

Derbyshire Mammal Group The Mammal Group The Mammal Group

Spring 2005 (Issue 5)

Website <u>www.derbyshiremammalgroup.com</u>
SmartGroups <u>www.smartgroups.com/groups/derbyshiremammals</u>

Chair

Dave Mallon 01457 853 560 d.mallon@zoo.co.uk

Secretary

Debbie Court 01773 821 804 (evenings) debs@debsndave.fsbusiness.co.uk

Treasurer

Steve Lonsdale 01332 737 935 lonsdales@ntlworld.com

Newsletter Editor

Steve Docker 01335 345 253 steve@busypeople.force9.co.uk

Website Administrator

Dave Alston 01773 821 804 (evenings) debs@debsndave.fsbusiness.co.uk

Group Recorder

Derek Whiteley derek@kangaroo92.freeserve.co.uk

Annual Membership £5

The Derbyshire Mammal Group is affiliated to The Mammal Society



In this issue:

Winter Mammal Monitoring
The Mole – Underground Adventurer
Water Vole
Harris Otters
Mammals of New Zealand
Water Shrew Survey
Water Shrews of Arbor Low

Winter Mammal Monitoring

by Dr Derek Yalden, President of the Mammal Society

Were you one of the stalwarts who got up early over the last 3 winters to survey a 1-km square for either sightings or signs of mammals? Have you wondered why you were getting a few more lie-ins this winter? Having tried the technique for 3 winters, it is now time to evaluate the results, to see if it might be worth while to continue this survey as a long-term monitoring programme. The draft report has just gone to DEFRA, who funded it, and it is too early to know how it will be viewed. I have just been editing that draft, and I can't very well reveal the results ahead of formal acceptance and publication. I can however say that the results look quite promising.

If enough surveyors are willing to count enough squares (about 300) from winter to winter, we should be able to gauge any serious changes in the occurrence of at least the most important species; rabbit (sightings and warrens), mole (hills), field voles (feeding signs), grey squirrels (sightings), fox (droppings), badgers (latrines, setts) - look amenable to survey. Since these include the most important food species, rabbit and field vole, for a lot of other species, this is promising. Sightings of deer and hares might also be sufficiently frequent to give some idea of how they are doing. Watch this space. On the other hand, perhaps the space you should watch is your local 1-km square. Is it one you might follow in future years anyway, to see how your records change from year to year?

Mammal Records

Derek Whiteley, DMG Recorder

The DMG database has just passed the 6000 records mark. Just for interest our 'top ten' mammals based on number of records is as follows. Don't read too much into this – I have been making a special effort to enter brown hare records, but the other species represent random records sent in by members.

Top Ten:

Brown Hare	1182
Grey Squirrel	791
Hedgehog	530
Rabbit	400
Mole	399
Fox	370
Badger	348
Mountain Hare	294
Pipistrelle sens lat	252
Water Vole	250

Others include:

Harvest Mouse	150
Weasel	149
Stoat	100
House Mouse	31

Current 'top ten' recorders (number of records on database):

Steve and Liz Lonsdale	610
Brian Cuttrell	179
Derek Yalden (since 2003)	176
Philip Precey	166
Dave Mallon	149
Bob and Val Clinging	138
Dave Budworth	97
Ian Weatherley	85
Debbie Court	52
Shirley Cross	52

This is only a bit of fun. If you are not on the above list don't worry – your records are just as valuable. This is a good opportunity to thank you all for taking the trouble to send in your records and observations. Keep 'em coming. Any format will do – use of the recording form is not compulsory.

The Mole – Underground Adventurer

Debbie Court

The mole (*Talpa europaea*) is one of the most recorded mammals in the British Isles. No animal in Britain is so well known but so infrequently seen as the mole and no creature so fascinating yet so misunderstood. Everyone can recognise the familiar heaps of soil – molehills. They are despised by gardeners and green keepers but adored by generations of children as Mole in Kenneth Graham's "The Wind in the Willows" or as Moldy Warp in Alison Uttley's "Little Grey Rabbit". The following nursery rhyme is about the mole:

Diggory Diggory Delvert!

A little old man in black velvet;

He digs and he delves –

You can see for yourselves

The mounds dug by Diggory Delvert.

