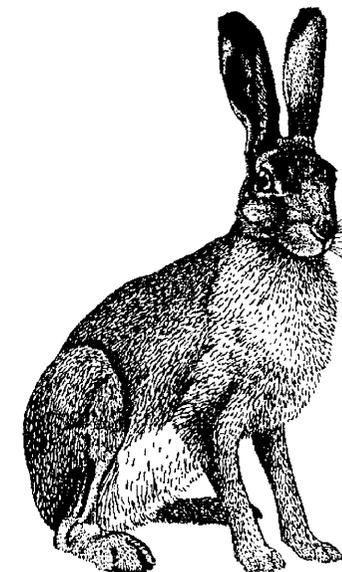


IMPRINT



The Yorkshire Mammal Group Newsletter

No. 27 (2000)



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Editor's Report

Geoff Oxford

This millennium edition of *Imprint* incorporated the usual wide range of excellent articles which, for the first time, seemed to flow in without too much prodding on my part. As a result, this *Imprint* is four pages longer than in the past few years. The wealth of material submitted for *Imprint* indicates a healthy and thriving organisation involved with a diverse array of practical field projects. Indeed, at the latest count, membership of the YMG stood at 57, while the North Yorkshire Bat Group boasted 42 members – just one short of 100 in total.

I must mention one event in particular that happened earlier this year. At the Easter meeting of The Mammal Society one of our members, Gordon Woodroffe, was awarded the Silver Medal for services to the Society and to mammal conservation. The background to this well-deserved recognition is given on p.1. Congratulations to Gordon on behalf of the YMG.

There are, as usual, a number of bat reports featured in this issue. Of particular note is Tony Lane's account of the origins and fortunes of the East Yorkshire Bat Group (EYBG) which celebrated its tenth birthday this year (p. 35). I'm sure he won't mind me saying so, but the success of this group owes much to Tony's charismatic leadership and vision. Over the last decade EYBG has made great strides forward in the recording and mapping of bats in East Yorkshire, and in various conservation measures such as the grilling of tunnels and experimenting with different bat box designs.

One of the highlights of 1999 was the initiation of a dormouse reintroduction programme in North Yorkshire, as reported in the previous *Imprint*. A short report (p. 17) provides an update on how the population is faring so far – and the news is good.

Finally my thanks to all who contributed articles, drawings and photographs to *Imprint* 2000, and to those who didn't, its never too early to be thinking about a topic for next year – I look forward to hearing from you!

YMG Member in Honours List

Geoff Oxford

In 2000, the annual Easter conference of The Mammal Society was held in Newcastle. During the event, Gordon Woodroffe, an active and long-time member of the YMG was presented with The Mammal Society Silver Medal by the Society's President, Dr Derek Yalden. This well-deserved honour was awarded in acknowledgement of Gordon's 'outstanding services to mammalogy' over many years.

A chemist by training, Gordon spent most of his pre-retirement life working for ICI. On retirement he was able to indulge his hobby of natural history in general, and mammalogy in particular. He read for a M.Phil. degree at The University of York studying various water-side mammals in the North York Moors National Park (NYMNP): water voles, otters, mink and water shrews (although the latter were rather thin on the ground!). Gordon was one of the first to highlight the threat to water voles posed by feral American mink, and also the interacting effect of habitat fragmentation on population survival. In addition, he found that the otter population of the NYMNP to be sparse and declining, as was typical of much of lowland Britain in the 1980s. In 1990 Gordon initiated an otter restocking programme in conjunction with the Vincent Wildlife Trust. Between 1990 and 1993 a total of 21 otters were released into the Derwent catchment (including four by English Nature) and an additional four into the River Esk system. This programme has been highly successful as judged by the abundance of otter signs (predominantly spraints) during subsequent regular, standardised field



Gordon receiving his silver medal from The Mammal Society President, Dr Derek Yalden

surveys carried out by Gordon with the invaluable help of Laura Winter, and latterly by Cara Morgan (University of York) as part of her D.Phil. studies.

Gordon has also made a number of important contributions to the work of The Mammal Society. He has been a member of Council for eleven years and edited the Society's magazine *Mammal News* for almost ten (until Spring 2000). During this time he nurtured the publication from a black and white newsletter into the full-colour and lively quarterly magazine we see today. Gordon is also the 'voice of the Society' in the respected bi-monthly conservation journal *British Wildlife*, where he has contributed the column on mammals since October 1993. In addition to these activities Gordon has authored two volumes, *The Otter* and *The Water Vole* (both now in their second editions), in The Mammal Society's most recent series of booklets and has contributed towards the sections on these species in the forthcoming fourth edition of *The Handbook of British Mammals*.

I would like to add the YMG's heartiest congratulations to Gordon on the presentation of his prestigious award. For even more details of Gordon's life and work visit <http://www.abdn.ac.uk/mammal/woodroffe.htm>.

National Mammal Week Event 2000 – Tophill Low Nature Reserve

Tony Lane

A National Mammal Week event was held on Saturday 1st July, 2000 at the Tophill Low Nature Reserve, near Drifffield, which is owned by Yorkshire Water. More noted for its bird watching facilities, the site comprises a substantial area with varied habitats including two large raw-water storage lagoons, borrow pits, wader scrapes, woodland, scrub and grassland, all contained within the boundaries of the River Hull and the Beverley and Barmston Drain. The whole site provides an attractive oasis within predominantly arable farmland.

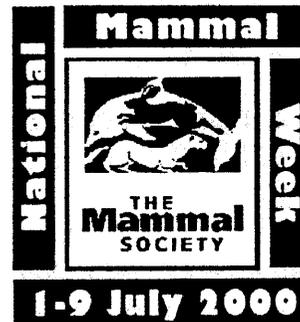
The event was a joint promotion by the Yorkshire Mammal Group and the East Yorkshire Bat Group. Publicity was achieved by informing The Mammal Society,

local natural history societies, visitors to the reserve and the Hull Daily Mail. There were only two non-affiliated participants who were made aware by the newspaper article. Two others saw it advertised on The Mammal Society web site, three came from the Yorkshire Mammal Group, one from Hornsea Natural History Society, and two from the Hull Valley Wildlife Group. Entitled 'Mammal Trek', the occasion was divided into three self-contained themes. During the morning Longworth traps were opened followed in the afternoon by looking for signs of mammals. Finally, there was a bat walk in the evening.

The preceding evening nearly seventy traps were set across five separate locations under the direction of Ann Hanson with assistance from Denise Ray and Tony Lane. As dusk approached bat group members made a reconnaissance looking for the current site of the local pipistrelle colony, noted for its unpredictable peregrinations. Fortunately the bats were located at a new, to us, position in one of the several disused cottages on site. On the down side was the overgrown privet hedge and garden full of nettles and thistles which needed attention before reasonable access could be assured.

Saturday's weather was dry and warm with sunny intervals – just right for a gentle stroll enjoying the delights of the reserve. Five attendees, including three children, followed the morning's proceedings with Ann Hanson and Robert Mashedor leading. Off to a good start, the third trap opened yielded a pygmy shrew (*Sorex minutus*), a species only recorded previously from an owl pellet collected on site. Unfortunately no other traps yielded specimens apart from one which was empty but smelling strongly of the characteristic shrew odour. As traps were recovered beside a pond Ann tried to convince us that the characteristic 'plop' into the water was from a water vole (*Arvicola terrestris*) and not a frog or a pebble (she actually saw it). Ann explained that pre-baiting and trapping an area over two consecutive nights often gives more representative results as small mammals become accustomed to the unfamiliar offerings and lose fear of trap's presence. The site has not been trapped in this way before. Hopefully the experience will lead to more successful attempts in the future.

For the afternoon session two participants from the morning departed and were replaced by a family of four (two children). The site is well populated by rabbits (*Oryctolagus cuniculus*) which are tolerant of human presence, and latrines were found beside most footpaths. Not surprisingly there was ample evidence of predation on the rabbits by foxes (*Vulpes vulpes*) with many discarded remains and fox scats with characteristic remnants. Hedgehog (*Erinaceus europaeus*) scats were also frequently encountered and a juvenile was found foraging the preceding evening. Mole (*Talpa europaea*) hills were prominent across much of the mown areas of grass around the water treatment plant. Roe deer (*Capreolus capreolus*) slots were



discovered in a muddy pool. Bat droppings were found below the pipistrelle roosting site in the visitor's centre.

The warm weather was accompanied by much butterfly activity with meadow brown (*Maniola jurtina*) and ringlet (*Aphantopus hyperantus*) prominent. The shed skin of a grass snake (*Natrix natrix*) was found next to one of the ponds, very close to a heap of grass cuttings which had been left there to encourage hibernating snakes! The wild flowers were magnificent, with meadow cranesbill (*Geranium pratense*), yellow rattle (*Rhinanthus crista-galli*), bee orchid (*Ophrys apifera*), common spotted orchid (*Dactylorhiza fuchsii*) and southern marsh orchid (*D. praetermissa*) putting on a fine display. The daytime singing green marsh frogs (*Rana ridibunda*) were also much in evidence around the reserve. The origin of these frogs is obscure but it is clear that they are spreading along the River Hull basin. Some bird watching was also squeezed in as we passed the several well appointed hides on site.

The evening bat watch was the best attended session with nine members of the public plus five from East Yorkshire Bat Group. As dusk approached vast spiralling plumes of midges (non-biting) accumulated over the trees adjacent to the lagoons attracting noctule (*Nyctalus noctula*) to feed low over the heads the admiring audience. Over thirty pipistrelles (*Pipistrellus pipistrellus*) were counted emerging from the cottage roof site. About an hour after sunset several Daubenton's bat (*Myotis daubentonii*) were seen feeding over one of the wader scrapes.

The day's proceedings were much enjoyed by leaders and participants alike. The venue has much to offer natural historians other than ornithologists, indeed the annual report of the Hull Valley Wildlife Group, based at Tophill Low, includes reports of wildlife other than birds. It was unfortunate that the event was not better supported by non affiliated persons.

Thanks are due to Yorkshire Water for allowing the event to be held at Tophill Low and to site warden Peter Izzard for his quiet co-operation at all times. Special thanks are due to Ann and Robert for their unflagging enthusiasm and patience. A memorable day.

Green marsh frog



Cutting Edge – Mammal Snippets

Compiled by Geoff Oxford

Pine marten politics

A fuss is brewing regarding reintroduction as a conservation tool for the pine marten (*Martes martes*) in England and Wales. The nub of the problem concerns the current distribution of pine martens and whether there is any scientific justification for a reintroduction programme. Some have argued that the pine marten is effectively extinct south of the Scottish border in the UK whereas others maintain that there is evidence of the long-term survival of sparse, elusive populations that are probably viable. In the former camp is the People's Trust for Endangered Species (PTES) which sought the views of gamekeepers, landowners, farmers and local people on possible reintroductions (see *Endangered British Mammals Fund Newsletter*, Issue 7, Autumn 2000, published by the PTES). The latter camp contains The Vincent Wildlife Trust (VWT) who have recently criticised the PTES consultation document claiming that is highly selective in the information it presents. In particular it is said to avoid 'all reference to evidence that might lead consultees to question the need for, or the wisdom of, a reintroduction of pine martens to England in the near future' (p.2, Johnny Birks & John Messenger, *A Response from The Vincent Wildlife Trust*, 11 October, 2000). The evidence in question concerns the persistence of remnant but viable populations in certain areas of England and Wales and the fact that they are apparently failing to recover. A lack of natural recovery and expansion suggests that conditions for this species are not ideal and under these circumstances reintroductions are not a morally defensible option. The VWT report claims that the PTES document played down reliable sightings and other evidence (e.g. corpses, such as the one recovered from The North York Moors in 1993 by Charles Critchley – see Jefferies & Critchley, 1994) and emphasised the lack of positive results in scat surveys.

