

HMG News



Welcome To The Autumn 2018 Edition Of HMG News



Photo by Cathy Dyason

All records should be sent to Andy Rothwell and photos can be sent to me for inclusion in the next Newsletter or saved for our next Open Day.

A big **Thank You** to Sheila and Julia who have contributed articles to this newsletter. However, I am sure there are more people in the Group who have had a mammal encounter in the last six months!

Articles can be sent throughout the year and they will be kept until the next publication.

Catherine Dyason, Newsletter Editor



Events

Please find below the mammal event listings for 2019. Further details for each event will be sent out closer to the time.

HMG Open Day and AGM

Autumn 2019

We are also looking into the following potential events (more details to follow):

- Visit to Alice Holt Forest
- New Forest talk

If you have any suggestions for an event or would like to lead an event, please let the committee know via Ruth Kernohan (contact details at the end of the newsletter)



News & Reports

A Wonderful Weekend At Knepp

Last year we spent a day at the Knepp Estate in West Sussex but this year we decided to explore it a bit more and we hired a yurt for three nights. There are lots of public footpaths through the estate but we wanted to see what was hiding down the 'no public access' paths and so we went on a half day safari. Our guide found us the Long-horned Cattle and the Tamworth Pigs.



Photo by Cathy Dyason



Photo by Cathy Dyason

We also saw Fallow Deer, a Red Deer, a White Stork and lots of Purple Hairstreaks.

Towards the end of the morning we found Matthew Oates contemplating an oak tree. On 2/7/18 he had counted 388 Purple Emperors. The season had started early again and by the 21/7/18 he could only find 5. He also counted 29 Brown Hairstreaks.

We did not see any Purple Emperors on the safari but on a walk later in the afternoon one floated past us. This was a pleasure to see and a relief as we were staying in the Purple Emperor yurt and the first question everyone asks is: Did you see one? So, yes we did, and we are going back next year to find the other 387!

Sheila and Cathy Dyason



Photo by Cathy Dyason



Winnal Moors: Water Vole and Bat Walk



Photo by Cathy Dyason

Rachel Remnant and Sarah Jackson arranged an evening walk at Winnal Moors. This site is 54 hectares in total with 4 major water channels coming north-south. There were 11 attendees of various ages and we all had a very enjoyable and educational walk. We heard a Kingfisher and saw a Heron, Common Lizard, Common and Soprano Pipistrelles but sadly no Water Voles. So, we shall have to go back again next year!

Water Voles are often confused with Brown Rats because they are a similar size, similar colour and they use similar habitats by the river. The main differences are that the Water Vole has tucked in ears whereas a Rat has ears that you can see very clearly. Water Voles have a snubbed nose rather than a pointed face. Rachel described a Rat as elegant and angular and a Water Vole as squatter with a fat, stumpy sausage body and slightly hairy tail. A Rat's tail does not have any hair. When Water Voles swim most of their back, bottom and head are out of the water. They go in a straight line across the water. They do not have webbed feet so they are not adapted for living in water. A Rat swims lower in the water.

When Water Voles are transported they are put into empty Pringles' tubes which are just the right size for them. It is unusual for Water Voles to survive for more than 2 winters but they breed well and produce two litters over the summer. They usually have about 5 offspring per litter. After 28 days they leave their mother. They breed from March to October. If they are born early in the year, they could be breeding themselves by October, but it normally takes them one winter to reach sexual maturity. The juveniles need to weigh 170 g to survive their first winter. Females have a territory of 30-150 m and the males have a territory of 60-300 m and the male territories will overlap several female territories. They usually use latrine signs to mark the edge of territories. When surveying Rachel often find latrines every 3 m so there must be a lot of overlapping.

Management, through coppicing and pollarding trees, creates different ages of trees and produces a mosaic of habitats which some people are now calling a kaleidoscope which is a better term because it indicates that it is continually changing. Water Voles need well vegetated banks. Through the 1980s and 1990s they suffered catastrophic declines due to the release of American Mink which Water Voles cannot evade. They can avoid Otters by going into their burrows but a female Mink can get into their burrows. The other thing that has driven their decline is intensification of agriculture, pollution and damaged waterways.

At Winnal Moors, they tend to burrow in the chalk bank and the other side is gently sloping peat and it is more difficult to burrow in there but they tend to feed that side. Also, a lot of latrines are found that side. They like slow flowing water. Water Vole surveys have been carried out at Winnal Moors for 10 years. Sometimes, they use suboptimal habitat areas where the water flows faster. They have to eat 80% of their own body weight in vegetation every day. They eat up to 30 different types of plants including Water cress, branched bur reed, willow herb, roots and tubers with the occasional snail or other invertebrates.

