Wiltshire Mammal Group

Newsletter - Spring 2022

Welcome to the spring 2022 edition of the Wiltshire Mammal Group newsletter.

As always, a massive thank you to everyone who supports our work, through surveys, mammal sightings, events and promoting our work.

I hope you feel inspired to get involved and try something new!

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Welcome

2021 was clearly still dominated by the pandemic and the various iterations of government guidance in place to keep us, and the NHS, safe.

But 2021 also saw a lot of hope, and a lot of optimism – which, frankly, is much more pleasant to dwell upon than Covid-19.

Firstly, we welcomed Robyn Owen as the Group's new Events Officer, who instantly got involved in multiple projects and events around the county. Robyn organised the harvest mouse surveys this year, and the online talks which recommenced in December.

We also welcomed Peter Thompson and Claire Neale, both of whom mucked in with various group activities and organisation. Claire has been working on dormouse monitoring in the north of the county, whilst Peter has supported Robyn with the harvest mouse events, undertaken water vole surveys (and in between, has assisted the bat group with the South Wiltshire Greater Horseshoe Bat Project too!).

Further cause for hope and optimism was provided by the next generation! It's been brilliant to see the outcomes of community engagement projects across the county, from the Aldbourne Wildlife Group in the north-east, to the Tisbury & District Natural History Society in the south-west. Many of the young people involved in these projects give me hope that their generation won't make the mistakes of those preceding them.

The increasing interest in our natural world also stimulated many organisations and land managers to get in touch and seek advice. We've helped as many as we can, including the Salisbury & District Angling Club, for example, and Haugh Farm's Carbodiversity & Wild School.

The continued developments in technology lead to further opportunities for mammal survey too. The development in recent years of the "Mostela trap" and other similar camera boxes, has enabled standard camera traps to be used for closer-focus work. This is a less invasive method for study and recording small mammals, including the ever elusive, and infrequently recorded, stoat and weasel.

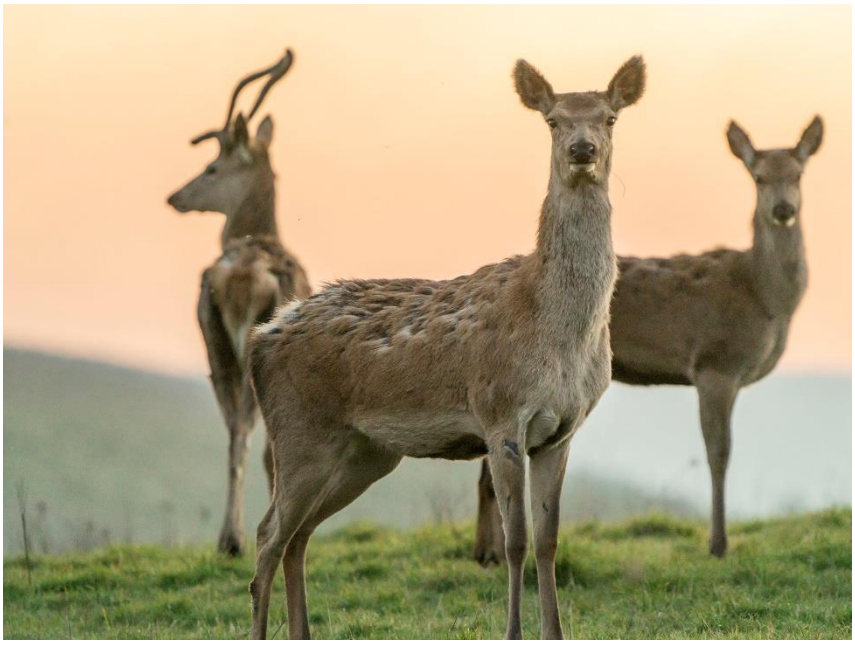
Research by the Mammal Society recently highlighted the concerning declines in our widespread small mammal species, including their predators, the stoat & weasel. This further built upon the work of Vincent Wildlife Trust upon these less studied mustelids.

We are excited and grateful, therefore, to welcome contributions to this newsletter from Bob Philpott and Nick Goddard, as they share, their own journeys in developing their Mostela boxes.

I hope you'll also find optimism and inspiration in this newsletter. Why not join us and get more involved?

Let us know what you see through the Wiltshire Mammal Group Facebook Page and Record your sightings with the Mammal Society's Mammal Mapper app or iRecord or Living Record.

GOH. February 2022



Red deer on Salisbury Plain (C) Steve Dewey

Wiltshire Mammal Group is YOUR group – get involved!

WMG is largely run by a very small committee, which achieves a lot. We do the finances, run the membership, keep the social media updated, produce the annual newsletter, assist with events where we lead and coordinate surveys where we can, liaise with our partner organisations, responding to enquiries from the public and media and much much more.

We are therefore delighted to welcome Robyn Owen, our new events officer, who is helping guide the group to greater things, including more events and engagement.

Also assisting behind the scenes are Claire Neale (with particular expertise in hazel dormice) and Peter Thompson (all round naturalist with expertise in farmland and wetland mammals).

Please extend a warm welcome when you meet them.

A large part of what we do relates to recording and managing data, liaising with the local environmental records centre, and verifying the steady flow of records arriving through Living Record, iRecord, Mammal Mapper app and much more.

We would like to increase the involvement of members in the running of the group. As part of this, we are looking for:

- Secretary – to respond to enquiries, help organise meetings, take minutes and communicate with the membership. Mammal expertise isnt a prerequisitie but enthusiasm for mammal conservation helps!
- Treasurer & membership – to develop the membership system and make further efficiencies. Again, mammal expertise isnt a requirement!

If you have experience of such roles already, please get in touch. But please don't be shy or presume you don't have the skills – we'd love to hear from you.

For further information regarding the group, membership and recording please email wiltshiremammalgroup@hotmail.co.uk or the relevant committee member:

Chair (position vacant) -

Secretary (position vacant -

Lisa Wade (**Treasurer & Membership**) wmgmembership@gmail.com

Robyn Own (**Events Officer**) wmgevents.info@gmail.com

Gareth Harris (**County Recorder**) wiltsbatrecords@gmail.com

Purgle Linham (**Website**) -

Notes from the County Recorder

Gareth Harris

2021 – the continued impact of the pandemic upon mammal survey and recording

In the 2020 newsletter we outlined some of the challenges that arose in 2020 in response to the SARS-CoV-19 pandemic, whether the resultant restrictions in in human activities in order to limit infection rates in humans, or the guidance published to minimise risks of infecting wild mammals, in particular bats. 2020 was massively challenging from a pure mammal survey and monitoring perspective, but of course, the human race had bigger things to worry about.

The downturn in activities in 2020 largely continued in 2021, but some activities were reviewed and recommenced, strictly following the necessary guidance for people and wildlife, limiting interactions wherever possible (by reducing durations of surveys, team sizes, training opportunities and handling). It's imperative that we safeguard the wildlife we study, so all necessary precautions were taken. This was felt, in particular, by those undertaking dormouse survey and monitoring whereby numbers of surveys at each location, and attending personnel were reduced, and consequently opportunities for training were much reduced.

