THE LAUNCH OF MaMoNet • WARWICKSHIRE DORMICE • OHDEER!
CAMERA TRAPS • DIVERSE WHALE AND DOLPHIN POPULATIONS
Mammal Matters

Following on from a successful spring conference (p.10) and looking through this latest edition of Mammal News it struck me that mammalogists are a busy bunch of people. We can draw inspiration from mammalogists of the past such as Derek Yalden (p.6) and John Clevedon Brown (p.21) and build on the work they did with all the new technology available to us. Why not try your hand at camera trapping (pp.16 & 20), using bait pots to find harvest mice (p.22), develop or download a recording app (p.17) or try out a footprint tunnel (p.5). Alternatively grab your camera and get out there to catch inspirational pictures of mammals; our photographic competition (p.12) produced some stunning images and generated press interest in mammals across the world. We look forward to what next year’s competition will reveal so get snapping. The Mammal Society would like to give special thanks to Amanda Wilson from the Student Committee who took on the co-ordination of the photography competition and managed to fit the massive amount of organising this took around her ongoing studies.

Whatever you do, remember your records of mammal sightings are vital to us, so whenever you see a mammal be it the ever-present rat, rabbit or grey squirrel or the excitement of a pine marten or dormouse, please take a few moments to send your record in to either The Mammal Society or your Local Record Centre. You’ll also see that we’ve got a number of new people to introduce, from our new Treasurer, Gary Roberts, to our new Training & Events Co-ordinator, Lexie Munro (below) and an exciting new project in Wales run by Becky Clews-Roberts, (more about this on p.5). It looks like it’s going to be a busy summer for all of us!

NEW MAMMAL SOCIETY STAFF

Gary Roberts – Treasurer

With a keen interest in the natural world, conservation and charity management – I am delighted to be the Society’s new Treasurer and hope my knowledge and experience will prove beneficial to the Society’s CEO, Marina, and her team. Currently, I am ORCA’s Fundraising Manager and Director of Verde – an environmental communications consultancy – designed to deliver charity management, media development, fundraising, marketing, design, conservation and project management. With comprehensive experience working for a diversity of organisations, including as a charity CEO and for over a decade managing a business, I look forward to joining The Mammal Society’s committee.

My career began 25 years ago restoring an operational chalk quarry in the Chilterns to a wetland nature reserve where I would often enjoy watching the hundreds of vegetables basking along the dykes and crunching the sweet, red apples I kindly provided them. Nearly 2 years at the Bat Conservation Trust afforded me some great bat-watching with horseshoe bats being one of my favourites. A passion for butterflies and moths led to a decade of managing the media office and fundraising for Butterfly Conservation. With an interesting career primarily in the conservation charity sector, to relax I enjoy exploring Portugal – its history, cultural and natural heritage. To contact Gary email: g.roberts@themammalsociety.org

Lexie Munro, Training & Events Co-ordinator

After completing a Marine Biology degree at St Andrews University, I spent 7 years working in marine ecological research. Starting as a volunteer survey diver for Devon Wildlife Trust, I went on to set up a small not-for-profit organisation, aiming to provide robust scientific data on the ecological status of protected reefs in Lyme Bay and Skomer to Natural England and Natural Resources Wales. I particularly enjoyed training volunteer teams in dive survey skills, marine identification and data analysis, and decided to focus my career on providing environmental training and education.

I trained as an environmental science teacher, spending 8 years working in secondary schools and sixth form colleges teaching biology, ecology and environmental science. I am very excited to join The Mammal Society in a role where I can draw on my training expertise to develop and enhance our existing training provision. I am keen to introduce a more interactive element to our training courses and to develop more training opportunities to engage younger mammal enthusiasts.

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Small mammals on ELS field margins

HOW DO THEY RESPOND TO AGRI-ENVIRONMENT SCHEMES?

Dr Richard K Broughton, Ecologist & GIS Specialist
Centre for Ecology & Hydrology, Wallingford. Email: rbrou@ceh.ac.uk

Since 2005 NERC’s Centre for Ecology & Hydrology (CEH) has been evaluating how farmland biodiversity may be enhanced by habitat management options available under Environmental Stewardship, the English agri-environmental scheme. Under the Common Agricultural Policy UK farmers adopt basic ‘cross compliance’ environmental standards, including leaving 1–2 m wide un-cropped margins around arable fields (Fig.1).

Under the Entry Level Scheme (ELS) tier of Environmental Stewardship, farmers can gain additional subsidy for installing 6 m-wide field margins of rough grasses to provide habitat for, e.g. for example, small mammals (Fig.2). However, few studies have examined how small mammals respond to agri-environment schemes in Britain (reviewed in Macdonald et al., 2007, Mammal Review 37), and the potential large-scale benefits of ELS margins remain untested.

Between 2005 and 2011 CEH compared small mammal communities on field margins across the 1,000 ha Hillesden estate, a typical lowland arable farm in Buckinghamshire. A randomised block experiment was established, with five replicate blocks of farmland (43–70 ha) each containing three areas of management: (1) standard ‘cross-compliance’ with conventional 1–2 m field margins; (2) a typical ELS regime where 1% of farmland was taken out of production and 6 m-wide grassy field margins were installed; and (3) a trial ‘ELS-Extra’ treatment that took 5% of land out of production and installed 6 m-wide grassy field margins and flower-rich plots. Using Longworth live trapping, we compared small mammal communities on conventional and grassy field margins between these treatments. Trapping was carried out on five morning and evening sessions over 3 days in autumn and spring, in 4 years of the 6 year period.

We used two trap-lines totalling 22 traps on each treatment replicate, to see how the small mammal communities developed after margin installation. In total 13,200 traps were checked during the study.

The results were very encouraging (Broughton et al., in prep.). Over the study duration the number of species detected on the estate increased from one wood mouse (Apodemus sylvaticus), to include bank vole (Myodes glareolus), field vole (Microtus agrestis), harvest mouse (Micromys minutus), common shrew (Sorex araneus), pygmy shrew (S. minutus) and water shrew (Neomys fodiens), with occasional house mouse (Mus musculus), brown rat (Rattus norvegicus) and weasel (Mustela nivalis). In autumn, generalised linear modelling indicated that average species richness was 44% greater on ELS and ELS-Extra field margins than on conventional cross compliance margins, with significantly greater abundance of bank and field voles. The average number of animals of all species in autumn was generally greater on the ELS/ELS-Extra margins (Fig.3), but this was not statistically significant and overall abundance also increased on cross compliance margins.

Across the estate, the overall number of animals detected in autumn quadrupled within 3 years before stabilising at this higher level.

The modelling indicated a more complicated pattern in spring, with an increase in species richness across all treatments over time, and an increase in overall abundance on ELS/ELS-Extra margins but no change on cross compliance (Fig.4). This pattern was driven by declining numbers of wood mice that were largely replaced by bank and field voles, perhaps hinting at inter-specific competition.

In summary, these results indicated that installation of 6 m-wide grassy field margins led to substantial increases in the diversity and abundance of small mammals not only on those margins created under ELS, but also on surrounding conventional farmland. This implied a possible ‘spill over’ effect of ELS margins creating a reservoir of animals that dispersed into other areas. However, we found no additional benefit of the ELS-Extra treatment over standard ELS, suggesting that the 1% of farmland given over to ELS management was sufficient to achieve positive benefits at the farm-scale.

Fig.2. A 6 m field margin of rough, tussocky grassland, installed under the Entry Level Scheme (ELS) tier of Environmental Stewardship.

Fig.3. Mean abundance and species composition of small mammals in autumn on pairs of trap-lines.