Birks & Messenger point out a number of consequences of ignoring the presence of pine marten populations in England and Wales. One is that conservation efforts will be diverted away from ensuring the survival and expansion of these relict populations with the message that they are not worth bothering with. Also, future attempts to assess the distribution of pine martens will be compromised because people will be reluctant to report animals they are assured are 'extinct' in their area. The VWT response raises other problems too. For example, is there enough food out there for a reintroduced pine marten population given some evidence that there is an imbalance in the structure of Britain's mammal community with too many predators and

insufficient prey. There is also the possibility of adverse effects of pine martens on species of conservation importance other than birds (which were covered in the PTES consultation document).

Politics clearly plays a key role in conservation, as this example demonstrates. However, it is to be hoped that the conflicts can be resolved in ways which are beneficial to the survival and recovery of pine martens in England and Wales.

A copy of the Birks & Messenger document can be obtained from Geoff Oxford for the cost of photocopying (40p).

Reference

Jefferies, D. J. & Critchley, C. H. (1994) A new pine marten *Martes martes* (L.) record for the North Yorkshire Moors: skull dimensions and confirmation of species. *Naturalist*, **119**: 145-150.

Stunning for their supper

Recent research by Vincent Janik (University of St. Andrews) has suggested that bottlenose dolphins (*Tursiops truncatus*) may stun their prey by using low-frequency sound. While investigating acoustic communication between dolphins in the Moray Firth, he identified low-frequency 'bray' calls that seemed to be almost always associated with feeding. He also found that these calls attracted other dolphins which might seem to be disadvantageous in that it increases local competition for prey. He considered several hypotheses to explain this phenomenon. For example, advertising prey might enhance the caller's social status or it might be a way of manipulating fish, with the attraction of other dolphins an unavoidable side effect. Janik concluded that prey manipulation was more likely because experiments with fish have demonstrated that they are disoriented by low-frequency sound, making them easier to capture.

Source

BBC Wildlife magazine – July 2000 p.31

North Yorkshire Bat Group Report 1999/2000

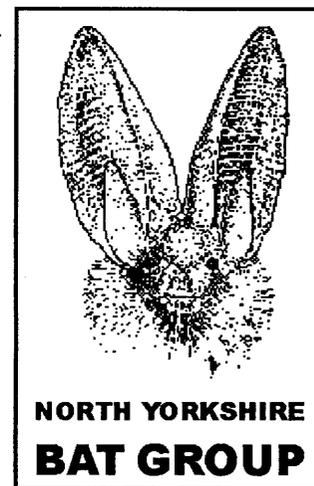
John Drewett

As I work with bats most of the time, it is often difficult after a busy summer to remember which of my activities was Group related and which work.. This is especially so this year having been administering the bat calls for English Nature since April. However, this does give an insight into just how much effort our volunteer bat workers put in each year. Together they have dealt with 200 calls in North & East Yorkshire since April.

As with every year, this year has had its highlights and low points. The new owners of a house in Ripley and their builders got the year off to a good start by going to enormous trouble during restoration work to give a colony of Brown long-eared bats their own self-contained 'flat' in the roof space. Let's just hope they appreciate it.

More mixed has been our efforts to deal with bats in bridges undergoing repairs. A discussion with the County Council's contractors Mouchel, on a snowy day in Helmsley, resulted in me being asked to give a presentation to their staff on bats and their conservation. This resulted in some excellent efforts by the company, such as the provision of bat roosting places in culverts which were being infilled at Stutton during the summer. However, it did not stop a near disaster when roosting holes at Kettlewell were blocked. This only came to light because further repairs were needed when a lorry damaged the bridge. Fortunately, no bats were entombed and the holes were reopened in time for the breeding season. Consultations over other works have taken place and a lot of effort put in by members to survey bridges before repairs are carried out. With a massive bridge strengthening programme planned for the coming year there is the potential for overload, so a meeting is planned for this autumn to establish a procedure which will fully take the needs of bats into consideration.

More hibernating bats than usual were found during the winter surveys at Fountains Abbey, but only Brown long-eared and Natterer's bats. The Pipistrelles which



usually spend the winter behind some lead down pipes were absent. No cave surveys were undertaken last winter, something which it is hoped to rectify during the coming season.

We did undertake both winter and summer surveys of traditional stone barns around Muker and Thwaite this year, with the support of the Yorkshire Dales National Park. A series of barns were visited in January and February and a search made in the walls for hibernating bats. This revealed no animals, although there were numerous apparently suitable crevices. In July I was fortunate to spend a week in the area, mapping habitats, searching out potential roost sites and checking barns during the day, then joining with other volunteers in all night bat activity surveys. This revealed that bats actively feed in barns into which fresh hay had been stored, but otherwise showed little use of what seem like ideal roost sites. However we did find three roosts in the area; two of Pipistrelles in buildings in Muker and a Daubenton's roost in the stone pier supporting a footbridge across the Swale. Perhaps our results would have been different had we chosen an area with barns, but no villages.

As usual our meetings showed considerable variation in attendances. Numbers were poor at both the Ripon and Scarborough indoor meetings in the spring, but were outstanding at bat walks in Thirsk, Thorp Perrow (twice) and Fairburn Ings. We were also impressed by how many people braved the torrential rain which greeted walks in York and Egton Bridge during this remarkably wet summer.

Some members and others continue to take part in National Bat Monitoring Programme surveys organised by the Bat Conservation Trust. This year has seen a welcome increase in the numbers taking part, adding further to the valuable information that these surveys provide in helping us to understand bat populations and provide a baseline against which future increases and declines can be measured.

Pressure from other bat work has seen training of new bat workers take a back seat this year. However, a number of trainees are part way through their course and there is a growing list of potential new bat workers wanting to be trained. A major effort to clear this backlog will be made over the coming winter which should benefit bat conservation in future years.

Finally, we are hopeful on a number of fronts of obtaining some funding next year to enable some exciting and worthwhile projects to be started during 2001. Watch for details in the monthly 'Updates'.

Water Voles on Clifton Ings

Nigel Stewart

I have recently started bird watching on the Ings on a regular basis. On numerous occasions while following the course of the Blue Beck, which runs between the Ings on one side and Rawcliffe Meadows on the other, I have seen water voles. By waiting patiently I have obtained very good views of these delightful creatures. There would appear to be a healthy population of voles in this area; indeed, on one of my visits in late July, I saw at least six individuals along one stretch of the beck.

One intriguing incident occurred on 31 March. While walking along the beck I came to an area where it branched off and looking along this stretch I observed two water voles in the water, one of which immediately swam away. Initially I thought that I had flushed them but wondered why the second individual had not swam away also. It was then that I noticed a weasel coming down the steep bank. The vole swam to the other side but was obviously injured in some way. The weasel was not deterred and ran across a pipe which straddled the beck, the vole struggled back to the other side and the weasel returned across the pipe. As the vole again swam back the weasel launched itself into the water. After a struggle of a couple of minutes or so the weasel dragged the vole out of the water and up the bank – quite a feat for this little predator.



The National Fox Survey 2000

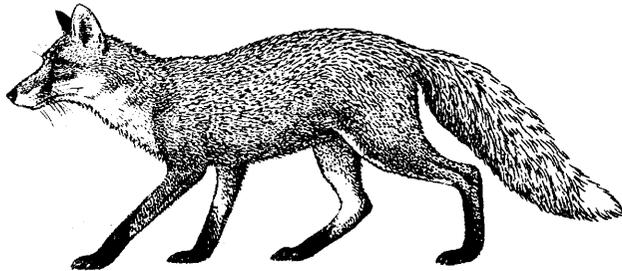
Ann Hanson

Background

During the early part of 1999 and 2000, volunteers all over Great Britain have been taking part in the National Fox Survey, run by The Mammal Society and co-ordinated by Charlotte Webbon at Bristol University.

The aims of the survey are –

- To determine the current size and distribution of the fox population and to compare this with patterns of land use.
- To determine the diet of foxes in different areas.



Survey protocol

The survey involved the allocation of randomly selected 1 km squares to volunteers, who then had to walk along all the linear features within their square twice between 1 February and 15 March, recording the position of all the fox scats found and collecting them for dietary analysis. The square was walked twice in order to determine the number of scats produced within a known time period. Then the fox density in the square could be calculated using the daily rate of scat production from studies on captive foxes.

Linear features were edge features, such as hedgerows, fence lines, road verges, woodland edges, footpaths & farm tracks, riverbanks, ditches, etc. Both sides of features were walked where appropriate, i.e.: hedges and rivers, which generally added up to a lot of walking! The same route was walked on each visit to the square, and scats within 3 m of linear features were marked on the relevant map. Scats were

collected in plastic bags and sent off to Bristol University for diet analysis. Habitat data were recorded for the whole square on a separate map, so that it could be related to fox diet and distribution.

Results

The 1 km square allocated to the Yorkshire Mammal Group was near Wheldrake and consisted of a mixture of woodland, arable and pasture, so was fairly varied and interesting to walk. Once we got our eye(s) in, fox scats were not difficult to spot, mainly as they seem to like to deposit them on any lump in the ground – especially mole hills (poor moles!). Over 40 scats were collected on each visit to the square, which seemed rather a lot until we discovered that a local landowner had reared and released several orphaned fox cubs the previous summer. Many of these foxes may well have still been resident in the area, due to a super-abundance of rabbits to eat and the fact that the area is not hunted. The foxes however were not being fed, so they presumably had a wild fox diet and the data should be acceptable for the survey.

Many of the scats collected contained very obvious food remains, such as rabbit fur and bones and even crunched up sugarbeet and carrot, scavenged from the arable fields after harvest. Whoever said foxes don't enjoy their veg

Several other mammal species and their signs were found during the surveys, including badger tracks and hair on wire fencing, a couple of huge, very bouncy brown hares and numerous rabbits and molehills. However, our second survey day provided a real treat, with a herd of 13 fallow deer grazing out in the fields and a small flock of very noisy crossbills in Wheldrake Wood.

Survey update

The preliminary results of the National Fox Survey show that about 470 1 km squares have been surveyed all over Great Britain and more than 8500 fox scats have been sent off to Bristol University for diet analysis (should keep them busy for a while!). Complete results of the survey should be available by November next year.

All that remains is to say thank you to all the farmers and landowners who kindly allowed us access to their land. Many thanks also to everyone who came out and helped with the surveys on two very sunny, but bitterly cold, days and apologies to the Post Office for the rather smelly packages.

