

Spring 2019 Dorset Bat Group Newsletter



Chatter from the Chair

Welcome to the Spring edition of the Dorset Bat Group Newsletter 2019.

The NBMP Colony Counts take place from May-July depending on the species. So if you know of a roost, get counting!

The number of VBRV Planning Visits are beginning to increase, so if you want to be involved or I haven't asked you to carry out enough visits then please let me know.

I did enjoy Lisa Worledge's talk on Bat Evolution. I've been telling people for years about bats evolving from tree climbing shrews and now I've got to explain about tree climbing whales, horses and pangolins! More on that later.

The AGM was poorly attended but that could have been because of the late Easter and the consequent late school holidays. Nevertheless, there was an entertaining Treasurer's Report in the form of a video, from Steve Masters and a fascinating talk by Matt Clarke on GHS bats at Belle Vue.

Colin Morris has now taken over Lisa Worledge's role at BCT as partnership co-ordinator and we wish him well in his new post.

Now is the time for renewing your Bat Group Membership if you have not already done so. This can be quickly completed on the Bat Group website. The price remains the same at £8.

Thank you for your continued support.

Hope to see you again soon

Sheila Dyason

Volunteer Bat Roost Visitor (VBRV) Training

This is your chance to do your active bit for Bat conservation and gain a Class Licence through Natural England to become a VBRV.

The next round of training begins again this autumn, starting in October and running through to February. Sessions run once a month on a Wednesday evening, from 7:30 to 9:00 at Brooklands Farm (DWT Headquarters) near Dorchester, and are led by our wonderful and experienced members Jan, John, Pete and Colin.

The material covered ranges from Bat ID to biology, conservation law and how to conduct a visit, including a sample roost visit, and of course health and safety. The final session is an informal interview with the course leaders to see if you are licence ready.

If you started the course before but didn't get your licence then do join us again and with the extra experience you should get it this time.

Dates and further information will go on the website shortly. Do check out the Natural England website section on Bats for further licence information.

If you have already contacted me about training please get back in touch to say you'd like to do the sessions so I can create an up to date emailing list to keep you informed (assume I've lost your email in my inbox somewhere!).

For further training details contact George Lee on geodbg@gmail.com

Dorset Bat Group AGM Report

Sheila thanked the Committee for their hard work over the previous year. None of the Committee Members wished to step down from their post. Nick Tomlinson proposed that the Committee be re-elected en masse, and Stuart Smith seconded this.

Chair's Report

The Bat Group now operates the VBRV Planning Visits. Sheila co-ordinates these and there has been positive feedback so far, particularly on the speed of response to such requests.

The next round of Voluntary Bat Roost Visitor training takes place in the Autumn. Thanks to George Lee for organising this and for producing the Newsletter.

Sheila thanked Nick for organising this year's series of winter talks. Unfortunately, two speakers were unable to attend due to illness. Nevertheless, there were interesting talks by Jack Merrifield on his research into the effect of artificial light and sound on bats in urban environments; Connie Tremlett on Pollinating Bats in Mexico; Lisa Worledge on Bat Evolution and Matt Clarke on Greater Horseshoe Bats at Belle Vue.

EBLV 1 was found for the first time in the UK, in Dorset. 2 Serotine Bats tested positive.

