Derbyshire Mammal Group

Newsletter

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Harvest mouse © DMG

Mammal Society Regional Conference

Ellie Rickman

As the newly installed chair of Derbyshire Mammal Group, I represented the group at the Mammal Society West Midlands Regional Groups Conference on 20th March 2021. This was the first of a series of Regional Conferences organised by the Mammal Society, with the aim of introducing regional mammal groups to each other and encouraging co-ordination and support between groups and with the national Mammal Society. The conference took place over Zoom and was well attended, not just by members of groups in the Midlands but also from other areas as far afield as Cornwall and the Scottish Borders. Several of the staff from the Mammal Society were also on hand including Fiona Matthews, chair of the Mammal Society, Katie Hills who is the Local Group Representative for the West Midlands, Frazer Coomber the post-doc Science Officer and Charlie LeMarquand the data and information officer.

The Conference kicked off with a talk by Fiona Matthews about the recently updated Mammal Red List. The frightening statistic that 1 in 4 mammals are threatened with extinction in the next 20 to 40 years shows the vital importance of such lists and the research that informs them. Red lists exist at local, regional national and international levels and provide valuable data for guiding conservation efforts, highlighting areas for research and most importantly, putting pressure on the powers that be to consider conservation as a priority. The value of red lists is only as good as the data that informs them and this is where the local mammal groups can have a really big part to play.

One of the key messages from Fiona's talk was that mammal records are vital, and not just the interesting stuff, we need to be recording the common things as well. If you look at some datasets for the UK it would appear that hedgehogs are more numerous than brown rats because people love to send in their hedgehog sightings whilst the lowly rat is rarely mentioned. Another valuable area of data that the Mammal Society would like to see more is occupancy data. The society has recently published its Mammal Tracker App. This is an app that can record a transect and any mammal signs encountered on route can be entered and automatically uploaded to the Mammal Society database. The value of carrying out transects in this way is that what is not recorded is almost as informative as what is recorded. The absence of records from an area is often a result of low survey effort, but with transect data, survey effort is provided alongside presence/absence data which can tell a much fuller story of what is going on in that area.

Fiona also highlighted the fact that density data is also a really useful measure that can inform a range of research areas. In particular, the Mammal Society is keen to get more data from small mammal trapping of indicator species such as shrews and voles. Density data can be obtained from trapping in a set area, which, along with data on habitat type and location can be very useful when trying to establish the local and national conservation status of mammal species.

Following Fiona, a series of 5-minute talks were then given by various regional group members, to summarise some of the works that had been going on in the region. These ranged from the very long-standing Staffordshire Mammal Group to the newly formed Birmingham group. It was interesting to hear what the other local groups have been up to, in particular some of the camera trapping for pine martens in Shropshire which has given some very interesting results showing just how far individual martens were travelling within the county. The final talk was from Frazer Coomber, the Mammal Society science officer who introduced a new harvest mouse project which he is keen for local groups to get involved in. This starts in autumn 2021 and will be mainly based on nest searches. The project aims to look at historic records for the species and then get the local groups to get out in the field to see if harvest mice are persisting in these historic locations as well as trying to identify any new populations. I think this is definitely something we as a group could get involved in and I have already indicated interest on the Derbyshire Mammal Group's behalf - so watch this space!

In conclusion, I found the conference to be really encouraging. It gave me lots of ideas for potential projects and activities that our group could undertake and it also inspired me to learn of the importance and value of the data we provide to the Mammal Society. It also enabled me to meet members from other groups and I hope in future we may be able to arrange some joint activities with some of our neighbouring groups. As the COVID restrictions gradually lift, I will be trying to arrange a timetable of activities so that we can start to meet up again and get out an about looking for mammals. Hope to see you all in person soon.