The mole is a cylindrical creature that could be likened to a mini furry torpedo as its whole body is streamlined for its underground existence. It does not appear to have a neck as the head joins seamlessly onto the body. It has reduced ears, and reduced sexual organs so it does not impede progress though the soil. The front feet are very powerful hands that scoop earth with tremendous force. They are one of the most powerful tools in the animal kingdom but they cannot bend to grip nor can the fingers move separately. The hindfeet are smaller and are used to kick earth backward during tunneling. The tail is held aloft and is used as a sensitive feeler when the animal runs backwards along its tunnels. The mole's snout is flat-ended and very sensitive to touch and detects prey and other moles by scent. Their long canine teeth are sharp to pierce the hard outer skeleton of their prey. Moles have very small eyes, only about 1mm in diameter, and poor eyesight being able to detect the difference between light and dark. The body is covered in short soft fur, which can be brushed in either direction enabling it to go forwards or backwards in the tunnels. Moleskin with its velvety feel was used in coat collars and waistcoats. It must have inspired the development of modern moleskin trousers which are standard army issue where the knap can be brushed both ways.

Scent is enormously important to moles as a means of communication since both sight and sound are almost useless underground. They leave scent marks on the walls of the tunnels, which are renewed every time the animal brushes by. These pungent signs act as a warning to others to stay away and appear to be very effective, as moles are almost never found occupying each other's tunnels. They live totally solitary lives, belligerently expelling intruders, except for a very brief period of a few hours each year when the female will tolerate the presence of a male. Moles breed when they are one year old. The female, once she has eventually found a male in the maze of tunnels, gives birth to 3 young between April and June.

Moles do not dig tunnels in search of food. They construct their tunnels as food traps and eat the earthworms and insect larvae that fall into them. Most of the food is covered in grit and time has to be spent cleaning it. They spend their time patrolling their tunnel smelling out the food. In good times such as when it's raining there may be a surplus of them falling into the tunnels – too many to eat at once. The opportunity is not wasted as the mole reacts by collecting the worms and biting their heads off! Presumably they know which end to bite! The worms remain alive but are unable to move off. They are stashed in a small chamber ready for future use. A mole needs to eat about 50 grams of worms per day, equivalent to over half their body weight.

Man must certainly be the greatest predator of moles. This persecution results from the damage caused to crops, lawns and golf courses by molehills. In addition, until 1950, there was a strong market in the sale of moleskins. At the peak of the moleskin trade America was importing over 4 million moleskins a year from England. It took over 100 good pelts to make a waistcoat. Nowadays gardeners mostly dislike them as they create havoc with their molehills on freshly manicured lawns. Vast amounts of money is spent and usually wasted trying to get rid of moles from the garden. Some of you may recall the comedy routine Jasper Carrot did on getting rid of moles from his garden with hilarious consequences. Various methods included using garlic and mothballs, fireworks, windmills and using a 12 bore shotgun and he still didn't succeed!

Moles can be found over most of Britain. It is however, absent from most islands including the Isle of Wight, Isle of Man, Anglesey and Ireland. In Derbyshire the distribution map below was kindly provided by Nick Moyes of the DBRC. He says that it is very incomplete and shows only 629 records and none of the DMG records forwarded by Derek Whiteley. Records show that they generally avoid

woodlands and are rare on peat moorlands but follow valleys, roads and shooting tracks up onto the moors e.g. Snake Pass, Woodhead, etc and reach altitudes over 550m. Clinging & Whiteley (1985)¹ report a sighting of a live mole at 2000 feet (609m) on Bleaklow. In addition you might like to look up the mole distribution map for the Sorby area 1970-1997 and 1980-2000 on the Sorby Natural History Society website.

www.shu.ac.uk/community/sorby

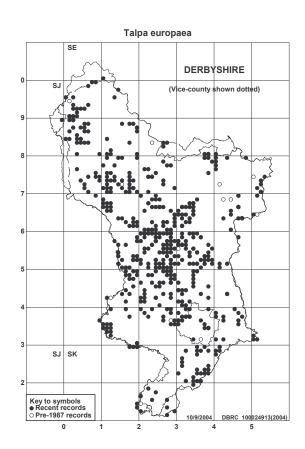
If you have any Derbyshire mole records, no matter how old they are please send them to Derek Whiteley (and they will be copied to DBRC on an annual basis).

Further reading:

Gorman, M.L. & Stone, R.D. (1990) *The Natural History of Moles*, Christopher Helm, London.

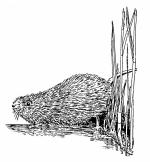
Stone, D. (1986) Moles Anthony Nelson, Oswestry.

