

#### **Devon Mammal Group Newsletter**

## **March 2019**

www.devonmammalgroup.org

Registered charity No. 1110056

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#### **FREEE APP:**

The Mammal tracker app, available free from the **iTunes App Store and Android Play Store, shows** you how to identify each species and enables you to easily submit geo-located photos whenever you find one. The app features 39 species and also includes a "Confusion Species" gallery for species that are difficult to identify. For more information, or to contact the developers, see the Mammal Tracker page on Natural Apptitude's website.

#### 2019 so far ...

We kicked off the year on **January 23<sup>rd</sup>** with our annual Quiz Night, held at the City Gate Hotel in Exeter. The venue and the food were great and Kate Hills, our quizmaster, presented us with a some challenging questions, set by the Cornwall Mammal Group. We had a good turn out and a fun evening was had by all.

On **Feb 19**<sup>th</sup> Professor Fiona Mathews, from The University of Sussex and Chair of The Mammal Society, gave an enlightening talk to a packed house at the Jurys Inn entitled, 'Where are our Hedgehogs?'. She spoke about recent and current research to determine why there has been such a dramatic drop in Hedgehog populations in the past decade.



Hedgehogs are struggling because the invertebrates they prey upon are declining, due to changes in agricultural practice and pesticide use. Road accidents and loss of nesting habitat has also contributed to their decline. They may also face increased threats from Badgers, whose population has doubled in recent years. The main cause of decline in gardens is thought to be poor management of hedgerows, solid fences which cut off access, and extensive paving.

In A Review of the Population and Conservation Status of British Mammals, carried out by The Mammal Society, the current estimated population of 522,000 is 66% lower than estimated in a previous comprehensive review in 1995.

The Mammal Society is involved in several projects to help understand the loss of the species. The *Hedgehog and Lighting Project* saw members testing whether artificial lighting affects Hedgehogs' uptake of supplementary food put out in the garden. Almost 40 citizen scientists carried out the experiment by putting out camera traps and then watching the Hedgehogs' behaviour in light and dark conditions. The results showed little change in behaviour, suggesting that most Hedgehogs are habituated to artificial light within their territories. Based on current population trends, Hedgehogs could be extinct in 50 years time!

**TMS NEEDS YOUR HEDGEHOG RECORDS!** Please help by downloading the free Mammal Tracker app at <a href="www.brc.ac.uk/mammal\_tracker/">www.brc.ac.uk/mammal\_tracker/</a>

On March 21st Dr Alex Barlow gave a fascinating insight into the diseases of Brown hares; they are susceptible to many. However, the latest disease is a key cause for concern – not least as it has 'crossed' species and comes from rabbits. Rabbit Haemorrhagic Disease 1 (RHD1) is a viral haemorrhagic disease and was first recorded in domestic rabbits in GB in 1992. It is spread by direct contact between rabbits, indirectly by infected faeces of predators and scavengers or by biting insects. It was first confirmed in wild rabbits in 1994 and this virus only affects rabbits.

RHDV2 is a new strain and also is very contagious. It was first reported in Britain in 2010, again in wild rabbits, and at the same

time was recorded in mainland Europe. As with RHD1, RHD2 death is rapid, with limited external signs of illness. Early this year it was reported that brown hares that died in Essex and Dorset last autumn were infected with RHDV2.

There are two things you can do: If you find a fresh hare corpse please let Alex know. He works for the APHA Starcross Veterinary Investigation Centre (03000 600020) and may be able to conduct a post mortem to determine cause of the death

Secondly, please send any sightings of rabbits or brown hares to Devon Biodiversity Record Centre (<a href="http://www.dbrc.org.uk/tell-us-about-your-sighting/">http://www.dbrc.org.uk/tell-us-about-your-sighting/</a>). Rabbits and hares are under-recorded in Devon and your record would help provide essential base-line data.

