to be bat activity hotspots. The six 1km squares that are identified as hotspots in Figure 2 are those that have within them large areas of open water, either standing or running (River Ouse, River Foss, York University lakes and Rawcliffe lake).

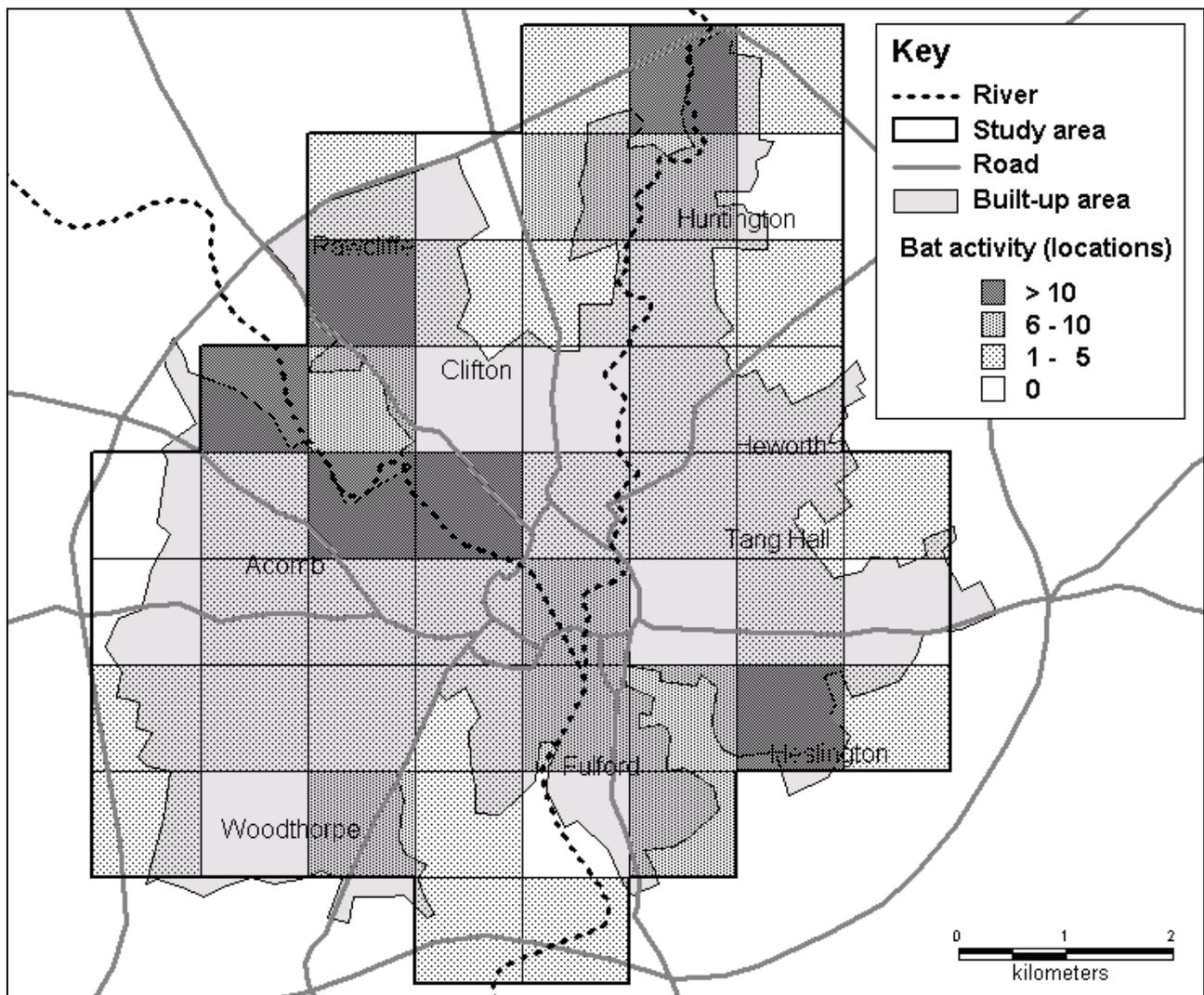


Figure 2: bat activity for each 1km square

The proportion of bat locations for each habitat type was calculated (Table 1). This clearly demonstrates that the highest level of bat activity was found associated with running water (36.2%), followed by built-up areas (21.5%) then hedges (15.6%). The proportion feeding within each habitat does not follow this same pattern, however, with the highest being associated with standing water (55.6%), followed by scattered scrub (22.2%) then running water (18.4%).