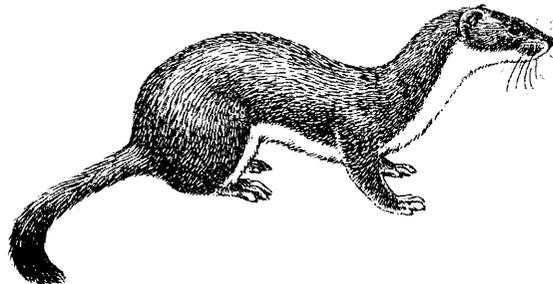
Mount Grace Priory

John Drewett

Our June field meeting saw an excellent turn out from members at Mount Grace Priory near Osmotherley. No doubt many were encouraged by the prospect of seeing the stoats which live in the drainage system beneath the priory and which were the subject of the BBC TV programme *Stoats at the Priory*.

Of course a large group of people does not bode well for watching mammals, so all except Michael Thompson were disappointed in their quest for stoats. Michael, looking through one arch, cheerfully announced that he had just seen a stoat run away, before the rest of us got a chance to look! In an obvious effort to compensate for this, later in the evening he did find us some stoat droppings.

The stoats have apparently recently taken to making most of their appearances at dawn when Becky, the resident curator, has watched a family of stoats being led through the massed ranks of nervously watching rabbits. It is those rabbits, which were seen in profusion, which no doubt provide the stoats with much of their food.



The main mammal sightings of the evening were of bats. Droppings were found in many parts of the ruins and over a half hour period from 21.20 more than 25 Common Pipistrelle bats emerged from the roof of the main building. Unlike most maternity roosts, where the bats all leave from one exit hole, these bats came out from numerous places along the entire length of the roof. Either a very strange maternity colony, or perhaps a lot of individual roosting males? Several *Myotis* bats were also seen later in the evening, as was a Noctule bat.

As the Priory has been a known bat roost for several years, with Pipistrelle, Brown long-eared and Natterer's bats recorded, four of us made a second visit later in the month, to check through the roof space. Here there were plenty of Pipistrelle and Brown long-eared droppings all over the floor, but no visible bats. Later that evening some Common Pipistrelles again emerged and a Soprano Pipistrelle was noted flying

among the ruins. Also one Brown long-eared bat passed between two of us in an archway at very close range.

Clearly, Mount Grace is a fascinating site with a good range of mammals, although some of the evidence is somewhat baffling. Hopefully we shall be able to arrange further visits in future years to solve some of the mysteries and perhaps see more mammals.

YMG Mammal Recording

Michael Thompson

During the last year, and since I last wrote about the Mammal Recording in last year's *Imprint*, I have entered 931 Yorkshire Mammal Group records on to the *Look Out For Mammals* Mammal Society's database for the years 1995 - 2000. As well as the YMG's records, I have also received a few from Gill Smith, Chairperson of the Ryedale Natural History Society, that I have entered into the scheme. The 931 records are of 27 mammal species, of which six species are bats; the 114 bat records are my own and I have, for the most part, passed them onto John Drewett. John keeps the bat records for the North Yorkshire Bat Group and the Y.M.G. Details of the tetrad records entered to date are shown in Table 1.

I have not included the dormouse captive-release site in the records. Some species are missing from the list, such a harvest mouse, house mouse, red squirrel, mink and otter, but, in due course, they might be added. I have still to add a long list of badger records from Jean Thorpe and David Dunne, mostly road casualties. Most of the tetrads in Table 1 are for North Yorkshire, but 33 are in areas outside the county, indicating, I think, that the membership realises that it is North Yorkshire's mammals that we are concentrating on. This was the area allocated to us by the Mammal Society's recording scheme.

The results show how the big and obvious species are recorded, where as the small mammals, which may be just as common, are under recorded. Much depends on the amount of small mammal trapping and owl pellet analysis being carried out. The brown hare numbers are high, but some of us have been involved in the national brown hare survey and have consequently been looking out for them. The hedgehog records are almost entirely made up of road casualties (see map). The ratio of stoat to weasel records is 2 : 1, which may indicate the actual ratio or merely that stoats are more easy to see. Roe are by far the most common deer species recorded in North

Yorkshire. Figure 1 shows the distribution of records for the hedgehog (*Erinaceus europaeus*), and Table 2 presents records for one particular 10 km square SE 65 (north-east York).

I am pleased they way the records have been coming in and would like to thank the following contributors: Denise and John Ray; Roma and Geoff Oxford; Charles Critchley; Ann Hanson and Robert Masheder; Lisa Kerslake; David Baines; Mary Youngman; Gill Smith (Ryedale Nats.).

More contributions are needed, especially form the north-west part of North Yorkshire. Please do help.

Figure 1. Distribution of records for the hedgehog (*Erinaceus europaeus*) in N. Yorkshire.

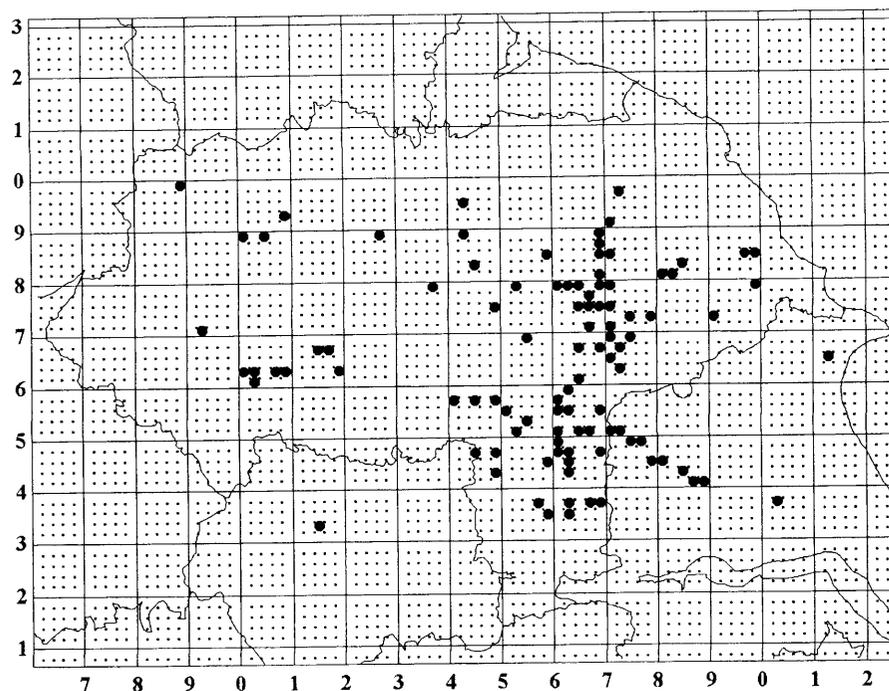


Table 1.

Records of North Yorkshire mammals currently entered in the YMG database.

Species	No. Records	Tetrads in N. Yorks.	Tetrads outside N. Yorks.
Hedgehog	121	87	12
Mole	124	88	9
Common shrew	14	10	0
Pygmy shrew	6	5	0
Water shrew	1	1	0
Brown hare	92	65	0
Rabbit	114	95	6
Grey squirrel	56	50	0
Bank vole	18	12	0
Field vole	11	11	0
Water vole	9	6	0
Wood mouse	13	9	0
Brown rat	15	15	0
Fox	62	55	3
Badger	82	52	5
Stoat	31	23	3
Weasel	16	13	1
Red deer	2	2	0
Fallow deer	2	2	0
Roe deer	28	27	0
Total	817		

Table 2.

Species list for ten kilometre square SE (44) 65.

Common name	Scientific name
Badger	<i>Meles meles</i>
Bank vole	<i>Clethrionomys glareolus</i>
Brown hare	<i>Lepus europaeus</i>
Brown rat	<i>Rattus norvegicus</i>
Common shrew	<i>Sorex araneus</i>
Field vole	<i>Microtus agrestis</i>
Fox	<i>Vulpes vulpes</i>
Grey squirrel	<i>Sciurus carolinensis</i>
Hedgehog	<i>Erinaceus europaeus</i>
Mole	<i>Talpa europaea</i>
Pipistrelle bat (45 kHz)	<i>Pipistrellus pipistrellus</i>
Rabbit	<i>Oryctolagus cuniculus</i>
Roe deer	<i>Capreolus capreolus</i>
Stoat	<i>Mustela erminea</i>
Water vole	<i>Arvicola terrestris</i>
Weasel	<i>Mustela nivalis</i>
Wood mouse	<i>Apodemus sylvaticus</i>



The Woodlanders – An Update on Yorkshire’s Dormice

Geoff Oxford

A torpid dormouse in characteristic position with its tail curled over its head



Photograph: Dirk Heaton

As reported last year (Oxford, 1999), a common dormouse (*Muscardinus avellanarius*) re-introduction was initiated at a locality in North Yorkshire during 1999 by Paul Bright and Pat Morris, under the auspices of English Nature. The success or otherwise of dormouse release schemes are monitored by monthly inspection of special dormouse nest boxes (see figure in Oxford, 1999) wired to coppiced hazel trees. These are regularly used by the animals for resting and breeding purposes - unlike other small mammals, dormice rarely enter Longworth traps. The purpose of this brief note is to provide an update

on the fortunes of the North Yorkshire population after the first full year of monitoring. A fuller analysis is in progress.

Around the middle of each month, from May to October inclusive, a small team of people checked 152 nest boxes distributed in an approximate grid throughout the release area and beyond. Table 1 below shows the number of nests and of dormice recorded in each month.

The number of nests found each month reflects a certain turnover as old, damp and fusty nests were cleared out and dormice constructed new ones. The first evidence for breeding was a heavy female with prominent nipples caught in July who may have been about to give birth. August provided three nests with young. One female had at least three pinkies (young not yet pigmented or furred, and with eyes closed) and two others had, respectively, five and four fully furred young. The pinkies were not disturbed but the furred young weighed between 8 and 10g. The box containing the pinkies in August housed four well grown (torpid) juveniles the following month,

Table 1.

Month	No. nests	No. dormice
May	23	5
June	20	4
July	17	4
August	24	15 + at least 3 pinkies
September	27	19 inc. 5 pinkies
October	33	20

who weighed in at about 9g each. This concurs with information in Morris (1991) which indicates that young begin to leave the nest at 30 days and are independent at 40 days. September also revealed another nest with five pinkies. Two nests with young were found in October, with young in one weighing around 12g or so, but in the other only 9g. Whether the latter would have been able to put on enough weight to overwinter successfully is doubtful. Interestingly, the box with five well-grown young in October was not the same as that containing the five pinkies in September. It is possible that the mother had moved the entire brood from one box to the other.

In Britain, young may be found between May and September and exceptionally October (Morris, 1991) although Hurrell (1980) indicates that breeding usually occurs from July to September. The latter range of months corresponds more closely with that observed in Yorkshire during 2000, despite the fact that these dates are for southern England and that the early part of the year was relatively cold and wet and may have been expected to retard breeding.