Fig.4. Mean abundance and species composition of small mammals in spring on pairs of trap-lines.
Trying to put together the most up-to-date Mammal Atlas is not an easy task, but one that we are working hard to achieve so that this much-needed document is available to everybody. The validated mammal records from 2008 to 2013 that The Mammal Society holds and is able to publish are limited (see Fig.1). We know that there are many records existing for these years, and we need your help in accessing them to use in the atlas.

Existing Records
The National Biodiversity Network (NBN) holds a wide range of mammal records that will make a significant contribution to the atlas. These records are held by NBN-recognised organisations (individuals cannot submit records to NBN). We are in negotiation with these record holders to use their records in the atlas, and most have agreed to share their data. However, good as NBN’s records are, there are a huge number of records held by individuals and organisations that have not been submitted to the NBN.

If you have data sets on the NBN from the years 2008–2013, and we haven’t already contacted you, you can help us by permitting us access to these vital records and, if you have records sitting on your computer, or on sheaves of paper on your desk, we would love to give them a good home! We know that many of the records people collect are sensitive and that the locations of certain mammals are not something that everybody wants to make public. However, any data sets we use would not be disclosed to any other parties and while we would love the records in the atlas to be at the 1 km square resolution, if it was preferable you could provide us with records at the 10 km resolution. If you have records, or know anyone that does, please get in touch with us to discuss how we might be able to include them in the atlas. All organisations and major contributors would be acknowledged in the final publication.

New Records
It’s not too late to contribute new records for the atlas. We need you to record more of the mammals you see, wherever you are. We have a good coverage of records provided by local mammal groups, mammal recorders and recording groups, but there is still room to improve the coverage across the country (see Fig.2).

Amazingly, records of even ‘common’ mammals such as rabbits are incredibly scarce as people assume they are ten a penny and that no one would be interested in the data. This isn’t the case and all records are vitally important to producing an accurate Mammal Atlas.

Road-kill mammals can provide us with much information. Monitoring these over time can show trends in populations; they can give us the first records of mammals as they expand their range and they can show us where accident black spots for mammals are. All this information can be used by County and National Recorders to help understand and protect a species better.

By recording any mammal road kill you see, you too can help collect data for the atlas. As you are driving, record the species, date and location of the mammal. A grid reference is ideal and there is now a phone ‘app’ called OS grid ref that can give you an accurate national grid reference at the push of a button. You only need to record to the 1 km square level (e.g. SJ8742) and you can then send your records to us by post or log them in online (http://www.mammal.org.uk/nmap).

Remember that your safety and that of others on the road takes priority over any atlas record.

You don’t just have to submit records of road kill. Sightings of live mammals are gratefully accepted too!

If you have any questions about the items in this article, or if you wish to send in any records, please contact:
Louise Sleeman: atlas@themammalsociety.org or Derek Crawley: d.crawley@themammalsociety.org
It has long been thought that both these species have been in decline but with little hard evidence to support it, a conservation strategy cannot be designed.

Becky Clews-Roberts is lucky enough to have been given the role of Wales Project Officer to help The Mammal Society lead the way in surveying for these two key species. The project will be using ‘citizen science’ to gather the necessary data.

**Footprints in the Ink**

In order to gain data on the hedgehog population in Wales we are asking people to place one of The Mammal Society’s footprint tunnels along a linear route such as a hedge or wall. This can be in their garden or elsewhere as long as landowner permission is granted. Some bait, such as hot dogs or hedgehog kibbles, is placed in the tunnel and as the hedgehog, or indeed other mammal, walks through the tunnel and over some ink, their prints are captured on a piece of paper. A footprint ID chart is included with the tunnel kit to help participants correctly identify which mammals have been roaming in their garden at night. So simple that anyone, even people new to the world of mammals, can give it a go!

Tunnels can be purchased (£9.95 + p & p) from The Mammal Society website; alternatively, people can have a go at making their own – again instructions are on the website. We are then asking participants to upload their findings onto The Mammal Society Atlas via the very easy to use online form. If, however, participants do not have Internet access, forms can be posted to The Mammal Society.

**The Hunt is on... for harvest mouse nests**

It has long been thought that harvest mice prefer the tops of tall grasses of arable crops in which to build their nests. No longer! Nests have now been discovered in a mix of habitats as well as lower down in the grass structure. As with dormice, harvest mouse nests have now been discovered in a range of habitats including patches of scrub, reed beds, coastal habitats and also heather moorlands as on Anglesey, North East Wales (courtesy of the MISE Project, p.22). You could argue that this now makes the job of finding the nests even more difficult but I would disagree, we could look anywhere and expect to find them!

Tetrad (1 km²) surveys of harvest mouse nests were undertaken during the 1970s and again in the 1990s. It is hoped that during MaMoNet, these tetrads can be re-visited as well as covering new tetrads not previously surveyed. This will enable us to report some comparison findings between these years whilst also covering a wider area.

This can only be achieved if we have helpers! Volunteers are needed to undertake nest searches during autumn and winter 2013–2014. We will aim to hold a training session towards the end of summer.

Once the volunteers have been assigned a tetrad, they can survey for nests and upload their data onto The Mammal Society Atlas. I undertake a bird survey in my tetrad and the sense of ownership of the data I gather and the sense of achievement at collecting solid data that can be used to inform conservation measures, far outweighs any negatives such as cold, wet weather during the survey!

Should you be interested in surveying for hedgehogs, please do not hesitate to purchase your tunnel (or make your own) and start surveying immediately.

If you are interested in helping us survey for harvest mice, please send your contact details to Becky.

This exciting project has been made available via funds from Natural Resources Wales (formerly The Countryside Council for Wales) and The Mammal Society.

Rebecca Clews-Roberts,  
Project Officer MaMoNet  
E: r.clews-roberts@themammalsociety.org  
T: 07743 085 374  
W: www.mammal.org.uk/mamonet_wales
Farewell to Derek William Yalden (1940–2013)

Derek and I met at school in the late 1950s and our career pathways were closely linked for decades. Inspired by W.G. ‘Bunny’ Teagle, Mammal Recorder for the London Natural History Society, we took up the challenge to fill in blank squares on his distribution maps. Encouraged by fieldwork in London, Derek helped to publish Britain’s first National Badger Survey and made major contributions to the first Atlas of British Mammals (Arnold, 1993). A new version of this was Derek’s project in hand when he died. Derek’s small mammal trapping led to his apprehension by the police, baffled by the sight of someone wearing bicycle clips, thick gloves and short-sleeved shirt leaving a copse long after dark. We discovered a colony of noisy frogs in the deep water of a local pond and Derek caught one for identification despite cold water and his inability to swim. This exploit led to the publication of his first paper (Yalden & Morris, 1961), written whilst he was still a student.

In 1965 Derek graduated from University College London, focused on morphology, taxonomy and palaeontology and embarked upon a PhD examining the functional anatomy of the mammalian wrist at Royal Holloway College. This was still an all-female college for undergraduates, but they failed to distract significantly. He joined The Mammal Society, attending his first Annual Conference in 1963 and paying for me out of his student grant. We soon became involved with its Bat Group and having passed my driving test and got a car, we expanded operations to include studies of hibernating bats in some of Surrey’s old stone mines and at bat locations further away. We jointly published The Lives of Bats in 1975 and also began contributing to The Mammal Society’s technical publications with Derek’s Owl Pellet Analysis in 1977 and Identification of British Bats in 1985. We were both awarded the Society’s Silver Medal at the same time in 1989, probably because nobody was quite sure which of us had done what!

Derek contributed to three editions of The Mammal Society’s Handbook of British Mammals (in 1964, 1977 and 1991) and completed the massive task of publishing its fourth edition in 2008. He also served as Editor of Mammal Review for 32 years (1980–2012) and was actively engaged as President of The Mammal Society for 16 years; a post he held at the time of his death.