2021 – an unseasonably cool and wet spring

Spring 2021 was rubbish to say the least. A prolonged cold snap in February was followed by a warm but dry March, and then a cold but dry April, and then a monsoonal May……. the result of which was to make life exceedingly hard for our wildlife, especially those that hibernate, including bats and dormice. The cold, dry Spring, followed by the wet May resulted in a very low insect abundance. Animals leaving hibernation were often confronted by unseasonal temperatures and a low food abundance.

County recorder's report 2021

The increase in interest in the natural world by the wider public noted during the various lockdown periods in 2020 lead to an increase in mammal recording through the Mammal Mapper app and iRecord. We hoped that this would be sustained beyond 2020 and this appears to be the case. Hopefully this will extend beyond recording to ever growing engagement in the natural world.

Hazel dormouse

Hazel dormouse monitoring continued at almost all sites and was compliant with Covid-related guidance. New sites for dormice were confirmed in The Donheads (south Wiltshire). Positive outcomes were recorded in the Savernake & wider area, sites near Pewsey, Longleat Estate and near Ludgershall.

Each is coordinated by its own brilliant monitoring group. As in previous years, over 20 sites are regularly monitored for dormice across Wiltshire; some of these are coordinated by mammal group members, others are coordinated by local groups specific to their sites (such as Wildlife Trust reserves, National Trust sites and so on).

Harvest mouse

WMG continued with its ongoing programme of harvest mouse nest surveys. In 2021, these were undertaken as part of the Mammal Society's national harvest mouse project. Four survey events were targeted to parts of the county considered under-recorded or not recently recorded including Corsham (West Wilts), western end of the Nadder valley (SW Wilts) and the area around Aldbourne (NE Wilts).

82 nests were found across the four survey events including 38 on Corsham Estate, 7 near East Knoyle, and 8 & 29 nests on two events near Aldbourne. These events involved over 40 participants many of whom continued with their own surveys. In particular, Emily & Matt Best and the Aldbourne Wildlife Group, who have achieved an astonishing coverage of the north-east of the county, around Aldbourne, in a previously poorly recorded area! Huge thanks also Abby Beddoe, Ellie Povey and Neil Pullen for their time and efforts in the Swindon Borough. Surveying many of the urban green spaces and reminding us all that harvest mice are not just found in farmland. WMG members such as Pete Thompson have continued generating records across south Wiltshire.

Huge thanks to the landowners hosting these events and to the trainers and participants for hugely successful events.

© Peter Thompson East Knoyle Harvest Mouse survey training day

Elsewhere in the county, Anna Forbes and the Action for River Kennett (ARK) Project, conducted further surveys at their reserve, Stonebridge Meadows, Marlborough, following the successes of 2020. There was a flurry of new records from sites throughout the Woodford Valley too, thanks to this author and to Keith Lea.

Water vole survey

WMG is increasingly concerned about the health of water vole populations in the county and has raised these concerns with relevant organisations in the county. Catchment-scale water vole surveys were undertaken widely in the county in the 2000s-2010s by organisations such as the Wildlife Trust, but survey activity has declined, largely due to a lack of resource to do so. Consequently, water vole records in the county are becoming increasing old, and out-of-date. Whilst it's heartening to see interest from groups such as *PARR - Pewsey Avon River Restoration* (on Facebook here), greater survey efforts are required in the county from all parts of the environment sector.

The Group was delighted therefore in 2021 to be able to support some surveys on Harnham Meadows in Salisbury, undertaken by Peter Thompson on behalf of the Group, and reported in the Mammal Society Local Groups e-bulletin in June 2021. Peter and I also visited sites on the River Avon in Amesbury with Salisbury & District Angling Club and saw the amazing work the Group is doing for water voles here too.

Mustelids

2021 produced further records of otters that confirmed how widespread this species is within the county and how easily they may be seen even in settlements such as Salisbury (with a family group causing quite a social media storm in May) as well as elsewhere. A series of road casualties across the county are always upsetting but continue to provide invaluable information. A number of abandoned cubs were also rescued and rehabilitated (with thanks to Wiltshire Wildlife Hospital and UK Wildlife Otter Trust).

Smaller numbers of records of polecat, stoat and weasel appear to have been reported over the past year, raising some concerns. The current dearth of rabbits across the county MUST surely be impacting these species.

American mink were also reported, and trapped, at a number of locations. We strongly encourage submission of sightings of mink and their field signs, and we're keen to hear from keepers and land managers undertaking mink control which has an absolutely essential role in water vole conservation.

Rabbit & brown hare

As in 2020, rabbit numbers remained low in 2021 across much of the county, although the spring offered signs of recovery, numbers had largely crashed again by the autumn. As rabbit numbers remain low, I wonder what impact this has upon our predators, especially stoat and polecat (but not forgetting red fox and avian predators too) and can only presume times are tough for them too. I would therefore encourage people to keep an eye on their local rabbit populations – conduct regular counts of adults and juveniles on your regular walks and see if they show signs of recovery.

In November, we re-circulated details of how to report brown hares found diseased, and how to submit their carcasses for research at the University of East Anglia. We promoted this work each year (2018, 2019, 2020, and 2021) and updates may be found here: URGENT: Disease in Brown Hares; your help needed. Dr Diana Bell and her team at the University of East Anglia, who is leading the research on hares, reiterated the need to remain vigilant and to continue reporting instances of dead/dying/diseased hares.

Events 2021

In addition to the harvest mouse survey events, the Group hosted additional events including Ric Morris' *Introduction to identifying the bones and skulls of British mammals* in March 2021, an online talk on brown hare with Peter Thompson (March 2021) and winter nesting ecology of hazel dormouse with Leo Gubert (December 2021).

Also in December 2021, we hosted our first winter walk, to involve members in mammal recording events, whilst surveying a previously under-recorded part of the county. An intrepid group of 6 met at Oxenwood Outdoor Education Centre in eastern Wiltshire and walked a long loop around the surrounding farmland and woodland, recording over 60 mammal records, including brown hares, harvest mouse nests and roe deer, whilst noting field signs of small mammals such as wood mouse, field vole, badger, muntjac and fox. Thank you to all who joined us and thank you to Oxenwood Outdoor Education Centre who kindly shared their car park and toilets!

During November we were also warmly hosted by Codford Gardening Club for an evening of hedgehogs and wildlife-friendly gardening.

All events were well supported, promoting recording, mammal ecology, and raising well-need funds for mammal conservation.

Recording & submitting records

There are a variety of ways to submit records to us – Living Record is still supported but increasingly we encourage submission via iRecord and the Mammal Society's Mammal Mapper app. Several members send in regular updates via our template recording spreadsheet.