It is heartening that the reintroduced dormice seem to be breeding successfully and their over-winter survival will undoubtedly be aided by the very good crop of hazelnuts this autumn. It should be remembered that dormouse boxes only sample a fraction of the population – some individuals live in natural tree holes and crevices and may be intermittently or never censused. It is a shame there is no easy, humane way of marking individuals so that an estimate of the total population size can be gained. Despite this, the conclusion must be that our reintroduced population seems to be doing well. Box surveys next year will indicate whether these early, encouraging signs of a thriving population continue.

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Suspected Infanticide in Otters

Gordon L. Woodroffe

Vic Simpson a veterinary surgeon at the Veterinary Laboratories Agency in Truro, Cornwall has been carrying out post mortems on otters found dead in south-west England (Simpson 1997). This is part of a long-term study funded by the Environment Agency.

He has found that the numbers of animals submitted have increased markedly each year: from one in 1958 to 56 in 1999. Most of the deaths have been due to road traffic accidents (161 out of 198). What is surprising, however, is the high level of what appears to be intraspecific aggression. For example, 16.5% of all the otters had suffered from bite wounds, mainly to the face, feet, anus and genitals. These wounds were quite distinct from dog bites and Simpson believes this is due to otters fighting each other. Both sexes were affected, although bites were found to be more common in males. In eight cases, the injuries were so severe that they were the cause of death. These results are in marked contrast to those in Shetland, where otters' ranges overlap and, according to Kruuk *et al.* (1987), interactions are believed to be relatively passive.

However, Simpson found further evidence of possible intra-specific aggression of otters in England. Two adult dog otters were found killed together in a road traffic accident in north Cornwall. One was so badly damaged that meaningful examination was impossible, but the other was in good condition and weighed 7.9 kg. Apart from some fresh puncture wounds and cheek lacerations, there were no significant lesions. The stomach was found to be distended with an unusually large amount of food (223 g) and, on close examination, appeared to be the greater part of an otter cub. Both the front feet and the tail were present and virtually intact. It was estimated that the cub was only about three weeks old, an age at which it would still be in the natal holt and protected by the bitch.

What is also very interesting is that on the following day a bitch otter was found killed on the road near the dog otters. It had been dead for several days and all four nipples were prominent; it was heavily in milk. Male infanticide is known to occur in other species of carnivores, notably African lions (Macdonald, 1989) but this appears to be the first published record of it in an otter.

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Another Return to Hopewell House Farm

Ann Hanson

Introduction

The Yorkshire Mammal Group carried out a long term small mammal survey at Hopewell House Farm near Knaresborough from 1980-1987 (Fraser, 1988), as part of the Countryside Commission's Demonstration Farm Project (see also Oxford, 1998). This was an attempt to show that modern farming and wildlife conservation can coexist, and the farm is still run on this basis today.

Earlier this year, the group was asked by Dr Margaret Atherden of the College of Ripon and York St. John to resurvey some of the sites covered in the original study, as part of a more extensive project being carried out on the farm over the summer. In order to do this, two small mammal trapping sessions were arranged for the weekends of 28-30 July and 25-27 August, to investigate different habitats on the farm.

The original surveys at Hopewell House compared different types of hedgerows (an old, established hedge, a re-laid hedge and a poorly kept hedge) and a trapping grid was also set out in a newly established plantation. A wet area near to a newly created pond was also briefly surveyed. A report of the original long term study can be found in Fraser (1988). By the year 2000, all the hedgerows on the farm could easily be considered well-established and the "new" plantation had become a semi-mature wood, so repeating the previous surveys would have been rather difficult. Instead we decided to again survey three hedgerows, but this time with different land-use (i.e.: arable, pasture and set aside) beside them as a comparison. We also carried out a botanical survey of the hedges to see if this had any bearing on the species captured. Our second trapping session surveyed a few different long-grass habitats on the farm in an attempt to capture the elusive harvest mouse, which had been trapped quite regularly in the 1980s.

Methods and Results

Hedge surveys

Three hedges with different land use beside them were compared. Twenty Longworth traps were placed in pairs at about 5 m intervals along the hedges and were checked on two mornings.

- Hedge 1 was about 1.5 m tall, with a good bottom and arable crops (wheat) with 2m field margins on both sides.
- Hedge 2 was 1.0 to 1.8m tall, with a few gaps, but a good bottom and a slight hedge bank. It had an arable crop (wheat) on one side and an area of set aside on the other.
- Hedge 3 was about 2.4 to 3.0m tall, with a field maple standard and a slightly gappy bottom. It had pasture (sheep grazing) on one side and a bridle track and arable crop (wheat) on the other.

The results (Table 1) show a good species diversity and abundance of small mammals on the farm, with four different species trapped (eight species were recorded over the original long term study). Although all three hedges surveyed are superficially similar in appearance, hedge 2 has a greater botanical diversity (Table 2). Hedge 2 also has a greater small mammal diversity and abundance than either of the other hedges, which could indicate better habitat quality. Land use alongside the hedges

could be significant, as hedge 2 is bordered by an area of set aside, which effectively extends the habitat available to small mammals out into the field. The 2 m field margins alongside hedge 1 probably serve a similar function. Hedge 3 is at a slight disadvantage as the pasture next to it has been heavily grazed by sheep, which have also grazed into the hedge bottom in places, making it rather open and less inviting. The second days trapping yielded good numbers of animals in both hedges 1 and 2, with rather fewer in hedge 3, which equates well with the habitat quality of the hedges and adjacent land.

Long grass surveys

Four areas of long grass were trapped in order to search for harvest mice.

- Area 1 – steep grassy bank alongside a bridle way. Fifteen traps at 5m intervals.
- Area 2 – 2m grassy edge to an arable crop (wheat) with semi-mature mixed woodland behind. Ten traps at 5m intervals.
- Area 3 – new deciduous plantation with long grass between the trees. Ten traps at 5m intervals.
- Area 4 – mature hedgerow with grassy bottom alongside new plantation. Fifteen traps at 5m intervals.

Unfortunately, this trapping session yielded no harvest mice (Table 3), despite the suitability of the areas surveyed and their proximity to previous nest sites. It did however further demonstrate the diversity and abundance of small mammals on the farm, despite the rather inclement weather encountered. Hopefully harvest mice are still present on the farm, although there are no recent records of nests being found.

Thanks are due to Robert Masheder, Mary Youngman, David Laughton and Michael Thompson for their help and enthusiasm, and also to Simon Webster for kindly allowing us to carry out the above work at Hopewell House Farm.

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Table 1. Small mammals caught in hedgerows

29/7/00 - Weather hot, dry and sunny. Previous night warm and dry with no moon.

	Species *	Sex	Age **	Weight (g)	Notes
Hedge 1	<i>S. araneus</i>	-	A	8.0	
Hedge 2	<i>A. sylvaticus</i>	M	A	21.5	
	<i>A. sylvaticus</i>	M	A	21.5	
	<i>C. glareolus</i>	F	A	19.0	
	<i>S. minutus</i>	-	A	3.0	
	<i>A. sylvaticus</i>	M	A	21.5	
Hedge 3	<i>A. sylvaticus</i>	F	J	15.5	

30/7/00 - Weather hot and humid. Previous night wet early, dry later, with no moon

Hedge 1	<i>S. araneus</i>	-	A	8.5	
	<i>C. glareolus</i>	F	J	16.0	
	<i>S. araneus</i>	-	A	6.5	
	<i>S. araneus</i>	-	A	8.5	
	<i>C. glareolus</i>	M	A	20.5	
Hedge 2	<i>S. araneus</i>	-	A	7.5	
	<i>S. araneus</i>	-	A	8.5	
	<i>C. glareolus</i>	F	A	19.5	recapture
	<i>S. araneus</i>	-	A	8.5	
	<i>S. araneus</i>	-	A	9.0	
	<i>C. glareolus</i>	M	J	14.0	
Hedge 3	<i>S. araneus</i>	-	A	7.5	
	<i>A. sylvaticus</i>	F	A	32.5	

* *A. sylvaticus* – Field mouse; *C. glareolus* – Bank vole; *S. minutus* – Pigmy shrew; *S. araneus* – Common shrew

** A – Adult; J – Juvenile

Table 2. Botanical survey of hedgerows (July, 2000)

Plant species:	Hedge 1	Hedge 2	Hedge 3
Hawthorn	D	D	D
Blackthorn	A	A	-
Elderberry	O	O	A
Field maple	O	A	O
Hazel	-	A	-
Oak	-	O	-
Holly	-	O	-
False-oat grass	D	A	A
Perennial ryegrass	A	D	A
Wild oat	O	-	O
Rough meadow grass	A	O	A
Sterile brome	-	O	-
Yorkshire fog	-	-	A
Cocksfoot	-	-	O
Scentless mayweed	A	O	-
Stinging nettle	A	A	A
Common cleavers	O	A	D
Fat hen	O	O	A
Cow parsley	O	O	-
Hogweed	O	O	-
Knotgrass	O	O	O
Bramble	O	A	A
White briony	O	-	A
Red dead nettle	O	O	O
Slender speedwell	O	O	-
Soft sow thistle	O	O	-
Field pansy	-	O	O
Creeping thistle	-	O	O
Shepherds purse	-	O	A
Field forget-me-not	-	O	O
White dead nettle	-	O	O
Groundsel	-	O	-
Bindweed	-	O	-
Scarlet pimpernel	-	O	-
Upright hedge parsley	-	O	O
Nipplewort	-	O	-
Common dock	-	A	-
Chickweed	-	O	-

D = dominant, A = abundant, O = occasional

Table 3. Small mammals caught in grasslands

26/8/00 – Weather wet and warm. Wet overnight.

	Species	Sex	Age	Weight (g)	Notes
Area 1	<i>A. sylvaticus</i>	M	J	14.0	
	<i>A. sylvaticus</i>	F	A	28.5	
	<i>C. glareolus</i>	F	J	11.5	
Area 2	<i>A. sylvaticus</i>	M	A	24.5	
	<i>S. araneus</i>	-	A	-	escaped
	<i>A. sylvaticus</i>	M	A	18.5	
	<i>A. sylvaticus</i>	F	A	31.0	
Area 3	<i>A. sylvaticus</i>	M	J	13.0	
Area 4	<i>C. glareolus</i>	F	A	21.0	
	<i>A. sylvaticus</i>	-	-	-	escaped

27/8/00 – Weather dry and warm. Wet overnight.

Area 1	<i>C. glareolus</i>	F	A	25.0	
	<i>S. araneus</i>	-	A	8.0	
	<i>S. araneus</i>	-	A	8.0	
	<i>A. sylvaticus</i>	F	A	27.0	
Area 2	<i>C. glareolus</i>	F	A	18.5	
	<i>A. sylvaticus</i>	M	A	26.5	
	<i>S. araneus</i>	-	A	8.0	
	<i>A. sylvaticus</i>	F	A	31.0	
	<i>A. sylvaticus</i>	F	A	29.0	
Area 3	<i>A. sylvaticus</i>	F	J	11.0	
	<i>A. sylvaticus</i>	M	A	20.0	
	<i>S. araneus</i>	-	A	8.5	
	<i>A. sylvaticus</i>	M	A	21.0	
Area 4	<i>S. araneus</i>	-	A	9.0	
	<i>A. sylvaticus</i>	M	J	20.0	
	<i>A. sylvaticus</i>	M	A	20.0	
	<i>C. glareolus</i>	F	A	22.0	
	<i>A. sylvaticus</i>	M	A	24.0	

Nomenclature as in Table 1

Vergin' Territory...