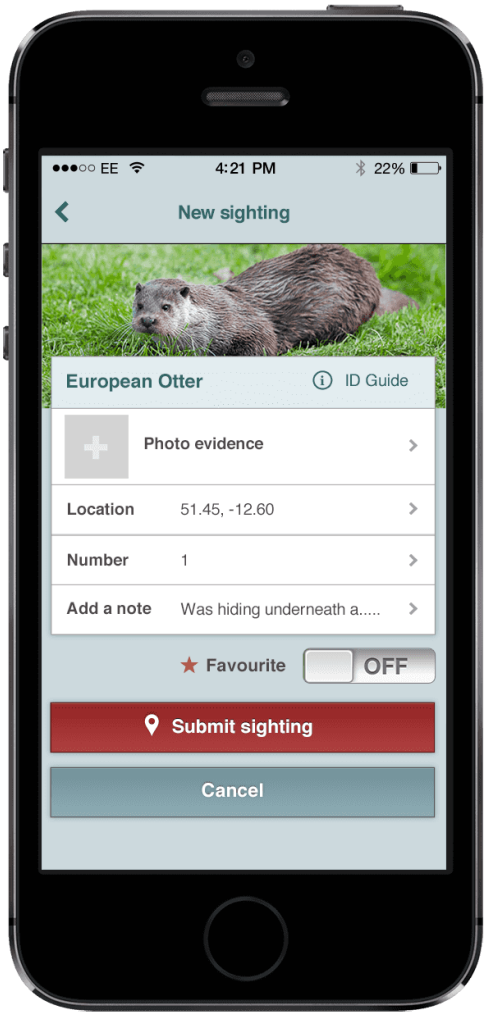
Badger Vaccination

On 12th May 2021 Derbyshire Wildlife Trust vaccinated their 1000th badger. Led by a dedicated team of volunteers, the vaccination programme across the county has grown steadily over the last 6 years, apart from a dip in the number of vaccinated badgers in 2017 due to a world-wide shortage of the Bovine TB vaccine. DWT is now recognised by the UK government as a national leader in badger vaccination. Vaccinating badgers against bovine TB is an important part of tackling the disease in cattle. DWT has appealed to the government to urgently fast track the transition from culling to badger vaccination; to stop issuing badger cull licences immediately; to implement a cattle vaccine, which offers the best long-term way to reduce bovine TB in the cattle population; review how cattle are transported around the country and ensure measures are in place to prevent infection spread from cattle to cattle. To read more see: www.derbyshirewildlifetrust.org.uk/supportcampaign/badger-vaccination

Derbyshire Mammal Group Recording

The DMG database contained a massive 130,572 records at the end of 2020. All our records are passed on to the Mammal Society and to DWT where relevant. Thanks to everyone who has contributed records, and especially to the recorder, Debbie Alston, who collates and validates the records and manages the database. Please keep sending records in ……and see below for a new way to record!

Mammal Mapper



Mammal Mapper is a FREE app designed to enable you to record signs and sightings of mammals in the UK. Mammals can be recorded along a route while walking, running or cycling, or even as a car passenger, or just one-off sighting, for example a hedgehog in your garden. You can enjoy building a library of the mammals you have spotted whilst contributing towards scientific research and mammal conservation. The Mammal Mapper app is very easy to use and includes detailed guides to help you identify the mammal and/or field signs, such as footprints and droppings, that you have seen. Afterwards, you can look back and remember what interesting wildlife you encountered and where! Mammal Mapper will also help you identify which mammal species you have seen with photos, descriptions, sounds and annotated images of those that are often easily confused, as well as making it easy to submit the record. Please try to take a photo where possible as this helps with verifying the record, but you can still submit records without photos. The app works on iOS and android OS phones. https://www.mammal.org.uk/volunteering/mammal-mapper/

Deer in Lockdown

Garry Gray

During the past winter of lockdown restrictions, I was fortunate to be able to observe two populations of deer using camera traps. Fallow deer and muntjac are regular visitors to a private part of the Calke Estate (South Derbyshire). Between October 2020 and April 2021 two pairs of Muntjac were observed during most months. No special insight was required to know it was more than one pair, as one of them had no left forelimb (Fig. 1). The other pair had a well grown fawn with them, plus the usual number of limbs.

There were groups of fallow deer that repeatedly visited the woods together, approximately a dozen in total and as many individuals again that were only seen once or twice. The largest group of 5 does and 3 fawns was seen weekly (Figs. 2-3), as were a few pairs of adolescents. Some of the mature bucks were often filmed in each other's company. After the rut was finished and the bulk of the acorn crop had been eaten or buried, the pattern of usage was very similar, whatever the weather.