Phase I habitat	% bat locations	% feeding within each habitat
Broad-leaved woodland	1.8	0
Scrub: scattered	4.1	22.2
Parkland and scattered trees	7.8	5.9
Neutral grassland	0.5	0
Improved grassland	4.1	0
Standing water	8.3	55.6
Running water	36.2	18.4
Boundaries: intact hedge	15.6	18.2
Built-up areas: buildings	21.5	14.6

Table 1: proportion of bat locations and proportion feeding within each habitat type.

Discussion and conclusions

Four of the eight species of bat previously recorded in the York area were identified during the survey: 45kHz and 55kHz pipistrelles, noctule and daubenton's. There are limitations to which species can be identified with a bat detector, however. It is extremely difficult to distinguish between the echolocation calls of the *Myotis* bats (daubenton's, natterer's, brandt's and whiskered). Of this genus, only daubenton's can be reliably identified by its habit of flying very low over the water surface to catch insects. Some unidentified *Myotis* bats were recorded, which could have been one or more of the other *Myotis* species. It is also possible that the other *Myotis* species do not feed or fly within York, but are found beyond the edge of the city in the surrounding countryside. No brown long-eared bats were recorded. This is most likely due to the fact that the echolocation calls of this species are very quiet and often not picked up on a bat detector.

Figure 1 effectively gives a snapshot of bat activity for each square on the night it was surveyed. The results suggest that the most common bat in York is the 45kHz pipistrelle. According to Thompson (1990) there were between 26 and 30 pipistrelle colonies within a 12.6km radius of York Minster, with an average of 84 bats per colony. Bats can fly several kilometres from their roosts to their feeding areas, therefore it is not surprising that this species was recorded so frequently, since there are many colonies in the area and it is often associated with towns and cities. The other bat species identified in this

survey were much less common. Perhaps the predominantly urban environment of York provides few feeding or roosting opportunities for these species. There has not been an equivalent of Thompson's survey for roosts of other bat species in and around York.

The high amount of bat activity associated with areas of open water is presumably due to the large numbers of insect prey that will be available in these areas. It was noted that the number of bats feeding at these locations also was also high, which suggests that this was the reason the bats were present.

It is not clear why the proportion of bats feeding was much higher for standing water than for running water. Perhaps there are more flying insects associated with standing water, or insect species that are preferred prey.

There are various unavoidable limitations to this survey. Bat activity is heavily influenced by weather conditions, which will vary on different evenings. Also, activity will vary at any given place for different times of the year. Early in the year some species may not have yet emerged from hibernation, and during the summer bats may move from one roost to another on one or more occasions. Bats will also not necessarily choose the same area to feed every night. From July onwards the young are on the wing, therefore there are potentially many more bats in flight at this time. Bearing these factors in mind, this survey can only provide an indication of levels of bat activity within York, and conclusions that can be drawn from it are limited. Nevertheless it is hoped that the results provide some insight into a species group for which there is a great deal still not known about behaviour and distribution.

Acknowledgements

Thanks to Anne Keville and Siobhan Hamilton for assistance with field work.

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Water Vole Memories

Peter Franklin

In my early teenage years during the 1960's I lived on the boundary of north-west Leeds in an area called Moseley Wood, which I remember as a considerable expanse of undulating and rocky birch wood. Along the edge of this woodland and through the adjacent fields ran Moseley Wood Beck.

This beck was a haven for water voles and held quite a substantial population. I doubt if a day went by when a water vole wasn't seen or at least heard "plopping" into the water, when walking along the banks.