Mammals in Wiltshire, an updated third edition……

In March 2017 the mammal group, bat group and WSBRC published the updated county mammal atlas, Mammals in Wiltshire, 2nd Edition. This is available to download from our website. Since 2017 we have made a series of advances in knowledge of several species in the county that would suggest that publication of a new edition may be worthwhile. Advances include the trapping of Alcathoe bat, *Myotis alcathoe* (at two sites in the county), which is a new record for the county and for south-west England. Furthermore, significant advances have been achieved for hazel dormouse, harvest mouse, Barbastelle bat and Bechstein's bat.

An interval of 5 years since publication of the second edition seems wise, placing a provisional update publication date in 2022-2023.

Mammal Mapper app
Gareth Harris

Please consider downloading the Mammal Society's Mammal Mapper app; this will ensure that your records are made available to Wiltshire Mammal Group and our local environmental records centre, whilst also capturing vital information that the Mammal Society can use in the monitoring of national trends.

Watch the Mammal Society's Latest Mammal Mapper video, narrated by Mammal Society patron Zeb Soanes; https://youtu.be/PgBuL8YL-X8

As the Mammal Society's website states "*Mammals can be recorded along a route whilst you're walking/running/cycling or even a passenger in a car, or as one-off sightings, for example a hedgehog in your garden*."

The app enables you to easily submit records of field signs as well as sightings of mammals (dead or alive).

All records submitted are available both to Wiltshire Mammal Group, the local environmental records centres as well as the Mammal Society. The Mammal Society are able to use the records to understand the distribution, abundance and conservation status of British mammals.

The main advantage of Mammal Mapper is "*the ability to record where you are looking for animals, or "effort" ……it provides information about where people are recording and more importantly, where animals are absent. In the past, it has been difficult to understand if gaps in records are caused by a true absence in animals at those locations, or if it is simply an artefact one of nobody recording in those areas. In addition, the inclusion of "effort" provides the ability for researchers to calculate the density of animals. These important biological data are necessary to estimate the total population of a species and understand its conservation status*."

Download Mammal Mapper and give it a go.

Water shrew (C) Steve Deeley

Harvest mouse surveys
Robyn Owen

There's nothing better than the delight of finding the perfectly crafted home of a harvest mouse … my partner would say there's nothing better than a pint after a stroll has become a four-hour mission to find one!

Autumn 2021 marked the beginning of the Mammal Society's National Harvest Mouse Survey. Following several years of harvest mouse surveys in Wiltshire, WMG were keen to support the project and encourage others to get rootling in tussocks to search for nests. We held four training days with over 40 attendees though November and December. We chose locations in the county that have never been surveyed and in areas with few records. Although the aim of the day was to train attendees, we wanted to incorporate a survey so that everyone could practice the methodology and to gather data on un-surveyed areas. To our delight we found nests at every location. The biggest haul was a whopping 38 nests from a single field margin in just an hour of searching at a farm in Corsham (Table 1). Everyone got the chance to see a nest in situ and most people managed to find a nest.

(C) Peter Thompson Corsham HM training day

Survey area	Number of nests found by training event
Corsham (West Wilts)	38
East Knoyle (SW Wilts)	7
Aldbourne (1) (NE Wilts)	8
Aldbourne (2) (NE Wilts)	29

Many attendees subsequently went on to do their own surveys in Wiltshire. From January 21st, 2021, to present we have 182 records in North Wiltshire and 91 in South Wiltshire. A fantastic effort from everyone who carried out their own survey, in particular, Emily & Matt Best, and the Aldbourne Wildlife Group, who have achieved an astonishing coverage in the north-east of the county, around Aldbourne, in a previously poorly recorded area! Huge thanks also Abby Beddoe, Ellie Povey and Neil Pullen for their time and efforts in Swindon Borough, surveying many of the urban green spaces and reminding us all that harvest mice are not just found in farmland. WMG members such as Pete Thompson have continued generating records across south Wiltshire.

So, what does this all mean for this tiny acrobat? Well, the data contributed to the National Survey are painting a clearer picture of harvest mouse presence in Britain, which can lead to a greater understanding of where and how to focus conservation efforts.

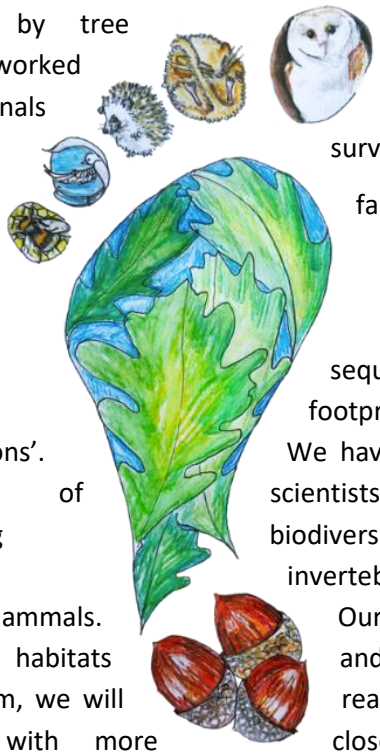
If you're a landowner consider; leaving your grassy margins uncut, scrub up some areas and connect them via hedgerows or grassy margins, avoid harvesting a field from the outside in and consider using fewer chemicals where possible.

Let's keep searching, keep recording and keep spreading the word about our smallest and most agile rodent!

A closer look at the work we do; Carbodiversity & Wild School

Robyn Owen

On the Western fringes of Wiltshire lies Haugh Farm; owned and occupied by Georgie and Tom Warner, three children and small menagerie of animals. Driven by a strong desire to protect nature, and inspired by rewilding concepts, Haugh Farm decided to start a new life in 2021 by dedicating their 25-hectare land to nature. Carbodiversity & Wild School, as its now known, aims to sequester carbon by improving biodiversity whilst educating people about the importance of nature and contributing to scientific research. Neighbouring a SSSI woodland, they want to inspire other landowners in the area to manage their land in a nature sensitive way to boost landscape scale biodiversity. Last year they have begun the restoration of species rich meadows, created areas for scrub to regenerate and hedgerows to widen, restoration of their traditional orchard by tree planting and worked with professionals to conduct baseline surveys.



"Our farm is focused on improving biodiversity and carbon sequestration … 'proud footprints for future generations'. We have an amazing team of scientists surveying and recording biodiversity data for plants, invertebrates, birds, and mammals. Our goals are to enhance habitats and biodiversity. In tandem, we will reach out to link people with more closely to nature and improve our understanding of the delicate web that connecting ecosystems support. We have had the privilege of working alongside Robyn from Wiltshire Mammal Group who has been a constant advisor, help, volunteer and inspiration for this project, and we are very grateful for the input of Wiltshire Mammal Group. It is wonderful to have support and enthusiasm from such brilliant team"

Wiltshire Mammal Group members have been working with Georgie to carry out mammal surveys and monitoring. In 2021 we installed 50 dormouse tubes, carried out a hedgehog and harvest mouse surveys and advised on mammal habitat creation or enhancement. We will continue to work with Carbodiversity & Wild School and support similar projects that are making such great efforts for nature conservation.

