

The House Mouse
CMG Recorder
Barn Owl Pellets
Enjoy, Respect, Protect
The Scilly Shrew
Sir Harry Johnston
CSGRT news



Cornwall Mammal Group

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Cornwall Mammal Group

Annual General Meeting

Woodland Valley Farm
Ladock, Truro TR2 4PT
SW 909516

Saturday 20th November 2021

10:30 am until 3:00 pm



Gillian Burke, presenter of Springwatch and Blue Planet UK is a very busy person - but in between all her commitments to natural history film making she finds time to use her scientific and media experience to support many national, regional and local organisations - these include the wildlife Trusts (she is the Vice President), Cornwall Seal Group RT, UKWOT, MSN, Buglife, Shelterbox and Black Voices Cornwall. We are massively grateful that she has found the time to talk at our AGM as well - I'm always told 'if you want something doing, ask a busy person...'

Our first 'proper' meeting for many months will be held at the home of the Cornwall Beaver Project and will begin with a talk from Gillian. Whether from the natural world or the human world, she is drawn to the rich vein of stories that are full of universal themes of awe and wonder, defeat and victory, struggle and survival. As a scientist, she is committed to tracking down and sharing evidence of hope. It's why she defiantly remains an optimist (on most days).

This will be followed by the presentation of our 2021 CMG Award. A light lunch will be provided by the venue, and you can take the opportunity to catch up with friends, check out posters and displays about our past work, collaborations and future plans and buy a raffle ticket or two. Our AGM will follow and then if the weather is kind enough we will walk down to the beaver site to look at changes since our last visit in 2018.

Booking and payment will be through Eventbrite: -

<https://www.eventbrite.co.uk/e/cornwall-mammal-group-agm-2021-tickets-175385732447>

Please order your tickets individually if possible - it will help us keep track of membership as well.

Any questions contact Dave Groves on cornwallmammals@btinternet.com or 01566 880469. Booking is essential as numbers are strictly limited. Booking will be closed on 15th November.

Events for Winter 2021/ Spring 2022:

- **Sunday November 7th**

Harvest mouse survey training, Tamar Lakes, Kilkampton. Sarah Butcher

- **Saturday November 20th**

AGM at Woodland Valley Farm, with guest speaker Gillian Burke

- **Saturday November 27th**

Harvest mouse survey training, Woodland Valley Farm, Ladock. Pete Cooper

- **Thursday 9th December**

Christmas Quiz (via ZOOM). Quizmaster Dave Hudson.

- **Wednesday 5th January**

Mammal track and field signs (Online talk via ZOOM)
Angie Nash

- **Wednesday 26th January**

Cornwall Dormouse Conference (via ZOOM)

- **Sunday 27th February**

Mammal track and field signs, (Practical session). Looe
Angie Nash

- **Wednesday 2nd March**

Online talk 'Mad March Hares' by Steph Wray, Chair of the Mammal Society

Notes from the chair: Dave Groves

So I'm writing this in a sweltering study and I would really rather be outside catching the sunny autumn weather, but such is the lot of the Chair.... We are in a strange no-man's land at the moment, keen to run in-person events but nervous of what happens when we leave the Zoom screen (can we still wear pyjamas for work?). However, with a suitable degree of caution we have already been out and about in search of mammals this summer. Firstly there has been Operation Hedgehog – although we have changed the routine significantly and are surveying through the year, rather than just in May. Lots of tunnels have been placed out around the county and we are awaiting results. My own experiences around North Cornwall still reflect our findings in 2019, plenty of hogs around houses but none in the open countryside. We have had our Longworth traps out a few community Bioblitz events –one with ERCCIS, another at Penhale sands and a couple with churchyard meadow groups in East Cornwall. Coming up, Pete will be leading the eighth small mammal survey at the Cornwall Beaver Project site in Ladock with help from 4 CMG members. Dormouse surveys and training have been continuing, congrats to Ellie and Charlotte who have both obtained the Class 1 dormouse handling licences which they will use in their PhD studies. Kate and I also attended the first Forum of the Tamar Beaver Management Partnership at Roadford Lake.

The barn owl pellet work that we started during lockdown has been completed and thanks to Megan, Anna and EcoSoc, and Steve and his family for help with this. 1502 prey items identified from 30 sites over 4 years. Lots of great records, especially the new harvest mouse sites. I'm glad to say that Mark at BTO is still feeding us pellets and I have another batch ready to roll and EcoSoc have a load of material for Freshers' Week.

One other observation from earlier in the summer – Marine Strandings recorded their first whitecoat seal pup from the colony on the North Coast on the 10th June this year (bearing in mind that the normal pupping season is September to December in Cornwall).

Committee news – we are very sorry to say goodbye (well we hope it is *au revoir*) to Alex who has been the inspiration and power behind most of our social media for the last 5 years, during which time our Facebook, Twitter and Instagram following has ballooned. Alex is handing over the reins to Emilie and Kayleigh who will join the committee. Gemma will continue to look after the website and I will act as (inept) cover when required.

Plenty to look forward for the coming year (and we haven't been able to say that for a while). First and foremost is our AGM. We are very fortunate that Gillian Burke is coming along to talk to us at Woodland Valley Farm on 20th November. Since graduating from Bristol University Gillian has worked in many aspects of natural history TV and film, including of course presenting Springwatch and Blue Planet, she is passionate about wildlife and involved with many local and regional organisations and is a great speaker. The meeting will also include a light lunch, the AGM itself and a chance to catch up on our past and future projects as well as those of closely related groups. If the weather behaves we will also try to get down to look at changes in the beaver site since our last visit. Watch out for booking details in your emails – the event will be advertised to current members first so don't leave it too long to get your tickets!