During this period my instincts as a budding hunter-gatherer had aroused my interest in wildlife. One day while stalking the banks of the beck with my newly made birch wood catapult, armed with a small pebble, I spied a water vole on the opposite bank. I took aim with my new weapon and fired. (Of course I wouldn't do this now). To my complete surprise I hit the target and the vole keeled over. I had to run further up the beck to find a place to cross over and back down the other side to retrieve my quarry. By the time I reached the spot where my target had lain it had disappeared. Perplexed, I put my hand down the nearest hole in the bank and was rewarded with a bite through the end of my finger. Obviously the vole had only been stunned and I had received what was my due.

On another occasion I was at place called Paul's Pond, which is halfway between Cookridge and Golden Acre park. At the shallow end of the pond, which was once a boating lake, willows and alders grow out of the bottom of the pond, through the mud, and it is possible to walk out into the pond on the branches which stretch out across the surface. I had spotted a moorhen's nest and had decided to investigate. When I eventually reached the nest, I realised it wasn't occupied by a moorhen, but was covered with a lid made of rushes and reeds. I lifted this lid and inside was a family of half

grown water voles. They scattered in all directions, but I managed to catch one. This I consigned to my empty sandwich box with the intention of taking it home and keeping it as a pet along with my numerous mice, rabbits, ferrets etc. When I had reached about half way home I had a pang of conscience and trudged back to the pond and released the vole with the rest of its family.

As a matter of interest, before the present car park for Golden Acre existed, where Adel beck flows under the Otley Road was a favourite place for water voles, and I remember on many occasions leaning over the wall and watching them swimming in the beck.

An old school friend of mine, who also has always been interested in natural history, and whom I still see regularly, spent many of his teenage days by the banks of Hawksworth Beck, which is a continuation of Moseley Wood beck, but much closer to its confluence with the river Aire above Kirkstall Forge. He also remembers water voles being very common there and remembers one occasion seeing a whole family swimming single file in the beck.

I have never walked the banks of Moseley Wood beck since my teenage years and since then have spent about twenty years away from my native county. During this time, to the present day, I don't recall seeing a single water vole apart from last year, when I saw one at the ponds at Queen Mary's Dubs near Ripon. My friend also can only testify to two sightings since he was a teenager. One, many years ago near Middleham, and last year one in a village pond somewhere near Skipsea. This despite being a keen fisherman and having fished the Yorkshire rivers on innumerable occasions.

I think that the water vole was probably the prime mover in arousing my interest in British Wildlife. It became my equivalent of the beaver, and the becks and woods of north west Leeds and surrounding area my Canadian wilderness. Let us hope it makes a remarkable recovery and once again the "plopping" sound as it enters the water becomes a regular occurrence as we walk along the banks of our becks and rivers.

“On the hoof” – a report of YMG mammal recording walks 2004

Ann Hanson

Hotfoot to Helmsley - 8th February 2004

A circular walk from Helmsley in North Yorkshire took us up Ash Dale and back down Beck Dale. This was billed as a short walk, which became progressively longer as my lack of ability to read maps became more obvious.... Thanks to everyone who stayed the course, retained a sense of humour even through the small blizzard, and fell into a very welcome teashop in Helmsley market-square late in the afternoon.

Due to plentiful mud and a light covering of snow, this walk produced plenty of mammal records. Along Ash Dale we found molehills, rabbit droppings and burrows, roe deer hoof prints, fox foot prints, grey squirrel nibbled hazelnuts and fir cones and a rather fresh mustelid scat (possibly stoat) right in the middle of the track. Coming back down Beck Dale we found a



Deer footprints

Photo: Robert Masheder

wood mouse nibbled hazelnut, some possible water vole burrows in the beck bank and the runs and burrows of numerous field voles in some overgrown pasture on the way out of the woods.