Ann Hanson



Introduction and Methods

In these days of intensive farming and seemingly unrestrained development in the wider countryside, it appears that one man-made habitat is becoming more and more important for Britain's small mammals and their larger predators. The habitat in question is the humble road verge. In view of this, The Mammal Society, aided by a small army of intrepid volunteers, decided to carry out a National Road Verge Small Mammal Survey. The purpose of the survey was twofold – to identify the relationships between small mammal abundance and road verge habitat characteristics, and to provide an indication of small mammal diversity along road verges.

Volunteers were asked to survey road verges with rough grassland habitat in autumn 1999 (i.e. at the peak small mammal abundance) and spring 2000 (when small mammal abundance is expected to be low). Twenty Longworth traps formed a transect line along a suitable stretch of road verge and were set for two days, being checked on two mornings and one afternoon (very handy for the weekend trappers amongst us!).

At each trap checking session a record was made of the species trapped, their location on the transect, their sex, breeding condition and weight, and the weather conditions at the time. A botanical survey of the verge was also carried out, recording diversity and abundance of plant species, overall plant cover and other site features (e.g.: ditches, hedges, adjacent habitat types and bank width).

Survey sites had to be in rural areas, with a rough grassland verge of preferably at least 3m in width, but not less than 2m, and not along major trunk roads, in order to avoid volunteers becoming rather too closely involved with The Mammal Society's

Road Casualty Survey. They also had to be adjacent to arable, pasture or woodland habitats.

Twenty traps were placed in pairs at ten trapping stations along the verge, spaced 7m apart, and baited with wheat and blowfly larvae. This made each transect line about 63m in length. All volunteers followed the same protocol so that the results obtained were comparable.

Results

The verge I selected as my survey site runs along Occupation Lane, near Tadcaster (I would like to point out that the fact that I live down this lane and have an aversion to getting up early on weekends had nothing whatsoever to do with my site selection). The verge is indeed rough grassland, about 3 m in width, with a thick hawthorn hedge and arable land adjacent. The overall plant cover was dense in autumn and moderate in spring, when the surveys were undertaken.

29-31 October 1999:

Saturday morning – weather mild, wet and breezy.
Common shrew (*Sorex araneus*) – 6.0g not sexed.

Saturday evening – weather mild, dry and gusty.
Wood mouse (*Apodemus sylvaticus*) – 25.5g female in perforate condition.

Sunday morning – weather mild, dry and gusty.
Wood mouse – 18.5g non breeding male.
Wood mouse – 10.0g non breeding male.
Harvest mouse (*Micromys minutus*) – 3.5g female in imperforate condition.
Wood mouse – 17.0g female in imperforate condition.

21-23 April 2000:

Weather mild, dry and breezy throughout.

Unfortunately no animals at all were captured during this trapping session, despite being able to hear shrews squeaking in the verge around the traps.

Conclusions

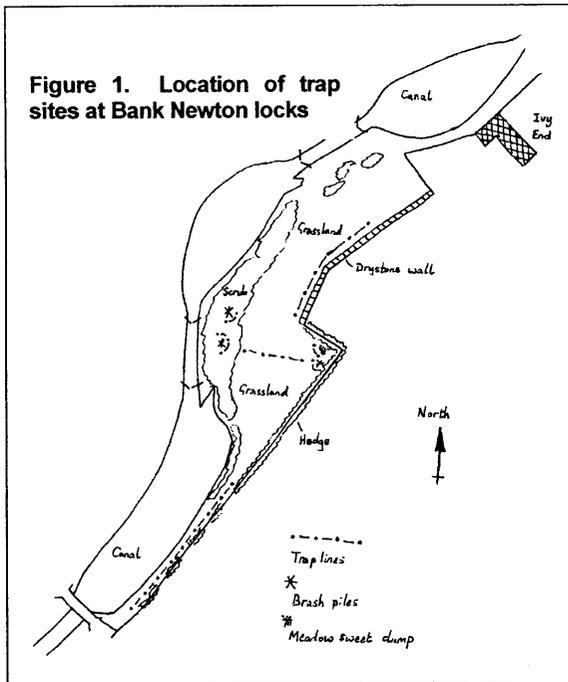
As expected, the catch on the second morning exceeded the first, as it takes animals a little while to find the traps and to pluck up the courage to go in. Wood mice seemed to favour this verge and in September were mostly trapped in or near bramble patches,

probably taking advantage of the abundant blackberries and the dense cover. The capture of a very healthy harvest mouse was a real bonus, as the only other one recorded from the site in recent years had just fallen prey to a cat. It should probably be noted that, although the stretch of verge surveyed was adjacent to arable land, there is a fairly large area of scrub and rough grassland nearby, which could be acting as a reservoir for small mammals along the adjoining hedgerows. Records from this site previously include wood mouse, harvest mouse, bank vole (*Clethrionomys glareolus*), field vole (*Microtus agrestis*), common shrew, pygmy shrew (*Sorex minutus*) and water shrew (*Neomys fodiens*), so this verge could potentially be much richer in species than the verge survey indicated.

Small Mammal Trap, Bank Newton Locks, Gargrave

Robert Masheder

Lock keeper Steve Rawson has the enviable job of looking after one of the most picturesque sections of the Leeds Liverpool Canal just west of Skipton. His job brings him into close contact with wildlife, both on the water and in the surrounding corridor. He noticed a small area of unmanaged land of about half an acre close to the flight of five locks at Bank Newton (SD 913 533) which was owned by British Waterways and decided that it would make an excellent nature area. Funding for the work came through the British Trust for Conservation Volunteers "Natural Pioneers Millennium Awards Scheme" which was set up to help volunteers develop their own skills and projects. Ann Hanson and Robert Masheder



from the Yorkshire Mammal Group went to this far corner of North Yorkshire to help Steve assess the small mammal interest of the site.

The habitat was largely unmanaged grassland dominated by coarse grasses, sloping steeply down to a belt of scrub and then the canal. The field boundary at the top of the slope was in part drystone wall, the remainder being over mature hedgerow. The site tapered and dropped down to canal level at the south end, becoming wetter, more shaded and more species rich.

Forty Longworth traps were set out and pre-bated per the locations shown in Figure 1. The traps were emptied on Saturday 22 July 2000, a warm, sunny, breezy day following a warm, dry night. Results are detailed in Table 1.

Thanks to Steve and Amanda Rawson for their hospitality.

Table 1. Results from Longworth trapping at Bank Newton locks.

Site	Scientific Name	Sex	Age	Wt. (g)
Drystone wall	<i>Sorex araneus</i>	?	A	7.5
Drystone wall	<i>Sorex araneus</i>	F	A	6.5
Drystone wall	<i>Sorex araneus</i>	M	A	11.5
Drystone wall	<i>Sorex araneus</i>	?	A	7.5
Drystone wall	<i>Sorex araneus</i>	?	A	7.0
Drystone wall	<i>Clethrionomys glareolus</i>	?	J	Escaped
Drystone wall	<i>Apodemus sylvaticus</i>	F	A	31.5
Meadow sweet clump	<i>Sorex araneus</i>	?	A	7.0
Upper brash pile	<i>Sorex minutus</i>	?	A	4.0
Upper brash pile	<i>Clethrionomys glareolus</i>	F	A	21.5
Grassy bank	<i>Sorex araneus</i>	?	A	6.5
Grassy bank	<i>Sorex araneus</i>	?	A	7.5
Grassy bank	<i>Sorex araneus</i>	?	A	7.5
Grassy bank	<i>Sorex araneus</i>	?	?	Dead
Scrub by canal	<i>Clethrionomys glareolus</i>	F	J	12.5
Scrub by canal	<i>Clethrionomys glareolus</i>	M	J	13.5
Hedge near canal	<i>Clethrionomys glareolus</i>	F	A	15.5
Hedge near canal	<i>Sorex araneus</i>	M	A	10.5
Hedge near canal	<i>Sorex araneus</i>	?	?	Dead
Hedge near canal	<i>Clethrionomys glareolus</i>	F	A	21.5

Mammals at Eastrington Ponds

Jon Traill

Earlier this year, the YMG very kindly lent me a number of Longworth small mammal traps. The following is a short summary of the trap carried out in late March and early April, 2000.

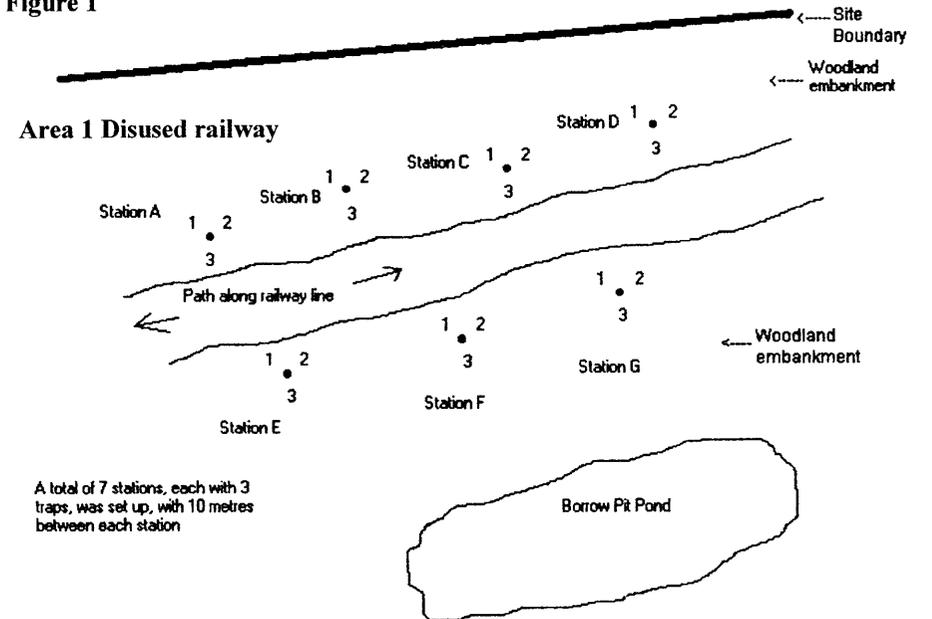
The site chosen for the trap, Eastrington Ponds, is owned and managed by the East Riding of Yorkshire Council. This little-known site lies some 5 miles east of Howden and 20 miles west of Hull. The site itself is about 24 acres in size and consists of a number of different habitats. Two main areas can be recognised, the first an old brickworks, now a pond used for fishing, and the second a section of the disused Hull to Barnsley railway line. A number of smaller ponds, known as borrow pits (the soil was borrowed to make the embankments), were created along the length of the railway and these are now rich in wildlife with a variety of fauna and flora. The railway line itself has along its length mixed species of woodland trees, including ash (*Fraxinus excelsior*), oak (*Quercus robur*), hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*). The main brickworks pond, although used for fishing, is also managed with wildlife in mind. The northern edge of the pond has an area of rough wet grassland with many wild flower species associated with it.