Kate Hills

# COMING UP SOON Cats and Mice Tuesday 23rd April 2019 at 7.30pm

Further details on page 5



American mink Steve Jellett

#### A review of invasive mammals in Devon Kate Hills

Tuesday 14th May 2019 at 7.30pm Jurys Inn, Western Way, Exeter EX1 2DB

Kate Hills is the Invasive Non-Native Species Ecologist at South West Water and Vice Chair of the Mammal Society. This talk will cover a range of topics including a review of the status of invasive mammals in Devon, their impact on native mammals, horizon scanning for new mammals that may become problematic, biosecurity, societal values and the wider approach to invasives by the GB Non-Native Species Secretariat will be considered.

Members: £1.50 Non-Members: £3.00 - Contact Helen: hkcalver@btinternet.com 07738098182

Booking for all talks is essential:



## Harvest Mouse project update, March 2019

By the time you read this, the current survey season, spent searching for Harvest Mouse nests, will be over and the breeding season (hopefully) in full swing. Back in

October, March seemed a long way off, but time has flown and we're now at the stage of collating records and writing up the end of year report.



This season has been quite different to last, with nests being much harder to find. Experienced volunteers, who took part last year, have often struggled to find them in places where they were numerous last year. Not finding nests can be rather depressing and I've certainly been guilty of thinking "I must be missing them", or that I was doing something wrong. I've been really impressed with and grateful to all those people who haven't let this put them off and have continued searching in different places. The 'nil return' searches have also generated invaluable data, and it will be fascinating to return to the same places next year and see what has happened, hopefully without the same

impacts of the mad March snow and the summer drought.

Over the last six months we have run training sessions all over the county, working with a range of organisations. These have been pitched at individual volunteers at venues such as at Escot, Northam Burrows and Woodah Farm. We have run courses for landowners and various organisations, including the RSPB, the Exe-Teign Facilitation Fund, The Donkey Sanctuary, the Avon Valley Project and North Devon Coast National Trust. Overall, more than 165 people have attended training sessions this season, learning about Harvest Mouse ecology, how to find their nests and how to record any sightings. Meetings and smaller scale surveys have involved the Environment Agency, Clinton Devon Estates and the National Trust Killerton team.

We have also run a couple of group surveys and I'm hoping that we can do more of these next year, as it's much more fun looking for nests with other people. It can also be quite competitive, which is very helpful when you want to find as many nests as you can. This project wouldn't be possible without the support of volunteers and we now have over 200 people signed up to our mailing list. The Harvest Mouse newsletter comes out a couple of times a month and includes the latest project maps,



courses and training dates, as well as photos. If you would like to receive this, do please get in touch.



Our Harvest Mouse ambassadors, Harvey, Hattie and Harriet have attended lots of training sessions and DMG meetings, as well as conferences for DWT volunteers. They are probably the most well-travelled mice in the county, and surely the most photographed. People have been enchanted by seeing these little mice, often for the first time, and fascinated to see the animal they are looking for and helping to protect. The sound of oohs and aahs, as people queue to watch or take photographs of them, speaks volumes. They also have quite a following on Twitter, with over 1000 people viewing their photos. It's not too late to submit records of your harvest mice nest sightings, or for sightings of the

mice themselves. Even if they arrive after the report has been written they will still be added to the database.

#### Send records by clicking on https://www.surveymonkey.co.uk/r/MXP9QYL

Over the summer the email address will be monitored less frequently, but it would be fascinating to hear if anyone finds any nests, especially if you think that they might be still in use. Although not officially part of the project period, I'm hoping to experiment with trail cams. If I can find an active nest somewhere I will try to get some footage of the mice themselves. There will also be opportunities for some live trapping, to see if we can find out more about population numbers and their range.

A big thank you to everyone for their help and enthusiasm for the project: it couldn't happen without your support, which is much appreciated. Next year, subject to funding, the project will continue, so watch out for group survey information early in the season so that we can start searching as soon possible.

@harvestmiceDVN

harvestmouse@devonmammalgroup.org

Sarah Butcher

## Coming up Next - Cats and Mice - Tuesday 23rd April 2019 at 7.30pm Jurys Inn, Western Way, Exeter EX1 2DB

Peter Cooper and Sarah Butcher will share the stage to report on their exciting projects



There is increasing interest in the feasibility of restoring Wildcats to England and Wales, from where they have been locally extinct for over 150 years. Peter Cooper, from the Derek Gow Consultancy will talk about what is practical and how they have been developing a strategy for potential reintroduction.