Circling Castle Howard – 21st March 2004

Another circular walk in the outer environs of Castle Howard again produced plenty of records. Brown hares were especially numerous, with 8 individuals being seen out in the fields. Due to the chill wind most of the hares were keeping their ears down rather than indulging in the usual Mad March Hare activity, but we still had some excellent views.

Other records included molehills on the wide verges of the main drive, rabbit droppings and burrows and roe deer hoof prints near to Low Gaterley Farm, followed by numerous badger foot prints and a very strong smell of fox out in the fields. Moving on to East Thorpe Stud we came across some fresh fox droppings, confirming our earlier suspicions.



Badger footprint
Photo: Robert Masheder

The day ended with a well-earned visit to (you guessed it) the Castle Howard teashop!

Buffeting along at the Barmby Barrage – 18th April 2004

The main focus of this walk was to

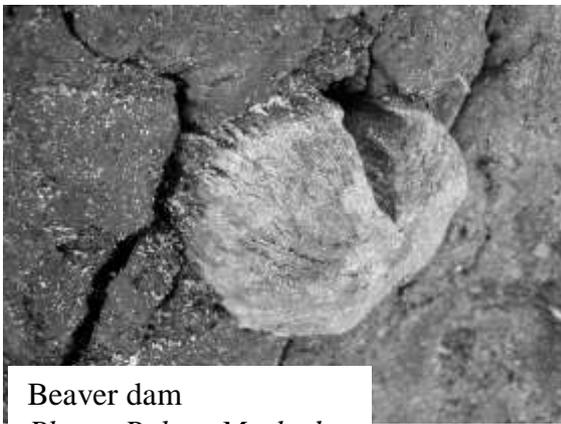
have been searching for otter signs along the rivers Ouse and Derwent. However, torrential rain for several days beforehand meant that the rivers were in full spate and any spraint or paw prints would have been washed away. Not to be deterred, we headed off to hunt for other mammals and their field signs.

Our first sighting was molehills at Barmby on the Marsh, then things went fairly quiet until we reached Asselby Island – a parcel of land that causes the Ouse to curve around it and does literally become an island when the river floods. Here we found roe deer hoof prints, fox fur caught on barbed wire and badger fur caught on brambles. Moving on we located some water vole burrows in a ditch bank in farmland near Asselby village. This is when things got more interesting as we came across two roebucks so intent on fighting with each other that they barely noticed us. We watched the determined deer as they alternately chased each other and stopped to fight until they were out of sight – exciting stuff!!

The last record of the day was a fox dropping at the edge of an arable field near Loftsome Bridge over the River Derwent. Finally, due to a lamentable lack of teashops at Barmby Barrage (boo), it was back to the bird hide near the car park to finish off our sandwiches and coffee – at least it was dry in there...

Beavering on the beach at Skipsea and all aboard the Yorkshire Belle from Bridlington – 4th September 2004

This glorious sunny day (unusual in itself!), first of all saw us hunting along the beach at Skipsea for the remains of an ancient beaver dam in the crumbling cliffs (see Imprint no. 29 (2002) for a full report on the dam by Geoff Oxford). The dam was eventually found and closely inspected. Beaver gnawed logs could still clearly be seen sticking out of the cliffs, while some of them had unfortunately been used on a nearby beach barbeque. A quick scramble up the cliffs revealed a large dip in the landscape, which had at one time been a lake across which the dam had been built. The dam is gradually eroding away so we were glad to have seen it before it becomes a distant memory.



Beaver dam

Photo: Robert Mashed

The only other terrestrial mammal record of the day was a large and handsome brown hare who we set up on our walk along the cliffs to the dam.

After a short drive to Bridlington, an age looking for parking spaces and a quick sandwich on the harbour, we

joined the RSPB skua and shearwater cruise on the Yorkshire Belle. Our mission – to look for cetaceans off the coast. Not long into the boat trip we were rewarded by a good sighting of a common porpoise off the starboard bow. That, however, was as good as it got for cetaceans and we only caught sight of a few tantalising dorsal fins (all common porpoise) for the rest of the trip. The birds did try to make up for the lack of mammals, with plenty of gannets, a few little gulls, and even the odd skua and shearwater soaring overhead.