We have other plans in the pipeline, again watch out for emails and flyers, our harvest mouse survey training is currently being organised and we are waiting for more information on beaver survey training days. Angie's delayed field signs workshop should be rearranged over the winter and we are looking at more workshop-style events on pellet analysis and spraint dissection. We are waiting for a couple of speakers to let us know when they are free for talks as well and our collaborative dormouse day is in preparation as well – although on-line.

As ever – we are always happy to welcome anyone who has suggestions for events, workshops, projects and venues. If you would like to get involved in helping to run the Group please speak with a committee member or join us at one of quarterly (approximately) meetings. Committee members try to organise one event a year, but there is plenty of help and guidance so it isn't too difficult.

All in all, plenty to keep us engaged with Cornish mammals – I look forward to seeing everyone at the AGM, full of enthusiasm, ideas and mammal stories.

The House Mouse (*Mus musculus*)

Probably the most widespread of the world's 6495 known mammal species (apart from humans...).

The UK population is estimated to be about 5.2 million. Originally from the Middle East, the house mouse arrived in the UK well before the Romans.

Often found around houses and buildings, House mice are also found in the countryside, but rarely where other mice species occur. Not all mice in the house will be house mice! Wood mice often take advantage of a warm roof space as will bank voles and shrews, not to mention brown rats.

Improvements in housing stock have reduced house mouse infestations but they are still common around farms, factories and transport infrastructure – like the London underground. Some mice live in cold stores – where they are heavier, hairier and have shorter tails than their compatriots.

House mice damage food stores both by gnawing and leaving droppings. Like all rodents their incisor teeth grow continuously so they gnaw on hard materials – sometimes this is wiring, metal and wood.



Image – Dave Chapman ©

After the First World War legislation was enacted to control house mouse and rat infestations. At the end of the Second World War the Ministry of Agriculture and Fisheries established a mouse colony in an old RAF building in order to study pest control measures.

Books written before the 1950s often make such comments as 'no introduction is needed to the familiar house mouse...'

but they are much less commonly seen nowadays. Often under-recorded because they are presumed to be common, confused with other mouse species or because residents do not want to acknowledge they have a 'pest problem'.

The epitome of catholic diet – wood mice will eat almost anything. Grain is their staple but invertebrates, vegetation, and carrion feature as well as exotica such as soap, candles and glue! They were very fond of early postage stamps apparently.

House mice were more common in the countryside before the introduction of mechanised farming. Mice often did much damage to grain in hayricks – one report records several bushels (16 gallons or 70+ litres) of mice killed from one rick. Another records over 3000 individuals killed in one rick.

Aristotle conducted an experiment with a house mouse, placing a single pregnant female in a container of grain, within a 'short period' he recovered 120 individuals.

The island of St Kilda, Scotland, had its own sub species of house mouse which died out when humans abandoned the island. House mouse hair colour varies naturally and early experiments in genetics were conducted by breeding house mouse varieties.

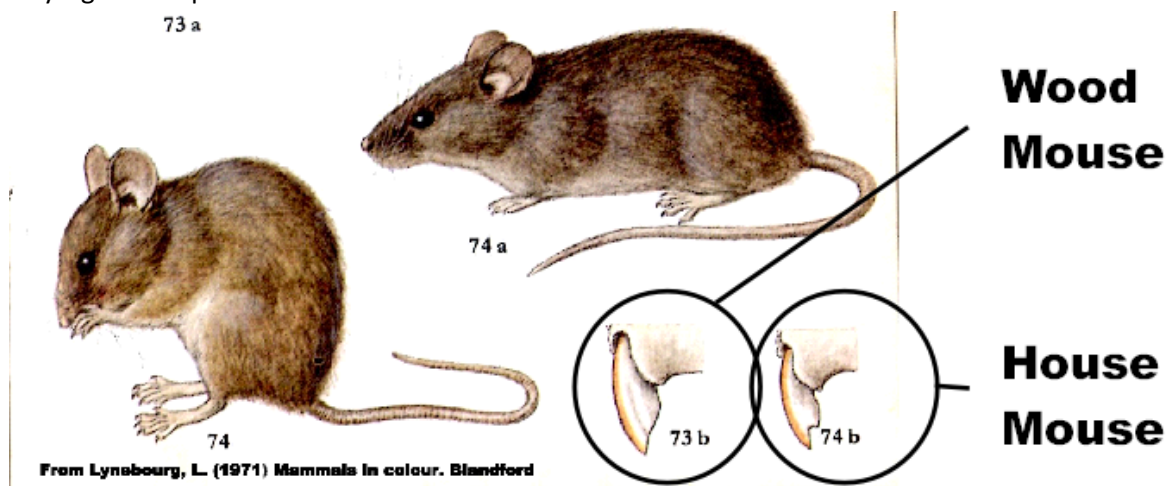
Adult wood mice are grey-brown and only slightly paler on their bellies (adult wood mice are orange-brown above with a grey-white belly although juveniles are similar in colour to house mice). Wood mice have smaller ears, smaller eyes and smaller feet than wood mice.

Wood mice leave a strong stale smell and their runs are often marked with greasy stains (nice...).

Scent is used to establish social structure and mark territory. Male pheromones accelerate puberty in juvenile females and stimulate oestrus in adults.