Water Voles have various interesting strategies to help them through the winter. They will partially plug up their burrow entrance with mud and vegetation to keep warm. They also excavate a gallery into which they pack cut vegetation and excrement, like compost, to generate heat as it decomposes. They will share burrows in the winter, again, possibly for warmth. However, in the breeding season, from February, they will become fiercely territorial.

They are better on chalk streams which are a fairly constant 12 degrees Celsius as spring water is coming up from underground. Other rivers may be slightly colder with less vegetation.

During the 2013 floods when nearly the whole reserve was flooded, latrines were found on the slightly higher, tussocky sedge. They also built aerial nests like football sized versions of harvest mouse nests. They could not live on any river bank as they were all flooded. However, the number of latrines found the following year were as high as they had been the previous year. The neighbouring land is, therefore, important because they must have gone up on to higher ground.

A water vole survey is basically a fingertip search of the bank in 20 m sections. Look for a run or a path through the vegetation. If an exit point from the water is found, then look for feeding stations and latrines. When they have young, Water Voles do not go far to feed and lawns of short vegetation develop near their burrow. They feed and then go back to their young.

Rachel found a latrine. When surveying it is the latrine that is definitive that Water Voles are present. The feeding signs and burrow could be made by something else. They have scent glands on their chests. They rub their chests with their feet and trample it into the droppings. Water Vole droppings are Tic-tac size and Field Vole droppings are the size of grains of rice.

3 people are needed for a survey: one is in the water or in a boat, one on the bank and there is also a recorder.





Photo by Cathy Dyason



Water Vole dropping

Photo by Cathy Dyason

Rachel demonstrating how to carry out a Water Vole Survey

On the way back we stopped to sniff otter spraint and saw and heard Common Pipistrelles and Soprano Pipistrelles.

Sheila and Cathy Dyason

Hampshire Mammal Group AGM 27th October 2018 at Shawford Village Hall

The present Committee consists of:

Martin Noble – Chair

Sheila Dyason – Secretary

Catherine Dyason – Newsletter Editor

Andy Rothwell – County Mammal Recorder

Susie Melhuish

Julia Nethercott

Marcus Hebbes

Andy Davies

Jay Doyle

Chris Matcham

Ian White – Co-opted member

Sarah Jackson and Ruth Kernohan from Hampshire and Isle of Wight Wildlife Trust

All of the Committee members wished to remain on the Committee and the Committee was re-elected by a unanimous show of hands.

Martin invited other HMG members to join the Committee but there were no immediate volunteers.

Sheila Dyason

Secretary 27/10/2018



Small Mammal Trapping At Pear Tree Green, Southampton



Photo taken by Jill Doubleday

Last September the Longworth traps were once again set on Peartree Green in Southampton to see what small mammals we might catch. I was ably assisted by Year 2 from the nearby St Patricks Primary School who had come to see what smaller inhabitants use their nearby local nature reserve. Following last year's successful trip with another local school, Felicity Irons-Smith, the secretary of the local conservation group Friends of Peartree Green, had approached St Patricks School to ask if the children might like to join in on the survey.

Peartree Green is a large area of public open space within urban Southampton bordered by the Southampton to Portsmouth train line and Itchen River along its western boundary and housing to the north, east and south. Some of the site is an old area of village green while the bottom end of the Green was laid with chalk from the construction of the M27 motorway in the 1970s covering areas used for landfill in the 1960s. The site has now developed into a series of fields that have developed into a complex mosaic of grassland and scrub. These areas support a good range of habitats and a variety of species, including several species of orchids and insects despite its urban setting. As the majority of the site is a mix of rough grassland and scrub with a good structural diversity it is favoured by small mammals.

The Friends of Peartree Green group were really pleased to get the site declared as a Local Nature Reserve in April of this year, which was the accumulation of a lot of hard work by the



local conservation group. They held an event to mark the declaration with activities including a nature hunt and guided walks.

Thirty traps were set within the areas of tussocky scrubby grassland and orchards overnight and the children arrived early the following morning with much excitement and bright sunshine to find out what we might have caught. We were accompanied by the members of the Friends of Peartree Green group, the class teacher, Southampton City Council Ecologist Lindsay McCulloch and a local councillor, Cllr Alex Houghton.