And finally...

You may have noticed a lack of walks over the summer months, for which I apologise. This was entirely due to the demands of the most recent dormouse populations to move to North Yorkshire – long may they remain here!

Many thanks to everyone who turned out for the mammal walks, at times in less than wonderful weather. Your good company in the face of adversity was greatly appreciated, as was your tolerance of my map reading abilities...

Any suggestions for next year?

Mammals of Extremadura

Michael Thompson

When I booked a holiday in Spain with a wildlife travel firm. I had no idea that such a place as Extremadura existed. It is, in fact, a large region of Spain, south-west of Madrid and bordering on Portugal. The glossies described it as being rich in wildlife and this proved to be the case. Arriving at Madrid airport in hot sunny conditions, the party with whom I was travelling were driven to Trujillo, a small hilltop town in the centre of the region. Our accommodation, situated in the surrounding countryside, was a restored farm complex bounded by fruit and olive tree groves. An ideal habitat for all sorts of interesting birds, reptiles, insects and a few mammals, which was helped by a week of cloudless skies and mid-afternoon, end of September, temperatures soaring to 32°C. The travel firm issued the participants with a checklist of those animals we would expect to see, listing some 14 species of mammals. Many of the listed mammals were similar to our own.

The most common mammal was the red deer *Cervus elaphus*, particularly roaming in small herds in amongst the cork tree plantations that abound in the area. Often amongst the herds would be a stag with a full head of antlers; the rut was fast approaching. Unfortunately, the cork tree plantations are going into decline. We were reminded by our leaders about the importance of buying wine with proper corks and not synthetic stoppers, thus maintaining the cork tree plantations. Beside a variety of small passerine birds within the plantations, we found evidence of wild boar *Sus scrofa* and badger *Meles meles*. Badger tracks and guard hairs on barb wire, as well as well trodden wild boar runs, were identified, but neither species were seen.

On two occasions, we were up at dawn chasing after black-bellied sandgrouse *Pterocles orientalis* in steppe country and it was then that we saw foxes *Vulpes vulpes* on three occasions. There is plenty of rodents for them to feed on, beside rabbits *Oryctolagus cuniculus* and the Iberian hare, there was the brown rat *Rattus norvegicus*, all of which we sighted. The Iberian hare *Lepus granatensis* differs from our own brown hare *L. europaeus*, but, for a long time, it was considered to be a variety of the African hare *L. capensis*. Now, due to morphological and genetic differences, the Iberian hare is accepted as a valid species. Like some of our own brown hares, the one and only Iberian hare observed was a road casualty.

The region is well endowed with rivers and man-made reservoirs. In these riparian habitats the otter *Lutra lutra* is to be found. In parts of Spain otter re-introduction programmes have been successfully carried out. On the Rio Magasga we found not only otter footprints, but also fresh spraints, some of which contained the shelled-remains of the red signal crayfish *Procambarus clarkii*, an arthropod that is well established in the area. We did not see an otter, but another mustelid was observed mid-afternoon on an opposite side of a river in the Monfrunque National Park where we had been observing birds. A female Egyptian mongoose *Herpestes ichneumon* appeared, followed by three young cubs. They were rummaging around on the river's bank looking for food. Widely distributed in Africa and parts of the Near East, the Egyptian mongoose is only found in Europe in south-west Spain and southern Portugal. The Iberian Egyptian mongoose is considered to be an introduction, but one that occurred a long time ago. I last saw this species in Israel in 1996.