Living indoors they can breed all year round – almost monthly litters of up to 8 pups which are weaned at a month and breed a few weeks later. Females may pool their litters in communal nests. They live in breeding groups of several females with a single dominant male.

Life expectancy at birth is only 100 days. The major cause of death is poisoning and trapping. The only significant predator is the brown rat.



House mouse skulls can be distinguished from other mice by the way their front incisors wear in a characteristic notch and also by the 3, rather than 4 roots on their first upper molar (if you want to go into details).

- Dave Groves

CMG member records hedgehog activity

It's always great to hear from members of the Cornwall mammal group about mammal related projects they have been undertaking. The following was shared with us from an active member, Robert Wells, from work he undertook back in April this year. Robert, the founder of Three Bays Wildlife Group, is a prolific recorder as well as a previous recipient of our CMG award, awarded to

individuals 'for exceptional contributions to the study, understanding and promotion of the mammals of Cornwall'.

The landowners at a seal site (location withheld) are going to rewild part of the field adjacent to the site. Cornwall Seal Group Research Trust and the local Marine Group (Three Bays Wildlife) are contributing ideas, information and help regarding screening of the seals and the project in general. Screening is needed as visitor pressure is increasing rapidly and we wish to protect the seals against disturbance whilst people look at them.

The landowners mentioned that they wish to encourage hedgehogs so I offered to do a base-line hedgehog survey before rewilding work commences. I put out six footprint tunnels (CWT property, conveniently still in my possession after previous use pre-covid) for four nights. With the assistance of one of the landowners, the tunnels were checked and replenished four times, but no hedgehog footprints were obtained. Plenty of small mammal sign was detected however.



The tunnels were collected in after four nights and, as the kit was out, I fancied trying my own garden again. I realised that the houses of three local families (with children) form a triangle around our house and it could be a way to involve/excite the youngsters. We set out the tunnels with the usual disclaimers about hoping to be lucky, it may take a while for the hedgehogs to find the tunnels etc.

Well, Slap My Thigh! On the second evening all SIX tunnels had hedgehog footprints! We had very few small mammals but then some appeared. Interestingly, it was not in a random pattern but in two distinct hopping zones (see photo). I presume that these are hopping wood mice and my previous more random footprints had been mostly scurrying bank voles.



One of the families successfully used their trail cam and even saw a hedgehog in daylight. It soon moved on but there was another local daylight sighting the next day. Today I saw a daylight hedgehog in our garden. It weighs in at 420g. Prickles and Paws suggest that, at this time of year (April 2021), this weight is not critical. However, whilst a single daylight sighting is a worry, repeated daylight sightings are definitely not a good sign. He/she tucked into water and some leftover "Spike's Dinner" food from the footprint surveying. He/she has now been collected by volunteer local hedgehog couriers and is on his way to P & P.



- Robert Wells

Barn Owl Pellets – the joy of vomit

Barn owls, and other raptors, are a lot better at finding small mammals than any enthusiastic ecologist with a Longworth trap, after all, their lives depend upon their success. Most raptors as well as corvids and gulls produce regurgitated pellets of undigested material. Typically an owl will produce a couple of pellets about 6 hours after eating their prey and this will contain bones, fur and feathers of their meal. Since barn owls tend to roost in fixed locations and normally hunt within a couple of kilometres it is a very useful, if coarse, way of surveying small mammal presence. Barn owl pellets usually contain the remains of 2 to 4 individual prey items since prey are usually swallowed whole.

Barn owls and their roosts are protected from disturbance so always ask the property owner and avoid collecting during the breeding season. The pellets I am looking at were collected by Cornwall Bird Watching and Preservation Society members involved in barn owl surveys. When collected, depending on the age, the pellet may be black and moist or grey and dry. If left more than a few months they begin to break down from the attention of various insects. Although a lot can be learnt from analysis of individual pellets, especially if they can be collected at known times, there is still plenty of information to be gathered from untimed or broken down pellets.

Although barn owls take a wide range of prey the vast bulk of it is small rodents and shrews. It is not entirely clear if they can discriminate during hunting or if their hunting takes them over more vole-y



Image – Dave Groves © Barn owl pellets before processing – note the bone fragments in a dense fur matrix.

areas but the majority of rodents taken are field voles, followed by wood mice. Shrews – both common and pygmy – are relatively common finds but their contribution to the diet is small – even a large common shrew weighs only 14 g whilst a large field vole can weigh three times as much.

Other small mammals may appear occasionally in pellets and perhaps the biggest challenge is to notice them amongst the more common species. Bank vole and field vole skulls are similar at first glance, bank vole are much less common in pellets presumably because they occupy less open habitats. Water shrew is not unusual and can be confused with common shrew. Rarer species such as dormouse, harvest mouse and house mouse can also appear as well as young rats. Grey squirrel, water vole and mole are also possible along with the occasional small mustelid. Barn owls will occasionally catch bats and not infrequently catch birds. Away from the mammal menu amphibians and insects are eaten and a surprising number of worms.

So how to examine an owl pellet?

The first step is to make sure it is an owl pellet as it isn't unusual for foxes to hunt around old barns and roost sites and their scat can be confused with pellets – the strong smell should warn you off! I find the easiest method of dissecting pellets is to let them dry out and then use strong tweezers and dissecting needles to pull them apart. Some people recommend soaking them in warm water but I find this can get a bit messier. You might want to consider wearing gloves and a mask and always wash your hands afterwards. You will almost certainly find moth larvae and other creepy crawlies in there.