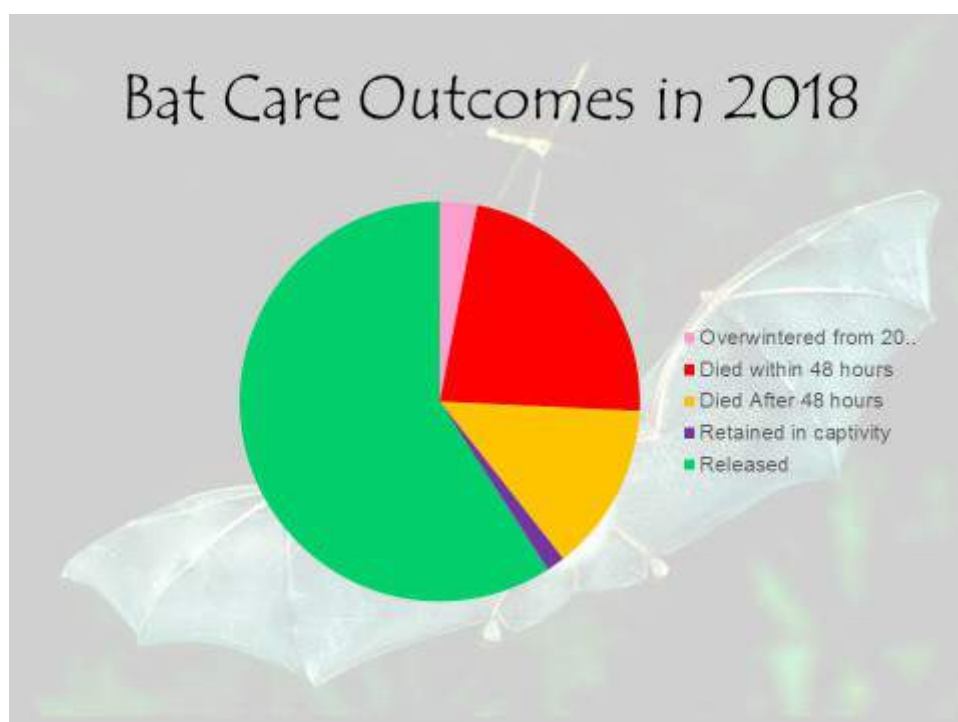
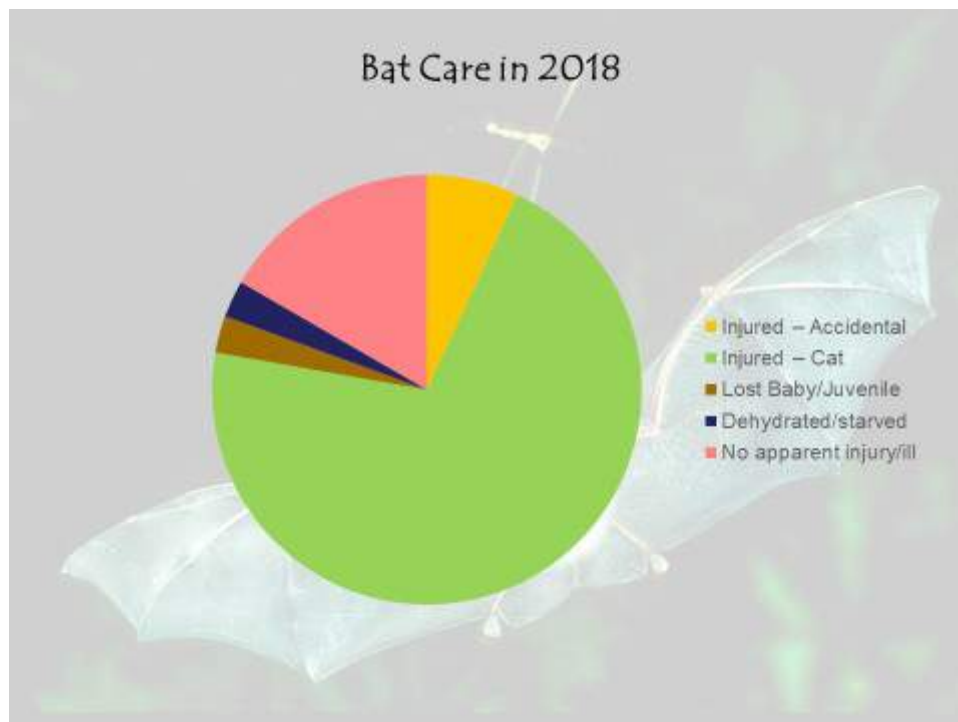
Other projects by Bat Group members include Adrian's work exploring Nathusius Bat migration. He started off with acoustic recordings along the south coast of Dorset and Hampshire and he now has static detectors on the Isle of Wight, Alderney, Jersey, Guernsey and Northern France. Next stop possibly Denmark. Will he eventually reach Latvia? Jan continues with the BCT Woodland Bat

Project. Nick continues to monitor the swarming sites, ring Natterer's and carry out box checks. Other box checks, hibernation visits and NBMP surveys are also adding to our knowledge of bats in Dorset.