Wiltshire Mammal Portal – website refresh

How time flies – the website is 6 years' old this year, so we're giving it some TLC and a bit of spring clean.

The Wiltshire Mammal Portal is a shared resource for the mammal group and bat group and provides a single point of information for all things mammal-related in the county.

Please check it out, *follow* it, let us know what you think.

Huge thanks to Kelly Sheldrick (Events Officer for our sister group, Wiltshire Bat Group) and Robyn Owen for all your work on this!

Tisbury and District Natural History Society - Young Nature Watch

Inés López-Dóriga

2021 was the first full year for Young Nature Watch (YNW), the Tisbury and District Natural History Society (TNHS) branch for young people (including the young-at-heart!). We had a programme full of hands-on activities, despite the then-usual COVID-19 hiccups. Our mammal-related activities consisted of a water-vole survey and a dormouse nut hunt, both of which I led with my mammal mentor Debbie Carter. Our attendants learnt about these two protected and endangered species as well as how to conduct surveys. We submitted all our records to Mammal Mapper, and we hope that they are useful in helping research and conservation efforts of these animals. Another of our successes this year was the award given to our young helper Izzy Fry, who obtained the National Biodiversity Network's Young Person's Award for Wildlife Recording, congratulations Izzy!

We had two groups of people in our water vole survey in May and we went to two different transects of the river Nadder managed by the Teffont fishing club, where we already knew

Water vole burrow & lawn (C)Inés López-Dóriga

water voles were present. We showed a bunch of enthusiastic people how to identify the most common field signs, such as pellets, footprints, burrows and feeding signs. After we finished, we then went on to do our own surveys for the People's Trust for Endangered Species (PTES) water vole monitoring scheme on other private land (it was not so easy to

walk due to overgrown vegetation, but we were happy to see otter signs too!) and we hope that some of the attendants did their own surveys too on their own.

For our nut hunt, in December, we headed to a reserve owned by the Wiltshire Wildlife Trust near Oysters

Otter spraint (C)Inés López-Dóriga

Coppice. Our attendants learnt about the three mammals that leave distinct chew marks on hazelnuts (bank voles, wood mice and dormice) with the help of Debbie's chewed nut reference collection. After this, we had the whole run of the area split into small groups, armed with drawings of teeth marks on nuts and magnifying lenses. We checked every body's hazelnuts at the end, with two definite dormouse-nibbled nuts (plus a possible), several wood-mouse-nibbled nuts and abundant bank vole-nibbled nuts (not to mention the nuthatch and grey squirrel-opened nuts)!

Our mammal activities in 2022 are all nocturnal! We will start with a March hare walk with Peter Thompson (we will walk on a full moon night armed with thermal imagers), a spring bat walk in the Cranborne Chase AONB (armed with bat detectors) and a deer rut walk in autumn (armed with tight lips and good hearing).

Although we are based in Tisbury, we welcome anybody at our activities as part of YNW – TNHS.

(Note our activities are free for <21 years old but there is a small fee for adults), so please email (youngtnhs@gmail.com) if you would like to make suggestions/help/attend, and visit our online platforms for news (https://www.tisburynaturalhistory.com/, https://www.facebook.com/tisnathist, https://www.instagram.com/youngnaturewatchwilts).

Inés López-Dóriga

Cotswold Water Park Nature Recovery Plan

Wiltshire Mammal Group & Wiltshire Bat Group were pleased to have contributed to the recent publication of the Cotswold Water Park Nature Recovery Plan, produced on behalf of the CWP Nature Conservation Forum.

The summary document and the technical document can be found on the Cotswold District Council website here.

This strategic plan follows on from two successful biodiversity action plans spanning over 20 years of conservation effort. Included in this publication are chapters relating to bats and to mammals of wetland mosaics, both building upon long term conservation efforts for these species' assemblages.

This follows the review and update of the SSSI in the CWP, which was announced in September 2021, following 10 years of work by many people. More details here.

Small Mammal Trapping at Parsonage Down NNR

Robyn Owen

In 2019, the Natural England Southern Hen Harrier Reintroduction Project acquired a 25acre field at Parsonage Down NNR, on the Southern edge of Salisbury Plain Training Area (SPTA). The main purpose of the field is to house the hen harriers prior to release in purpose-built aviaries and subsequently provide a secure location for them to feed and roost post release. The secondary purpose is to use the field as a demonstration to land managers on how they could 'farm for nature' within a single field, benefiting local biodiversity.

The release field is comprised of strips of differing winter and spring sown crops and rough grassland interlinked with beetle banks and mown ryegrass paths. The crop types comprise of bird, pollen and nectar mixes, and triticale enhanced with wildflowers. Minimal chemical inputs are used, and ground predators are excluded with a mains electric fence. Since creation we have been delighted by the rapid influx of insect, bird and mammal species using the field. In the spring and summer months the sound of buzzing insects, jangling corn buntings and exuberant song of skylarks is deafening. Birds of prey such as kestrel and barn owl hunting on the field is a daily occurrence, including hen harriers and short eared owls in the winter months. We have found harvest mouse nests, weasels, and rabbits amongst the vegetation.

In the Autumn of 2020, we began monitoring small mammals within the release field to test what we thought we were seeing; that the field composition and design was increasing the abundance of small mammals. We put out 50 Longworth taps in the Northeast Corner of the field, and 50 Longworth traps in the Southwest corner of the field. We baited for two nights and trapped for two nights in Autumn 2020, Spring and Autumn 2021.

When comparing Autumn 2020 to 2021 there was an increase in the abundance of small mammals (2020: 0.21, 2021: 0.25) for the whole field. At the North location the abundance of wood mice decreased from Autumn 2020 to 2021, but the abundance of field vole and common shew increased (Fig 1). Interestingly, within the same time period for the South location, the number of wood mice increased along with field vole and common shrew (Fig 2). Within the same year of 2021 there was a marked difference in small mammal abundance for the whole field from Spring to Autumn (Fig 3).