Firstly note if the bulk of the pellet is fur or feathers, this will give you a clue as to what you are looking for. Most identification is based around skulls and jaws so work through the pellet thoroughly and remove everything you find to a clean tray. You will need to tidy away attached fur and crud from the bones.



Some skulls will be intact but most will be missing the cranium (brain case) and most jaws will be separated. Rodent skulls are

Image – Dave Groves © Typical remains Newsletter, Winter 2021/Spring 2022
extracted – shrew skulls on top row and lower jaws below.

robust with obvious cheek bones (zygomatic arches) which may be broken. Vole skulls are tough but wood mouse skulls are often fragmented and can be recognised by the palate bearing upper teeth. By removing the first upper molar tooth examination of the number and location of root holes allows distinction between different mouse species.



Image - Dave Groves ©Field vole skull showing zig zag upper molars

Voles have zig-zag molars which can be removed – if there are distinct separate roots it is a bank vole and if the tooth is uniform then it is a field vole (Water vole have similar teeth but are much larger).

Careful checks of mouse skulls, again by removing molar teeth and checking the roots, will allow separation of wood mouse (by far the most common rodent) from house mouse and (very rarely) harvest mouse or dormouse. Don't discount the possibility of yellow-necked mouse even though it is very rarely recorded west of Dorset. Rat skulls and

teeth are more robust, even in small juveniles. Shrew skulls are also fragile, smaller and narrower but the pointed forward sections with its serrated red-tipped teeth are distinctive. Lower jaws allow us to distinguish different vole species and also shrews, based on size and tooth structure. All Cornish shrews have red-tipped teeth but the Scilly Shrew (a.k.a. lesser white toothed shrew, *Crocidura suaveolens*) has white teeth. A very large insectivore skull may be a mole – watch out for well-developed canines and white teeth.

Analysis of skulls will reveal the identity of most small mammal prey although some of the long bones and the pelvis can also be used. Other prey to watch out for in pellets are insects – some of the chitinous wing cases and head parts survive well – and amphibians whose bones and teeth are distinctive.

Finally – don't forget to record your findings and submit them to ERCCIS/ORKS letting them know where the pellets were collected. Barn owl roost records should be blurred to 2km tetrads on public databases. Check with the records centre if you need more information.

There are plenty of resources on the net for identifying mammal bones – try Will's Skull Site <http://www.skullsite.co.uk/>, the Barn Owl Trust's site <https://www.barnowltrust.org.uk/sitemap/galleries/pellet-analysis/>, Jake's bones <http://www.jakes-bones.com/> and Ric Morris's site <http://www.ipernity.com/home/329017>.

- Dave Groves

Our very own Tony Atkinson was the recipient of the Pete Guest Award from the Bat Conservation Trust this year for his outstanding practical contributions to bat conservation. His hard work, knowledge, enthusiasm and dedication in helping to record and conserve our bat species and inspiring others to do so made him a worthy winner. You may remember he also won the Cornwall Mammal Group award in 2020 for his services to our Cornish mammals. Every year we award a deserving individual to recognize their 'exceptional contributions to the study, understanding and promotion of the mammals of Cornwall'. Here is an extract from his acceptance speech given to the Bat Conservation Trust.

"I'm honoured to be this year's winner of the Pete Guest Award, and at first hearing of it I felt flattered. But then I began to think it should be all those people who have stumbled around in the dark on transects with me; or crawled into muddy holes; or wiped away the cobwebs; or endured the riverside midges who should feel flattered. I couldn't have done an awful lot of that without your support, and more importantly,

your enthusiasm. Nowadays of course I just sponge on you to carry my ladder, or do the counting...so bless you all.

But the stars of this show are the bats. You would think that after nearly 50 years working with bats I would have got used to finding out something new about them. But I am constantly amazed at some new revelation of their sophistication. They have capabilities far beyond anything we might have, such that we still don't understand how they do it.

Why don't they deafen themselves and their neighbours with their loud echolocation calls, when their ears are capable of hearing a faint whisper of an echo back off an insect? Why do they keep waking up and moving around during the winter when they are supposed to be in hibernation. How can a bat, in deep torpor, at close to freezing, know that it is going to freeze if it stays where it is, so wakes out of torpor to move to somewhere more congenial for "hibernation". Do Pipistrelles really eat 3,000 midges a night in summer? A roost near me used to have 400 Pips in it. So in that area, there are 1,200,000 midges fewer every night. Wouldn't it be like Scotland for midges down here in Cornwall if it wasn't for the bats?

I'm going to keep rooting for the bats!"
Tony Atkinson.

Congratulations Tony from all of us at CMG!

Enjoy, Respect, Protect

A walrus is a pretty spectacular sight in the UK. Having journeyed at least 4000km from the Arctic to Ireland, Wales, Cornwall, France and Spain and we hoped his presence in Scilly meant this juvenile male was on his way back home.

An extraordinary mammal and the third largest pinniped after the two elephant seals.

Spectacular features? Tusks, whiskers and bulk.

Surprising features? His diving ability (to 500+m), strength and ability to climb. His 400+ whiskers are sensitive enough to detect 2mm by 3mm shapes!

Walrus prefer benthic bivalves, especially clams which they suck out by creating a vacuum in their mouths.

His greatest needs? Food, a space to rest and sleep. He would normally be lying on a crowded haul out with the warm, soft bodies of other walrus. This might explain why he preferred lying on inflatables warmed by the sun?



