

HMG News



Welcome To The Autumn 2019 Edition Of HMG News



Water Vole (photo by Cathy Dyason)

A big **Thank You** to Sheila and Sarah who have contributed articles to this newsletter. Articles can be sent throughout the year and they will be kept until the next publication.

Catherine Dyason, Newsletter Editor

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Events

Please find below the proposed mammal event listings for 2020. Further details for each event will be sent out closer to the time.

October – Small Mammal Trapping with John Buckley

November - Open Day at Shawford

Possible visit to the Isle of Wight

Possible visit to Bordon – Bat Barn (Natterjacks and Nightjars)

News & Reports

HMG Open Day & AGM

Saturday 30th November 2019

Hampshire Mammal Group AGM

Committee Members Present:

Martin Noble – Chair
Sheila Dyason – Secretary
Catherine Dyason – Newsletter Editor
Andy Rothwell – County Mammal Recorder
Julia Nethercott
Chris Matcham
Debbie Whitfield – HIWWT Rep

Martin mentioned some of the events that the Mammal Group organises. John Buckley organises a small mammal trapping event at Itchen Valley Country Park every year. In the past we have had Bat walks, Hare walks, a visit to Bramshill Plantation, Badger watches and talks by various Committee members. If there is anything in particular that people would like to see happen, then contact one of the Committee.

Debbie and her team produce a report, every two years, on the current state of Hampshire Mammals. It is on the HIWWT website.

Martin enquired if anyone would like to join the Committee as there are two vacancies. If you are interested then contact Martin or alternatively, contact Debbie on the HIWWT website.

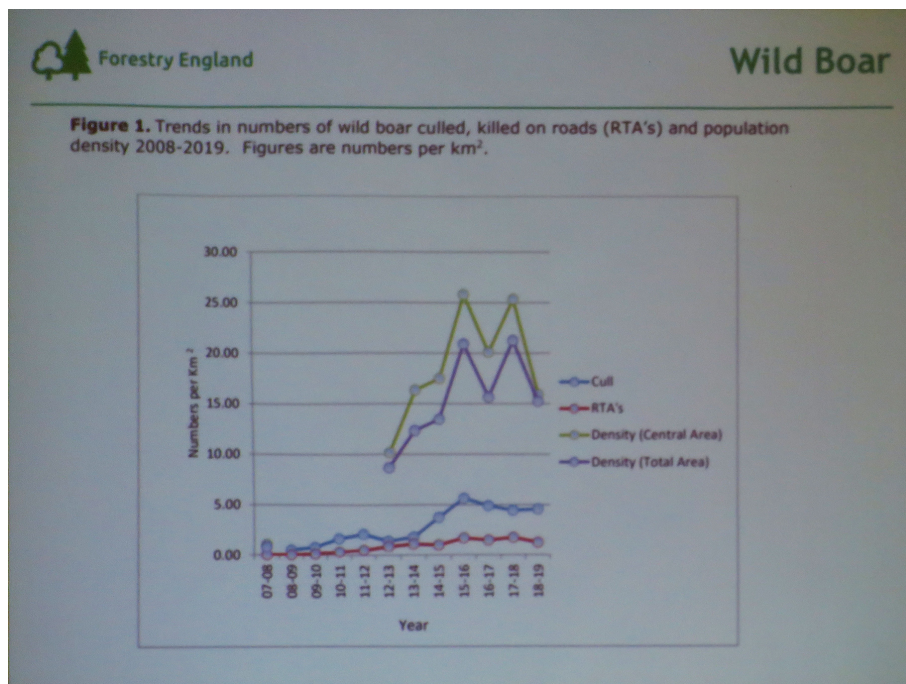
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Hampshire Mammal Group Open Day

The first speaker was **Andrew Stringer**, Forestry England (FE) Ecologist, and he was talking about '**Forestry England Mammal related Projects**'. The FE is the largest single provider of countryside leisure visits in England with more than 230 million visits a year. Its forests contain 11,136 animal species, 2970 plant species and 5113 fungi species.