In marked contrast, sites within the City of Derby that had produced regular camera trap records of roe deer during 2018 to 2020, were apparently empty of these deer after the first lockdown. These less used areas in parks, green spaces or normally forgotten corners generated images of more people, more dogs, but similar numbers of fox and badger as before. The roe deer had been a mix of adolescent males, mature females, and young fawns (Fig. 4) that were born in the city. I'll be checking to see if they return, once people have reclaimed their normal urban habitats.

Fig. 1.


Fig. 2.
12 C 28.96 inHg
TRAILCAM01
11/02/2020 09:35AM


Fig. 3.
21F -06C
2012/01/01 00:00:00
95%

Fig. 4.

Using the DMG Trailcams

Shirley Cross

For the last 2 years I have monitored a Trailcam on the edge of the wood at the top of the garden. Most of the time it is triggered by grey squirrels burying nuts or digging them up, but sometimes there is something else, such as badger, fox, roe deer, muntjac or wood mouse. The camera is normally attached to a tree (Fig. 1). For small mammals, I made a tunnel followed the technique described by Nick Littlewood* and colleagues. This involves fixing a close-focus lens over the camera trap lens and reducing the flash intensity with sticky tape (Fig. 2) then attaching the Trailcam to a baited tunnel (Fig. 3). The problem I have here is too many wood mice (Fig. 4) and bank voles which makes checking the images very tedious. I had planned to try other areas last year but that did not happen, so I am hoping to try again this year.

**Use of a novel camera trapping approach to measure small mammal responses to peatland restoration. European Journal of Wildlife Research (2021) 67: 12. The article is open access - download from: https://doi.org/10.1007/s10344-020-01449-z*

Fig. 1.

Fig. 2.

Fig. 4.

10 Tips for Camera Trappers

Garry Gray

I have been using camera traps for about 6 years. Learning through trial and a good deal of error, I feel like I am finally starting to get more consistent results. If you are thinking of giving this fascinating form of armchair nature watching a go, I hope the following is of some help.

All the usual field craft applies in terms of finding a place that mammals are likely to be, but the extra challenge with camera traps is to pick the right spot to place the camera. Unlike SLR cameras, almost all trail cameras are poor at taking images of fast-moving animals and so you need to find ways to make the animal stay in focus. The good news is that you can get sharp images simply by being selective about where the camera is positioned.

1. Leave the camera out there for a long time without checking on it. A week is good, 4 weeks even better if you can bear the anticipation
2. If taking photos rather than video, set the camera to take three consecutive images rather than just one. One of the images will be sharper than the others
3. Avoid facing the camera into direct low angle sunlight or images at dawn & dusk can be ruined by glare. Use trees or buildings to block out the sun, for example by moving closer to them. (Fox, Fig. 1)
4. Trail cameras come with very variable amounts of flash and there will be an area where the image is overloaded with light and will 'white out' obscuring the animal. Test a camera in the garden to find out how far back to position a camera from the chosen spot to avoid white out.
5. For larger mammals, consider the junction of several animal trails (badger trails are widely used by other species) and place the camera 5m back along one arm of the junction. The distance helps to keep the animals at the junction in focus and if it continues towards the camera there is the chance to get a close up. (Badger, Fig. 2).
6. Mammals rarely rush into a new space, so are likely to pause as they emerge from a hedge, turn around a tight bend in a track or climb over an obstruction. Set the camera to cover the place where you expect them to pause. A squeeze under a fence is a reliable option, as is easy access to water. (Muntjac at fence, Fig. 3).
7. If attaching the camera with a webbing strap always tidy the loose ends away, to avoid the wind causing false triggers with a flapping strap. Also removes temptation from browsers. This fallow deer fawn gave the strap end a good chew (Fig 4).
8. All mammals appear to be very aware of the presence of trail cameras, perhaps they can hear them, maybe it is visual. Positioning the camera low down (knee high) gets good looking images. Even better put the camera just back from something that obscures the animal's line of sight of the camera, like a tree stem or a leafy plant, until it arrives where you want to take the image. (Badger nose, Fig. 5).
9. For smaller mammals and animals that are curious about enclosed spaces, like stoat or polecat, add something in front of the camera like a tube or a box to encourage a passing animal to pause and look inside. The results are better if a close-up lens is added to the front of the trail camera to bring the point of focus level with the end of the tube. See links for advice on how to do this. (Vole in a tube, Fig. 5).
10. Taking this idea one step further, the Small Mustelids Foundation invented the Mostela camera trap method*. This introduces small mammals into a clear space in front of the camera and sometimes they stay side-on so that details like relative tail length can be seen to aid species identification. I made a scaled down version of a SMF Mostela that uses a smaller 5cm pipe, intending to favour weasels rather than stoat and mink, and used a +3.5