An incredibly rare sighting of a juvenile walrus in the Scilly Islands. Image – Dan Jarvis ©

The presence of a species legally protected from disturbance in a commercial harbour was a major challenge and risk to himself, property and livelihoods. After an emergency meeting with the community, authorities and experts, an action plan was agreed to keep everyone safe and Lizzi Larbaestier from British Divers Marine Life Rescue was dispatched to the islands to monitor the situation closely.

Initially his presence was discouraged in the harbour through the use of approved, innovative, non-contact deterrents (including sounds and scents). Harbour officials advised boat owners to take preventative action by blocking access for the walrus with temporary barriers and obstructions as relocation was deemed inappropriate, logistically impossible and past experience shows animals usually return. Thanks to the skipper from the Star of Life (Scilly's ambulance boat) the dynamic risk assessment soon changed to providing a safe space for the walrus to rest in preference to boarding boats.

Lizzie built a walrus scented pontoon and the walrus found it almost immediately. During the heat wave Lizzi had to enlarge the pontoon and all the while people and property were kept safe. On 2nd August the news we had all hoped for – the walrus was spotted in Ireland!

The most recent updates (27th September) have shown that 'Wally the walrus' has made it as far as Iceland on his tour of Europe. Let's hope he has soon saved up enough energy and blubber reserves to survive the risk of swimming back to the Arctic. At least a huge team

effort kept him safe on our patch and enabled him to feed and rest well enough to move on. Massive thanks to everyone involved.

We would like to thank everyone who has been involved with caring for the walrus over the last few weeks at Scilly, including St Mary's Harbour Office, Isles of Scilly Wildlife Trust, British Divers Marine Life Rescue, Cornwall Seal Group Research Trust, St Agnes Boating, Marine Management Organisation - MMO, Department for Environment, Food and Rural Affairs (Defra), Natural England, and the Cornish Seal Sanctuary.

For more real time information as the story unfolded

<https://www.cornwallsealgroup.co.uk/2021/07/isles-scilly-walrus/>

<https://www.cornwallsealgroup.co.uk/2021/07/walrus-update/>

<https://www.facebook.com/CornwallSealGroupResearchTrust/photos/a.171698073216871/1433914013661931/>

<https://www.facebook.com/CornwallSealGroupResearchTrust/photos/a.171698073216871/1428572524196080/>

- Dave Groves

Scilly shrew and other terrestrial mammals and I

Whilst the the Isles of Scilly hit the headlines this summer with news of the walrus, they are perhaps more famous in mammal circles for the Scilly shrew. The Scilly shrew, a fascinating little mammal, is also known as the **Lesser White-Toothed Shrew (*Crocidura suaveolens*)**. It is the only shrew found in the Isles of Scilly (and is only found here and on the Channel islands in GB). It was probably introduced by boats, from France or Northern Spain but there are archaeological remains of this shrew from the Bronze Age. This shrew is also distinctive because it is the only British shrew that does not have red-tipped teeth and is the most grey in colour. They are active day and night and may be heard, even if they are not seen. They are found on the larger islands and I've seen them on St Mary's and Tresco. The Scilly shrew is an insectivore and key foods include sand hoppers found on the shore line and snails and slugs, so may be considered a gardeners friend. Many locals don't like the shrews in their house and consider them intruding vermin. I was delighted to be given adult and baby Scilly shrew corpses on the last day of my week's holiday in the Isles of Scilly. Thanks for organising this for my mammal collection Helen Richardson (SWW's IOS manager)!

Mammals are a passion of mine – as are invasive species. Islands are particularly susceptible to invasive species and especially invasive mammals; the Isles of Scilly are no exception.

Invasive Non-Native Species (INNS) are plant or animals (terrestrial, fresh water or marine) that have been moved from their place of origin by humans, accidentally or intentionally, and have a negative impact on the environment, the economy and health. INNS can thrive as they have no natural predators, competitors or diseases to control them and they can have a greater impact on islands as island species can be small, localised or highly specialised and therefore more vulnerable. Invasive mammals can have a disproportionately large impact and there are three INNS mammals in the Isles of Scilly: brown rat, rabbit and hedgehog.

Brown rat (*Rattus norvegicus*)

The brown rat is one of the most successful mammals world-wide. It is widespread and abundant and has a close association with humans. Rats are recognised pests with negative economic impacts on food, crops and property. They also impact on human health and spread disease. They can have a negative impact on the environment and in 2013 the Isles of Scilly Seabird Recovery Project was established to protect shearwaters, petrels and puffins. Rats were successfully eradicated from St Agnes and Gugh and chicks were successfully recorded in 2014. We only saw a live rat once on this trip, on a small island, at high tide, on our nearest beach Porthloo.

Rabbit (*Oryctolagus cuniculus*)

Rabbits were introduced to GB by the Normans and have long been associated with islands, where they introduced as a food store; such islands were often called Coney Island – coney is an old name for rabbit. Rabbits can be considered agricultural or garden pests. They are found on a number of the islands, and although not often seen they leave visible droppings. We regularly saw rabbits in a couple of places on St Marys, but only 2 each time; I thought they would be more abundant. Rabbits are widespread in GB, however, they are declining significantly in numbers and are classified as ‘near threatened’ on the IUCN* red list.