¹ Clinging, V. & Whiteley, D. (1985) *Mammals in The Natural History of the Sheffield Area*, Whiteley, D. ed Sorby Natural History Society.



Water Vole

by John Keeling



When as a lad
If I'm not mistook
To recall the visions of the brook
Whereupon the entrance to his hole
Set the ever-endearing vole.

Courtesy of DWT

But then as a boy as I progressed
The brook looked full of emptiness
My eyes would stare but he would not betray
The presence of his hideaway.

Then from early teens into youth Reality hit me and the truth In England's green and pleasant land Things were really not so grand.

Though betrayed by youth I still have faith "A thing that can't be stole!" For down that brook the other day Came Ratty, or should I say, a vole.

Mammalian Species

Dave Mallon

The American Society of Mammalogists has for many years published profiles of mammals under the title Mammalian Species. These each focus on a single species and are written by one or more experts. They are several pages long and contain basic information on the biology, ecology and evolutionary history of the species. Several hundred have been produced so far and new ones are added at regular intervals. For a long time these have only been available in university libraries and so on, but they are now being made available on the internet and can be downloaded free in .pdf format. There is a relatively strong focus on New World mammals and they include many bats and small rodents. There are also many large global species such as tiger and polar bear, while species of local interest include mountain hare and stoat. They can be accessed most easily by typing 'Mammalian Species' into google, or from www.smith.edu

N'otter nother day in paradise!

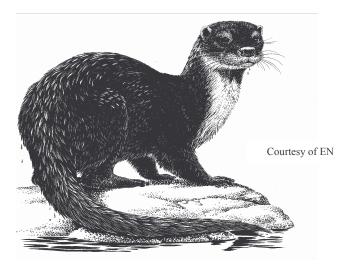
by Sue Crookes

I had been to Shetland twice in the last 2 years and experienced wild otters in their natural environment and was keen to learn more about this wonderful mammal. In August 2004 the opportunity presented itself. Paul and Grace Yoxon, who are based at the Isle of Skye Environmental Centre, were undertaking an otter survey on the Isle of Harris. The islands off the Northwest coast of Scotland are still a stronghold for otters and the purpose of the survey was to obtain an idea of distribution, population estimate and indication of the most important areas and habitats for otters. Surveys had already been carried out on other islands, including Raasay, Pabay, Canna, Eigg, Muck, Coll, Tiree, South Uist, Barra, and now Harris. Time was to be spent on different coastal types - rocky, shoreline, beach - and on different geographical aspects. The project would prove invaluable in identifying areas for otters, as in the event of an oil spill off the West coast of Scotland, it would be vital to know the areas to protect.

The journey over to Skye and then Harris was in perfect weather conditions with the ferry crew pointing out Minke Whale and later good views of Gannets, Guillemots and Puffins. The Hebrides lie at around 58°, the same as Moscow and are a long chain of islands, 13 of which are inhabited. Our homes for the week were a row of 4 cottages in Tarbert. After meeting other group members, we settled down for the introduction of identifying secondary signs – spraints, holts, lie-ups and runs. It was to be hoped we would see the animal itself and fingers were crossed for this to be the case. We were to be split into small groups or couples and search areas given, of which the ones I had are detailed below.

The first day was at a small place called Plocrapol and after locating 7 holts and a lie-up, I was the first to spot the group's first otter. A mere glimpse, but a hope of more to come? Black-throated divers bobbed on the surface with 2 porpoises surfacing nearby. The second day around Tarbert pier and the coastline above proved successful with spraint sites and holts, 15 and 5 respectively in a 2½ kilometre stretch. The Hebrides are renowned for changeable weather and the next day was no exception, with mist and rain making scanning the sea difficult.

But our area that day was around Luskentyre beach and even in poor weather this beach is stunning. Pure white sand as far as the eye can see with the rasping call of a Corncrake being heard in the nearby reeds. A few spraint sites were found around here but in no great abundance and the only sighting of a mammal that day was a mink as it scampered over the rocky shoreline. Wednesday was to be our day off, but 3 of us, who were getting on well together. decided we would spend if not all the day, at least some of it, carrying out the survey. Paul gave us an area around Geocrab and as Andy went to survey from one end of the rocky coastline, Sarah and I checked from the opposite end. Within 10 minutes I hissed quietly to her and pointed to a huge dog otter on flat slabs of rock just in front of us.