Wild Boar are in the Forest of Dean. It is a planted forest, not a natural one. It is dominated by Oak and Sweet Chestnut so there is plenty of food for the Boar and their numbers are increasing rapidly. It is difficult to cull them because so many people use the Forest day and night.

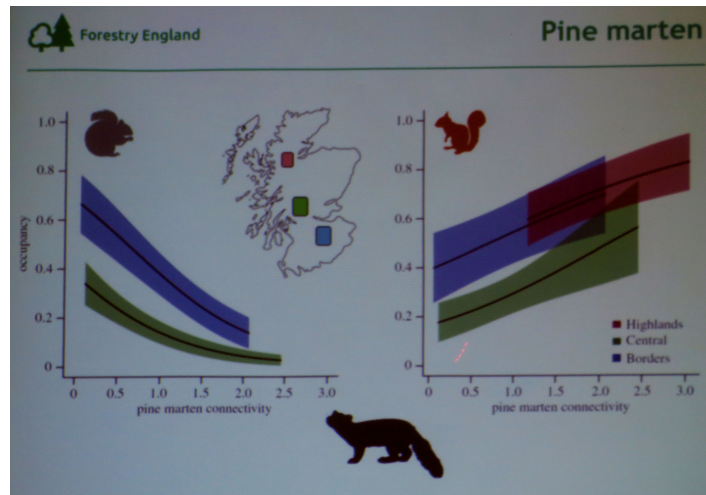


There are two captive Beaver projects on Forestry England land in Cropton Forest, Yorkshire and in the Forest of Dean. The projects are to trial natural flood management through slowing the flow of water. Beavers can fell trees up to 1 metre in diameter, only matched by Elephants in the wild and they build dams – they are engineers. Beavers stay in a territory for 10-15 years before they move on to a new territory. When it is abandoned it turns into a meadow and it does not succeed into woodland for many years because the land has been flooded and the mycorrhizal fungi have been eradicated and they do not come back in for many decades. One study has suggested that they only come back in the faeces of Voles.

Beavers build many dams so that when there is a flood event the water goes into the dams and slows down and does not go straight into an already fast flowing river. It is not just the volume of the dams that is important, but also the surface roughness of the area around the dams where the emergent plants make it difficult for the water to penetrate.

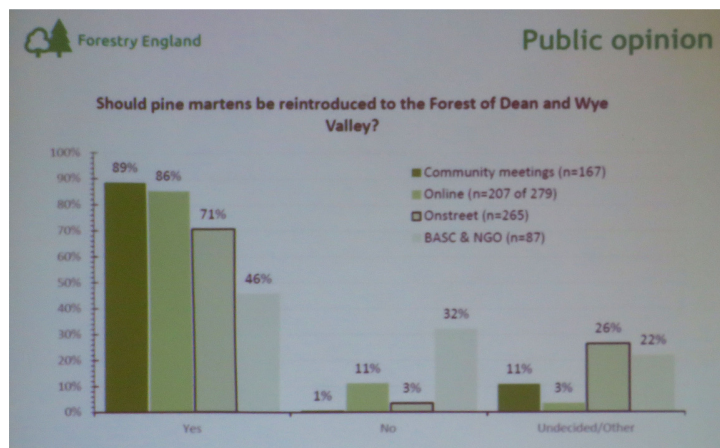
In 2015 the Vincent Wildlife Trust reintroduced Pine Martens from Scotland to Wales. There were discussions about whether Pine Martens should be reintroduced to the Forest of Dean to reinforce the Welsh population. It would be expected that the two populations would merge in about 15 years. Risk of extinction would then decline from 22% with one population down to 5% with two populations. However, it is not just whether the species can thrive there but what will their ecological impact be.





They have an interesting relationship with Grey Squirrels that are non-native and therefore have not evolved with Pine Martens. They do not see Pine Martens as a threat and are therefore more easily predated than Red Squirrels which have evolved and adapted to Pine Martens.

The socio-economic question: do people want Pine Martens in the area? The main concern was what were Pine Martens going to do to the local bird population.



The reintroduction went ahead in September with the soft release into the Forest of Dean of 18 animals from Scotland. Two males have been killed in road traffic accidents. Females are more important for the survival of the population. The plan is to release 60 animals into the Forest of Dean over the next 3 years which should eventually link in with the 51 Pine Martens in Wales.