Hedgehog (*Erinaceus europaeus*)

The hedgehog is probably GB’s most distinctive mammal. Although native to the mainland, hedgehogs are not native to the Isles of Scilly and are believed to have been introduced to St Mary’s in the 1980s. Many welcome this charismatic species, especially as a gardener’s friend eating slugs and snails. However, hedgehogs can pose a threat to beetles, shrews and ground nesting birds eating eggs and young chicks. A hedgehog control programme has been carried out in the Outer Hebrides on North Uist. Hedgehogs are only found on the one island in the IOS and do not appear to have a negative impact that warrants a control programme. We had a hedgehog visiting our garden and it is the first time my 10 year old daughter has seen a live one. Hedgehogs are considered ‘vulnerable’ on the IUCN red list and have suffered a 46% decline in the last 13 years in GB.

If you are visiting the SWW team or go on holiday to the Isles of Scilly, please help track the status of mammals here, and send details of sightings (dead or alive) to the Environmental Records Centre of Cornwall and the Isles of Scilly - <https://erccis.org.uk/share-sightings>

- **Kate Hills**
Biosecurity and Invasives Manager, SWW
Vice Chair, Mammal Society

* The International Union for Conservation of Nature (IUCN) is an independent, worldwide organisation that supports the integrity and diversity of nature.

Sir Harry Johnston

The old ones are the best....

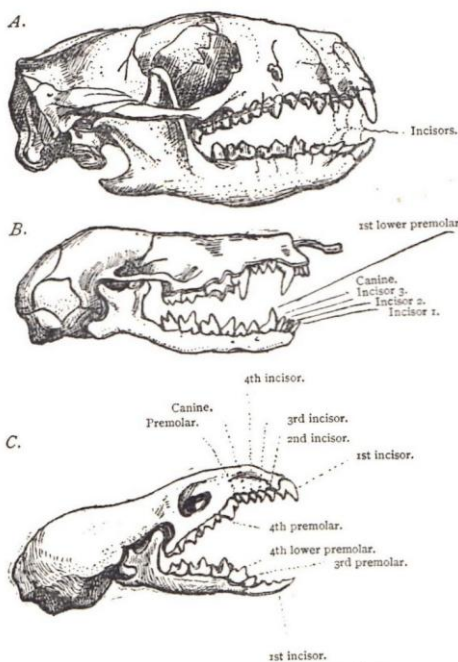
Sir Harry Johnston, or more correctly Sir Henry Hamilton Johnston GCMG KCB, was the author of one of those great Victorian natural history tomes than you can still find in dusty second hand bookshops. ***British Mammals – An attempt to describe and illuminate the mammalian fauna from the commencement of the Pleistocene period down to the present day*** was published by Hutchinson in 1903 as part of the Woburn Natural History series edited by the Duke of Bedford. My copy is inscribed *John D Mackenzie, Alphington, Penzance 1905* – I'm sort of hoping this might be the artist John Drew Mackenzie because Sir Harry did all his own illustrations – some better than others! The book has some serious ambitions, as the subtitle suggests, and draws heavily from previous writers such as Thomas Bell and Gerald Barret-Hamilton but it is still a huge piece of research. It gives a fascinating insight into the late Victorian understanding of British mammals and their history at a point when significant discoveries in biology and palaeontology were being made all the time. As with many contemporary natural history publications observations of appearance and behaviour are often provided from letters from contacts and colleagues and there is a good deal of information, and illustration, from hunting and taxidermy which might be frowned on today. However the field craft used in stalking is the same that we use in wildlife photography.

Although Sir Harry died at the tender age of 69 his natural history writing was only a retirement project. As a young man he explored Africa, met Stanley in the Congo, became a colonial administrator and was one of the key players in the colonisation of the African continent, working closely with Cecil Rhodes. For health reasons he was transferred the Uganda where he provided the first detailed European description of the Okapi (now named in honour of this as *Okapia johnstoni*). His natural history interests were recognised by many

awards and an honorary doctorate from the University of Cambridge. By 1900 he was back in England where he stood for the Liberal party at Arundell. Obviously not a man to embrace idleness he spent his later years writing accounts of his experiences in Africa and a number of novels, including sequels to several of Charles Dickens' books.



Another one for Marine Strandings? Note the Jolly Jack Tars included for scale. Fin whale on the beach – one Sir Harry's paintings.



SKULLS OF INSECTIVORES, TO SHOW TEETH.
A. Hedgehog and B. Mole (nat. size); C. Lesser Shrew
($2\frac{1}{2}$ times nat. size).

A more traditional natural history illustration from *British Mammals* – and still very useful for spraint and pellet analysis today.

Although there are plenty of excellent natural history guides currently available, very little compares with the discovery of some of these older books hiding unloved in the corner of a dark shelf. The history of the books and their authors and even the previous owners all add to the excitement. I hate to encourage competition but I thoroughly recommend looking out for Sir Harry's work and that of his peers.

- Dave Groves

Oat cookies (inspired by Nigel Slater)

Now it's almost Autumn it is time to think all things oaty and easy to eat with a cuppa while contemplating mists and mellow fruitfulness. These cookies are easy, very quick and look pretty good (even though I say so myself!).

Ingredients

120g softened unsalted butter/Stork

120g light muscovado sugar

1 egg yolk/vegan egg yolk replacement

120g porridge oats/coarse rolled oats

90g plain flour

Half a teaspoon of baking powder

Generous pinch of sea salt

3 crystallised lumps of ginger blitzed or finely chopped

Handful of roughly chopped dark chocolate



Method

Set oven to 180C

Beat butter and sugar together until light and creamy

Beat in the egg yolk and ginger

Mix in the oats, flour, baking powder and chocolate

Divide mixture into 8 or more depending on how large you like your cookies - a make mine into 16.