As we were below the skyline and downwind we had good views of him before he slipped into the water. As Andy approached, he could tell by our excitement that we'd seen something! We sat a while to scan the area in the hope of seeing him again. An otter was spotted and then jubilation as we suddenly realised it was a female with 2 cubs in tow. In little over 3 hours we watched them fishing, getting out onto a rocky islet to spraint, mutual grooming and playing. At one point all 3 clambered out and went into bracken on the opposite shore. We took turns to watch and eventually an hour later they reappeared to slide into the sea and commenced fishing again. On our return the next day we found the lie-up, with a slide into the sea. where lions mane jellyfish pulsated past. As we sat for lunch and listened to seals singing we thought we were in paradise! The last day came all too soon with a search around Lingabay, far to the south of the island near Rodel, were numerous spraint sites were found, but the otters chose to be oh so elusive that day!

The above is just a brief personal resume of my part in the survey. Paul has produced a paper with a more detailed account, including statistical data. This can either be e-mailed, picked up from me at the Derbyshire Wildlife Trust office in Belper, or posted on receipt of an SAE.

In all the group surveyed a total of 51.2km of the Harris coast, which accounts for 35% of the South Harris coastline. A total of 89 holts were counted, together with 232 sprainting points. The following freshwater lochs and rivers where examined.

Loch Stichcleit (NF 12800/0035): Otter evidence Loch Direcleit (NF 1550/9900): Otter evidence Loch Grannda (NF 1820/9300): Otter evidence Loch Carran (NF 0860/9600): No evidence Loch a Bhealaich (NF 0960/9520): No evidence Loch Fincastle (NF 0930/9720): Otter evidence Loch na Cachlaidh (NF 0530/8410): Otter evidence Loch na h Uamha. (NF 0580/8425): Otter evidence Loch Langabhat (NF 0530/8800): Otter evidence

Spraints were collected at these freshwater lochs and all contained marine prey species indicating otters were still utilising the marine environment and moving inland.

In conclusion, it was estimated that there were 255 holts and an adult otter population of 243 for the island of South Harris.

Based on the data, the estimated otter population for these islands has been achieved by working out a relationship between resident females and active holts and a relationship between resident females and other otters. The estimate is, however, likely to be an underestimate because of otters living in inland freshwater systems.

Look out for a new website for biodiversity in Derbyshire, to be launched in the near future:

www.derbyshirebiodiversity.org.uk



Mammals of New Zealand

Steve Lonsdale

Which is the odd one out: stoat, weasel, goat, red deer, brushtail possum, beaver, hedgehog? The answer I'm looking for is 'beaver' - all the other mammals now exist in the wild in New Zealand.

New Zealand has an interesting mammalian fauna. The islands were formed some 70 million years ago, when they split away from the large land mass of *Gondwanaland*. At that time mammals had not yet evolved; indeed, the initial fauna of New Zealand included no herbivorous or predatory animals at all.

Over time, the niche-roles of the large herbivores and the predatory mammals in New Zealand were taken up by large birds such as moas, and (often flightless) eagles and hawks, all of which are now extinct. The niche-roles of the smaller mammals were taken up by large insects.

Today there are some 54 species of land mammals (excluding the seals) on the two main islands - all of these have been introduced (either deliberately or by accident) at some stage over the past 1000 years or so.

The first wave of these mammals came with the Polynesian settlers in around 900AD. These early settlers brought dogs, rats and mice. These introduced mammals (and their human companions) made a significant contribution to the extinction of many of New Zealand's native fauna, especially the flightless birds, which were hunted and used for food.

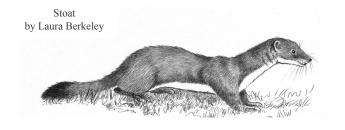
Europeans first arrived in the late 1700s, and brought many mammal species with them, mainly for sport or meat. Of the 54 introduced species still present today, at least 20 were brought from Europe and 14 from Australia (mainly several species of wallaby, mostly for sport hunting). Interestingly, almost all the most widespread and successful introduced species are of European origin these include hedgehog, rabbit, brown hare, ship rat (black rat), house mouse, cat, stoat, red deer and goat. The only other common widespread species on the islands is the brushtail possum, from Australia.

The main reasons for purposeful introduction were for hunting or meat. From Europe, the rabbit, brown hare, chamois, red deer, sika and fallow deer were all introduced for hunting. Domesticated (meat) animals introduced by Europeans are the pig, cow, goat and sheep.