It is difficult to discern the cause of the increase in overall abundance of small mammals without statistical analysis over multiple years and without having compared these data to local datasets. It is not clear

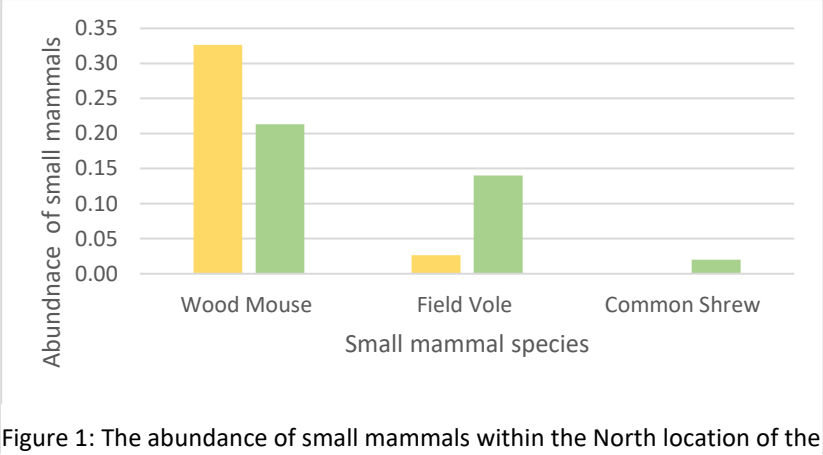


Figure 1: The abundance of small mammals within the North location of the hen harrier reintroduction field in Autumn 2020 and Autumn 2021

therefore, if this increase is due to a natural cycle or to the habitat that has been created within the field. The difference in the Southern and Northern species abundances are interesting, and perhaps due to proximity of habitats surrounding the field; the North site is <40m from a hedgerow, which most likely explains the higher number of wood mice in the North site to the South. It is also interesting that the wood mice have decreased with increased abundance of field voles in the Northern site – could this be competition? Again, it is difficult to know without more data over consecutive years and statistical analysis.

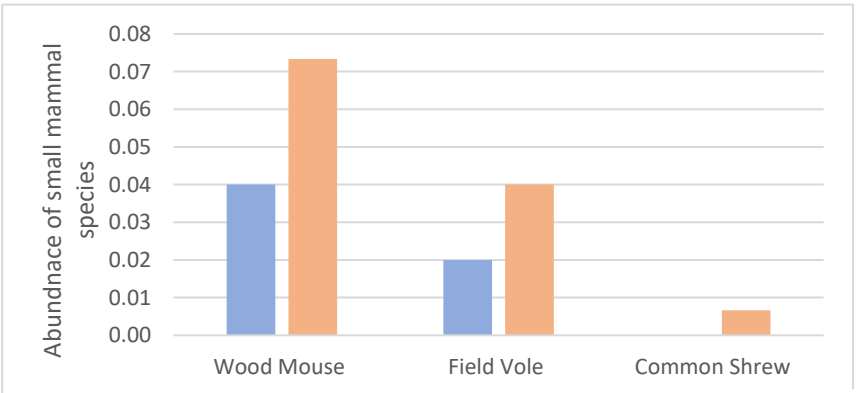


Figure 2: The abundance of small mammals within the South location of the hen harrier reintroduction field in Autumn 2020 and Autumn 2021

Abundance was calculated by dividing the total captures per site by the total number of traps, then by number of trap checks e.g. ((X/50)/3) (Gurnell and Flowerdew 2006). Gurnell J., and Flowerdew, J.R. 2006. Live Trapping Small Mammals: A Practical Guide. The Mammal Society.

The difference between Spring and Autumn is marked and we are keen to know if this pattern will be similar in future consecutive years.

The increase of field voles in both sites is promising for the food availability of diurnal hunters such as the hen harrier. Furthermore, given the frequently that we see avian predators hunting on the field compared with neighbouring conventional fields these results seem promising that the field is possibly more fruitful.

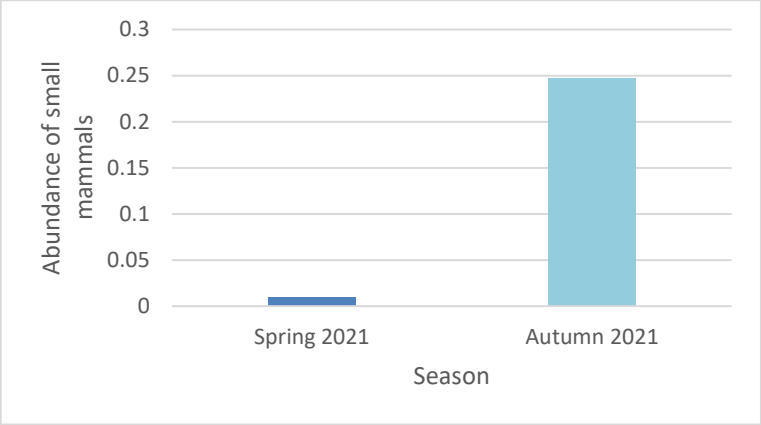


Figure 3: The total abundance of small mammals at both North and South locations within the hen harrier reintroduction field in Spring and Autumn 2021

Small mammals are not just fascinating and worth conserving in their own right, they are also vital in the food chain for many predatory species. By continuing to monitor the small mammals in the field we hope that we can encourage land managers to diversify and connect habitats to support birds of prey and other wildlife. It is encouraging that in just a just a few years we are seeing, and hopefully recording, the wildlife benefits of a more diverse field system.

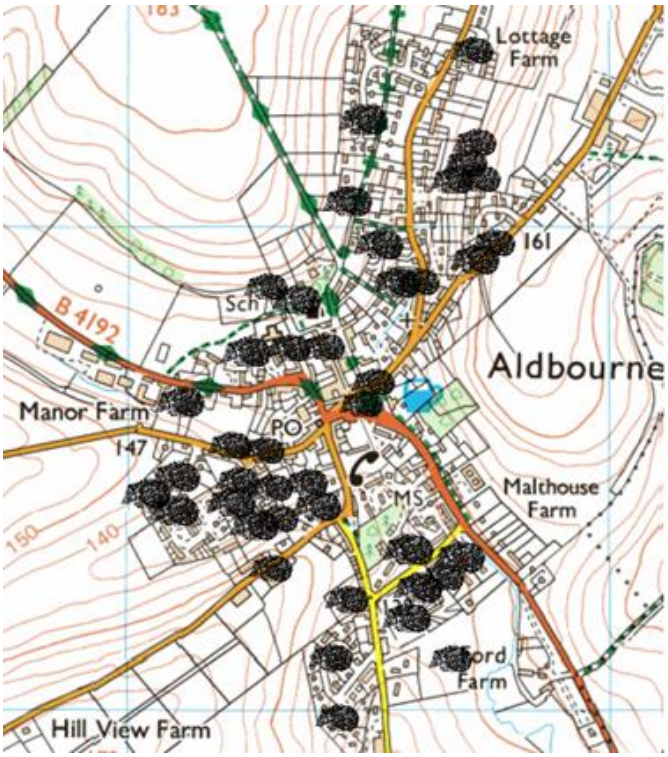
For more information about the hen harrier reintroduction project and how you could assist with mammal surveys please contact robyn.owen@naturalengland.org.uk

All photos by Flemming Ulf-Hansen

Aldbourne Wildlife Group

Emily Best

2021 was an exciting year in our village with the establishment of Aldbourne Wildlife. A group for nature enthusiasts, passionate about recording nature in all its forms, sharing the wonders of our local wildlife with others and inspiring one another to protect the natural world.



2021 Hedgehog sightings map

We thought that there could be no better way to begin to engage with the village community than by asking about the nation's favourite mammal, the hedgehog. Nationally, 50% of rural hedgehogs have been lost in the last decade so we were delighted to hear from 38 households in the village who have enjoyed visits from hedgehogs this year. We mapped sightings and provided updates on their whereabouts on Facebook and in the village magazine The Dabchick.