Derek gained a Lectureship at the University of Manchester in 1965, an institution he served for 40 years. Its students appreciated his enthusiastic teaching and he also supervised 20 successful postgraduates. Derek initiated long-term studies of sandpipers and golden plovers in the Peak District and his paper describing the fortunes and ultimate demise of the feral wallaby population there was published a week after he died. Fieldwork occupied a massive amount of his time and energy for 40 years, as well as being part of his academic job. His versatility is evident from 235 formal scientific publications, ranging from fossils to studies of peat erosion, black grous, sheep grazing, Late Glacial mammals, and use of abundance/mass relationships for assessing conservation priorities. He became especially interested in the history of British birds and mammals based on archaeological excavations and the analysis of place names, publishing various papers on the subject and two highly original books.

Derek rarely travelled abroad, but in 1968 he joined me as a zoological advisor on an Army expedition attempting to travel by boat down the Blue Nile in Ethiopia, a dangerous activity that had not previously been accomplished. The scientific objective was to collect specimens for the Natural History Museum in London. The expedition was highly successful and led to more expeditions (without the Army), which obtained several species new to science, including three (a frog and two rodents) named after him in recognition of his major contribution to studies of the Ethiopian fauna. Derek and colleagues published over 20 papers on Ethiopian animals, and he developed links with the University of Addis Ababa, supervising a PhD study by one of its students, Afework Bekele, whose own PhD students were examined by Derek on a visit to the country a month before he died. Occasionally Derek took short holidays to good wildlife places, and he once visited the Gambia where his Peak District sandpipers spent the winter. In the 1980s he made occasional contributions to BBC radio programmes, but everyday life centred around his academic work.

We discovered a colony of noisy frogs in the deep water of a local pond and Derek caught one for identification, despite cold water and his inability to swim.
spanning an extraordinary breadth of endeavour. Recognising this, in 2010 he was awarded the Gold Medal of the Linnean Society of London.

Despite his expertise, Derek was always friendly and approachable. He was a good friend to us all, diffident about his own extraordinarily comprehensive knowledge and forgiving of those who fell short of his high academic standards. His students remember him as enthusiastic and supportive and he got on well with a wide range of colleagues in several disciplines. Even in difficult situations I never once saw him lose his temper or show anger – except the day a kite swooped down and seized a precious rodent specimen he had caught in Ethiopia. The kite’s effrontery proved fatal and the remains of its breakfast are in the Natural History Museum, now formally named Desmomys yaldeni.

Derek became one of the most versatile and successful zoologists of his generation. He died in his sleep during a rare and brief holiday in the Forest of Dean, where he was looking forward to seeing his first British wild boar.

Pat Morris, April 2013

The Mammal Society Regional Seminar 2013
Sat 2nd Nov 2013 • 10am to 4pm
Walford and North Shropshire College

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Registration costs include tea/coffee & lunch.

Focus on Meres and Mosses Partnership talks:

Luke Neal of M&M: Background to meres and mosses

Paul Roberts (Shropshire Mammal Group): Partnership working between the group and meres and mosses

Malcolm Monie (Whitchurch Water Vole Project): Water vole research in North Shropshire

Dr Gareth Parry: Predation pressure and habitat use in populations of water voles (Arvicola amphibius)

Stuart Edmunds: Camera trap use in searches for the elusive mustelids

Helen Trotman (Shropshire Wildlife Trust): Badger vaccination trial progress

Paul Hill, Cheshire Mammal Group: Mammal projects in Cheshire

The costs include refreshments and a meal, provided by Walford College. Accommodation will be available at the Preston Montford Field Studies Council for those travelling from further afield.

Preston Montford FSC would include pick up from the station, evening meal, accommodation, breakfast and transport to the venue for £50 plus VAT if sharing a room and £60 plus VAT for a single room.

@Shropsmammals
The Mammal Society 023 8023 7874

Book online at www.mammal.org.uk
The Warwickshire Dormouse Conservation Group was established in December 2009 to support the Local Action Plan: ‘Common Dormouse (Muscardinus avellenarius)’. The aim of the group was to update the report written for Natural England, then English Nature, by Stefan Bodnar (‘A Strategy for the Conservation of Dormice in Warwickshire, 2001’) that identified only six positive sites in 1999/2000, on the basis of finding ‘dormouse’ nuts. The group would resurvey these sites as well as look at other woodlands in the county, hopefully finding more dormice. We could not believe that after 10 years there appeared to be only one known natural population left, at Weston & Waverley Wood, owned and monitored by the Forestry Commission and managed with dormice in mind, although for the past 3 years no dormice have been recorded there. The Dormouse Conservation Group has now grown to an impressive 52 members, including ecologists from local consultancies and the Warwickshire County Council’s Biological Record Centre.

We were fortunate in that our first ‘assignment’ gave us contact with the dormice themselves, albeit introduced animals. Members supported the first release in Warwickshire by the People’s Trust for Endangered Species (PTES), of 40 dormice in 2009, by relocating 100 nest boxes that had become difficult to find. It was very cold but people seemed to enjoy their day in Windmill Naps Wood.

In June 2010, 25 more dormice were released at Windmill Naps, providing some members with their first sight of a dormouse. The animals required a ‘frequent feeding’ rota until the end of September. The basic food mix was supplemented by mealworms, cherries, blueberries, grapes, pears and, of course, hazel nuts. All this attracted grey squirrels (Sciurus carolinensis) which provided us with a serious challenge as they were able to open the feeding tube doors in the holding cages by chewing the cable ties and even releasing some hinged rings we used. Eventually the use of D-clips foiled them.

The group’s own fieldwork began in February 2010 with ‘reccies’ of woods in preparation for nest tube surveys and nut hunts in the five dormouse sites found to be positive for dormice in 1999 (in addition to Weston & Waverley Wood). We also looked at two other woods, one of which had a recent report of a hibernating dormouse in a log pile.

Meanwhile, back at base, 200 nest tubes were being made out of Tetrapak cartons to supplement those bought with a grant from PTES and by early summer over 300 nest tubes had been installed. With so few of our members holding handling licences, monthly monitoring was only possible at two of the sites. The rest were not checked until the autumn when nut hunts were carried out in other woods. Sadly we found no evidence of use by dormice at

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**Ruth Moffatt, Local Biodiversity Action Plan (LBAP) Co-ordinator from 2003 to 2008 and currently LBAP volunteer**

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After all the snow we had had it was nice to wake up on Sunday 17th January and find it had all disappeared, leaving a beautiful crisp morning, and what better way to spend it than helping with a bit of dormouse conservation. So off to join the first event of the Warwickshire Dormouse Conservation Group and meet several other volunteers who had also been kind enough to sacrifice their lie-in for the sake of a small rodent that was probably snoring away in a nearby teapot.

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**Network during a break in fieldwork!**
Photograph by J Underhill

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Newly released dormouse waiting to be fed!
Photograph by I Tanner
any site although the tubes were popular with wood mice (Apodemus sylvaticus), shrews (Sorex spp.) and birds (Parus spp.). During the summer our members were not idle – in addition to feeding the new dormice, those who had not seen a dormouse already assisted the Forestry Commission Ranger with the monthly box checks at Weston & Waverley Wood.

In 2011 and 2012 more nest tubes were installed in other woods as students seeking subjects for dissertations and local wildlife groups joined the hunt for Warwickshire’s dormice! As a result Alne Wood became the site for Warwickshire’s third release by PTES, of 41 dormice. This was their 18th release in England since the programme began in 1992. Once again members rallied to help by enthusiastically joining the feeding rota.