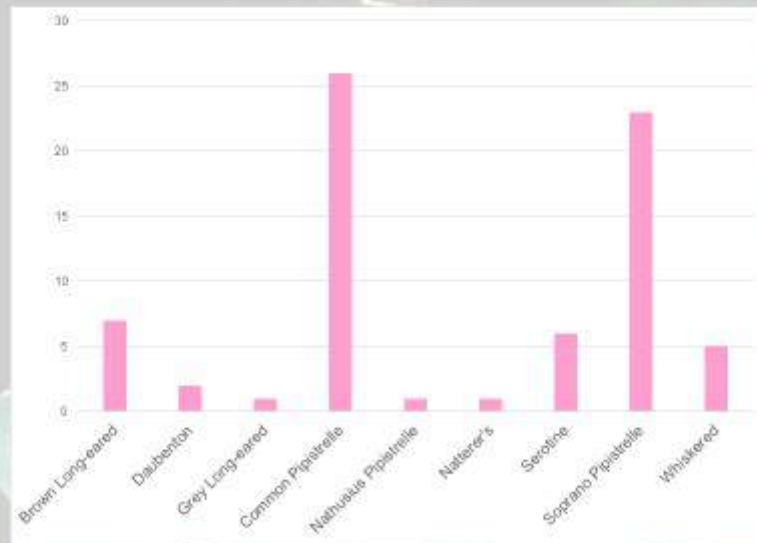
Annual Bat Group subscriptions are now due. They can be paid on-line.

Catherine Dyason, Secretary

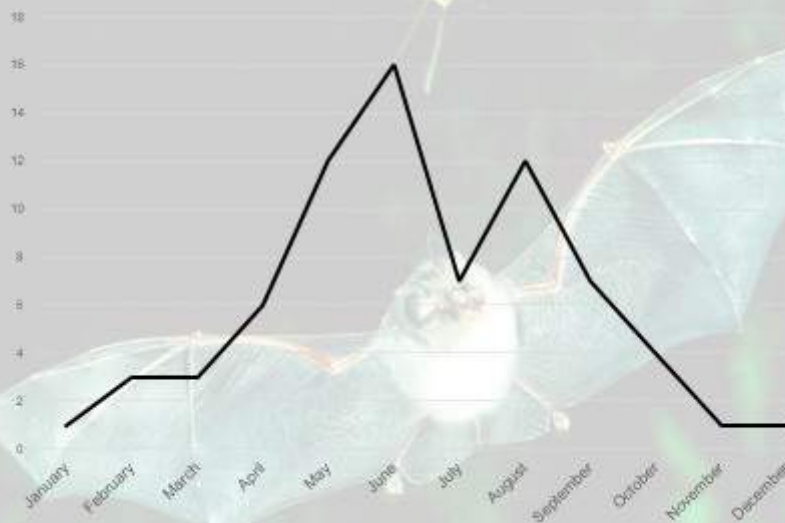
East Dorset Bat Rescue and Rehabilitation