Devon Mammal Group's Harvest Mouse Project Officer, Sarah Butcher, will present her report on the work she, and the huge team of volunteers she has trained, have carried out this winter. She will bring you up to date with what they have found, and tell you a little more about what she has planned for next winter.

Members: £1.50 Non-Members: £3.00 - Contact Helen: hkcalver@btinternet.com 07738098182

## **Cornwall Seal Group (Research Trust) - still learning!**



After 20 years, CSGRT Rangers are still discovering new things, taking scientific knowledge forward about our globally rare Grey Seals. Bunting was just 2-3 years old when she was entangled in lost trawl net, so Sue Sayer contacted British Divers Marine Life Rescue and on July 12th 2016 Dan Jarvis led a rescue enabling Sue to cut Bunting free and release her back into the wild. Within 30 days, CSGRT identified Bunting fully healed and 17 months later she was 40 km away looking massively fat, fit and healthy.

As if not enough, this winter she taught us something new about seal behaviour. On 1st December 2018, aged 4-5 Bunting was photographed by Craig Ashley play mating for the first time with a young male 'Fish Neck' ... her first boyfriend! Just four days later, Craig spotted her again – play mating with boyfriend 2 – then two weeks later she had boyfriend 3 and within a month we were surprised to find her with boyfriend 4! Boyfriend 5 was a well-known, easily identifiable male '3 Scars' and his lucky day was photographed by Andy Rogers, as this was Bunting's first successful mating on 6th January 2019! Surely that was it? NO! Bunting's final, sixth boyfriend was observed play mating on 13th January 2019!

Whilst not surprising, we didn't know that first time females will attempt to mate with multiple males. Whilst Bunting has now gone off our ID radar, we hope that she will have her first pup in September ... let's hope our awesome volunteer team can find out where.

Sue Sayer

**Cornwall Seal Group Research Trust (**Charity number: 1162936) <a href="https://www.cornwallsealgroup.co.uk">www.cornwallsealgroup.co.uk</a>

Cornwall's internationally renowned, multi award winning seal conservation charity (<u>CSA</u>; <u>CV</u>, <u>CMG</u>) Identifying and monitoring local seals and protecting their marine environment

## **Back from the Brink: The Grey Long-eared Bat Project**



The Grey Long-eared Bat is one of the UK's rarest mammals. The population is restricted to southern England, where they hunt for moths and other insects over wildflower meadows and marshes. These habitats support a wide array of insects, in large numbers and diversity of species making these areas the perfect feeding ground for Grey Long-eared Bats. Their rarity is, in part, due to the significant decline of these favoured foraging habitats -

both in quantity and quality. Unimproved grasslands in the UK have declined by over 92% in the last century, due to changes in farming practices and agricultural intensification. As part of the national 'Back from the Brink' programme, the Bat Conservation Trust is working with landowners, local communities and other partners to reverse the decline of this threatened species.

Currently, there are only nine known maternity colonies in England, most of which are geographically isolated from each other. These maternity colonies are at the heart of the project, and work is being carried out with landowners and land managers close to and between these colonies to promote positive land management for Grey Long-eared Bats and a host of other wildlife. Apart from unimproved grasslands, Grey Long-eared Bats need a range of other habitats in the landscape to ensure their success. Whilst the wildflower meadows and marshy grasslands provide foraging opportunities in an open habitat, Grey Long-eared Bats are also an 'edge habitat forager', meaning that they glean insects from vegetation around the edges of more cluttered habitats such as woodlands. This makes it important to have a range of different habitats within the landscape: grasslands, hedgerows, woodlands, scrub and water bodies all help to create a varied habitat mosaic.

Since 2017, the project has engaged with over 100 landowners in and around the core sustenance zones and commuting routes, raising awareness of this remarkable species and encouraging bat-friendly land management in the areas where it matters the most. Throughout this area, the project has secured over 34 hectares of grassland restoration, through changes in management or wildflower seeding. This will create more favourable foraging habitat for Grey Long-eared Bats as well as many other bat species. On some of these areas, the project will be monitoring bat activity using AudioMoths, to record the impacts of the changes in management.