Adam Eggesfield, HCC Senior Ecologist talked about **'Mammals in the Planning System'**.

Development that needs planning permission from the Local Planning Authority has to comply with the *Conservation of Habitats and Species Regulations 2017 (as amended)*. This covers European Protected Species such as Bats, Dormice and Otters; *The Badgers Act*; *The Natural Environment and Rural Communities Act* which covers mammals such as Hedgehogs and Brown Hares.

The *National Planning Policy Framework* states that plans should identify, map and safeguard components of local wildlife-rich habitats; promote the conservation, restoration and enhancement, of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

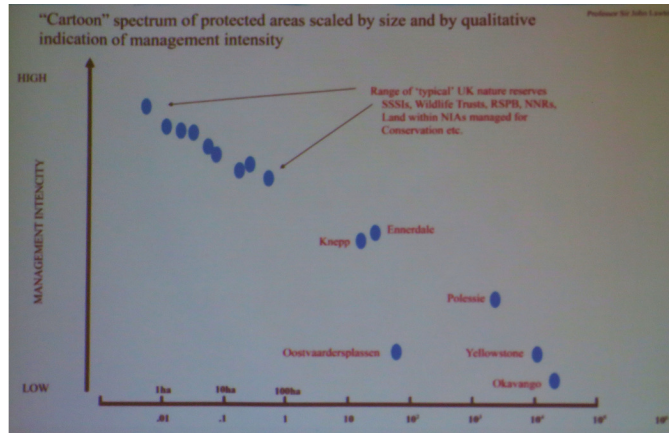
Key messages: We really value your data! 'Good' data is key to robust planning for biodiversity.



Derek Gow, Ecologist and Farmer, talked about ‘**New Nature – Back to the future?**’

Rewilding is not new. It has been talked about in continental Europe for the past 30 years. It is not about rewilding, it is about preparing the land for a different future, not just for us but for the planet itself. What we call nature reserves are not very old at all. Wicken Fen is the oldest at about 130 years old. Prior to this people did preserve areas of the landscape for animals but they were animals that they wanted to hunt, not for the intrinsic value of the animals themselves.

Farming has a culture going back 4,000 years whereas nature reserves have a culture going back about 150 years. The smaller the nature reserve the more intensively it needs to be managed. You do not have the space where large animals can mimic the systems that used to manage the land through soil disturbance. Small nature reserves were usually designated for particular species and in many cases these species have now declined or become locally extinct.



We drive through this landscape every day. It changes a bit in the west with more livestock where it is wetter and in the east where it is drier there are more arable fields. However, it is green and for most people if it is green it must be full of nature.



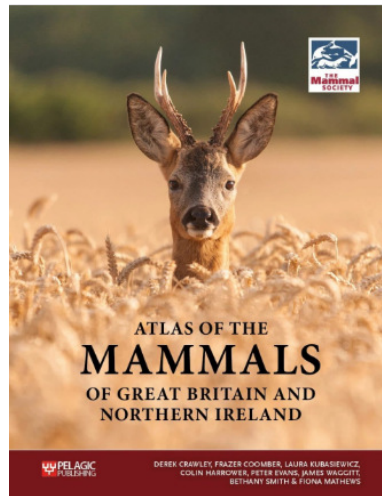
There is only about 50 years of crop growing left in a lot of the soil and then it is not going to produce anything. There is only about 1% of the flowering meadows left in the UK. Our landscape is increasingly dead. It is not a green and pleasant land despite all the money that has been invested in the nature reserves. It is not getting any better. 70-80 % of Britain's rivers are also in poor ecological health.

Single species plantations of trees in straight lines, small, isolated and fragmented. 3 billion trees are to be planted in the UK by 2050 to help to tackle climate change but many are going to be non-native such as Sitka Spruce which is a commercially valuable crop. We are setting up the monoculture for the future which is likely to collapse as the climate continues to warm and novel diseases and pathogens come to this island.