Bat Species in 2018



Bat Care in 2018 By Month



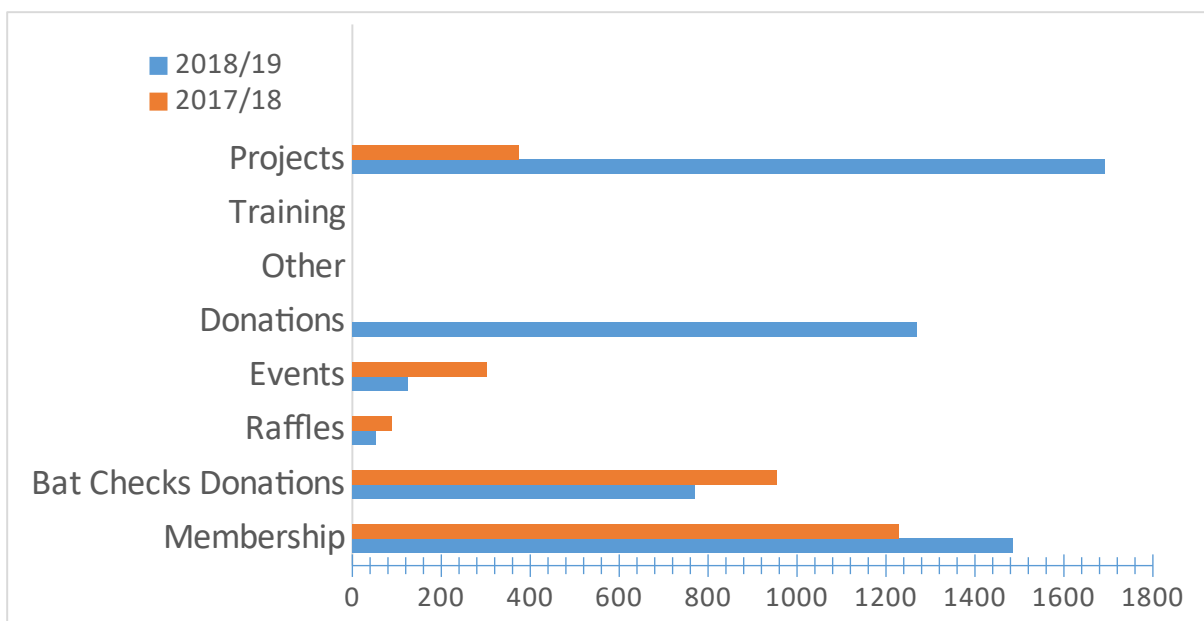
Sally Humphreys
Chair, EDBRR

Treasurer's Report 2018-2019

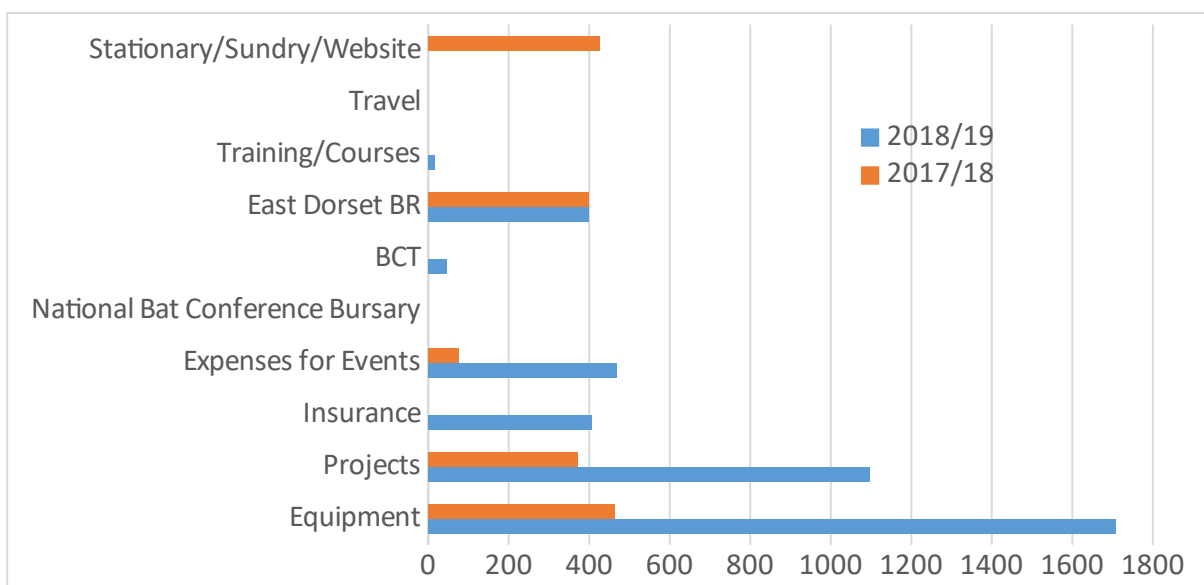
Steve Masters, the Treasurer, was unable to attend the AGM but he sent a powerpoint presentation with a video attachment.

- In community account - April 2018 = £4052.23 and April 2019 = £3651.92.
- In our 'savings' account – April 2018 = £1621.91 and April 2019 = £1624.10.
- Incomings for 2018/19 = £5396.24
- Outgoings for 2018/19 = £4137.89
- **So we were up by £1258.35**