If you would like to get involved with helping out with this monitoring, please do get in touch through <a href="mailto:cdunton@bats.org.uk">cdunton@bats.org.uk</a>.

**Craig Dunton** 

### **Sid Valley Bat Research Project**



The Sid Valley Bat Research project, which is hosted by the Sidmouth Science Festival organisation, is recording the distribution and species present within the catchment of the Sid Valley, East Devon. We have had another productive year which predominantly focused on researching which species were foraging and commuting along the River Sid itself.

The first bat of the season caught was a Nathusius' Pipistrelle in April so will be

out trying to see if we can catch some more at the same site on the river Sid this April. Other species caught were Common Pips, Soprano Pips, Serotine, Daubenton's, Lesser Horseshoe, Whiskered, Natterer's, Barbastelle and Brown Long-eared Bats.

We had another successful presentation in the historic Town Council Chamber followed by a bat transect in The Byes riverside parkland (National Trust and EDDC) which was full to capacity again. This event will be run again on Saturday 15<sup>th</sup> June 2019.

All events take place in the Sid Valley and are open for anyone to attend.



#### The dates proposed for this year are:

Date	Time	Activity
Saturday 11th May	19:45	Bat catching
Saturday 15th June	20:00	Talk and Walk
Saturday 27th July	20:00	Bat catching
Sat 10th August	19:45	Bat catching
Saturday 31st August	19:00	Bat catching
Saturday 14th September	18:30	Bat catching
Saturday 5th October	17:45	Sidmouth Science Festival
		Event – Bat catching

Please contact <u>louisewoolley@hotmail.co.uk</u> if you are interested in taking part in any <u>events</u>, especially if you live in the Sid Valley and would be happy to host a bat detector in your garden. For more information about the project see <u>www.sidvalleybatresearchproject.co.uk/</u> or check out the project on Facebook: Sid Valley Bat Project or Instagram.

#### Wildwood's Wolf Pack



In 2017, Wildwood Escot was delighted to announce the arrival of six beautiful Wolves: Elvis, Lemmy, Moby, Sting and their sisters' KD and PJ. After a long journey from Sweden this sibling pack soon settled into their new home and has become a much loved part of the Wildwood family.

While in Sweden, the pack was part of a study by Stockholm University which investigated how Wolf behaviour was affected by domestication into dogs. This was carried out by comparing the behavioural responses of Wolf and domestic dog pups. To eliminate parental influences from the study, the Wolves and dogs were all hand-raised. Once the study was over they were moved to Wildwood as part of a new campaign to become

ambassadors for the Eurasian Grey Wolf.

Since moving to Wildwood Escot, the pack has been managed via protected contact, which allows the keepers to have a relationship with the Wolves at protected custom-made areas of the enclosure. This allows the Wolves to demonstrate more natural behaviours, while still allowing keepers to health-check, train and medicate individuals. All of this is facilitated further by the positive relationship built between keepers and the Wolves. There are many pros and cons to hand-raising captive animals, but our pack demonstrates how hand-raising in this case has resulted in lower levels of stress in response to visitor presence when compared to parent-raised Wolves. This benefits our cause greatly, as it allows the general public and school groups to get a



closer look at this once-native species, helping generate that spark of interest. It is amazing how many of our visitors feel humbled by the interest our Wolves show in them.



In February 2018 we hit a bump in the road when keepers noticed that Moby was limping. After further investigation, it was discovered that he had broken his leg; in the wild this injury would have been fatal. A fantastic group of vets intervened and managed to save his life with major surgery. In order to minimise separation time between Moby and the rest of the pack, reintroduction was completed after three days, thus reducing the risk of further injury by Moby's stress level and ensuring the pack's relationships would be unaffected. He was well received and

their reaction to his injury was a great demonstration of how pack dynamics work.