Bats were numerous, but identification limited. I had with me my Bat Box III detector and with it was able to identify the common pipistrelle *Pipistrellus pipistrellus* and the soprano pipistrelle *Pipistrellus pygmaeus* around the orchards and farm buildings where we were staying. The latter species was flying over a large pond. There were obviously other species about, but no roosts were located. One evening the party went into Trujillo for a meal, but, before doing so, went up on to the ramparts of the Arab built castle. From the castle walls emerged lots of bats of various sizes and shapes, many must have been *Myotis* species. One bat, a noctule *Nyctalus noctula* appeared emitting a typical noctule-sounding low frequency call that was picked up on the detector. Soon afterwards five very large bats emerged uttering the same low frequency call. Their flight pattern and call suggested a noctule species. Our leader had long suspected that the greater noctule

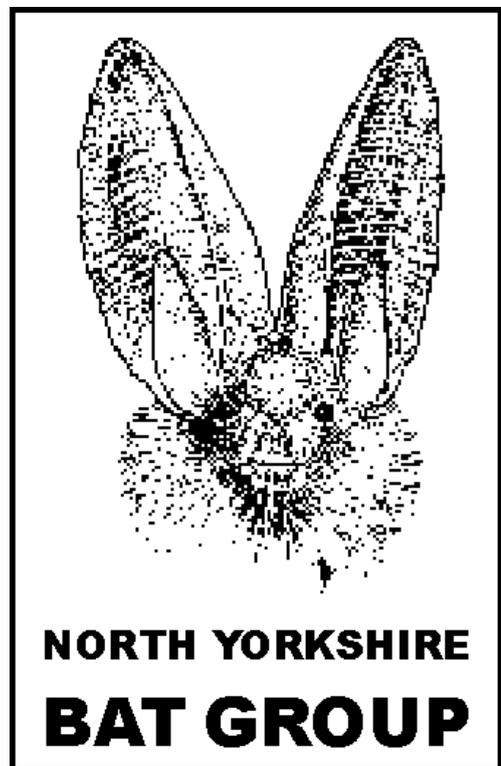
Nyctalus lasiopterus was roosting in the castle walls and these findings seem to confirm his suspicions. The greater noctule is twice the weight of the noctule and, according to distribution maps, is to be found in Spain, albeit few records.

All in all a very successful trip.

North Yorkshire Bat Group - Highlights of 2004

John Drewett

The year started off with winter hibernation surveys. This year we surveyed the Hoffmann Kiln at Langcliffe in Ribblesdale as well as our usual site at Fountains Abbey. Neither produced very many bats, such is the nature of hibernation surveys carried out by searching through crevices, but at both sites we established a methodical way of surveying which can be repeated in future years. Of particular interest was the discovery that some Common Pipistrelle bats were hibernating in crevices in the stonework of the Fountains Abbey Cellarium, in an area used by Daubenton's bats in summer.



Thanks to the efforts of David & Alan Ryder an excellent attempt was made to re-establish monitoring of sites at Fountains Abbey in summer. A number of visits were made to the site and the data gathered will be incorporated into a report summarising this and previous records of the site over the coming months. This is a very complex site to monitor, so we will be examining the results with a view to improving on the surveys next summer.

Through a contact with Ian Davidson-Watts of the Ministry of Defence and to partly provide experience for some trainees we carried out one night of mist netting and harp trapping at the Serpentine Tunnel at Fountains in the

autumn. This tunnel regularly has one or two Brown long-eared and Natterer's bats visible during winter hibernation surveys and both these species were caught during the evening. Natterer's were the dominant species, suggesting that the tunnel could be an autumnal swarming site. However, those bats caught appeared relatively early in the evening, so further work is needed to confirm this.

Whilst all this work was going on at Fountains Abbey the BBC in Leeds made contact, wishing to film something about bats for the regional slot following one of the programmes in Alan Titchmarsh's series. In July, I spent the evening trying to catch Natterer's bats with a hand net (they didn't emerge!) and being filmed watching Daubenton's over the river. None of this made it onto the screen, but later another successful attempt to catch bats was made at one of the roosts located during David & Alan's surveys. Assuming this was a Pipistrelle roost it was rather off-putting to catch the first bat only to discover it wasn't. Of course, the interviewer wanted to know what it was. My best guess was Whiskered Bat, which those bat experts among the readership will know can be separated from the very similar Brandt's by features of the teeth or penis. The former is not easy to spot when the bat is silhouetted against your hand by the glare of TV lights and the latter not a useful characteristic in a breeding roost of females!

