HMG News





Welcome To The Spring 2020 Edition Of HMG News



Muntjac on a housing estate in Basingstoke
Photo by Pete Gillatt

The Hampshire Mammal Group Committee hope that you are all keeping safe and well during these difficult times.

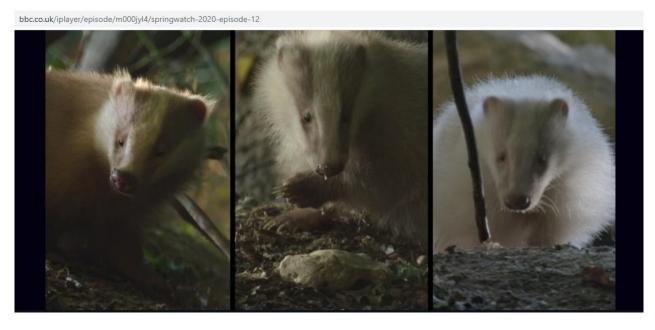
A big **Thank You** to Sheila Dyason and Pete Gillatt who have contributed articles or photos to this newsletter. Articles can be sent throughout the year and they will be kept until the next publication.

Catherine Dyason, Newsletter Editor

News and Reports

New Forest Badgers On Springwatch 2020

Chris Packham was very excited to find that his local Badger sett had a variety of different coloured Badgers.



Erythristic

Leucistic

'Albino'

Erythristic – excess of red pigmentation

Leucistic – partial loss of pigmentation but not in the eyes.

Albino – lack of pigmentation including the eyes which are red.

However, he did not think that the Albino was a true albino as there was a hint of darker facial markings.

The Ancestor Of All Animals



Evans et al. report on the earliest known organism, *Ikaria wariootia*, with a front and back, two symmetrical sides and openings at either end connected by a gut. It is a 2-7 mm long worm-like creature.

The fossil was discovered in south Australia and it is believed to be about 555 million years old. It is thought to have burrowed in thin layers of well-oxygenated sand on the ocean floor in search of organic matter, indicating rudimentary sensory abilities. The burrows that have been found preserve v-shaped ridges suggesting it moved by contracting muscles like an earthworm.

The genus name comes from Ikara, which means 'meeting place' in the language of the indigenous Adnyamathanha. The species name comes from the place where it was found – Warioota Creek in South Australia.

Evans, S. D., Hughes, I. V., Gehling, J. G. and Droser, M. L. (2020) *Discovery of the oldest bilaterian from the Ediacaran of South Australia*. Proceedings of the National Academy of Sciences of the USA. https://www.pnas.org/content/117/14/7845

DNA Editing to make Grey Squirrels Infertile



Photo by Pete Gillatt

Based on an article by Jonathan Leake in The Sunday Times 5/1/2020

For 150 years Grey Squirrels have been negatively impacting on our native Red Squirrels. They were imported from America by aristocratic landowners and now there are between 3 and 6 million of them. The deadly parapox virus spread by Grey Squirrels could wipe out Reds by 2030. There are only about 140,000 Red Squirrels remaining in the UK.

Conservationists have tried trapping and shooting Grey Squirrels and releasing Pine Martens that predate on them but they still thrive. Now, researchers at the Roslin Institute want to create gene-edited squirrels for eventual release into the wild. The males would carry the altered gene but females that inherited it would be sterile whilst the males would be unaffected and, therefore, would continue spreading the gene through Grey Squirrel populations.

The project is part-funded by the European Squirrel Initiative, a charity that promotes research into conserving Red Squirrels. They think it is a humane way to decrease Grey Squirrel numbers.

However, the charity, People for the Ethical Treatment of Animals, think it is morally unconscionable and that it will not solve our ecological problems.

At Roslin they are working to reduce the risk of other eocsystems being unintentionally affected and developing self-limiting gene drives that stay in the population for a number of generations before burning out.

Camera Traps Capture Brown Bear in North-West Spain



Yahoo 3.5.20

Images of this 3 – 5 year old male Brown Bear were captured on cameras in the Invernadeiro National Park in Galicia's Ourense Province. It is the first time in 150 years that a bear has been seen in this area that is home to Wolves, Deer and Wild Boar.

According to two local wildlife rangers, the bear spent the entire winter in the park, probably after making its way south from the Sierra del Caurel Mountains.

Brown bears have been a protected species in Spain since 1973. In an effort to consolidate the bear population in the Pyrenees between France and Spain, Brown Bears from Slovenia have been introduced over the past two decades.

Sheila and Cathy Dyason

African Leaf-nosed Bats

A paper in a special issue of the journal *ZooKeys* focused on the coronavirus pandemic and announced the discovery of new species of African leaf-nosed bats - cousins of the horseshoe bats that are thought to have served as hosts of the virus that caused COVID-19.



Sundevall's Leaf-nosed Bat *Hipposideros caffer* B. D. Patterson, Field Museum

Sundevall's Leaf-nosed Bat was found to consist of 8 distinct lineages, 3 of these appear to be new to science. They get their common name from the elaborate flaps of skin on their noses that the bats use as radar dishes to focus their calls and help catch their insect prey. The family is spread throughout Africa, Asia, and Australasia but its African members are poorly known to science due to lack of research and political unrest in the areas where they are found.