Both release sites, chosen for the suitability of the habitat and no resident dormice populations, are monitored by PTES and local licence holders through the summer months but unfortunately results have been disappointing. There are many factors that could be the cause of low numbers being recorded and an independent review of the whole release programme is currently taking place.

Given such a keen membership, it is disappointing to have to report that, 3 years on, the work of our dedicated group has not yet found any new dormice sites. However, all would agree that it has led to networking between people who might otherwise not have met. It has also led to an invitation by the consulting engineers for the High Speed 2 (HS2) railway to contribute to their Environmental Impact Assessment (EIA) for the West Midlands and Warwickshire sections. We have no confirmed records along the HS2 route but we did get PTES to check out a report of dormice eating apples in a garden backing onto the route. Unfortunately this turned out not to be dormice and another record of a ‘dormouse’ retrieved from a cat and fed on fruit and nuts, in Warwick, turned out to be a very sleek wood mouse!

Now in 2013 we have a different focus to our work as we are involved in the 2 year Princethorpe Woodlands Living Landscapes area project, funded by SITA and run by the Warwickshire Wildlife Trust. Our role is to survey the six woodlands with PTES funding equipment and transport. The PTES grant includes a sum of money to help with transport cost for two of our members to train for dormouse handling licences.
It was a stunning start to The Mammal Society Spring Conference in April at the University of Exeter. Not only were the top 50 mammal photographs, from the Society’s first ever mammal photographic exhibition, on display, but Pat Morris gave a cracking Cranbrook Lecture on the Friday night. In a new move this event was free and open to the wider public. It was great to see new faces from around Devon (and hopefully new members) in the audience.

Xavier Lambin’s (University of Aberdeen) talk on landscape-scale mink control in North East Scotland presented an inspiring model for invasive species control and community wildlife management. What is more some excellent research papers have been published along the way!

Professor Robbie McDonald (Environment and Sustainability Institute, Cornwall)

Pat’s challenge was to talk about the Society. From small and humble roots the Society now has a distinct niche not only in the academic world, but also with conservationists, consultancies and amateurs. Pat could not talk about the Society without referencing Derek Yalden, who has been a stalwart of the Society for many decades and who was much missed at this conference.

The standard of speakers this year was exceptional and the range of subjects captivating. It was delightful to have some exceptional and the range of subjects discussed recent surveys in Scotland. These confirm extensive re-colonization of its former range, with pine martens now established in areas beyond the Highlands. Emma Sheehy (National University of Ireland, Galway) also explained that pine martens have been increasing in Ireland and, in her study area, this has led to a decrease of grey squirrels, resulting in an increase of red squirrels. I would like to say a heart-warming tale of Biodiversity Action Plan species helping each other, but Henry Schofield (Vincent Wildlife Trust) countered this with a fascinating talk about pine martens in Poland. In extreme conditions they are hunting bats, in total darkness, in the extraordinary setting of Second World War underground tunnels.

The report given by Ian White (PTES) on long-term dormouse monitoring was depressing, but a great incentive to get out in 2013 and look harder. That relates to the talk by Philip Wheeler (Centre for Environmental and Marine Sciences, Hull) on the importance of detectability in mammal studies – are dormice actually rare or just very elusive?

Peter Pilbeam (Cambridgeshire Mammal Group)

Another new move was to include a Local Groups section in the main body of the conference. Dave Groves spoke about the challenges of producing a Cornwall mammal atlas (due to be published this year). I spoke about the unusual position of Devon Mammal Group (DMG) being able to give out grants to encourage mammal recording. James Williams made a passionate presentation about what volunteers can achieve with otter surveys in Somerset. Kate Williamson gave an intriguing talk on the Wales Mammal Group, studying otters and DNA in the Lleyn Peninsula (how I would love to do something similar with the Cornwall and Devon Mammal Groups on the River Tamar!). Many thanks to Derek Crawley in his role as Local Group Co-ordinator and his plans for setting up regional mammal seminars.

One of the concluding talks was by Fiona Matthews (University of Exeter) with a truly stunning talk on mammal management and culling issues. She looked at ‘speciesist’ attitudes and made us question approaches to mammal control. There were four other memorable features of the conference: the networking opportunities; the gala supper (the food was excellent); The Mammal Society medal which was awarded, most deservedly, to Paul Chanin; finally Johnny Birks leading the way onto the dance floor in his own inimitable way. It was an excellent conference; thank you to the many folk who worked so hard to make it run smoothly, and I look forward to next year’s and celebrating The Mammal Society’s 60th birthday.

Kate Hills

Photographs of the day kindly submitted by Tom Williams (DMG)
I was honoured to be asked to judge The Mammal Society Photography Competition this year, along with Steve Magennis. We found it very difficult to choose between all the amazing images celebrating the diverse mammals we are lucky enough to support in the UK. I feel that Roy is a worthy winner with his amazing shot of a rat in mid-air!

I have always been wild about natural history... in fact for as long as I can remember it has been part of my life. Even though I grew up in South East London, I was always watching the birds that visited our garden or enjoying the wildlife in Greenwich Park, one of my favourite haunts.

When I moved to my current house, on the outskirts of Litchfield, I knew the garden had massive potential. Surrounded by open fields and with mature trees as well as a natural hedgerow, it had all the ingredients for a wildlife haven. As my family has grown up, I have had the chance to spend more and more time developing and nurturing it for wildlife. Providing feeding stations, nest boxes, water and planting wildlife-friendly species, my efforts are being rewarded and I can now boast 48 species of birds visiting, 17 mammal species recorded here and 12 different types of butterflies!

It is the wildlife that visits my garden that inspired me to start my blog and then to create my WildlifeKate website. It has given me the chance to share what I do with people all over the world and many are amazed by the wildlife that visits, especially the mammals! My ‘Clay Cavern’ mock burrow with a camera, attracted the attention of the BBC Springwatch team after I captured footage of mice, voles and shrews. This led to me helping them build their ‘Mammal Stump’ and they are returning to film my mammal visitors this year!

Much of my wildlife discoveries and footage this year have been thanks to Bushnell trail cameras. These small units, which run on AA batteries, have a sensor which detects body warmth and movement, triggering the unit to take a photo or a video clip. In daylight many trail cameras will even capture video clips in full HD. At night, the unit bathes the area in infrared light, allowing captures even when it is pitch dark (below right). The footage is saved onto an SD card and can simply be removed and placed in the PC where your videos or stills can be uploaded.

The new NatureView HD and HDMax have now added close-up lenses to the impressive list of functions and this is great news for those wanting to watch or record small mammals. I have had great success monitoring burrows and filming smaller creatures. I have also been delighted to capture footage of young fox cubs and badger cubs venturing into the big wide world.

These units offer both the enthusiast and the researcher the chance to monitor and film creatures easily and remotely that does not mean hours in the field and does not disturb the wildlife in any way. If you would like to know more, you can contact me via my website at www.wildlifekate.co.uk and my videos captured with this kit can been seen at www.youtube.com/thewildlifekate

WildlifeKate

Kate MacRae, AKA: WildlifeKate
Mammal News Summer 2013

Mammal Photographer of the Year 2013

Winners & Finalists

1st Place Winner
Photograph by Roy Rimmer
Roy wins a Spypoint HD-10 Wildlife Camera courtesy of www.scotcountry.co.uk worth £250.

The Mammal Society decided to launch the Mammal Photographer of the Year competition to get people out there and looking for new ways to capture mammal images. The remit was to show them in a different light, and make the ordinary extraordinary. With nearly 400 entrants, we were overwhelmed with the quality and the judges Kate MacRae (www.wildlifekate.co.uk) and photographer Steve Magennis (www.stevemagennis.co.uk) had a hard time picking the winner!