Technology is very important to bat workers, as is frequently highlighted by events. The presentation given to the conference celebrating 25 years of Hopewell House Farm as a demonstration farm for farming and wildlife was able to reveal that at least four or five species use the farm at night, a fact only discovered thanks to the use of bat detectors. We still only know of one roost - that of Brown long-eared bats in the barn - but bat detectors simply weren't widely available to the original surveyors 25 years ago.

One interesting bit of research recently carried out in Northumberland highlighted that Brown long-eared bats in barns don't necessarily behave like Brown long-eared bats in houses. In houses this species is usually associated with older, larger properties where it hangs along the main beam, leaving a tell-tale row of droppings beneath. This makes spotting a Brown long-eared roost relatively easy. By using infra-red video cameras and night sights the researchers revealed that the same species in barns will often tuck itself away in crevices leaving little or no evidence inside the building. During a survey near Richmond this summer I and my colleagues found just such a situation in a range of barns. Only one bat was visible inside, but an estimated 60+

bats were roosting there. With plans (still at an early stage) to carry out another survey of Dales barns with the National Park this coming year, this is something we will have to bear in mind.

During the year our licensed batworkers have continued to provide an excellent service in assisting English Nature by visiting householders and others with bat 'problems'. Through their diligent work we are able to persuade almost everyone we visit that their bats are something to treasure rather than be concerned about. This year there has been one notable and very well publicised exception.

St Hilda's church at Ellerburn is situated in a beautiful rural valley in the North York Moors near Thornton-le-Dale. With woodland, streams, lakes and meadows all around it is ideal bat habitat and this is evidenced by the long-standing populations of four species roosting in the building. These have been recorded informally by some of our members for a number of years and the Natterer's bats have formed part of the study into this species carried out by Leeds University. We have therefore been very concerned about a concerted campaign to have these bats excluded from the church.

There are only a small number of known Natterer's roosts in Yorkshire, many of which are in churches and with around 60 or so bats, this is perhaps the largest. Because the bats live inside the church and enter and leave over the main door, they do spread droppings liberally around the building. However, all advice and offers of assistance to help contain the problem made by both English Nature and the bat group have been rejected. The bat group carried out a survey at the church in May with the help of a large proportion of our membership and at a later date some members spent a morning cleaning the church (by agreement) only later to have their efforts described as 'organised vandalism'. English Nature have even made a generous offer to fund a cleaning contract only to have it rejected.

No one would pretend that bat droppings inside the church can be eliminated whilst the bats roost there, but we feel the situation can be managed to make it acceptable. It happens in numerous other churches, often with far more bats. We are therefore very disappointed that a small number of people are attempting to have removed this part of the church's heritage. An anti-bat campaign has been waged through the media (even making it onto TV in the United States) and has included propagating a number of false statements about the impacts of bats on human health. More recently the campaigners

obtained the support of the local MP, John Greenaway who raised the matter in a debate in Parliament, calling for the bat protection laws to be changed. It was quite rightly pointed out that that is not a realistic approach until the existing law has been fully utilised in an attempt to resolve the issue. Let us hope that this is one case that can be sensibly resolved in 2005.

Yorkshire Mammal Group programme, 2005

All meetings take place at 7.30pm in Ashfield House, York College

- 6th Jan AGM and Quiz
- 3rd Feb Phil Richardson (National Trust): Bats and the National Trust
- 3rd Mar Local taxidermist David Astley: The art and science of stuffing mammals
- 7th April Johnny Birks (Vincent Wildlife Trust): Pine Martens on the North York Moors
- 5th May Phil Wheeler (Hull University): Conserving the Anoa, Sulawesi's endemic dwarf buffalo
- 6th Oct Steve Carter (Central Science Laboratory): Hedgehogs on the Uists - the story so far
- 3rd Nov YMG speakers night
- 1st Dec Xmas special event