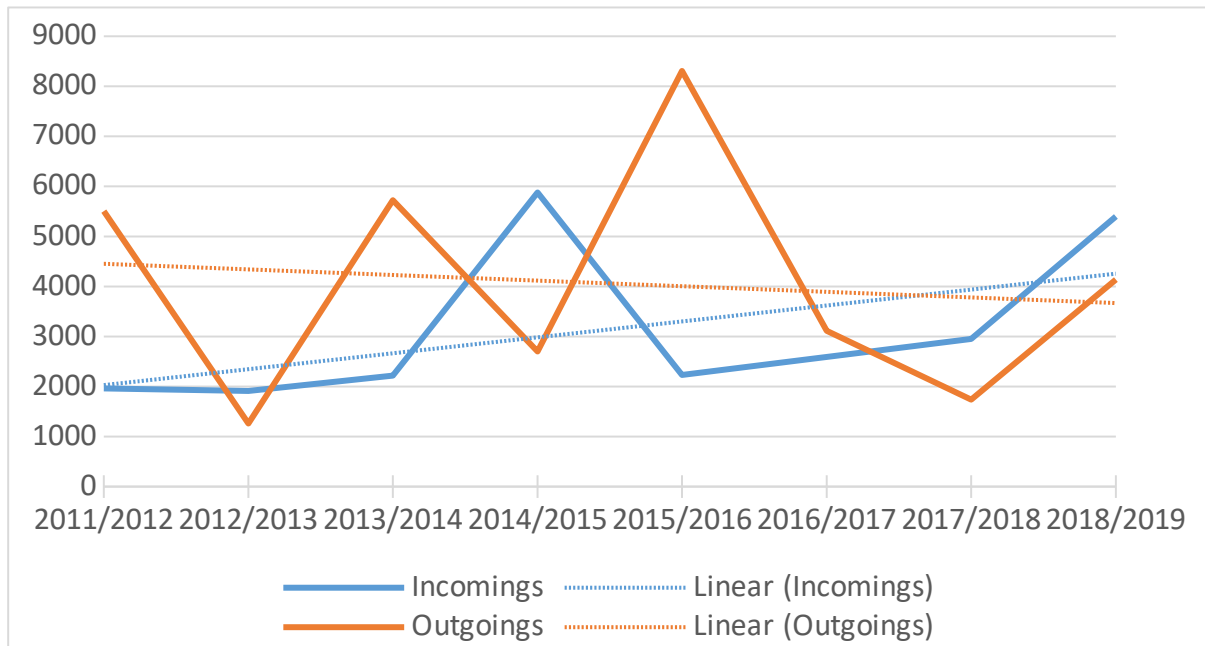
Incomings 2017/18 vs 2018/19



Outgoings 2017/18 vs 2018/19



Incoming and Outgoings over last 8 years



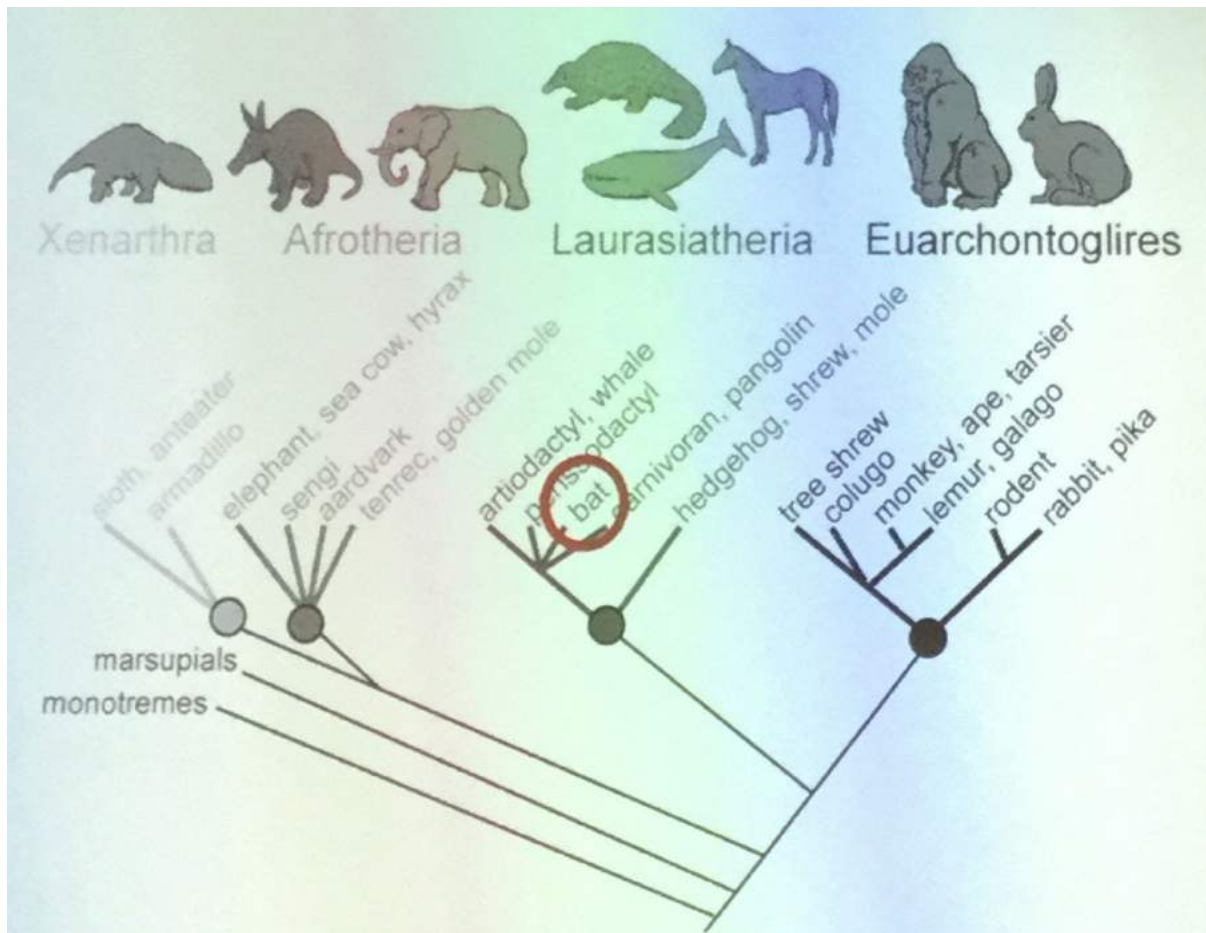
Report on Lisa Worledge's talk on Bat Evolution