Two other reasons for purposeful introduction were for transport (the horse) and for pest control. It is these latter introductions which are causing the most problems today. Mammals introduced from Europe for pest control include the hedgehog, stoat, weasel, ferret and cat. These are all now widespread, and have had a significant deleterious effect on many members of the indigenous fauna, unfortunately, not usually the intended ones.

The introduced mammals have changed their behaviour to adapt to the local conditions. For example, in the short period of time we spent there, we saw more stoats than we have seen in total in the UK.

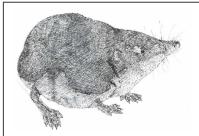
Brushtail possums sit on roads at night (presumably because the surface is warmer than that of the surrounding land), and, though traffic volumes are low in New Zealand, there are still enough vehicles to ensure that large numbers of possums are killed every day - many drivers aim directly for them as they are seen as a pest - and in some areas there are dead possums every 2-300m or so along the road. The stoats have realised this, and each dead possum usually has an attendant stoat using it as a convenient source of fresh meat. A slow, quiet approach to a recently killed possum will almost certainly result in a good sighting of a stoat.



The hedgehog too has changed its habits - in most parts of North Island it does not hibernate. This is almost certainly a result of the winters in New Zealand being significantly milder than those in the UK, which results in a plentiful supply of the hedgehog's food (slugs, beetles, snails, insects, etc) which is much less available during the winter in Britain.

New Zealand affords opportunities to get close to many mammals - particularly the sea mammals (swimming with seals and dolphins is possible in a number of areas, and close-up views of sperm and other whales are possible every day off the east coast of South Island). The bird life (e.g. albatrosses, penguins, tui, bell bird, pukeko etc) and other natural history (flowers, tree ferns, kauri trees etc) are also spectacular.

If you are traveling to New Zealand, and wish to know more about the mammals of the country, the recommended book is **The Handbook of New Zealand Mammals**, edited by Carolyn M. King, which covers all the land breeding mammals (including the seals and sea lions). It does not cover the sea-breeding mammals (i.e. the whales and dolphins).



Water Shrew by Julian Jones

Water Shrew Survey

Dr Derek Yalden, president of the Mammal Society

Have you had any success with this water shrew survey that the Mammal Society is running? You know the one, I hope. Set 4 small-bore plastic drainpipes, baited with casters, 10m apart on a 30m stretch of stream bank, leave them for 2 weeks, collect them up, and examine the droppings left behind by feeding shrews. If water shrews ate the casters, the resultant droppings should be filled with white fragments of hog lice (*Asellus*) and shrimps (*Gammarus*), perhaps with bits of caddis, mayfly or stone fly nymph as well. If it was only common shrews, then earthworm remains - soil and chaetae - should be obvious.

I tried last spring to set 4 sets of tubes, and then in summer to set 8 sets, in various Peak District rivers - Ashop, Derwent, Dove, Manifold, Dane, Wildboarclough, Blackbrook, etc. Some of the sites looked poor, others looked really promising. Trouble is, I haven't yet found a decent shrew dropping to examine. In every case, the rivers had come up and flooded the tubes, in several cases washing them clean away even when I weighed them down with stones.

As you will gather if you have seen the latest *Shrew News*, some people have been more fortunate. So far, the National Survey has recorded water shrew signs in some 132 sites out of about 5 times that number surveyed. It looks as though the water shrew is very thinly present in the north and west - only 6 positive records from Scotland despite about 80 sites there being surveyed, and only 5 positive sites in Wales. At least 5 surveyors in Derbyshire have been successful, even if I have failed abysmally. Keep up the good work. This is a species for which we have only a very poor idea of distribution and status. Even negative records may help to tell us what is wrong about the habitat from a Water Shrew's point of view.

The Mysterious Water Shrews of Arbor Low Stone Circle

Derek Whiteley

My first mammal of the year was a dead water shrew. Killed by a cat at Arbor Low stone circle, the corpse was collected before breakfast on 1st January – a good start to the New Year for me – not so good for the shrew. During 2004 the same cat had provided a various assortment of common and pygmy shrews, wood mice and field voles. This was the first *Neomys*.

Others have followed – the latest being a beautiful pristine specimen of water shrew, carefully collected and placed in the farmhouse fridge (unknown to her parents) by 4 year old Kirsten Dick, my daughter's playmate. It is currently being freeze-dried as a voucher specimen.