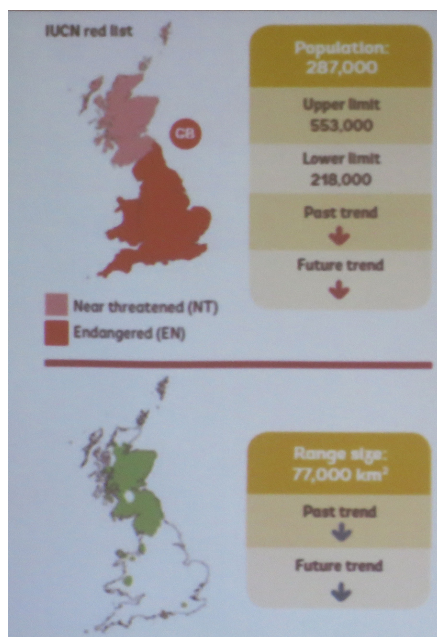


Professor Fiona Mathews, Chair of the Mammal Society, spoke about ‘**The State of British Mammals**’.

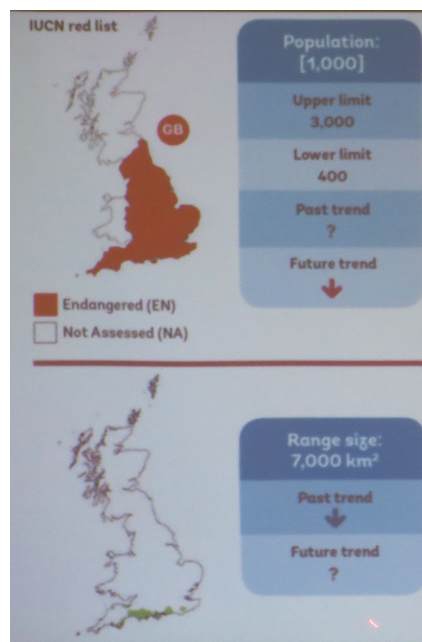
The State of Nature Report stated that populations of the UK’s wildlife have plummeted since 1970. A quarter of mammals are at risk of extinction. Alcatohoe Bat, Harvest Mouse and Brown Rat are poorly recorded. Data issues include recording effort for some species. The Rabbit is Britain’s most widespread species. There were 140,000 sightings of Hedgehogs.



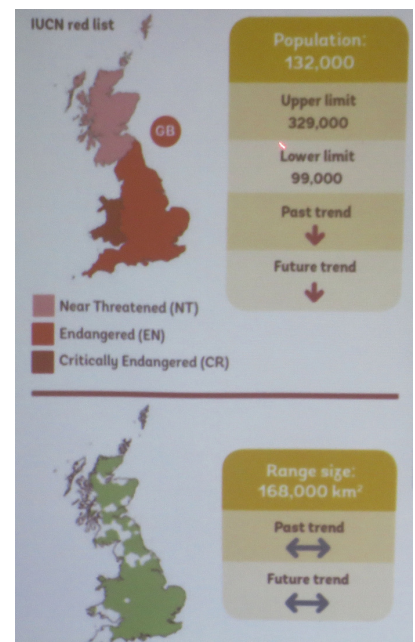
Population sizes were based on density within each habitat and a literature review of more than 500 papers. Otters, Pine Martens, Polecats, Badgers, Deer, Greater and Lesser Horseshoe Bats, Beavers and Wild Boar have increased in numbers whilst Hedgehogs, Rabbits, Red Squirrels, Hazel Dormouse, Orkney Vole, Water Vole, Black Rat and Wildcat have declined. Wildcat and Black Rat are critically endangered.



Red Squirrel



Grey Long-eared Bat



Water Vole

Fiona urged people to get involved with all recording but particularly:

- * Occupancy
- * Roost density, sex ratio and identity (Bats)
- * Variation in density with habitat quality and geographical location
- * Density indices for some species e.g. Longworth trapping and Harvest Mouse surveys.

Sheila and Cathy Dyason

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IVCP Small Mammal Trapping 2018 & 2019

By Sarah Jackson

We had a rather soggy Sunday for the small mammal trapping but a hardy band of Hampshire Mammal Group members donned their waterproofs and set off to see what the traps held in store.