Which came first: flight or echolocation? To evolve flight, you probably need to see where you will land and, therefore, you will have good vision. Most bat species have good vision. If you have good vision, or exceptional vision like fruit bats, why evolve echolocation? There is a nectar feeding species that has such advanced eyesight that covers daylight, night time, colour vision and UV vision. However, if 'protobat' evolved echolocation first, it would have been metabolically very expensive. Hence, modern bats couple wing beats and echolocation to offset the cost. Nevertheless, other species such as dolphins, the Tenrec of Madagascar and the Pygmy Dormouse from Vietnam, have evolved echolocation to orientate themselves. Then there are the fruit bats that mostly do not echolocate. Did they evolve echolocation and then lose it or are they too big and fly too slowly, to echolocate? The bigger the bat, the more lift it achieves with each wing beat, so it does not need to flap its wings as often and it has been found that the bigger the bat the less it echolocates. Are they going to get enough information from fewer echolocation calls to make it worth the energetic cost? However, there are some echolocating fruit bats, they just do it in a different way. The Egyptian Fruit Bat makes a series of clicks with their mouths and 3 species of bats in Thailand that make clicks with their wings as a rudimentary form of echolocation. It is now believed that echolocation evolved more than once in bats.

A 52.5 million year old bat fossil could fly but there is no definitive evidence for echolocation. So, possibly flight evolved first. However, moth fossils from 75 million years ago indicate that some moths were able to detect and avoid predators with ultrasonic echolocation. It may not have been a bat.

It used to be thought that bats evolved from a tree shrew. A more primitive bat fossil has been found with a claw on every digit. More modern bats have a claw only on their thumbs, although a few species have a second digit with a claw. The fore limbs are longer than other bat species and they are between modern bats and long-armed terrestrial creatures like Sloths. There is no evidence that this bat could echolocate. You could, therefore, say that echolocation developed after flight.

The early bat was probably something like a Tree Shrew. The evolutionary tree of life, showing the relatedness of mammals now uses molecular data and this has changed the relationships as we understand them. Bats are more closely related to whales, horses, pangolins than they are to humans and they are not flying mice. Humans are more closely related to mice than bats are. Neither are they related to Tree Shrews. Also, Horseshoe Bats and Fruit Bats are more closely related than previously thought.



Sheila Dyason

GREAT WILDLIFE EXPLORATION AT KING'S PARK BOSCOMBE SATURDAY 25 MAY 2019



At the request of CBP Council Countryside Service and as part of the above event Jan Freeborn led a bat walk into the previously unsurveyed territory of King's Park, an area of urban greenspace which includes areas of grassland managed for amenity use, longer grassland managed with a more relaxed mowing regime for wildlife conservation and biodiversity and linear mixed woodland with some large mature trees. Adjacent to this area is a large and long established cemetery together with older residential areas with large garden.