Roll into balls and then flatten slightly (you want them thickish so they stay a bit chewy) on a baking sheet lined with baking parchment.

Bake for 12-15 mins (size dependent) until they are lightly coloured but not yet crisp. Transfer carefully to a cooling rack they will be very bendy. They will crisp up as they cool.

They store happily for a week but hardly ever last that long!

Other successful flavour combos I have done instead of chocolate and ginger are: date and chocolate; lemon and ginger; cranberry and pistachio; hazelnut and chocolate (basically pretty much anything and chocolate works)

They are especially yummy made very small and sandwiched together with ice cream...just mentioning for a friend...

The beauty of CSGRT's long-term data set is that we can begin to spot changes. **Phenology shifts** appear to be taking place. **Peak haul out season for seals is now earlier** moving from April in 2013/14 to March (for 5 years) to Feb (for 2 years) and even Jan and Dec (for 1 year each). Likewise, the pupping season, that **used to peak in October, has moved to September for the last 2 years and was shorter and more compressed**. Alongside this, seals have started using **haul outs** not previously recorded on the Lizard and at West Cornwall, whilst **haul outs have shifted** on the Roseland.

Our PID Hubs processed a truly gobsmacking **139,704 photos** in 2020 and generated a total of **12162 seal identifications** of which **86% were re-identifications** (including IoS female S62 Man with a Horse and Cart). This included our new maximum of **122 different individual seal identifications** in a single survey as confirmed by two experienced volunteers.

Of all the seals re-identified, **7 were seals were first added to our catalogues back in 2000** (4 males and 3 females).

777 observations of 94 different entangled seals were recorded up to a **maximum of 19** entangled (current or ex) on a single survey.

In **lockdown, seal disturbance was down almost 70%** between February and August, although August was our **worst August on record**.

On a more positive note, there were **790 sightings of 121 different ex rehabilitated tagged** seals up to a **maximum of 12** on one survey. These had been released from the **Gower** in southwest Wales, **Combe Martin** in north Devon, the **Isles of Scilly, Gunwalloe** and **Sidmouth**.



"Man with a Horse and Cart" – just one of the many seals identified by CSGRT.

Can you see how it got its name? Image - Sue Sayer ©

We continue to learn that there is no **such thing as an average seal**...like us, they are all doing their own individual thing. Our photo identification work continues to demonstrate how far our seals swim and how much they depend on joined up and protected coastal habitat. Our photo ID work has helped us to realise just how **complicated seal society** is and the impacts we are all having on their health and welfare.

2020 SEAL STORIES

Some of the seals who were given a voice by CSGRT in 2020

Seals we said goodbye to:

Ex RSPCA rehab seal ‘**Vobster**’ who was **released in north Devon** was found **bycaught off the northwest coast of France – RIP.**

Sadly LP182 ‘**Stinkweed**’ (an ex RSPCA taggie) was found dead at Hayle – **another adult male to die in his prime – 11 years old – RIP.**



Isles of Scilly seal “Stinkweed”, given a voice by CSGRT in 2020. Image – Sue Sayer ©

Long distance swimmers

Looe's LF8 '**Lucille**' amazed us all by hauling out in Brixham! She now **links south Devon to north Cornwall** where she was identified in 2017.

Adult male LM46 '**Wiggins**' turned up in Mevagissey again and at West Cornwall on the north coast for the first time.

A seal was recorded behaving strangely by the Padstow Ferry Skipper in the **River Camel** and to our amazement this turned out to be BRX4 '**Flower**' from **south Devon** – behaving normally for her.

As pupping season peaked, **CSGRT partnered with BDMLR to rescue a pup (named Empanada by the Cornish Seal Sanctuary)** from West Cornwall. Later she swam right around the treacherous Land's End seas leaving her Lizard release site on the south coast to appear back on the north coast beach she was rescued from. This is a **minimum journey of 75km navigated in just 12 days at the ripe old age of 3 months!**

Ex rehabilitated tagged seals news

ROS1000 '**Morgan**' on the **Roseland** had been rehabbed by **RSPCA Mallydams and released in Sidmouth in 2018.**

RSPCA's Wookey was photographed hauled out in north Devon. In December, he became our **first link between north Devon and the Gower.**

A second Mallydams seal called LP649 '**Panda**' was photographed by Andrea at West Cornwall, which was the **first ever link between the Gower and Cornwall.**

Other taggies continue to thrive and Teresa Boulden spotted ex rehab seal '**Puffa**' at Pendeen who we have **identified since 2003.**

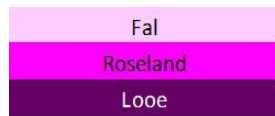
LP41 '**Jenga**' rescued in 2007 became the first ever ex rehabbed, tagged male seal to be **recorded mating** – his chosen female was S451 '**Skateboard**'.

Other discoveries

Celebrity seals hauled out on cue to greet Simon Reeve and he was introduced to NF8 '**Radley**', S466 '**Skinny H**', S344 '**Seahorse**', S409 '**Pitchfork**', S422 '**Ivy**', DP822 '**Heart sideways**', PJF8 '**Fuchsia T**' and LP298 '**Whist**' in turn.

Adult male common seal LC18 ‘Ellis’ returned to the Roseland before hauling out on a mooring buoy in the Fal.