Although they have been with us for two years, they continue to remain part of an important message for us at Wildwood to share. For centuries Wolves all over the world have been persecuted because of misunderstanding and fear. Many of these misunderstandings are the result of myths and stories that paint the Wolf as a villain. Unfortunately, these stories are often taught to our younger, more easily influenced generation: stories such as the *Three Little Pigs* and *Little Red Riding Hood*.



Our mission at Wildwood is to educate and reconnect visitors with our environment and wildlife. At this time we hope we can dispel these misconceptions and spark a connection between our visitors and these incredibly majestic animals by sharing stories of how Wolves have influenced our history, culture and even the British landscape. In time this will help us all with the bigger project, to re-wild Britain, by reminding people of the importance of certain species.

Charly Mead – Wildwood Escot

## Don't forget to renew your membership!

Annual membership is still only:

£7.50 individual, £10 family & £5 low income

You can renew via the website <a href="http://www.devonmammalgroup.org/">http://www.devonmammalgroup.org/</a>

If you pay by standing order, you membership will automatically renew.

If you're not sure if you pay by SO, please check with Chris Hughes (membership secretary)

chrishhug@gmail.com



## DMG's 20th Anniversary Celebration Saturday July 13th 2019

Yes, it's 20 years since a small body of mammal enthusiasts decided to form a group, primarily aimed at raising funds for mammal research. We will be celebrating our anniversary by inviting you to a fun, family picnic event at the Langaford Farm Charitable Trust site near Moretonhampstead.

Put the date in your diaries and watch out for further details of this event. We look forward to seeing you and your family, large or small for lunch and an afternoon of fun.

# Fossilised bones digested by crocodiles reveal three new mammals from the Cayman Islands

Two new mammal species and a subspecies have been described from the fossilised bones.

Scientists studying fossilised bones from the Cayman Islands in collections in British and American museums have described three mammals new to science.

The ancient bones, collected from caves, sinkholes and peat deposits on the Islands between the 1930s and the 1990s, belonged to two large rodents *Capromys pilorides lewisi* and *Geocapromys caymanensis*, and a small shrew-like mammal named *Nesophontes hemicingulus*.

It is thought the three mammals were endemic to the Cayman Islands and probably became extinct around the 1700s, due to the arrival of European settlers and introduced non-native mammals such as rats, cats and dogs.

"Humans are almost certainly to blame for the extinction of these newly described mammals, and this represents just the tip of the iceberg for mammal extinctions in the Caribbean," says Professor Samuel Turvey, from ZSL's Institute of Zoology, and co-author of the paper.

"Nearly all the mammal species that used to live on these tropical islands, including all of the native

Caribbean sloths and monkeys, have recently disappeared," he adds.

D E G H 10 cm

Hutia fossils that were digested by Cuban crocodiles. © NMMNH

The state of the teeth and bones for three of the specimens indicates that they were digested by crocodiles. Enamel, dentine and cement were found to be missing from portions of the teeth that would be been exposed above the gum line, and research indicates that this could be attributed to predation and digestion by a

crocodylian. In comparison, regurgitated pellets from raptorial bones contain bones and teeth without this kind of damage.



Cuban hutia Capromys pilorides closest living relative to the newly described mammal

There is one extant subspecies of *Capromys pilorides* (*left*), and two extant species of *Geocapromys*, all of which are found in the Caribbean. "With only one possible sighting early in the course of European expansion into the New World, these small mammals from the Cayman Islands were complete unknowns until their fossils were discovered. Their closest relatives are Cuban; how and when did they manage a 250-km journey over open water?" asks Professor Ross MacPhee from the American Museum and a co-author of the study.

One theory is that floating rafts of vegetation carried mammals across from Cuba to the Cayman Islands. Such rafts have been documented to float as far as 100 kilometres in less than a week.

**Megan Shersby** 

### DMG Equipment: members are welcome to borrow it!

DMG has two trail cameras that can be borrowed, along with 30 Longworth traps, 38 tube traps and a couple of hedgehog tunnels and spring balances. To borrow any of these please contact us at <a href="mailto:contact@devonmammalgroup.org">contact@devonmammalgroup.org</a> with details of what you would like to borrow, and for how long. You will need to arrange to collect and return the equipment.