One local resident commented "love it, what a wonderful way to watch wildlife" and there is even discussion of applying for a hedgehog road sign. Such a simple project was enjoyed by many and provided an opportunity to discuss things we can do to support hedgehogs such as putting out food and water, not using harmful slug pellets and connecting gardens through hedgehog holes. By continuing to ask for sightings each year we will be able to monitor our local hog population.

In June we teamed up with the village EcoChurch group at St Michaels church to take part in "Churches Count on Nature", a national citizen-science event that aims to record the biodiversity in churchyards. We ran biodiversity monitoring workshops over 5 mornings for all 7 classes at St Michael's CofE school; each group spent between 1-2.5 hours with us, being "wildlife detectives". Six hedgehog footprint tunnels and 4 small mammal footprint tunnels were baited with cat food between strips of masking tape painted with charcoal and vegetable oil paint. We found hedgehog footprints in all corners of the churchyard, and also numerous small mammal tracks (vole, mouse rat) as well as cats!

We set 10 Longworth mammal traps each night and found 2 wood mice and 2 bank voles, which the children were hugely excited to see. We are very grateful to Wiltshire Mammal Group for the loan of this equipment. Moth traps, mist net demonstrations for bird ringing and slowworm monitoring were also enjoyed.

The week finished with a Saturday morning BioBlitz welcoming parents and community members to take part and in the evening more than 20 adults and children joined us for a bat talk and walk around the churchyard, where we watched 4 or 5 Serotine bats hunting, sometimes swooping just overhead. We wish to extend a massive thank you to Wiltshire Bat Group for deploying a static bat detector in the churchyard which detected Common Pipistrelle, Soprano pipistrelle, Brown Long-eared bat, Serotine, Noctule and Leisler's bat, which incidentally, neatly equates to the species we have recorded in other parts of the village this year.

A brief look through the brilliant "Mammals in Wiltshire" atlas is enough to see that there is a sparsity

of mammal records in the top right of the county around Aldbourne.

This autumn Aldbourne Wildlife has been on a mission to rectify this for one species in particular – the harvest mouse. Only a couple of historic records were known for the parish (30-40 yrs. old), but after two very informative local survey training days, run in collaboration with Gareth Harris and the Wiltshire Mammal Group, we have found harvest mice nests in 14/16 2km survey square within the parish (the remaining two squares only dipped into the parish).

In total 25 different mammal species have been recorded this year (there are historic records of 8 others around Aldbourne- perhaps a challenge for the year ahead). If you are interested in finding out more about our projects and work with birds, insects, reptiles and amphibians or are interested in getting involved please do check out our website AldbourneWildlife.com or like our Facebook group.

Aldbourne Wildlife

Working with Trail Cameras for small mammal monitoring (Part 1)

Bob Philpott

Originally used by hunters to monitor the movement of game, trail cameras have become an important way of recording mammals. More recently they have also been adapted to record smaller mammals, using bait to attract them and obtaining a close-up photographic record.

There are two types of small mammal camera trap around at the moment; an open ended trap (see here and a box trap known as a Mostela Trap (see here).

I decided to make my own 'Mostela' type trap using a relatively cheap camera, in this case an Aldi Maginon WK4. This article covers how I made this and how I use it.

Adjusting the focus point of the Camera:

Ordinarily a trail camera will focus on a point too far away for it to record small mammals easily. You can get reasonably priced close-up filters which come in a pack

of +1, +2, +4, +10 with a filter holder (normally 37mm but measure your camera lens first!). Using blacktac simply fix the filter holder over the lens. I am using the +4 filter to give me a focal distance of 10 inches.

At this range the InfraRed (IR) led lights will be too strong. To reduce the strength, cover the lights with a piece of white paper and overlay that with brown parcel tape. Trial and error will tell you how many strips of parcel tape you need (you will be surprised).

Making the Box:

Imagine a small theatre within a box, at one end there is a pipe allowing access onto a 'stage' whilst at the other there is a trail camera set up to record whatever appears.

Having accepted my carpentry skills are a bit below par, I decided that a recycled plastic box would be the best

place to start. You need a box about 2 foot by 1 foot and about 9 inches high, enough to fit your camera in. I acquired a Whambam box off the internet although there are many others around.

An old soil pipe offcut (110mm diam) of about 18 inches will provide an entrance, use a hole cutter to fit the pipe. The original Mostela instructions recommend a 100mm pipe entrance which can be achieved with a soil pipe joining piece (old soil pipe offcut is cheaper!). I used old chipboard flooring panels to make a **floor** (that gives it a bit of weight) and some plywood to make a **backdrop**.

Without screwing them in place, fit the backdrop and then the **floor**, you want the backdrop to be removeable.

Finally, you might need a length of plain architrave to retain the bait. I used some old skirting board.

Use a hole cutter from the inside to make the hole on each side. Push the hole cutter tight to the floor and backdrop. When you push the pipe through it will then hold the wood in place.

Cut the architrave to fit across the floor and push it tight against the pipe and screw it to the floor. To cut the pipe, mark it while it is situ, then take it out and cut it so that the backdrop is visible.

Print a ruler off the internet and stick it on the backdrop behind the pipe. The ruler will wear out every few months but replacing it is easy and I have found that even black rulers will reflect glare.

Fitting the camera:

Depending on the type of camera, you can either attach it to the floor or as in my case to the wall with some ¼ inch bolts. Put it as high as possible and angle it down.

Using the 'Mostela':