lens to make the image bigger. It is a little small for weasels but shows promise for shrews! (Bank vole, common shrew, weasel, Figs. 6-8)

*Mostela and tubecam ideas and designs are available on the Small Mustelids Foundation website: https://stichtingkleinemarters.nl/en
See also: Croose E. & Carter S.P. 2019. A pilot study of a novel method to monitor weasels (*Mustela nivalis*) and stoats (*M. erminea*) in Britain. *Mammal Communications* Vol 5. Available free to download from the Mammal Society website: www.mammal.org.uk

Fig. 1.

Fig. 2.


Fig. 3.
35F 02C 2020/11/02 23:30:43


Fig. 4.
21F -06C 2012/01/01 00:00:00


Fig. 5.
-05C 2021/03/13 04:50:05 90%


Fig. 6.
28F -02C 2019/01/24 18:21:06 100%

Fig. 7.

Fig. 8.

Fig. 9.

D.O.R. Otter (*Lutra Lutra*)

Jo Bissell

On the 25th October 2021, I received a text from someone I used to work with saying that a friend of theirs had seen a dead otter on the A38. The friend knew the area where it had been killed well and had been back to move it off the carriageway. He knew where he had left it, and did I want it?

You never quite know what you are going to find when you embark on these kinds of meetings but only time would tell. We met at a location not far from the Ripley junction of the A38, and the gentleman who had hidden the animal turned up. We chatted a while and it started getting a little dark so thought it was time to actually find the otter.

Armed with a shovel to carry the beast on, he went off up an embankment into a wooded area. If anyone had been watching, I'm sure they would have thought that there were some strange things going on!!! A short time later he came out with what was an otter. It was a dog otter, unfortunately he had a lot of head trauma; length 112cm and weighed 6.8kg.

I hope that one day I will get to see an otter in Derbyshire that is alive!

Willington beavers

Progress in 2020 was delayed by the COVID situation, and it is now hoped that the beavers will arrive on site in autumn this year. The good news is that thanks to generous funding from Severn Trent Water and Biffa, the size of the release enclosure will now cover 40 hectares, twice as large as originally planned. Two pairs of beavers with their young will be translocated from the population in the River Tay catchment.

Coming soon to Derbyshire? Beaver lodge at Loch Coillie Bhar, Argyll

Oh Deer!

Reeves' muntjac (to give it its full name) is the UK and Derbyshire's smallest deer species. Native to China and Taiwan, it was first released in the UK in 1901 around Woburn Abbey, Bedfordshire. Since then, it has spread over much of southern England and the Midlands, aided by escapes and other releases. Muntjac have been established for some time in the south of the county around Calke Abbey, Ticknall, and South Wood, and have been spreading up the mid-Derwent valley (see the articles by Shirley Cross and Garry Gray, above) and also into north-east Derbyshire, though they remain rare in the north-west. Muntjac prefer dense cover and have adapted to town gardens where they may make themselves unpopular by feeding on the flower beds. One has seen at the fire station in Burton-on-Trent and on 1 June 2020, police in Belper investigated a suspected intruder that turned out to be a muntjac trapped in a garden shed: when cornered, the animal headbutted one of the officers. It was eventually released 'without charge'.