The mammal trap was carried out over four weeks and consisted of two, two-week traps in two different parts of the site. The first was a section of the disused railway, and the second an area of rough grassland (Figure 1). It was hoped that this approach would obtain a more representative picture of the small mammal populations using the site.

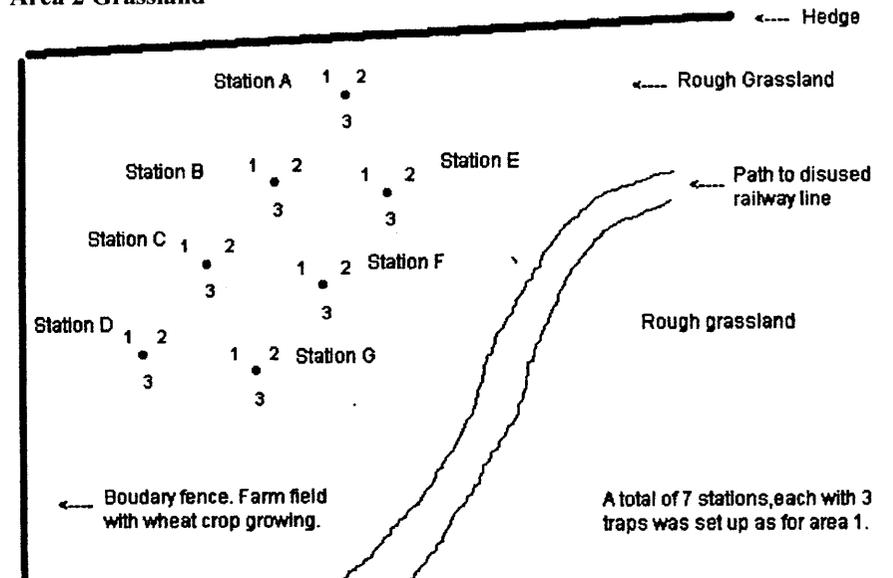
Before any trap could be carried out, both areas were clearly defined on the ground using canes to mark the points where traps were to be placed. Three traps were put at each station, and each station was 10 m away from the next. A total of seven stations were set up at each of the two areas, railway and grassland, with a total of 21 traps set.

Every trap was thoroughly checked to ensure it was in good working order and then pre-baited with the door locked open. This was done for three days to allow time for any small mammals to get used to them and hopefully use them as feeding stations. At this point, none of the traps contained any food for shrews. Shrews are insectivores and need live food, usually provided in the form of castors (blowfly pupae) in mammal traps. They are fully protected under the Wildlife and Countryside

Figure 1



Area 2 Grassland



Act 1981 and a licence is required to trap them. Shrews do unfortunately, find their way into Longworth traps and if there isn't enough food, they can die overnight. By leaving castors out of the traps at the pre-bait stage, no encouragement is given to shrews to enter the traps.

Once the three day pre-bait had elapsed, the trapping could begin. The first site, the railway, had all its traps re-checked and dry bedding (hay and wood shavings) added. Food was then placed in the entrances, both for mice and voles and a quantity of live food (castors) was put in as well to ensure that any shrews venturing into the traps could survive the night. All traps were then set with the door unlocked, held only on the spring mechanism. Any small mammal entering the box would activate the spring and the door would close behind it, trapping it in the nest chamber.

Traps were set late afternoon and checked the following morning, and again at intervals throughout the day. Any traps with the door closed were collected and their location noted. Any mammals caught were identified and sexed and released back into the same area. The trap was re-set with new food and bedding if necessary. If any shrews were caught these were not handled but immediately released; identification of species was confirmed as they were released.

The results were recorded for the 14 day period for both areas and are shown in Tables 1 and 2. As can be seen from the results all the expected species were recorded, namely wood mouse (*Apodemus sylvaticus*), bank vole (*Clethrionomys glareolus*) and field vole (*Microtus agrestis*). Both pygmy (*Sorex minutus*) and common (*Sorex araneus*) shrews were also caught in both areas. The one real surprise was to catch harvest mice (*Micromys minutus*) on three consecutive days, possibly the same individual on each occasion. Harvest mice are not commonly caught in Longworth traps as they spend most of their time in the tops of tall grasses, reeds and rushes, rarely venturing to the ground. However, during the winter months they spend time in underground burrows and runs, often remaining dormant for several days in severe weather. In early spring they begin to look for new nest areas. This is often carried out on the ground as the grass stems are still short, thus preventing their aerial activities. The previous autumn eight harvest mouse nests were found in the grassland area and the trap confirmed that the site still has some residents for this year. A second more thorough nest count is to be carried out this autumn to try to build up a better picture for the site.

Of the other species caught there were no real surprises, but it was nice to confirm that field voles were still present as this species has undergone a decline in numbers in many areas over recent years. If a future trap was planned, it would probably be beneficial to see if the same individuals were being caught and whether they travel far. Looking at the results obtained from the present trap, it would seem likely that the same individuals were

Table 1 Area 1 - Disused railway line

trap no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A1					WM(f)									
A2		WM(f)	WM(f)	WM(f)										
A3														
B1	BV(m)													
B2				BV(m)	BV(m)				CS			WM(f)		
B3										WM(f)				
C1														
C2							PS							
C3														
D1														
D2								CS						
D3														
E1					WM(m)	WM(m)	WM(m)							
E2														
E3														
F1	BV(f)	BV(f)												
F2										BV(f)		BV(f)	BV(f)	BV(f)
F3														
G1														
G2														
G3														

KEY WM = Wood mouse; BV = Bank vole; CS = Common shrew; PS = Pigmy shrew
m = male; f = female

Table 2 Area 2 - Grassland

trap no.	Days													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A1	WM(m)		WM(m)	WM(m)	WM(m)					WM(m)				
A2		WM(m)		BV(?)	BV(?)						BV(?)			
A3												WM(f)		
B1				WM(f)				WM(m)						
B2	WM(m)	WM(m)												
B3		BV(?)			WM(m)	WM(m)								
C1									BV(?)	BV(?)				BV(f)
C2	BV(f)			BV(f)										
C3					BV(f)								BV(f)	
D1														
D2				HM										
D3									FV(f)	FV(f)				FV(f)
E1						FV(f)								
E2														
E3		CS												
F1		FV												
F2														
F3														
G1	WM(f)	WM(f)	WM(f)											
G2			HM				BV(m)							
G3		HM					BV(m)							

KEY WM = Wood mouse; BV = Bank vole; CS = Common shrew; PS = Pigmy shrew; HM = Harvest mouse
 FV = Field vole; m = male; F = female; ? = sex unknown

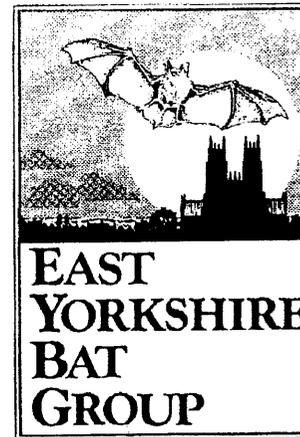
being caught at certain points (e.g. Disused railway, Station A, trap 2, days 2, 3 and 4) and a capture, mark, recapture test could definitely confirm this.

Although not highly scientific, the results obtained have been both interesting and rewarding and the trapping session enjoyable to carry out. Further smaller-scale traps have been carried out and it is hoped that a second, larger scale trap can be organised with capture mark, recapture built into the survey. Overall the exercise was definitely worthwhile, if for no other reason than to show where certain small mammal species are to be found on the site. It has also been a useful education tool, as volunteer helpers have gained a great deal whilst joining in with the survey.

Thank you once again to the Yorkshire Mammal Group for the loan of the traps; without them the survey could not have taken place.

East Yorkshire Bat Group – A Review of the First Ten Years

Tony Lane
 Secretary, East Yorkshire Bat Group



On the 17th March 1990 a public meeting entitled 'Meet the bats' was led by Ron Deaton and members of the Harrogate Bat Group with some captive bats. Another public meeting followed on 31st March entitled 'Bat groups in action' with James Robertson (Nature Conservancy Council), author of *The Complete Bat*, as main speaker. Geoff and Roma Oxford were in attendance with bats on display. About a hundred people attended these meetings and it was clear that there was sufficient support to go ahead with establishing a local bat group.

The inaugural meeting of the East Yorkshire Bat Group was held on 21st April 1990 at Beverley Minster Parish Rooms and was attended by twelve founder members. Several of the founders continue to play a vital role in the Group's activities. My wife, Sue (Minutes Secretary), Philip Moodie (Treasurer), Pam Lunn (a bat carer), Kevin Freer and Jennie Moodie are staunch supporters at meetings.

One of the first decisions made by the embryonic Group was to adopt the attractive letterhead design by commercial artist, Barry Walsh, of a bat in flight against Beverley Minster silhouetted by the moon. A smaller venue for indoor meetings was needed and the cosy meeting room at the Tiger Inn, Lairgate, Beverley has proved a successful solution.

The first field meeting was held at Lockington church on 28th April 1990, where there was a pipistrelle roost, and attracted nineteen attendees who were introduced to the delights of bat droppings and urine splashes on woodwork and brasses! The importance of monitoring local bat colonies by emergence counts was emphasised as bats started to emerge and the use of an ultrasound detector was demonstrated. The next field meeting was held at the Humber Bridge Country Park and led to a remarkable find. During the evening noctule bats were seen and heard feeding over the park and it was pointed out that this bat species generally used tree hole roost sites. Jonathan Carter, a resident of North Ferriby, was attending his first bat group meeting and enquired if bats make noises in their roost because a dead tree he passed in the village at dusk was emitting unfamiliar bird-like chittering. The next evening Jonathan counted over one hundred noctule emerging! Subsequent monitoring of the roost established the site to be one of the largest nursery roosts in Britain with in excess of two hundred adult female bats being recorded.

By the end of 1990 membership had grown to thirty-four mailing addresses and the demand for a batworker trainer became a pressing need, not only from the membership wishing to become licensed but also to fulfil requests for bat roost visits from the Nature Conservancy Council (later English Nature, EN). Having qualified as a batworker trainer I found myself with the daunting task of satisfying the needs of sixteen trainees! Since that time I have dealt with the training needs of thirty-three batworkers from the Lincolnshire and Yorkshire regions.

Bev Hylton (current Chairperson) was one of the newer members joining during 1991. Bev's job with the local council as a Country Park Ranger proved a valuable asset with easy access to planned events through the aegis of the County Council so that bat walks and talks soon became a regular feature of the Group's public relations work.

Pam Lunn was the first bat carer to experience the trials and tribulations of caring for grounded bats. Lesley Helliwell provided invaluable encouragement and support during the early years and continues to be a fount of information and advice.

The value of monitoring local bat colonies for national data base schemes such as that run by the Institute of Terrestrial Ecology (ITE), subsequently continued independently by The Robert Stebbings Consultancy, was realised at an early stage

and volunteers from the Group and roost owners were recruited for the scheme. The more recent National Bat Monitoring Programme co-ordinated by the Bat Conservation Trust (BCT) has also been fully supported.