We had some doubts about the reaction we would get to the winning photo from the general public, who usually have a very negative attitude towards rats. On the whole, we actually had a very positive reaction to the photograph itself. However, as some welfare concerns have been expressed, we asked the photographer to explain how the photo was captured.

The wild rat was caught in a live animal trap baited with fresh meat, fresh water and which was filled with straw for bedding. It was kept in a 5ft x 4ft set-up with two paint tins placed inside, with small pieces of day-old chicks placed on top, for a couple of days until it was taking the food. Roy said: ‘I wanted to photograph the rat leaping towards the lens so I had pre-focused on the paint tin and got the image on the first attempt.’ Roy released it the next morning where it was found.

Roy continues, ‘When photographing captured mammals it’s all about preparation. Having your camera and flash pre-focused on one spot before you introduce them into the set, means you can sit back and use a remote trigger to fire the camera and capture the image with the minimum of disturbance to your subject. The two flashguns were set to 1/16th power to freeze the action; the flash burst only lasts for 1/30,000 of a second.’

Given the steps taken, we felt that Roy had taken appropriate measures to ensure the welfare of the rat and so we accepted the photograph for the competition. It was not a mammal in the wild, but we thought this image did such a good job at showing a new, amazingly agile, side to an animal normally loathed and regarded as vermin, that perhaps it will help people look at rats with a renewed sense of respect and admiration.
I am very privileged to have a fox den in my garden. From day 1 when the cubs first emerge I observe and photograph their antics. They are not tame but I have a strong bond of trust with two females that are particularly inquisitive. They interact with my many pets and myself but are wary of strangers. They have both recently found mates but interestingly they stay in the background. All my photos are taken on my Canon Eos 550d in my garden in Hextable Kent.

2nd Place Winner – Julie Milne

I noticed several wood mice and a vole were feeding on seeds etc. falling from the bird table, so I built a nearby enclosed feeding table at ground level just for the small rodents. By gradually raising it a little way off the ground the mice/voles would go up a strategically placed ramp. When they were used to this I replaced the ramp with a blackberry stem which they readily took to. They would often grab an item and run back down the stem carrying it. I placed a few blackberries and hazel nuts on the feeder which were eagerly carried off.
The best time to photograph them was very early in the morning using several flashguns which also helped to freeze the movement.

3rd Place Winner – Gary Cox

Julie wins a photography day with Cooley Wildlife Photography in Ireland worth £150. (www.cooleywildlifephotography.com)
Mammal Photographer of the Year 2013  Winners & Finalists

Highly Commended  Photograph by Richard Fisher

Highly Commended  Photograph by Tim Hunt

Highly Commended  Photograph by Mark Fox
Highly Commended Photograph by Harry Martin

Highly Commended Photograph by Austin Thomas

Highly Commended Photograph by Tom McDonnell

Highly Commended Photograph by Kate Williamson

Highly Commended Photograph by David Gibbon

Highly Commended Photograph by Joel Walley
Over 200 years ago, people first started to use remotely triggered flashlight cameras to photograph animals in their natural habitats. Since those early days, methods to ‘capture’ wild animals on photographs or videos have come a long way and now employ digital recording, motion sensors or infrared sensors to trigger the cameras and infrared flashes to avoid the glare and disturbance of traditional flashguns. Camera traps have many advantages over other methods of studying wild animals but near the top of the list is that they are non-invasive and cause little disturbance to the animals or their surroundings. Moreover, they can be left in position for several days at a time. Wildlife biologists use camera traps to detect rarely seen and endangered species in exotic locations and also to survey for particular species presence and abundance in a systematic way. In addition to their application to research, many people nowadays buy these relatively inexpensive camera traps just to see what animals are visiting their own backyards.

There is always the thrill of anticipation of looking at recently recorded footage, knowing that you may pick up scenes of animals and their behaviour that you might never normally see.

We have been studying small mammals using cameras attached to wire conical plant stands, taking pictures in a vertical plane from a distance of about 70 cm.

We only have to clear the vegetation directly under the camera. It should be said that the cameras we use are not designed for such close-up work, but they give pretty good results, even if the pictures are very slightly out of focus. For nearly 2 years, we have been testing cameras to see how best they can be used for the following purposes:

- to survey for the presence and abundance of different small mammal species;
- to independently assess other invasive (live trapping) and non-invasive (hair tubes, tracking stations) survey techniques; and
- to quantify aspects of the behaviour of small mammals, such as activity patterns and exploration.

One challenge to capturing images of these small animals is that they have the ability to move rapidly. To take this into account, we use short video clips of 10 or 20 seconds to detect the animals.

The animals do not appear to be particularly fazed by the cameras being activated, although we believe they can probably detect the sound of the trigger, if not the infrared flash itself.

We can clearly distinguish on film all the small mammal species in our study areas with the exception of yellow-necked mice and wood mice. Mice, when they explore, hold their tails rigidly out behind them, and we can easily measure the lengths of the tails on film using screen callipers. Yellow-necked mice are larger than wood mice and adults have longer tails which offers the potential to discriminate between the two. However, there is a small area of overlap in tail lengths between the two species, meaning this method of discrimination is not 100% foolproof.

Our research has shown that the use of camera traps for studying small mammals has enormous potential. We bait the cameras with a few grains of wholewheat and one thing we have observed is that mice and voles will sit under the cameras for minutes at a time just feeding, whether live traps are present or not. Working out how many of a particular species are present will require careful study design of camera numbers and spacing. Small mammals, in particular mice, can move over large areas and so pictures of the same animals may be taken on different cameras; this confounds the use of capture success as a measure of the numbers of individuals present. Field protocols to address this problem, coupled with live trapping to validate the findings, will be tested later this year. All-in-all, camera traps can be used for a whole range of studies on small mammals, but each study will need to be carefully planned to address particular questions.
OhDeer!
Help map deer road casualties using your phone

The six species of deer living wild in Britain are our largest terrestrial mammals, ranging from the majestic red deer, to smaller fallow, roe, sika, muntjac and Chinese water deer. The large rise over the past 40 years in road traffic volumes as well as numbers and distribution of deer has unfortunately led to deer casualties at roadsides becoming an increasingly common sight. The total number of deer–vehicle collisions (DVCs) in Britain is estimated to exceed 42,000 per year, but most are not actually recorded. The issue of DVCs is truly nationwide, with a significant level of incidents now recorded in most local authority districts (see map). The highest overall frequency of deer road casualties as one might expect occur in areas with greatest traffic flows, not least in South East England and the Central Belt in Scotland; while highest rates after accounting for differences in traffic density occur in East Anglia, East Sussex and Hampshire, and in the Scottish Highlands, Tayside and Aberdeenshire.

Deer casualties seen at roadside or related collisions with vehicles can now be logged using a FREE citizen-science smartphone app. This will provide a new additional stream of information to feed into the long-term National Deer–Vehicle Collisions Project undertaken through The Deer Initiative Partnership since 2003. The major advantage of using smartphone apps to record environmental records is the potential for quick and convenient provision of accurate location information in real time via their inbuilt GPS, without any need to refer to maps. The OhDeer app is envisaged to be particularly suited to obtain accurate information on deer casualty locations via environmental field workers during, for example, road habitat or other survey work. However, anyone who sees a deer road casualty or is involved in a collision with a deer can also submit records in this way.

All data submitted via the OhDeer app is freely available to browse online in spreadsheet or map format. In addition, The Deer Initiative, as members of the Tracking Mammals Partnership, also regularly contribute information on any deer collision records for which the deer species is reliably reported to the Deer Society’s 5-yearly national distribution surveys; and can be made available also for Biological Records Centres and county mammal recorders.