Ellis



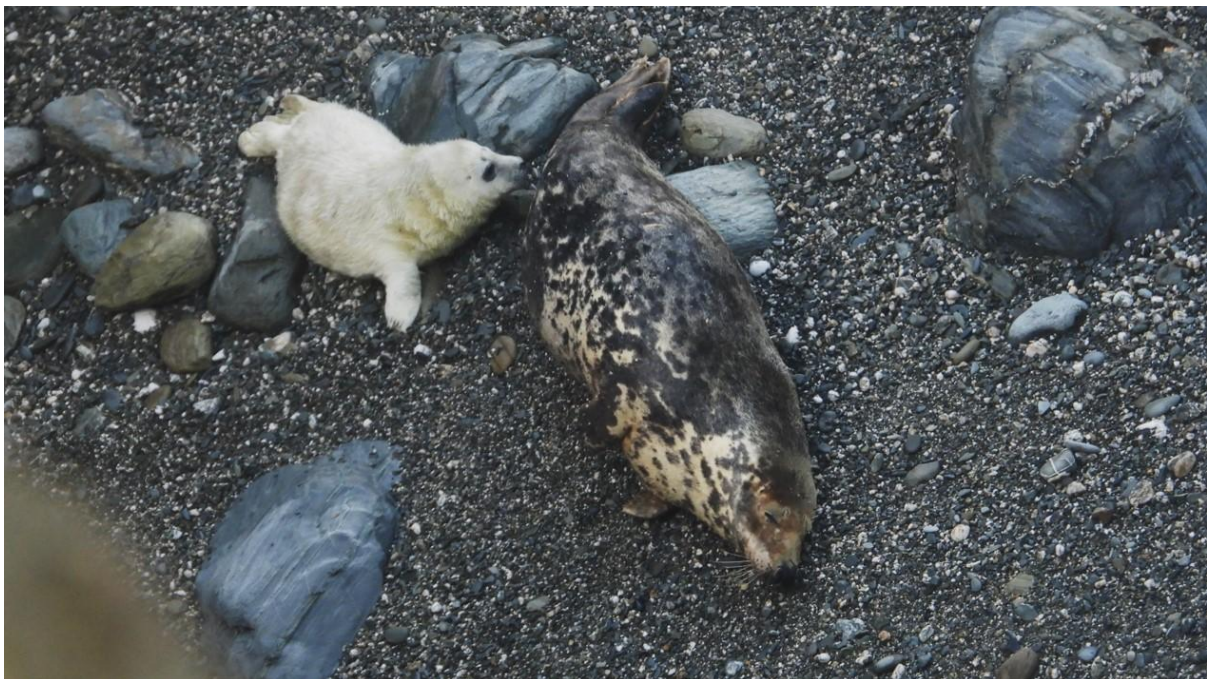
Ellis	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Jan			2						1	2	5	6
Feb							1	2	2	3	4	
Mar						1	5	1	1	3	3	
Apr						2	2	1				8
May							1	1	1			3
Jun						1		2				
Jul								1	1		2	1
Aug										1		
Sep								1		1		
Oct	1								4	1	2	
Nov					2				3		2	
Dec						1		3	6	4	4	
	1	0	2	0	2	5	9	11	19	14	23	20

Taggies provide invaluable information as they can be accurately aged and LP123 ‘Ugg’ and LP228 ‘Orion’ revealed that **older seals are not always longer/bigger.**

BRF20 ‘Tulip place holder’, who has an extremely swollen and blind right eye has actually survived in this condition since 2012 – she seems to spend the summer in the Fal or on the Lizard, and the winter on the Roseland haul out.



Ellis, a male common seal. Image – Sue Sayer ©



Our world record breaking mum – S112 ‘Ghost’ was back! We were delighted that she returned to have her **17th pup in 18 years** – right on cue. She hung around for 24 days – a good sign for her pup!

CSGRT used the evidence we collated to give seals a voice in **36 public consultation** submissions and 2 statutory **Seal Network UK** meetings. We hosted a socially distanced visit to HQ by **Vicky Bendall the DEFRA Seals and Seabirds Policy Advisor**. This included IoS seal Stinkweed who sadly died in 2020.

Sue Sayer chaired the new **Seal Alliance's Disturbance Working Group** which held 8 meetings with exciting developments coming soon. CSGRT represent seals on the National Steering Group for a new statutory organisation aimed at reducing wildlife bycatch – **Clean Catch UK led by DEFRA**.

In lockdown, CSGRT approached **Natural England to review the Aire Point to Carrick Du Site of Special Scientific Interest** and seals have been confirmed as a monitored species across this protected area. This is the **third SSSI in Cornwall** where seals are features of interest and **well protected legally even from disturbance**.

CSGRT helped to get seal interpretation signs up at Perran Sands Holiday Park and the Bowgie Inn. They created temporary pupping signs put up by Natural England and the National Trust on the Lizard, Roseland and Pentire and guidance in St Ives Bay and Dorset where juvenile grey seals had been actively engaging with swimmers.

Our supporters benefitted, as newsletter subscribers (<http://eepurl.com/dHdy3j>) were able to access new **virtual monthly meetings**. We held an incredible **341 online meetings** with volunteers, partner organisations, business networks and statutory agencies.

CSGRT's 20th birthday was celebrated with a **virtual conference** attended by **700+** different people and appeared on 3 TV programmes, **Countryfile, Springwatch and Simon Reeve in Cornwall**.

Incredibly, COVID19 has changed our charity and seal conservation for the better forever.

- **Sue Sayer**
(CSGRT)