The National Habitats Survey organised by Bristol University, evaluated the importance of all the various habitat types for feeding bats. Several randomly selected kilometre squares were surveyed by Group members and it was comforting to discover that even superficially unpromising arable farmland had bats present.

When the Group requested historical records from the ITE there were only 40 for East Yorkshire (VC61). Thanks to a busy field programme looking for potential feeding and roost sites, surveys on the behalf of EN and the care of grounded bats the Group generates about one hundred records annually. A series of Annual Reports chronicle Group activities.

To date nine bat species have been recorded in East Yorkshire and their distribution plotted at the 10 km level for the BCT millennium project. There are just two records for the rare Nathusius' pipistrelle (*Pipistrellus nathusii*) - Easington and Hull Docks). The new-to-science soprano pipistrelle (*P. pygmaeus*) has been widely recorded from woodland bat boxes and more rural nursery roost sites in dwellings. Brandt's bat (*Myotis brandtii*) has only been recorded from either bat boxes or from hibernacula. All the other locally found species have recorded nursery sites (*P. pipistrellus*, *Plecotus auritus*, *M. daubentonii*, *M. mystacinus*, *M. nattererii* and *Nyctalus noctula*).

Conservation work includes the erection of bat boxes at various woodland sites where natural roosting opportunities are limited. The group has over three hundred boxes across eight sites, which are checked at least twice yearly. Only Nathusius's pipistrelle and Daubenton's bat have not been recorded. A cluster of sixteen mixed-sex noctule was found hibernating in a box at Bishop Burton College grounds. Experimental boxes to suit bat's differing requirements have been constructed including a novel combined bird-bat box which proved highly acceptable to birds and bats at different times of the year.

East Yorkshire lacks natural caves other than the sea caves at Flamborough Head, even so important underground sites for hibernating bats have been found, including disused railway tunnels. Conservation work, including the fitting of bat grilles at Burdale Tunnel, has been supported by grant awards from EN, BCT, the Peoples Trust for Endangered Species, North Yorkshire County Council and site owners, Birdsall Estates. The importance of Drewton Tunnel as an hibernaculum has been the subject of a publication (Lane & Deaton, 1990).

Conservation work has been carried out on the noctule nursery tree roost at North Ferriby. The dead beech (*Fagus sylvatica*) has suffered from natural decay and

savage attack from squirrels. Tree surgery, the fitting of new copper plate to the apex and a skirt to deter squirrels combine to extend bat usage.

Group members combined with North Yorkshire bat Group to monitor Daubenton's use of Kexby Bridge on the Derwent. The study was subsequently published (Oxford *et al.*, 1996). An unexpected finding was a roost site under a bridge arch which necessitated an approach by boat. Once anchored under the arch a relaxed, gentle wafting in the current made a pleasant alternative to the usual craning over the bridge parapet looking down at a buttress crevice in ever increasing gloom!

An unexpected delight at the completion of an after-dark transect of Wheldrake Forest, looking and listening for bats, was the finding of glow-worms (*Lampyrus noctiluca*) - the first record for this site and creatures not seen since boyhood days in my native county of Kent.

From time to time bat ectoparasites have been found including fleas (identified by Bob George), ticks, nycterid flies and bat bugs (identified by either Colin Howes or Tony Hutson). During Group activities a lot of invertebrates are found other than the expected bat ectoparasites. Geoff Oxford has encouraged the collection of spiders by receiving and identifying specimens. As a result of this activity many valuable records have ensued including several new 10 km records.

After celebrating its tenth AGM the Group, with membership at thirty-seven mailing addresses, looks forward to establishing bat conservation as an integral part of Local Biodiversity Action Plans. With time expansion detectors and computer-assisted analysis of bat sonograms now available to bat groups, East Yorkshire may yet record another of Britain's bat species.

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Hai-Bar Reserve

Michael Thompson

In southern Israel, not far off the main highway going south to Eilat, is a nature reserve - but a nature reserve with a difference. Administered jointly by the Holy Land Conservation Fund and the Israeli Nature Reserves Authority (NRA), Hai-Bar is devoted to an extensive captive-release programme, especially of mammals. The mammals in question are those that were found in Israel and its surrounding areas during Biblical times, hence its full name is the Hai-Bar Yotvata Biblical Wildlife Reserve. However, it seems that twelve of the Biblical mammals have disappeared

altogether from the area and, except for the extinct wild Syrian ass, attempts are being made to re-introduce some of them. As well as mammals, the Reserve handles birds of prey and reptiles, some of which are very rare. Opened in 1968, the Reserve was deliberately established near the Yotvata oasis because of its savannah-like landscape and abundance of two species of acacia trees, with plenty of natural grazing. The whole area, some 12 km², is perimeter fenced and has visitor facilities available within the compound. In 1977, Hai-Bar was opened to the general public. I visited the Reserve, with others, in April of this year. In this short article, I intend writing about only a few of the mammals we saw.



White or Arabian oryx, *Oryx leucoryx*

Photograph: Michael Thompson

On entering the Reserve, the visitor is immediately aware of variable sized caged-enclosures, depending on the size of the animal, whether it be mammal or bird. The smaller enclosures contain various rodent species, whereas the largest contained a pair of leopard, *Panthera pardus*. Leopards are still to be seen in the wild in Israel, especially in the desert areas of the Negev and, surprisingly, in the hills of Galilee. What pleased the party I was travelling with was that the enclosures were large enough for the mammal that was being caged, and all seemed well cared for. Other

caged carnivores observed were the wolf *Canis lupus*, the fox *Vulpes vulpes*, the sand fox *Vulpes rupelli*, Blandford's fox *Vulpes cana*, the fennec *Vulpes zerda* the caracal *Felis caracal*, the wildcat *Felix lybica*, the sand cat *Felis margarita* and the striped hyaena *Hyaena hyaena*. Of these mammals, I had seen in the wild evidence of a fox in Wadi Rum, a sand fox in southern Jordan in 1998, and the striped hyaena on Mount Carmel in my boyhood days. It would seem, according to the Israelis, that only in Israel are these carnivores surviving, their small, viable populations are carefully protected and augmented by captive-release programmes.

At Hai-Bar they describe it as the nightlife desert showroom, but it is not dissimilar to the nocturnal houses that you may find at most of Europe's best zoos, such as



Ibex, *Capra ibex nubiana*

Photograph: Michael Thompson

Cologne. Of interest, I found they had small colony of fruit bats *Rousettus aegyptiacus*, a bat which was nearly exterminated by the citrus fruit industry, but now, through careful protection, is recovering in numbers. There is a cave in Galilee I have visited on several occasions, which has a large colony of fruit bats and is now being protected by the NRA. Another nocturnal mammal, curled up in a rocky crevice, was an Asian garden dormouse *Eliomys malanurus*; its habitat is both in gardens and rocky terrain.

To see the large ungulates, we had to be driven out into the large open space, surrounded by the perimeter fence. It was, as far as I was concerned, like going on a safari. Almost immediately, we were in a small herd of White or Arabian oryx, *Oryx leucoryx*. The last time I saw these

beautiful antelopes, with their unicorn-like horns and in similar surroundings, was at the Shaumari Wildlife Reserve in eastern Jordan in 1998 (Thompson, 1998). On this occasion I was able to get much closer and photograph them. The Israeli NRA had great difficulty in establishing the herd, because of resistance from their Arab neighbours. Eventually they did so with, I suspect, the final intention of releasing them into the Negev in south Israel, where they were found in Biblical times (see Numbers 23:22).

One successful captive-release programme has involved the Asiatic wild ass or onager, *Equus hemionus-onager*. Several pairs have been released into the Ramon Crater reserve in the Negev during the last few years to run wild. Unlike the Somali wild ass, *Equus africanus somalicus*, the ancestor of the domestic donkey, the onager

is not tameable. I saw a small number of the Somali wild ass, with their light grey pelages and alternative black and white striped legs, roaming with a few onagers, as they did together in Biblical times (Job 39:5).

Two conservation success stories in Israel have been the recovery of the ibex *Capra ibex nubiana* and two species gazelle, the Dorcas or Negev gazelle *Gazella gazella* and the mountain or Arava gazelle *Gazella gazella*. Hai-Bar has played its part in that recovery programme, and all three species are present on the Reserve. I was lucky enough to see them all in the wild when travelling around Israel on this recent trip. In the southern, arid parts of the country ibex can often be seen. They are common in the vicinity of En Gedi, overlooking the Dead Sea. At En Gedi, I came face to face with a young female ibex and was able to photograph her; I also saw small numbers elsewhere in the Negev. Dorcas gazelles are now common in the southern rift valley and the Negev in Israel, and I saw one or two on a couple of occasions. High up in the Galilean hills three mountain gazelles were trying to cross a much-used road. I had a glimpse of them as we passed by in a mini-bus. According to surveys carried out in 1986, it was estimated that there are now some 4000 mountain gazelles in Galilee, the Golan and the Jordan valley. For the Biblical Jews, the gazelle was a symbol of love and beauty, "My beloved is like a gazelle" (Song of Songs 2:9).

Reference

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Filey Dams Nature Reserve - The Dennis Aspinall Memorial Trap 2000

Ann Hanson

Background

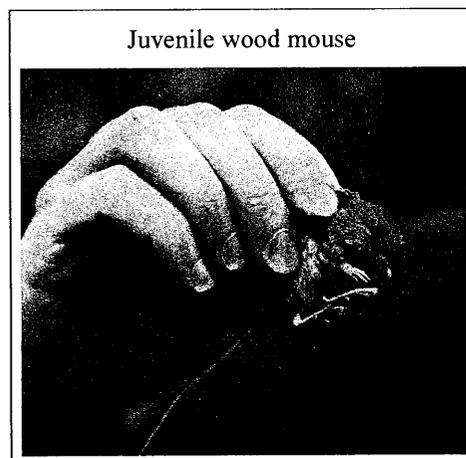
Five years have elapsed since the Mammal Group last carried out a small mammal trap at Filey Dams, a Yorkshire Wildlife Trust Reserve on the outskirts of Filey. The reserve consists of several large ponds, surrounded by reed beds and wet grassland, and generally has a thriving population of water shrews, as well as several other small mammal species. The last trapping session at the site was during a severe drought, when most of the ponds had dried up, and only one juvenile water shrew was captured, together with numerous

other small mammals. This year there was more than enough rain over the summer and the ponds were brimming by September.

Approximately 70 Longworth traps were set in four different locations around the reserve. They were put in place on Wednesday 6 September, prebaited for two nights and set to catch on the Friday night. The traps were checked on Saturday 9 and Sunday 10 September from about 10.00am onwards.

Locations trapped

- Green Pond – traps were placed along a mature hedge bottom, in an area of densely planted willow and alongside a pond.
- East Hedge – traps were placed along a hedge consisting mainly of alder and hawthorn bordering an area of rough grass.
- Sluice – traps were placed in dense bramble patches next to a recently dug out sluice.
- Dams Goit – traps were placed in an area of willow carr and hawthorn scrub, bordering a large pond. Due to a poor catch in this area on Saturday morning, several traps were moved into an adjoining reedbed for Sunday.