If you own a smartphone, all you need to do to get involved is to download the FREE ‘Epicollect’ app (via Android or iPhone store) and then simply load the OhDeer project. Further information on this, as well as alternative ways of providing deer collision information to the project, can be found at deercollisions.co.uk/pages/participate.html. For any queries regarding the app you can contact Jochen Langbein direct via email jalangbein@deercollisions.co.uk or twitter at @JoLangb.

Jochen Langbein, May 2013


[Map showing relative rates of DVCs]

RTA roe buck. Photograph by J Langbein

Fallow deer by A38 dual carriageway. Photograph by J Langbein

H500 HYFRE IRE
Watching a pod of pilot whales being pursued with vigour by several false killer whales is as exhilarating as it is chilling. I was privileged to watch this wildlife drama unfold while our ferry voyaged across the Bay of Biscay to its destination port of Bilbao, Northern Spain. The sense of tension was further heightened by the stimulating commentary on the developments provided by the scientists as we watched these cetaceans from the bridge of the ship. From this brief encounter the name false killer whale seems a misnomer. Along with the equally sociable and playful pilot whale, both species are actually dolphins. What fascinated me was how the bridge of this ferry provided an ideal platform to watch these marine mammals and, enjoying sunrise the following morning, accompanied by hundreds of striped and common dolphin riding the bow waves, was an additional spectacular introduction to the world of cetaceans and their marine environment.

Several charities and over a decade later, my connection with cetaceans has been re-kindled. This March I commenced fundraising for ORCA, one of the UK and Europe’s leading cetacean conservation charities. Founded 12 years ago, ORCA works to identify and protect critical cetacean marine habitats. Together with governments, non-governmental organisations (NGOs), research institutions and the shipping industry, ORCA works to create safer habitats for whales, dolphins and marine wildlife. With our unique take on marine conservation, ORCA is a charity dedicated to studying cetaceans. ORCA has developed four key programmes: surveying our oceans; saving large whales; inspiring people through citizen science and education; and protecting vulnerable places. These programmes are connected and designed to operate together to deliver ORCA’s vision – Oceans alive with whales and dolphins.

**Sentient Beings**

Cetaceans are sentient beings with the ability to engage and inspire people. Those of us fortunate enough to have seen whales and dolphins are in awe of these wonderful, majestic and intelligent mammals. An amazing 23 species live alongside us - that’s one-third of the world’s cetaceans recorded in UK and European seas. They range from the tiny harbour porpoise, to shy Cuvier’s beaked whale and the acrobatic striped dolphin. Even the world’s largest animal, the blue whale, visits our seas. Read on to discover more about these mysterious ambassadors of our seas and how, as members of The Mammal Society, you can help survey them.

**Engaging People through Citizen Science**

Identifying important cetacean habitats is undertaken by ORCA’s survey teams and wildlife officers who are all volunteers. These volunteer teams are on board ferries and cruise ships in European seas conducting monthly scientific surveys, recording species seen, where they are and what they’re doing. Our volunteers undertake talks for passengers and activities on deck, providing expert knowledge on the astonishing marine wildlife in our seas. By encouraging people to join our teams, ORCA are not just helping to save whales and dolphins but also giving them an opportunity to watch these amazing mammals in the wild, and collect vital information. This citizen science is helping ORCA work towards solving the many problems cetaceans face.

**Environmental Monitors**

Cetaceans are considered important bio-indicator species of the health of our wider ocean environment. Learning more about their numbers, diversity of species, behaviour and dates observed develops ORCA’s understanding of these fascinating marine mammals, which over the longer term may help assess any potential effects of climate change within the marine ecosystem. This information is available to government agencies and NGOs to help guide cetacean conservation policy through the EU Habitats Directive. Again, over the longer term, our data may help assess how their populations are being impacted by overfishing, pollution and habitat destruction. Thus, our work supports the development of marine protected areas and the creation of safe havens for whales and dolphins in European seas.

**Valued Partners**

ORCA has several corporate conservation partners. They include Brittany Ferries and...
DFDS Seaways who facilitate our wildlife officers and survey teams on board their ships to collect data, engage with passengers to promote ‘citizen science’ and marine environmental education. Through public outreach programmes and monthly surveys ORCA teams monitor the North Sea, North East Atlantic, Celtic and Irish Seas. ORCA’s dedicated wildlife officers and volunteers often make their observations using Opticron binoculars.

Bay of Biscay – A Wildlife Haven

The Bay of Biscay boasts many different environments: from shallow waters and deep-sided submarine canyons to the extensive abyssal plain (deep ocean floor) over 4,000 m deep, where dense, cold water is nutrient-rich. Closer to Spain and Portugal, are the Torelavega and Cap Breton Canyons where squid live. These are the main food for the mysterious Cuvier’s beaked whales. Also found in the canyons and abyssal plain feeding on squid are the ‘Mobey-Dicks’ or sperm whales. This species can dive to 1,000 m for up to 90 minutes. The diversity of different physical environments means that Bay of Biscay supports habitats that are suitable for a range of whale, dolphin and porpoise species including rarities like the world’s smallest whale – the pygmy sperm whale. Throughout May (2013) ORCA’s wildlife officers have experienced spectacular sightings of fin, sperm, Cuvier’s beaked and minke whales; bottlenose, common and striped dolphins. Further north, our ‘Your Seas’ project, in the North Sea has recorded harbour porpoise, white-beaked and bottlenose dolphins. What I find so wonderful is that through ‘Your Seas’, school children are experiencing amazing cetacean-watching experiences on the DFDS Seaways voyage between Newcastle and Amsterdam, as well as through land-based coastal watches.

Database Development

Unbelievably only two cetacean species are listed in the UK Government’s Biodiversity Framework and pre-2010 Biodiversity Action Plans (BAP): the bottlenose dolphin and harbour porpoise. The bottlenose dolphin also benefits from three Special Areas of Conservation (SAC) created for its protection at Cardigan Bay, Lleyn Peninsula and Moray Firth. The conservation of cetaceans is woefully inadequate. Notably it is the smaller species that are afforded the least protection as there are no international conventions safeguarding them. The Government has acknowledged that conservation efforts to protect these BAP species are limited due to ‘data deficiency’. This is changing. ORCA has a database with over 8,000 sightings and records equating to over 50,000 individual whales and dolphins which has been developed over a 12 year period. This information has been collected by our volunteers.

I-Spy Whales & Dolphins

Would you like to enjoy encounters with the weird and wonderful Cuvier’s beaked whale? Or watch hundreds of playful common, striped and Risso’s dolphins? As keen mammal enthusiasts, ORCA would love to welcome Mammal Society members on board Brittany Ferries to enjoy I-Spy Cetacean voyages throughout July, August and September. Cetacean watching in the Bay of Biscay is an exhilarating and spectacular experience. Participating in surveys and species counts is a superb, innovative approach – using citizen science through people engagement to safeguard whales and dolphins.

Survey volunteer training run by ORCA. Photograph by Michael J Tetley

Looking out for Whales and Dolphins

To enjoy a 3 day mini-cruise to Spain with good cuisine, the ambience of the ship, amazing wildlife, dolphins and whales, Santander’s tapas bars and the great company of our Wildlife Officers please visit www.orcaweb.org.uk. For Mammal Society members booking I-Spy trips, ORCA will offer a year’s membership at half-price. Happy whale watching.
Camera Trapping: Course Review

Set in the heart of the beautiful New Forest National Park, this course offers a fascinating insight into the use of camera trapping to record mammal sightings. The course covers the history of the camera trapping method, the features of camera traps, and the costs and advantages of using camera traps, whilst also demonstrating practical skills in the field.