The DMG trail camera was very useful last October, when we cleared back the shrubbery in our garden, and found a mysterious hole under the fence. I set the camera up near the hole, and a few days later (after several pictures of the local cats) got a photo of a badger emerging from the hole.







If you are using the traps or trail camera in a public place please make sure

that they will not be disturbed (one of the trail cameras has a lockable case, so is more secure).

If you are trapping small mammals you will need to provide the appropriate food (including shrew food, as the traps do not have shrew holes) and bedding.

You should also be covered by a Natural England Shrew Licence which can be downloaded from:

https://www.gov.uk/government/publications/shrews-licence-to-take-them.

Please send all records from trapping or camera traps to DMG. You can use the form on our website <a href="http://www.devonmammalgroup.org/records/">http://www.devonmammalgroup.org/records/</a> or contact us if you have lots of records and we'll send you a spreadsheet.

In order to train members to use the taps or to learn more about small mammal trapping, DMG often runs mammal survey training sessions, such as Adrian Bayley's "What's on Your Doorstep" training days. All courses will be advertised on the DMG website.



#### Ellie Knott

DMG member Helen Wharam sent the following article after she borrowed the camera trap from us. "For the first time in several years, Phil and I saw a hedgehog in the garden a couple of times last summer, so we started putting out proprietary hedgehog food. Neighbours' cats use the garden and we've seen a fox

once or twice, so we put the food under a shelter designed for hedgehogs.



Something found the food straightaway and ate it consistently during autumn and throughout winter. I work in an environmental health team and as winter went on I was getting a bit worried we might be feeding the neighbourhood's largest and luckiest rats! We asked Ellie about non-hibernating hedgehogs, and she explained that it might be a young, underweight or probably a female hedgehog, foraging while the weather remained relatively mild. Ellie

offered us the loan of Devon Mammal Group's trail camera.

We knew the camera was working after getting a clear image of a cat the first night. And on the second night we captured a stunning image of a fox. Finding a hedgehog was harder! It took Phil's persistence moving the camera around and trying different settings before we started to get lovely images of a hedgehog each night.

I'd wondered how much we'd be able to see even if we did get a photo – perhaps a blur or vague outline. The images were so much better than we'd imagined. Phil took stills and video, and we saw 'our' hedgehog coming and going, entering the food shelter [more than once on some



nights], drinking and even having a very energetic scratch. We learned that she starts foraging while it's still only dusk – about 6.30pm while we had the camera in February, so after returning the camera I've known when to go out and have heard her scuffling about.

A couple of years ago I'd bought a hedgehog house, more in hope than expectation. It hadn't been used when we last checked to clean it... On our last night using the camera, the last video showed the hedgehog disappearing into this box with no sign of hesitation, so we assume she's been using it for a while. We are very grateful to the Mammal Group and feel very lucky that we've been given this opportunity to borrow the camera. It is such a privilege to be able to see so clearly some of the life in the garden after dark ... and not a rat to be seen!

Phil's useful tip is to fasten the camera to a garden chair. We used a wrought-iron chair which could easily be moved around to try different angles, and which is too heavy to be blown about."

**Helen Wharam** 

#### **Chair's Chat:**

DMG is buzzing at the moment! The last two talks have been completely booked up, and sadly we have had to turn people away. Remember to book early folks!

Our Harvest Mouse Project has gone from strength to strength and we continue to offer the Small Grant Scheme for our members research projects. Check the website for more information.

We are delighted to welcome three new members to the committee: Helen Calver is our new secretary, Teresa Sullivan has taken over the Small Grants Scheme and Rebecca Robinson will be overseeing the website and social media. Thank you so much!

Other committee members are: Phil Collins (Vice Chair), Ellie Knott (Treasurer), Chris Hughes (Membership Secretary) Stephen Carroll, Kate Hills, Hilary Marshall and Jess Smallcombe. I'd like to thank them all for the time and energy they put in to running DMG. A very big thank you to Jess, who will be stepping down from the committee soon, as she is about to become a mum this summer. Congratulations Jess!