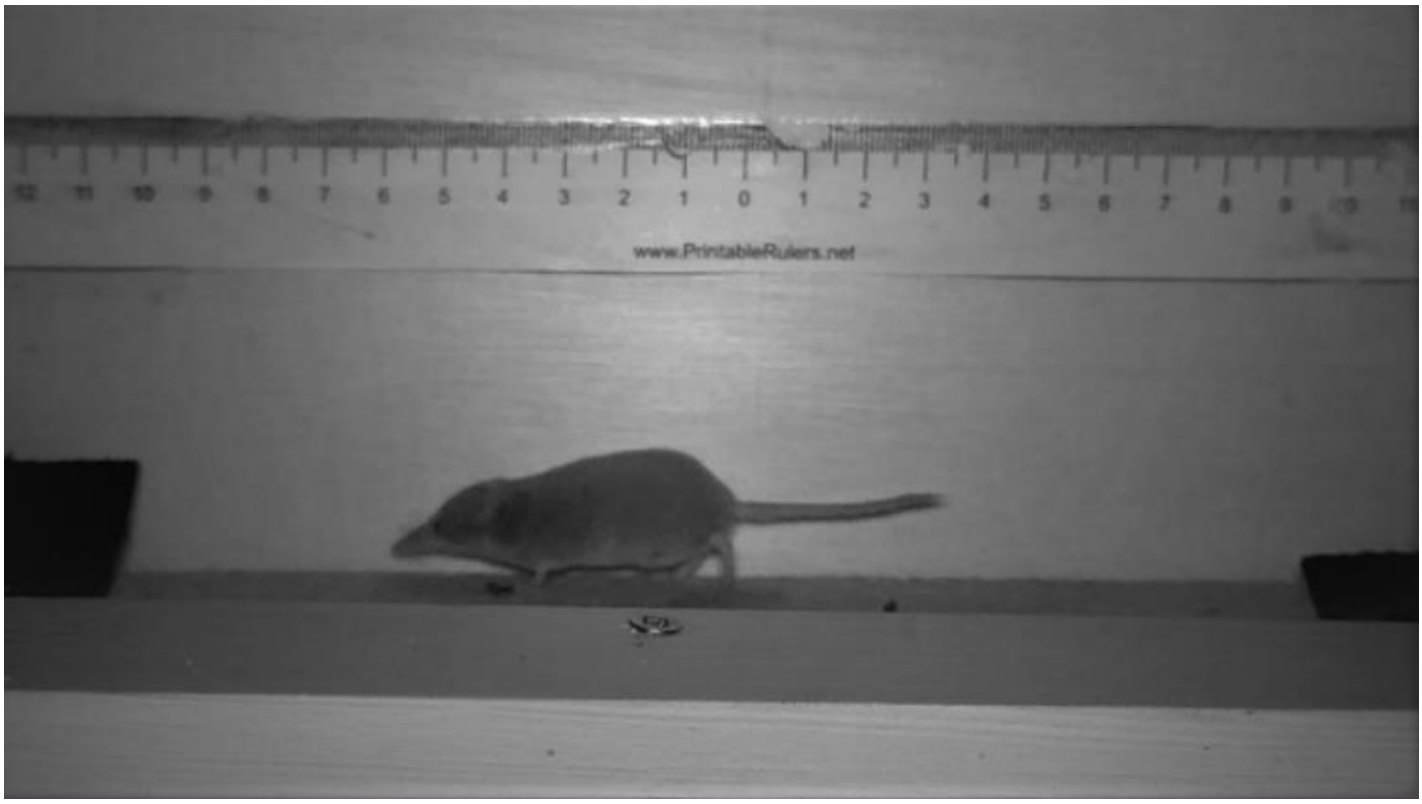
Initially bait the tunnel area well to get as many mice and voles into it as you can. After that NEVER CLEAN IT, the smell of the rodents should attract other mammals in. I always use a small amount of bait each time I place it out.

After that it really is trial and error as to where and how long you leave it.

Whatever you do wood mice seem to love it. I am sure I have had the situation where one mouse came in regularly simply to smile at the camera!!

I always use the camera set on video as some of these mammals move fast. The beauty of these camera box traps is that even something like a fast-moving shrew will be picked up and recorded.

(All photos by Bob Philpott)



Common Shrew

Working with Trail Cameras for small mammal monitoring (Part 2)

Nick Goddard

During last year's lockdowns I (like many others) had plenty of time at home and finding a plank of Siberian Larch in the garage decided to build a small mammal camera trap, firstly to use in the garden, but hopefully later further afield.

Initially I had intended to build a Mostela Box, but they need to be quite big, and I was unable to source any affordable FSC certified external ply, so I abandoned that idea in favour of something more modest.

For the camera I already had a Browning Dark Ops HD Pro X. This is a surprisingly small trail camera which nevertheless produces pretty good video and still images and it uses No Glow illumination, meaning that it is almost undetectable by most wildlife. To make it work within the container I wanted to build I needed it to focus much closer than it does 'out of the box', so I ordered a set of camera close up filters from Amazon (Polaroid, 37mm, about £11) and found that with the +4 filter Blu-tacked on the front of the camera I could achieve a sharp focus point about 25cm to 27cm from the lens.

Having sorted out the camera I was able to decide the dimensions for the box – it ended up being 440mm long, with internal dimensions at the open end of 140mm wide x 120mm high. It's a very simple design (see photo) Using some spare pieces of aluminium angle strip (left over from a greenhouse construction!) and a piece of Perspex, I was able to create a sliding lid. This has the benefits of protecting the inside of the box, the food, and the camera, from rain, and also providing overhead light access to help with filming any animals which appear in the daytime. I used more aluminium strip to make a compartment to hold the camera in place at the correct angle for where I wanted the focus point.

Baiting the trap with mixed bird seed has seen it visited by Wood /Yellow Necked Mice and Bank Voles. I have not used mealworms as bait because we have Hedgehogs in the garden and mealworms are very bad for them (they cause Metabolic Bone Disease, an intensely painful and ultimately fatal condition). I run the camera in video mode, and then extract any stills I want later on a computer. Obviously, the bird seed is not attractive to Shrews although they may still decide to explore the inside of the box (I hope one day a Weasel might come in too, enticed by the smell of mouse!).

After success in the garden Wiltshire Wildlife Trust kindly agreed to me using the box in some of their woodlands so I am now logging those results. One final point – I use rechargeable batteries in the camera. It seems to work perfectly well with them (although maybe not for as long as with fresh batteries) in spite of what the manufacturers recommend. I've had a lot of fun with making and using the box, I would encourage anyone else

to have a go, I'm happy to provide further information on request.

PS My ideas above were taken from the few articles online describing the building of small mammal camera traps (with some modifications of my own!), I do not claim originality!

Further information

For those interested in making their own structures for photographing small mammals, and inspired by Bob and Nick's success, here are some papers and guidance to further inspire you:

The Mostela: an adjusted camera trapping device as a promising non-invasive tool to study and monitor small mustelids

Building up a picture of weasels and stoats – The Vincent Wildlife Trust (vwt.org.uk)

New paper published on a method to monitor weasels and stoats – The Vincent Wildlife Trust (vwt.org.uk)

A pilot study of a novel method to monitor weasels (Mustela nivalis) and stoats (M. erminea) in Britain (Mammal Society)

Research methods – Stichting Kleine Marters

Harnham Water Meadows Water Vole Survey – May 2021

Peter Thompson

Harnham water meadows are designated as a Site of Special Scientific Interest (SSSI) and comprise around 84 acres. They are situated just to the southwest of the city of Salisbury.

These water meadows, which were first documented in the 17th century, are managed by the Harnham Water Meadows Trust; a group of volunteers who maintain and promote the meadows and conserve the natural diversity of wildlife.

The Wiltshire Mammal Group was interested in surveying these water meadows as water voles occur mainly along well vegetated banks of slow flowing rivers, ditches, dykes and lakes, so the Harnham water meadows seemed a likely place to potentially locate them.

After making a few enquiries, John Hunter (Trustee) kindly gave me permission to survey these water meadows for water vole on behalf of the Wiltshire Mammal Group.