Setting all the traps out three days in advance as normal had not been possible as the days preceding the survey were so dull and rainy. It's probable that reduced time for the small mammals to become familiar with the traps and the poor weather affected the catch. Overall there was a 32% trap occupancy rate for the 88 traps but it was higher (44%) for those set out for a day longer compared to those set for a day less (22%).

In the event we had a reasonable haul, comprising:

- 2 common shrew
- 7 bank vole
- 7 field vole
- 15 wood mice
- 2 harvest mice

Initially we were weighing and sexing the individuals, but as the rain got harder it was decided to stop these activities to avoid the small mammals getting wet. It was fortunate that John had re-stocked the supply of clear plastic bags for emptying the traps into, as they were getting rather wet and needed to be replaced during the survey.

Although last year's trap checking day was far wetter, the traps had been set out for the standard number of days during relatively dry spell of weather and the trap occupancy was 75.6%.

The following were caught:

- 7 common shrew
- 2 pygmy shrew
- 10 bank vole
- 10 field vole
- 30 wood mice
- 2 yellow-necked mice
- 6 harvest mice
- 1 weasel - the first one ever trapped in a Longworth at IVCP and you could tell it was annoyed!

Thanks as always to John Buckley, and John Davis in 2018, for setting it all up and leading the survey.



Photo: John demonstrating how to check a trap (Sarah Jackson)



Venom in Mammals



I went to the *Venom Day* in Bangor, Wales and was surprised by the first talk by Anna Nekaris which was about Slow Lorises. They are the only venomous primates. They have a sweat gland on the ventral side of the elbow that when combined with saliva activates the venom. It is similar to cat allergen that can cause death in small mammals and anaphylactic shock in humans.

The Loris brachial gland may mirror the defensive spur of the male Platypus, which has evolved as a seasonal offensive weapon used only during the breeding season, and could explain why Loris venom is only sometimes potent to its recipients.

Both male and female Lorises can produce the venom presumably for predator defence or resource defence. They can be very aggressive. Females are more territorial than males. Their home ranges do not overlap with other females and so they do not share resources. Anna has never seen females acting positively with neighbouring females.

Male territories only overlap when they are dispersing. Both males and females can disperse up to 8 km from their home range. The limiting resource for males is females. The number of wounds are 3 times higher in males than in females. The males are fighting for the right to mate with the females. The wounds are always on the head. During capture males were more aggressive than females and the more aggressive the animal the fewer wounds it had. Younger animals were also more aggressive but there was no relationship between the amount of venom produced and aggressiveness. If you are aggressive enough then you do not have to fight.

Anna's work covers all Lorises including the African Pottos and Angwantibos, and Asia's Slender and Slow Lorises. Anna and her team have named seven new species, and they have studied six species of Loris for a year in the wild, contributing novel data on diet, habitat use, social organisation and population status.

Sheila Dyason



Snippets

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

* Kuhl's and Savi's Pipistrelles have been recorded along the Dorset coast although Professionals are being careful and saying yes but they could be something else.

* Grey Squirrels and other small mammals have been shown to exploit heterospecific alarm calls as indicators of danger. However, many species—especially birds—emit non-alarm auditory cues such as contact calls when perceived predator threat is low, and such public information may serve as cues of safety to eavesdroppers. Lilly MV, Lucore EC, Tarvin KA (2019) Eavesdropping grey squirrels infer safety from bird chatter. PLoS ONE 14(9): e0221279. <https://doi.org/10.1371/journal.pone.0221279>

* Tasmanian Devil facial tumour disease is a transmissible cancer that affects Tasmanian Devils and is spread by the animals biting each other on the face. The tumours often become very large and usually cause the death of the affected animals.

* The finding, in Sulawesi, Indonesia, of the earliest hunting scene in prehistoric art was published on 11th December 2019 in Nature <https://www.nature.com/articles/s41586-019-1806-y> and discussed on Radio 4's *Inside Science* on 12th December. The cave painting is thought to be 40 thousand years old and is in the form of narrative compositions with people and animals which could indicate folklore or spiritual beliefs.

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/>

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