Results and Conclusions

Results are shown for the two days in Tables 1 and 2, respectively. Six different small mammal species were captured during one weekends trapping, including wood mouse (*Apodemus sylvaticus*), bank vole (*Clethrionomys glareolus*), field vole (*Microtus agrestis*), common shrew (*Sorex araneus*), pygmy shrew (*Sorex minutus*) and water shrew (*Neomys fodiens*). By far the most numerous were wood mice, mostly juveniles, indicating a very successful breeding season. Of most interest were the water shrews, which were also juvenile or subadult, and found in two different locations on the reserve – both very wet areas.

Many thanks are due to Jack Whitehead for all his hard work and patience – the success of this trap was mostly down to his efforts. Also, thanks to everyone else who came along and helped with so much enthusiasm, despite the rain, mud and enormous spiders!

Table 1

9/9/00 – Weather warm, overcast and dry. Previous night warm and dry.

Location	Species	Sex	Age	Weight (g)	Notes
Green Pond	Wood mouse	M	J	15.5	
	Wood mouse	M	J	17.5	
	Wood mouse	M	J	15.0	
	Wood mouse	M	J	13.5	
	Wood mouse	M	J	18.0	
	Common shrew	?	A	8.0	
	Wood mouse	M	J	16.5	
	Bank vole	F	J	13.5	
	Common shrew	?	A	8.5	
	Common shrew	?	A	8.0	
	Wood mouse	M	J	15.0	
	Wood mouse	M	J	13.5	
	Wood mouse	M	J	17.5	
East Hedge	Wood mouse	M	J	13.5	
	Wood mouse	F	A	26.0	
	Wood mouse	M	A	24.0	
	Wood mouse	M	J	13.5	
	Field vole	F	A	19.5	
	Wood mouse	F	J	12.0	
	Wood mouse	F	J	12.0	
	Wood mouse	M	J	13.0	
	Common shrew	?	A	8.0	White ear tufts
Sluice	Wood mouse	F	J	12.0	
	Wood mouse	F	J	14.0	
	Wood mouse	F	A	26.0	
	Water shrew	?	J	10.5	Dead in trap
	Common shrew	?	A	8.0	
Dams Goit	Wood mouse	M	A	25.0	
	Wood mouse	M	A	18.5	
	Wood mouse	?	?	23.5	Escaped
	Wood mouse	F	A	21.0	

Table 2.

10/9/00 – Weather wet, warm and windy. Previous night wet and warm.

Location	Species	Sex	Age	Weight (g)	Notes
Green Pond	Water shrew	?	J	12.0	
	Wood mouse	F	A	35.0	
	Wood mouse	M	J	19.0	
	Water shrew	?	A?	13.5	
	Wood mouse	F	J	17.5	
	Wood mouse	M	J	17.5	
	Wood mouse	M	J	18.0	
	Wood mouse	M	J	16.0	
	Bank vole	M	A	20.0	
	Common shrew	?	A	8.0	
	Wood mouse	M	J	15.5	
	Wood mouse	M	J	20.5	
	Wood mouse	M	J	14.5	
	Pygmy shrew	?	A	4.5	
	East Hedge	Wood mouse	F	A	26.5
Wood mouse		F	J	14.5	
Wood mouse		M	J	14.0	
Common shrew		?	A	9.5	
Wood mouse		M	J	14.0	
Sluice	Common shrew	?	A	8.0	
	Wood mouse	F	J	14.0	
Dams Goit	Wood mouse	F	J	9.5	
	Wood mouse	F	A	26.0	
	Wood mouse	F	J	11.5	
	Water shrew	?	J	13.0	
	Wood mouse	?	J	?	Escaped
	Wood mouse	M	A	18.0	
	Wood mouse	F	A	25.0	
Reedbed	Wood mouse	M	J	16.5	
	Wood mouse	M	J	14.5	
	Wood mouse	M	J	17.0	

Is it a Yorkshire Record ?

Michael Thompson

Over a decade ago, Charles Critchley and the Wildlife Rangers of Forestry Enterprise erected around 200 bat roosting boxes in Dalby and Cropton Forest as part of a conservation exercise. Once a month, from April through to October, the boxes are inspected – an endeavour that takes all day to complete as the boxes are scattered over a wide area. As part of this scheme the bats are ringed and during the surveys ring numbers are recorded. Numbers on new rings and those on re-captured bats are fed into a computer programme managed by Professor John Altringham of Leeds University. Every year, like other bat enthusiasts, I join Charles and his team on one of these occasions and go around the boxes. This year I went on 22nd June.

On this last visit we found 12 bats in the boxes, made up of four species, namely the pipistrelle 45 *Pipistrellus pipistrellus* (number of individuals, 4), pipistrelle 55 *Pipistrellus pygmaeus* (1), the brown long-eared bat *Plecotus auritus* (5) and the whiskered bat *Myotis mystacinus* (2). One south-west facing box at Dalby Beck contained five ringed, brown-long-eared bats, three parous females (one of which was pregnant) and two males. The pregnant female had vaginal bleeding, suggesting imminent delivery. All these brown long-eared bats had been ringed in 1999.

Another box, situated at Allerston Moor in the middle of Dalby Forest, contained a ringed pipistrelle 45 - ring number R3574. This bat was originally ringed on 13 September 1990 and re-captured, at the same site, in August 1994 and October 1996. Two other males re-captured on this occasion were six years old. Charles informed me, from his records, of a pipistrelle 45 bat that he ringed (LZ7907) at one site and that he had re-captured the same bat at the same box, or the same site, thirteen times in the last seven years. Other than the three brown long-eared females, all the rest found in boxes on that day were males.

Analysis of these ring findings demonstrate a number of interesting features of bat biology. First, the cluster of brown long-eared found were either together to conserve heat, and thus energy, during a period of cool, damp weather, or as a remnant of a small nursery colony. Second, pipistrelle R3574 was at least 11 years old, assuming that it was one year or more at the time of being ringed. Third, the re-capture data amongst the males shows evidence of box philopatry.

By the time I ended my pipistrelle bat study around York in 1993, I had re-captured 11 eleven year old females, but only two males, four and two old years respectively. Of the eleven year old females, four were pregnant at the time of their re-capture (unpublished). The long-term study (1977-1984) showed an annual survival rate for adult females to be 0.64 per year (Thompson 1990). Pipistrelle male bat longevity according to Altringham (pers. comm) is about five years, although the two species had not been separated. Avery (1991) states that there is little information for males, but that some live at least five years. There are records of pipistrelles surviving in the wild in the Czech Republic for 16 years, but no mention is made of the sex of these bats. Stebbings (pers. comm) has now found ringed male pipistrelles surviving in the wild in Thetford Chase for 16 years. I suspect that R3574 is a male longevity record for *Pipistrellus pipistrellus* in Yorkshire; it certainly is in Dalby Forest.

Some of the first evidence that male pipistrelles were using bat boxes as mating sites came from Swedish studies (Lundberg 1989). In these studies it was found that male pipistrelles monopolise roost bat boxes from June until October, the females having moved elsewhere to form nursery colonies. The males defend their boxes, which are known as "territorial" boxes. The females join these territorial, polygynous males in their boxes at the end of July to establish transient mating harems. The studies also showed that the mean survival rate for females exceeded that for males. The York study (Thompson 1992) showed that there was a high level of nursery roost philopatry (translated – love of home) amongst female pipistrelles. These ringing recoveries amongst male bats (all species) in Dalby Forest would seem to indicate a high level of male "territorial box" philopatry.

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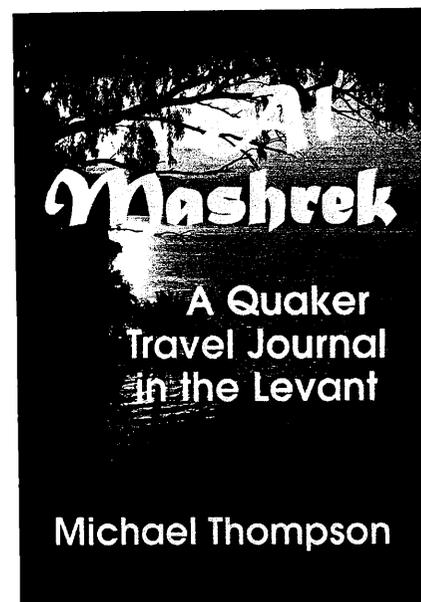
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A brown long-eared bat



Book Review

Lorna Woodroffe



Al Mashrek. Michael Thompson. William Sessions Ltd, York. 2000. Pp. 212. Price £9.00, paperback. ISBN 1 85072 239 0. *

Michael Thompson's book is a journal in the true sense of the word, being a log of places visited and events encountered and at times endured.

The love of the land of his birth together with Quaker influences, give an interesting insight into his early life. To me the first chapters relating to this period provide the core of the account, giving a fascinating picture of the Near East where there has been a Quaker presence for almost 150 years.

Michael's love of wildlife, stimulated by observations made during the travelling which took place in his childhood, was nurtured at Sidcot (Quaker) School, with subsequent journeys adding to his knowledge. It wasn't until the 1990s that he helped to organise tours, which included the wildlife, and visited such diverse sites as nature reserves, bat caves, an international bird ringing centre and marine observatories. The book includes an interesting checklist of the flora and fauna of the countries visited.

I learnt a great deal about countries I have never visited, especially regarding the range of habitats, the richness of the wildlife and the individuality of the people. Some of the later chapters would have benefited from tighter editing but overall I recommend this book to anyone interested in the wildlife, history or people of those countries we perhaps know mainly from their warring factions.

* available from the author at 'Burwood', Railway Street, Slingsby, N. Yorks. YO6 7AN – price includes P & P.

Yorkshire Mammal Group Programme, 2001

- January 4th. *Hippos and Bats of the Black Volta*. Daniel Bennett (University of Aberdeen)
- February 1st. *Grey Seal Monitoring – an Approach using G.I.S.* Sean Twiss (University of Durham)
- March 1st. *Farming and Conservation and the Work of the Farming and Wildlife Advisory Group (FWAG)*. Phil Lyth (FWAG, Northallerton)
- April 5th. *The Tale of the Spanish Rabbit*. Deborah Petterson (School of Biology, University of Leeds)
- May 3rd. *Studies on a Reinforced Otter Population in North Yorkshire*. Cara Morgan (Department of Biology, University of York)
- June 7th. *Evening Field Trip*. (details to follow). During the summer months there will be other field study events, including those by the North Yorkshire Bat Group.
- October 4th. *Gorilla Mountains*. Gordon Woodroffe (YMG)
- November 1st. *Voles R Us (watervoles)*. Heather Kennedy (Environment Agency, Leeds)
- December 6th. *The Making of the Life of Mammals (Sir David Attenborough's next Landmark Series)*. Dan Tapster (BBC Natural History Unit).

Indoor meetings are held in the Common Room of the Department of Biology, University of York and start at 7.30pm. All are welcome.

For further details contact: Denise Ray on 01759 371167

Yorkshire Mammal Group Committee Members, 2001

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