The trainer, David Oakley, is a lecturer at the University of Southampton and has been working with camera traps for many years. In this time he has captured many thousands of mammal sightings. He began the day by discussing the importance of mammal recording and emphasising the benefits of using camera trapping to collect verified sightings of mammals. He further elaborated on the history of the technique and illustrated the development of the technology.

Prior to the field course, David demonstrated how to programme the cameras, highlighting the importance of best practice whilst also discussing the various pitfalls of placement, lighting and different camera settings. It was particularly beneficial to learn valuable practical skills for those of us that were beginners to camera trapping.

After lunch we made the journey from Lyndhurst to Bramshaw, where David is fortunate to have access to secluded woodland, an ideal place to record mammal sightings in the wild. Each course attendee chose a place to set up their camera; a week later David retrieved the SD cards and downloaded the captured images to share with us. It was fascinating to see that the cameras have recorded many mammals, including deer and badgers, and the recordings were shared amongst the course attendees.

The course concluded with David explaining how the data can be analysed and verified, and how this can contribute towards The Mammal Society Atlas. The day was a brilliant introduction to camera trapping and a big thank you must go to our trainer David Oakley for this enjoyable day.

Due to the popularity of our Using Camera Trapping course we hope to run this course again during early autumn, dates to be confirmed at the time of going to press. Please contact Lexie at training@themammalsociety.org for further details.

Richard Austin

Training Diary July – October 2013

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<th>Date</th>
<th>Course</th>
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<td>Beaver Ecology &amp; Conservation</td>
<td>Knapdale Forest, Argyll</td>
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<td>July 12th</td>
<td>Dormouse Ecology &amp; Conservation</td>
<td>Cheddar, Somerset</td>
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<td>Aug 2nd–4th</td>
<td>Mammal Identification Weekend</td>
<td>Nettlecombe, Somerset</td>
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<td>Aug 4th</td>
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<td>Wildwood, Kent</td>
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<td>Sept 6th–8th</td>
<td>Mammal Detective Weekend</td>
<td>Upcott Grange Farm, Devon</td>
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<td>Badger Development &amp; Mitigation</td>
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<tr>
<td>Oct 26th</td>
<td>Autumn Photography</td>
<td>Lyndhurst, New Forest</td>
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To book: email training@themammalsociety.org or visit our website www.mammal.org.uk

Mammal Detective Weekend

6th–8th September, Upcott Grange Farm, Devon PL16 0JS

Suitable for all mammal enthusiasts this informal, mostly field-based, weekend provides a unique opportunity to observe and learn about a wide range of British wildlife, both through field signs and direct observations. The course is held at a beautiful setting in the River Tamar valley, rich with wildlife including red, roe and fallow deer, badgers, foxes, stoats and horseshoe bats, as well as many aquatic species such as water voles, otters, mink and even beavers! Over the weekend you will be able to observe the local beaver, bat and deer populations, learn how to tell mammal species from their tracks and other field signs, practise small mammal trapping and learn how to use your mammal detective skills to support UK mammal conservation projects. Local farmhouse accommodation (with breakfast, packed lunch and optional evening meal) is available.

Please note: children over 10 are welcome to join this course, but each child attending must be accompanied by an adult.

Further details of these and other courses can be found on The Mammal Society’s webpage or contact training@themammalsociety.org

Owl Pellet Analysis

Sunday 4th August, Wildwood, Kent CT6 7LQ

This new course offers the chance to learn which mammals are the most popular food sources for a range of owl species. You will find out why owls produce pellets and how to collect and dissect owl pellets. Under the expert guidance of our trainer Hazel Ryan, you will practise identifying a range of mammal remains from your dissected pellets, and learn how to record and use your findings. There will be an opportunity to visit the small mammals at Wildwood to see living examples of the species you have identified.

Right: Owl pellet analysis. Photograph by T White

Further details of these and other courses can be found on The Mammal Society’s webpage or contact training@themammalsociety.org
Consultation on Change

Three years ago, we sent out a questionnaire to catch up with our members, and ask you whether or not we were focusing on the things important to you and how we could improve what we do, to do more for mammals and members. This coincided with a forward plan for 2009–2015, which laid out our key aims for the 6 year period. However, we now think that the exciting direction The Mammal Society has taken since 2010, which has seen us grow our public profile, increase training provision and hold more events around the country to reach more members than ever before, highlights the need to draw up a new document to outline our future vision more clearly and define what The Mammal Society is all about.

To that end, we have initially consulted with 1,100 members, asking them to complete a new questionnaire, to find out more about them, what they think about what we do, and what we should prioritise. Over 350 have replied, and here is a brief summary of the results so far:

- Two-thirds join to support mammal research and conservation, half to learn more about mammals, and a third to network and share information with fellow members;
- Over half attend our training and events, buy our publications, and take part in mammal surveys, just under half submit records for The Mammal Society Atlas, and a third are involved with their local group;
- Most want to us to share more new research and advice for surveying and legislation, have closer links to local groups with more information on local projects, and have a stronger campaigning presence to advocate effective conservation policy;
- With regard to training and events, members rate the quality and relevance very highly, but would like to see us reach out to more locations and try to keep the costs down as much as possible.

So far we have consulted with those for whom I have an email address, but I want to reach out to everyone. If you use email, but don’t think you have been contacted about this, and would like to be a part of the ongoing consultation about the future direction of The Mammal Society, please email me, so that I can send you the questionnaire. If you do not use email, please call or write to me, and I can send you a copy to complete in the post.

Once we have some more responses to this initial round, we will start to shape our key aims and objectives, in ongoing conversation with our members, to prioritise our activities and ensure we work towards goals that our members find important and which achieve something for mammal research and conservation.

Farewell to John Clevedon Brown (1928–2013)

John was born in Australia but spent much of his early life in Bristol, helping with the family horticulture business and developing interests in botany and archaeology. He started academic life relatively late, gaining a BSc in Zoology at Bristol University and then in 1960 a PhD on hedgehog brain anatomy. His first appointment was at Royal Holloway College (RHC) Zoology Department and then in the late 1960s he moved to the Anatomy Department at Cardiff University Medical School. In 1971 he took up a Lectureship in the Department of Applied Biology at Cambridge where he developed his interests in histology, histochemistry and mammalogy, retiring in 1988.

John will be most remembered for his ground-breaking work with Graham Twigg at RHC on the sex differences in small mammal pelvic bones (now commonly used in owl-pellet analysis). He also supervised Pat Morris’ PhD on hedgehog ecology and published on a variety of anatomical, ecological and methodological topics. John was an early member of The Mammal Society and served on Council as Scientific Secretary, Publications Officer and Editor of Mammal Review (1970–1980). John was instrumental in helping to launch Mammal Review with Blackwell Scientific Publications and in the publication of its early volumes, making many important contributions himself as well as finding other review authors. John was awarded the Society’s Silver Medal in 1981 for his outstanding service to the Society. His teaching on the history of British mammals at RHC inspired our late President, Derek Yalden, to study the subject and write his book on this subject in 1999. John was a bibliophile, also enjoying classical music, gardens and gardening, cooking, British history and archaeology (publishing in 1957 and 1994 on excavations near Bristol). He died on Sunday 14th April after several weeks in hospital.