Two things are interesting about these water shrews. They are quite high up, at 1231 feet above sea level, on the limestone plateau, and amongst the highest recorded in the county. But where do they live? The immediate habitat comprises cattle grazed pasture and dry stone walls. Lathkill Dale is 2.5 kms away and the River Bradford is 4kms to the east. Half a km to the south are some small flooded gravel pits – a more likely possibility. Slightly nearer are some typical 'dew' ponds or field ponds. If such ponds, of which there are hundreds in the White Peak, can sustain water shrews it would be good news. Further investigation is required but it may turn out that water shrews are not as scarce as we think they are – and more catholic in their choice of habitat.

Furry Friends Quiz

The Furry Friends Quiz raised well over £700 for the DMG receiving 176 entries, including 14 correctly completed quiz sheets. The winners were drawn as follows:

1st Prize Mrs Munro of Windermere 2nd Prize Mrs Coombes of Ravenshead 3rd Prize Mrs Bull of Oakwood, Derby

Well done to the prize winners and a big thank you to Sue Jones and John Bland (quiz organisers) and all who took part.

The Derbyshire Wild Quiz

As part of a series of successful fundraising quizzes the Secretary of Derby Natural History Society has now compiled a Ouiz Sheet specially to raise funds for the Derbyshire Wildlife Trust. The usual mix of cryptic clues and puzzles has a wildlife theme and there are general knowledge questions on sport, television, music etc with answers referring to wildlife. The closing date for entries is Saturday 3rd September 2005, so you have all summer to do it!

To obtain a copy send s.a.e. and cheque for £1 payable to "Derbyshire Wildlife Trust" to Derbyshire Wild Quiz, 12 Chertsey Road, Mickleover, Derby DE3 0RA

Addition to DMG Programme

Sat & Sun 25th/26th June 2005 A weekend trip to Kent to visit Down House, the Ham Fen Beaver project and the Wildwood Discovery Park.

Outline itinerary as follows:

Sat 25th June 2005 Down House - Home of Charles Darwin. Arrive around midday for lunch, followed by a tour of the house and gardens.

Sat 25th June 2005 (Evening) Ham Fen Beaver Project. Guided tour of the site with the Ham Fen warden looking at habitat, field signs and with an outside chance of a beaver sighting.

Sun 26th June 2005 (Morning) Wildwood Discovery Park. Guided tour of the park (before park opens to the public) followed by a behind the scenes tour of the captive breeding programme including water voles, dormice, harvest mice and water shrews.

Booking essential. Contact Steve Docker.

Useful Contacts

Mammal Society: Tel: 02074 984358 (MS)

enquiries@mammal.org.uk

www.mammal.org.uk

Mammals Trust UK: Tel: 02074 985262

enquires@mtuk.org www.mtuk.org

Derbyshire Badger Groups:

High Peak: 01298 26957

Brian Ashton

Mid Derbyshire: 01773 852647

Irene Brierton irene_brierton@btopenworld.com

North East Derbyshire

07711 506012

Richard Bradbury margandik@freeuk.com

South Derbyshire: 07754 094177

Steve Grimley sdbg@stone3.freeserve.co.uk

Derbyshire Bat Conservation Group: c/o DWT

Sorby Mammal Group: 01142 367028

Valerie Clinging president@sorby.org.uk

Derbyshire Biological Tel: 01332 716655 Records Centre (DBRC): nick.moyes@derby.gov.uk

Nick Moyes www.dbrc.freeserve.co.uk

Derbyshire Wildlife Trust: Tel: 01773 881188

(DWT)

enquires@derbyshirewt.co.uk www.derbyshirewildlifetrust.org.uk

Water for Wildlife Officer & Tel: 01773 881188

Otter Project: Philip Precey

pprecey@derbyshirewt.co.uk

Water Vole Project: Tel: 01457 864825 Helen Perkins hmperkins@yahoo.co.uk

Derbyshire Natural History e-group:

www.groups.yahoo.com/group/derbyshirenaturalhistory

Many thanks to all those who contributed to this issue of Derbyshire Mammal Group News.

Also, a special thanks to Liz Docker who helped with the lavout and design, to Laura Berkeley, Julian Jones, the Derbyshire Wildlife Trust and English Nature for their excellent illustrations and to AES Ltd for the use of their reproduction facilities.

Please send material, details of forthcoming events, comments etc to Steve Docker: Tel: 01335 steve@busypeople.force9.co.uk

Whilst every effort is made to ensure that material is factually correct opinions expressed are those of individual authors and may not represent those of the Derbyshire Mammal Group.

© Copyright 2005 Derbyshire Mammal Group.