Patterson, Demos, and their colleagues at Kenya's Maasai Mara University and the National Museums of Kenya, and the Field Museum undertook a genetic study of leaf-nosed bats in Africa almost entirely based on museum specimens collected in various parts of Africa over the last few decades. In several cases, supposedly widespread species proved to be several genetically distinct species that simply looked alike, but their DNA hints at their distinct evolutionary histories.

The new species of leaf-nosed bats did not play a role in the coronavirus pandemic.

A possible reason for bats being prone to spread disease can be traced to their ability to fly. "Flying is the most energetically expensive way to get around. If you skin a bat, it looks like Mighty Mouse, they have hardly any guts, they're all shoulders and chest muscle. They're incredible athletes," says Patterson. And since flying is such hard work, they have high metabolisms and strong immune systems, and their DNA is really good at repairing itself when damaged. This extra hardiness means bats can harbour disease-causing agents without getting sick themselves; that same dose can be harmful to humans who come into contact with the bats.

However, while these bats do not normally have much contact with humans, the more that people destroy bats' habitats and expose themselves to bats through hunting and consuming bat meat, the more likely it is that bats will spread viruses to people. "Unless you try to seek out bats, either to harass them or kill them, it's very, very unlikely that they'll infect you," says Demos.

The researchers also emphasize that in addition to questions about how the bats could harm humans, we need to make sure that we humans do not harm bats in hopes of curbing disease. Patterson notes, "These bats have a place in nature and perform essential ecological functions, and we can't let our terror of COVID cause us to pull apart natural ecological systems."

https://www.eurekalert.org/multimedia/pub/229464.php

Events

Please find below the 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)

Snippets

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

* Giant Anteaters in the Pantanal, Brazil, have been recorded scratching their claws on a tree – to keep them sharp but it is also thought as a way to communicate with other Anteaters. They chose trees where the trunks were very visible and easy to see. They made both horizontal and vertical marks.

https://ptes.org/a-giant-anteater-leaves-its-mark/

* The Ring-tailed Lemurs of Madagascar attract mates with a sticky fluid that smells like a mixture of pears and well-hung meat. It is the first pheromone to be identified from a primate. The males exude the secretion from glands on their wrists, which they rub onto their tails.

BBC Wildlife Magazine June 2020

* Rats were trained to pull a lever to obtain a food reward. The lever was then rewired to simultaneously give an electric shock to another rat. The first rat then stopped pulling the lever and gave up the food reward so the other rat did not get hurt.

Clever Creatures by Stuart Blackman, BBC Wildlife Magazine June 2020



* North Korea's Pyongyang Zoo houses Rhinos given by Robert Mugabe of Zimbabwe; Antelopes by the Mengistu Haile Mariam of Ethiopia; Pandas by Mao Tse-tung; Elephants by Ho Chi Minh and Camels donated by Colonel Gadaffi.

Louise Callagham, The Sunday Times June 14th, 2020

* In 2013 **the Olinguito** Bassaricyon neblina, was discovered in the cloud forests of Colombia and Ecuador. It is 35 cm and the smallest member of a family that includes raccoons. It eats fruit, insects and nectar. It is solitary, nocturnal and spends most of its time in trees.

Source: Smithsonian Institution



https://www.bbc.co.uk/news/science-environment-23701151

- * **The Lesula** *Cercopithecus Iomamiensis*, is a monkey from the Democratic Republic of Congo and the species is described as shy and quiet.
- * The Saola Pseudoryx nghetinhensis can only be found in Vietnam and Laos. It looks like a small deer but more closely related to cattle and the first live Saola was discovered in 2010.
- * The Cypriot Mouse *Mus cypriacus* is a species of mouse native to Cyprus. It was discovered in 2006 and has bigger ears and teeth than European mice.



http://www.cyprusbeat.com/12-unique-animal-species-cyprus/

* The Burrunan Dolphin *Tursiops australis* is a species of bottlenose dolphin found in parts of Victoria, Australia and Gippsland Lake. It is believed that only 150 of them remain alive.



Charlton-Robb K, Gershwin LA, Thompson R, Austin J, Owen K, McKechnie S. - "A New Dolphin Species, the Burrunan Dolphin Tursiops australis sp. nov., Endemic to Southern Australian Coastal Waters.". PLoS One 6 (9): e24047. DOI:10.1371/journal.pone.0024047.

* Paucidentomys Vermidax is a type of shrew-rat that only has 2 teeth. It lacks molars and eats Earthworms. It was discovered in 2012 in Indonesia.



By Unknown author - https://colnect.com/en/stamps/list/country/101-Indonesia/year/2019/

* **Bioturbation** – the reworking of soils by plants and animals. Mentioned by Gary Moore, sound recordist on Springwatch 2020, in relation to the Tamworth Pigs at Knepp turning over the soil during their foraging.

Photos

Thanks to Pete Gillatt for these wonderful photos























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And now for a short quiz! Where in Hampshire are these found?

1.









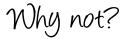
2.



3.



Answers on the last page



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:

Records for Andy Rothwell: <u>HMGRecorder@hiwwt.org.uk</u>

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/

Newsletter Editor - Catherine Dyason: newsedhmg@yahoo.co.uk

Sarah Jackson, HIWWT HMG Rep: Sarah.Jackson@hiwwt.org.uk

Deborah Whitfield, HIWWT HMG Rep: Deborah.Whitfield@hiwwt.org.uk

Where in Hampshire are these found? Answers:

- 1. Hocombe Mead, Chandler's Ford
- 2. Lakeside Country Park, Eastleigh
- 3. Blashford Lakes