On the 5th May, I was extremely fortunate to be accompanied by Lesley Wright during the survey – also a Trustee. Lesley was the perfect host, unlocking gates and directing me around the meadows as someone who obviously knows and loves the meadows well.

Before too long we found good evidence of water vole being present on the site – in the form of several holes situated along the bankside.

Water vole holes in bank alongside water course

Further investigation showed evidence of "grazing" of the vegetation in and around the holes, another pointer that water voles were indeed present and using these holes. In addition, in a few places we found the "Tic-tac" shaped small droppings associated with water vole.

So, we had confirmed that this red listed, UK endangered species is indeed present on the Harnham water meadows. So why is this of importance?

Well, recent evidence indicates that water voles have undergone a long-term decline in Britain, disappearing from 94% of their former sites. Predation by the introduced American mink has had a severe impact on water vole populations, even causing local extinctions. Habitat degradation and pollution are also thought to have contributed to the decline of the water vole.

Water vole field signs were plotted on a map of the meadows and shared with the Trust to inform future management.

The future of water vole on Harnham water meadows

Water voles will readily spread and colonise areas where their habitat is well managed. They require areas of soft, undisturbed earth banks in which they can burrow, with wide margins which have tall grasses, stands of rosebay willowherb, purple loosestrife, meadowsweet, or nettles, often fringed with emergent rushes, sedges or reeds, to give them food and cover.

These areas exist on Harnham water meadows where one side of the ditch has been fenced off, usually a couple of metres back from the water course itself. It is very noticeable that where this fencing has been

implemented next to permanent water courses, water voles have colonised.

However, in places where no such fence exists, allowing sheep to graze right down to the water's edge, the cover has been denuded and water vole are missing. Wherever possible therefore, attempt to create cover alongside water courses, in the form of naturally occurring, un-grazed vegetation. If this can happen on both sides of the water course – all the better.

Also, of creating a joined-up network of watercourses and associated un-grazed vegetation across the meadows. This will allow water vole (and many other species) to move freely around the meadows without having to cross areas with no cover, with the extra worry of being predated.

The above management will help the Harnham water vole population to thrive long term. However, should the non-native, introduced American mink become established in the area, all this hard work could be undone.

Unlike the otter, which would eat a water vole if it could catch it, mink are small enough to pursue a water vole down its escape hole (which are sometimes situated below water). Therefore, the water vole's main way of escaping a predator is nullified. This is the reason why the Mink is such a serious predator of our native water vole.

Should it become known that mink have started to use the area, the Trust could consider legally controlling mink, as many Wildlife trusts now do. One clever way of detecting Mink is to use a "mink raft". This is a floating tunnel, with a tray of soft clay within. Mink will explore any tunnel such as this, and therefore leave their footprints behind on the clay. The clay tray can be checked for footprints.

A mink raft is placed on a river to monitor presence/absence of mink

If presence of Mink is established, one can set a live trap to catch the Mink and humanely dispatch it. See here for further details:

I would like to finish this report by thanking John Hunter for permission to access the water meadows and Lesley Wright for her invaluable help on the day of the survey.

In the meantime – enjoy your voles!!

Partners & funders

Wiltshire Mammal Group enjoys the support of a number of organisations across the county. All are warmly thanked.

Forestry England, supporting projects in The Savernake, Collingbourne Wood, West Wood, the Braydon Forest and Grovely Wood, who continue to be mega supportive.

Simon Smart Black Sheep Consulting, who have supported the harvest mouse surveys since 2017 and so much more!

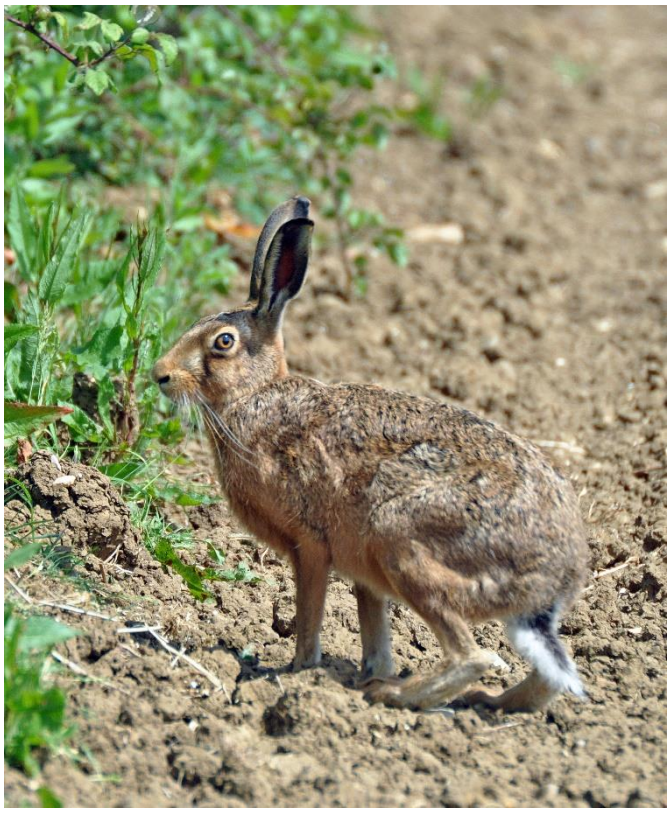
Tisbury & District Natural History Society, in particular, Peter Shallcross and Inés López-Dóriga

Jonathan Thomson (Underhill Wood) for supporting ongoing studies of small mammals and bats (and much much more!)

Longleat Center Parcs for supporting the ongoing dormouse studies

Natural England's Hen Harrier Project Team, especially Robyn Owen for involving mammal group members and sharing mammal trapping data each year.

Our thanks also to a considerable number of private landowners across Wiltshire who host various surveys and monitoring projects and who routinely provide access and a warm welcome.



Brown hare (C) Pete Thompson

Thank you also to the photographers who share their images to enliven our website and newsletter, in particular, Peter Thompson, Steve Dewey & Steve Deeley.

In memory of Alison Maddock

Alison Maddock lived in Bratton and was an active member of the mammal group who was involved in a number of surveys and events.

Alison unfortunately passed away in 2016. She is greatly missed by her family and friends.

Alison's daughter Stella recently contacted the mammal group offering a grant, in memory of Alison, to support our work, from the sale of Alison's car.

With gratitude therefore, we have purchased additional survey equipment which will be deployed in the coming spring, supporting dormouse surveys at several sites across north Wiltshire.

Our thanks to Stella, and of course, to Alison.

Join Wiltshire Mammal Group

Interested in mammals & conservation? Want to get more involved? Looking for that perfect gift for a wildlife-loving family member?

Wiltshire Mammal Group relies upon your help to make a difference for mammals in Wiltshire, through donations, volunteer time and membership subscription.

For more information about joining Wiltshire Mammal Group, see the website or contact Lisa on wmgmembership@gmail.com.

Membership is £10 per year per household. Members are given priority for events and training events.

If you enjoyed this newsletter, why not check out Wiltshire Bat Group's newsletter too.