Source: https://www.derbyshiretimes.co.uk/news/people/armed-police-officer-headbutted-deer-after-call-suspected-burglary-derbyshire-2871970

Peak District Otter DNA Survey

A team at Sheffield University is aiming to obtain genetic profiles of individual otters in the Peak District to estimate otter numbers, study otter movements through the Peak District and territory sizes, investigate how season and landscape impacts on otter distribution and identify any barriers to dispersal or risks crossing territories. Surveying may also help to identify areas where it may be possible to reduce the risks to otters whilst travelling, such as otter deaths by road traffic. A commercial kit was used to extract genomic DNA from otter spraints. The DNA is used to confirm the dropping was produced by an otter and not by a mink or other species). The project is appealing for help to find otter spraint, particularly in the Peak District. Please contact Dr Deborah Dawson (d.a.dawson@sheffield.ac.uk); and for more information on the project see: https://www.sheffield.ac.uk/molecol/deborah-dawson/peakdistrictotters (*and see DMG News 32 for ID of otter spraints and spraint sites*).

High Altitude Bats

Derbyshire Bat Group is operating a joint monitoring programme with the Moors for the Future Partnership (MFFP) on the northern moors. Kinder Scout plateau. This involves deploying an Anabat Express detector continuously for two weeks at a site and analysing the calls later. At the first site in the Upper Derwent Valley at 485 metres (1590 feet), common pipistrelle, noctule and a long-eared bat were recorded in June 2020. Then in July and August 2020, five species were recorded at a site on Kinder Scout, at 613 metres (2011 feet) close to the highest point in the county (636 m or 2087 feet). These were common pipistrelle, soprano pipistrelle, noctule, brown long-eared bat and a *Myotis* species and are the highest bats ever recorded in Derbyshire. The records also show previously unexpected use of these high moorland habitats. This may be related to the revegetation of the plateau following habitat restoration work by MFF since 2011. For more information, see: https://www.derbyshirebats.org.uk/news/moor-bats-summer-2020-update/

Zooniverse Iberian camera trap project

If you want to do some mammal surveying but don't want to go far, check out this project to help with a real-time, automatic monitoring protocol for species living in protected areas. Volunteers are asked to count and identify mammal species in camera trap photographs taken in 40 locations in the Doñana National Park, Spain, one of Europe's most iconic nature reserves. The camera trap system takes three photos every time it detects movement. The massive number of images is collected continuously, 24 hours a day, giving a global view of what happens when no one is looking. Your contributions will help the research team determine the abundance and distribution of these species at Doñana and provide valuable training data.

Learn more, and get involved at: https://www.zooniverse.org/projects/aicensusuhu/iberian-camera-trap-project.

Mountain Hare Survey

If you are taking advantage of travel restrictions easing to visit the Scottish Highlands, you could take part in mountain hare survey project jointly organised by NatureScot (formerly Scottish Natural Heritage), the Mammal Society, the British Trust for Ornithology (BTO), the James Hutton Institute, and the Game & Wildlife Conservation Trust. You can turn any walk in Scotland into a *Rambling Survey* of mountain hares using the Mammal Mapper App (see above) to record any mountain hares you come across. If you have more time, you can take part in the mountain hare *Square Surveys*, which are focused on 1 km squares. For more information and to sign up, please see: https://www.mammal.org.uk/mountainhareproject/

You can also see mountain hares across the northern Peak District moors. Good places to see them include Derwent Edge and the adjoining moors east of Ladybower, Derwent, and Howden Reservoirs (good parking at Severn Trent Water's Fairholmes Visitor Centre); Bleaklow, and Kinder. If you do see a mountain hare, please don't forget to send the record to DMG! Mountain hares have by now changed back into their brown summer coat. They can be distinguished from brown hares by the all-white tail (brown hare tail has a black centre) and other features – see the photos below.

Mountain hare

- *Coat grey- or mid-brown on top*
- *Chest and underparts white with white showing clearly on flanks*
- *Ears relatively short compared to head*
- *Tail all white*

Brown hare

- *Coat tawny or yellow brown on top*
- *Chest and flanks also brown, with limited white underparts visible*
- *Ears long in relation to head*
- *Tail with black centre*