Numbers of small mammals caught were down on last year but we still managed to catch 3 wood mice and 1 field vole much to the children's excitement. The children enjoyed seeing the animals up close and learning about the differences between the species and what they like to eat. They went back to school with a better idea of some of the smaller inhabitants that also use their local patch of open space.



Photo taken by Jill Doubleday

Julia Nethercott 25th Oct 2018



Poole Harbour Red Squirrels



Photo by Cathy Dyason

We were surprised to learn that there are red squirrels on three islands in Poole Harbour: Brownsea Island, Furzey Island and Green Island. The population on Furzey Island began with a single pair being introduced 40 years ago and there are now thought to be between 25-50 squirrels. The origin of the Green Island squirrels is unknown.



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Although rarely seen, Red Squirrels can swim. This squirrel had swum over 300 metres across Ullswater in the Lake District, to the surprise of a boat full of tourists. Therefore, squirrels could have swum to Green Island from Brownsea.



Red Squirrels are mainly vegetarian but will also eat small birds and their eggs. On Brownsea they eat Sweet Chestnuts, Beech Mast, Pine Kernels and peanuts.

Red Squirrels can live up to 6 years and they can start reproducing within their first year. Then they can have two litters annually, with up to 6 kittens in a litter and a possibility of 66 kittens in a lifetime.

Anna Schilling and researchers from Edinburgh University have been visiting Brownsea twice a year for three years to study the Red Squirrels there and they are also studying Red Squirrels on the Isle of Arran. If they can fund further research they would like to continue the study, so they are currently applying for funding.

Their research focuses on leprosy in Red Squirrels and this is present on Brownsea and Arran. However, the two squirrel populations are infected with different types of leprosy. Anna has been capturing squirrels, taking blood samples and checking their general health. The researchers analysed the DNA sequences of the squirrel leprosy genomes and used this data to generate a leprosy family tree. The closest relatives to the Brownsea Island leprosy were bacteria circulating in humans in medieval Europe. DNA samples were obtained from the skeleton of a leprosy victim who died and was buried in Winchester more than 700 years ago. Winchester is only 70 km from Brownsea. The researchers are now trying to work out whether the squirrels got leprosy from people and have been carrying it around ever since, or were humans originally infected from squirrels? However, it is not thought that the squirrels pose a threat to humans. Nevertheless, the researchers would like to determine whether Red Squirrels in the rest of Eurasia might be similarly infected.

Full results will be shared when Anna concludes her studies late next year. The squirrels appear to be healthy apart from growths on their ears, noses and sometimes feet. She hopes, as part of the study, to be able to produce a symptom guide to be able to better inform land owners across Europe to identify signs of leprosy.



Photo by Cathy Dyason

Sheila and Cathy Dyason

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Snippets

This is a section where people can send in short pieces of news

* The biggest species of squirrel is the Indian giant squirrel, which can grow up to 1m long. The smallest is the tiny African pygmy squirrel which is 7-13cm.

<http://www.discoverwildlife.com/animals/mammals/facts-about-squirrels>

* The American Red Squirrel, which is a different species to the European Red Squirrel, is smaller than the European Red Squirrel but it scares off the American Grey Squirrel from a food resource. (Episode 2 BBC Autumnwatch)

* Researchers at the University of East Anglia have joined forces with Norfolk and Suffolk Wildlife Trusts to investigate the cause of mysterious hare deaths in the region. Over the past month, landowners, farmers and members of the public have reported sightings of obviously sick and dead hares. Could it be a strain of myxomatosis or hemorrhagic disease? (Hare Preservation Trust)

* Beavers to return to Essex for the first time in 400 years. A pair of beavers will be setting up home in North Essex as part of a natural flood management scheme.

<https://www.gov.uk/government/news/beavers-to-return-to-essex-for-the-first-time-in-400-years>

Why not?

We would love to hear from you. As well as sending your mammal sightings to Andy Rothwell, why not send us an account of what you have seen for our next newsletter. How about a member's letters page?

Some Useful links:

Hampshire Mammal Group Pages: <http://www.hiwwt.org.uk/hampshire-mammal-group>

Living Record www.livingrecord.net

Mammal Society: <http://www.mammal.org.uk/>

People's Trust for Endangered Species: <http://www.ptes.org/>

Hants Species E-Group: <http://uk.groups.yahoo.com/group/Hantsspecies/>

Email Catherine Dyason newsedhmg@yahoo.co.uk

Ruth Kernohan, HIWWT HMG Rep: Ruth.Kernohan@hiwwt.org.uk