John Flowerdew
A novel non-invasive method for detecting the Harvest Mouse (Micromys minutus)

Ceri Morris,¹ Catherine O’Reilly,² Peter Turner,² Liz Halliwell,¹ Denise O’Meara² & Edel Sheerin²

¹ Natural Resources Wales, Maes y Ffynnon, Penrhosgarneedd, Bangor, N Wales, LL57 2DW.
² Waterford Institute of Technology, Cork Rd, Waterford, Ireland.
Contact: ceri.morris@naturalresourceswales.gov.uk

Introduction

The status of the harvest mouse (Micromys minutus) in Wales is largely unknown. The species is elusive, and the traditional survey method relies on finding nests during the winter when vegetation dies back. Baited tubes at ground level have previously been used to detect harvest mice droppings through DNA analysis. The Mammals in a Sustainable Environment (MISE) Project trialled a novel method for detecting harvest mice in the stalk level of tall vegetation thus minimising the likelihood of other species dominating the survey.

MISE Project

The project aims to survey and conserve native mammal species in Ireland and Wales, with the help of innovative genetic techniques, while engaging volunteers in activities to increase skills and raise awareness.

Methods

The survey method was trialled in September 2012 at a site in Cheshire (owned by Chester Zoo) where harvest mice were released in 2002 and 2003. Fresh nests were found during the trial, confirming the species’ presence. The habitat is wet reed bed and mixed grasses.

Pairs of plastic pots were attached horizontally to bamboo canes, with one pot at ground level and another 1 m high among the vegetation at stalk level, and baited with a millet seed mix. The canes were arranged in two parallel 100 m transects of 10 canes each, with a total of 40 baited pots.

After 2 days the pots were checked for small mammal droppings. All faeces were collected as a single sample into plastic-capped tubes and stored frozen before transportation to the laboratory. All faecal material present was sampled. DNA extracted from faecal pellets was tested using species-specific primers for harvest mouse (M. minutus), wood mouse (Apodemus sylvaticus) and field vole (Microtus agrestis), in an SYBR Green based quantitative PCR (qPCR) assay.

Discussion

All of the harvest mouse positive samples were found in the stalk-level pots. The large proportion of unidentified samples in the ground-level pots could either be attributed to another species not included in the test, or due to poor quality samples. The ground-level pots had become wet, which may have degraded the samples, while the stalk-level pots were relatively dry. In the future it would be more efficient to use one pot per cane at stalk level.

This method proves an effective technique in detecting the presence of harvest mice, although efficacy with low density populations needs to be established. It is a relatively cheap and easy technique which can be used by volunteers. A survey pack is being developed to encourage use by groups across Wales. By targeting sites with historical records of harvest mice, as well as those with favourable habitat, the MISE Project hopes to improve our knowledge of this species’ status in Wales.

Results

Of the 40 sample pots, 36 contained small mammal droppings. Harvest mouse DNA was identified in 10 samples (28%), while 5 (14%) contained wood mouse DNA. The remaining 23 samples (64%) were not identified. One hundred per cent of the harvest mouse samples were found in the stalk-level pots, with wood mouse DNA found at both levels. Two samples showed both species in the same pot. Field vole was not detected. Of the ground-level pots, 95% of the samples failed to identify species.
Otters

By Paul Chanin. Published (2013) by Whittet Books

This revised and updated version of Otters by Paul Chanin is such a wonderfully comprehensive and interesting book that I read it from cover to cover in a single sitting. The book covers all aspects of the life of the otter, including much of the latest scientific studies. Despite the huge quantity of information contained in the book, the relaxed writing style and succinct summaries of detailed research mean that it does not overwhelm, making it a great read for amateurs and professionals alike.

Starting from the obvious, “What is an otter?”, the book goes on to cover everything from finding signs of otters; the complex issues relating to otter territoriality; locomotion; communication; breeding; food and feeding, and so much more. First-hand accounts from the author’s own studies on otters make the book even more enjoyable; it is encouraging to know that even the experts don’t often get to catch a glimpse of these magnificent animals!

Particularly interesting are the sections covering historical information about the otter including the origins of many of the words we regularly use in otter ecology, how otter hunting helped predict the decline of this species and how the experts went about finding out the real reason for the dramatic losses of otters in the UK. And once you finish the book you may have a different take on mink, as it seems when it comes to otters at least, they may not be the bad guys!

The book really benefits from the wonderful illustrations by Guy Troughton throughout and a fabulous addition is an incredible section of photographs taken by wildlife photographer Laurie Campbell, with each image described by the author.

Otters is a super book and a great testament to the years of hard work the author and many others have devoted to studying this charismatic animal.

Book Review by Phoebe Carter

Urban Mammals: a concise guide

By David Wembridge. Published (2012) by Whittet Books for The People’s Trust for Endangered Species

This is an excellent little book about the mammals you could see in your garden or in the parks and other spaces of urban Britain. As its name suggests it is a concise guide but not so brief as to be frustratingly lacking in detail. It is well written and very readable with the light touch that is such a welcome characteristic of many of the Whittet books on wildlife. The book is also nicely illustrated, with high quality colour photographs throughout and a number of useful maps and diagrams. For each species mentioned there is a short account of the appearance and key morphological characteristics, as well as information about activity and habitat preferences, and a summary of conservation status and estimated population size. The information in the book is up to date and well researched; the author has clearly done his homework. Given that so many of our British mammals are nocturnal, the photographs and descriptions of tracks and signs are particularly welcome; often, you may only know that a hedgehog or a fox has visited your garden at night when you find the droppings or scats in the morning.

There is a useful glossary at the back of the book as well as a summary of the taxonomy of the mammalian fauna of Britain.

Overall, would I recommend this book? Yes, definitely, but only if you don’t already have a copy of the 2010 PTES book, British Mammals: a concise guide, which David Wembridge co-authored with Clare Poland Bowen. There is inevitably quite a bit of overlap between the two guides (including quite a number of the same photographs). Even at the very reasonable price of £9.99 for Urban Mammals, you would probably not want or need to buy both volumes.

Book Review by Dr Sheila Pankhurst, Department of Life Sciences, Anglia Ruskin University

Mammal Encounters

Here at the Natural History Museum we not only work with dead specimen animals but occasionally with live ones too. The Natural History Museum’s scientists carry out cutting-edge research around the world, visiting some of the most biologically diverse areas of the planet and encountering an amazing range of wildlife. However, working with live animals doesn’t always mean a trip abroad – here in the Museum’s Wildlife Garden we work alongside plenty of live animals every day. Since the garden opened in July 1995, Museum scientists, wildlife gardeners and volunteers have been recording the plants, insects and other animals to be found here. So far, more than 2,300 species, including 10 mammal species, have been recorded. I started in this role 4 months ago and, just the other day, I encountered the resident foxes (Vulpes vulpes) for the first time, coming face to face with one in the reed bed. Foxes have been sighted here occasionally since the garden opened and have been breeding here since 2010. Although they are only occasionally spotted during the day, evidence of their presence can be found throughout the garden from holes dug in the ground, scat and footprints.

In the early summer evenings, bats can also be observed here. The common pipistrelle (Pipistrellus pipistrellus) is most regularly seen, although the soprano pipistrelle (Pipistrellus pygmaeus) was also recorded here 2 years ago.

For a few years, a lone rabbit (Oryctolagus cuniculus) would appear in October and then disappear during the summer. There was the occasional sighting, but the evidence mostly came from footprints in the snow or holes dug in the ground.

In previous years, we have recorded both the house mouse (Mus musculus) and wood mouse (Apodemus sylvaticus) along with an unconfirmed sighting of a field vole (Microtus agrestis). Our most recent survey was carried out using Longworth traps over a period of 2 weeks in September 2012: overall, 39 house mice were trapped – both males and females. One trap contained three mice! Unfortunately there were no wood mice this time, but we will trap again closer to the spring, also using a hair-trap method that may be more successful.

Larissa Cooper, Ecologist/Wildlife Gardener
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