On a perfect evening for a bat walk around 20 people including families turned up at sunset for a short introductory talk about bats, where bats might be found on the site and a quick instruction session of how bat detectors worked. The walk followed a route around the site including the edge of the residential areas and unsurprisingly the first Pipistrelles were seen and heard flying and feeding over the canopy of the linear woodland to the south of Littledown Avenue. These bats had probably emerged into the darker light levels of the woodland as it was still relatively light and so there were good views of bats outlined against the sky. This activity continued for around 10 minutes until the bats flew off.

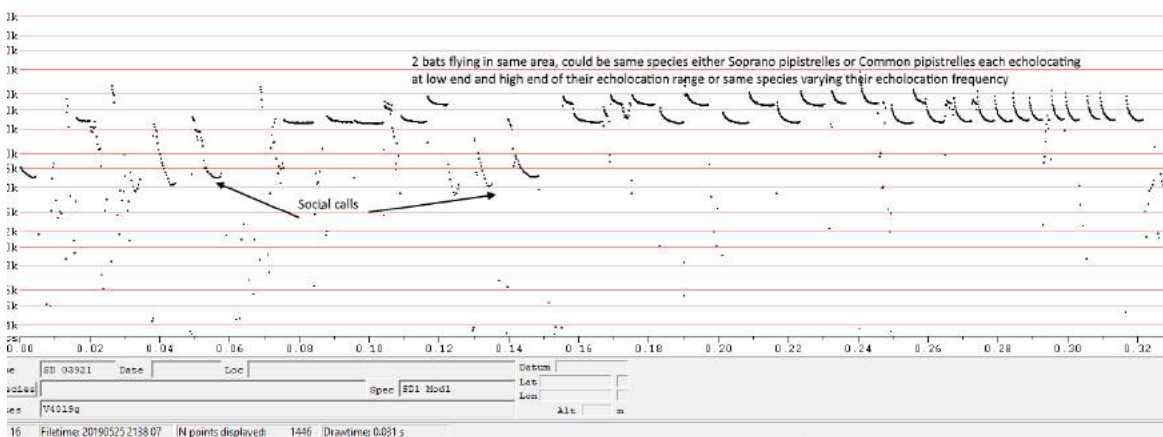
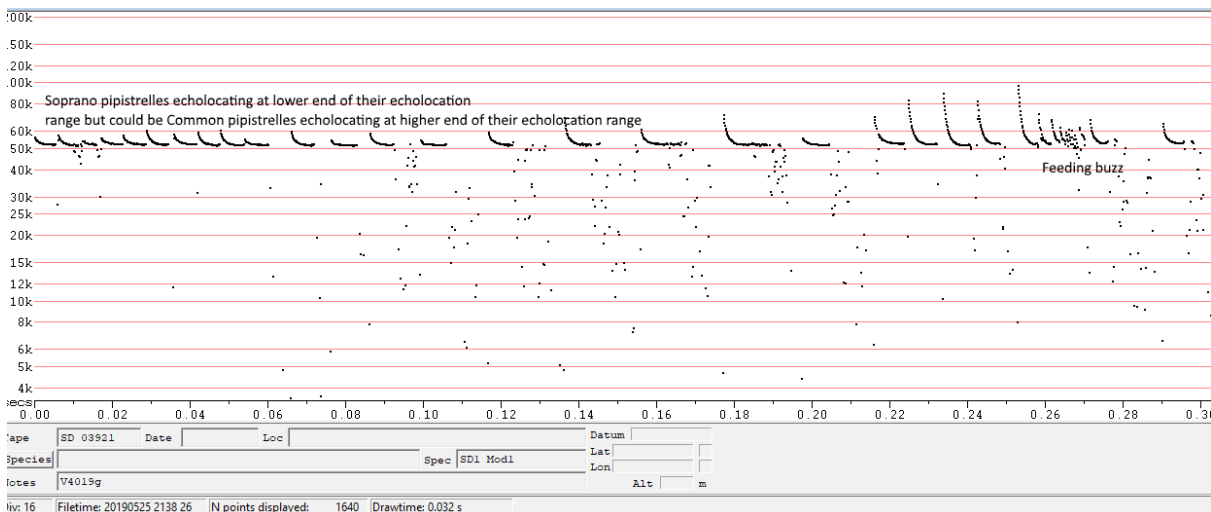
Frustratingly only a few individual bats were heard or seen for the remainder of the walk so it was decided to stay on for a further 30 minutes to see what happened. A good decision!!

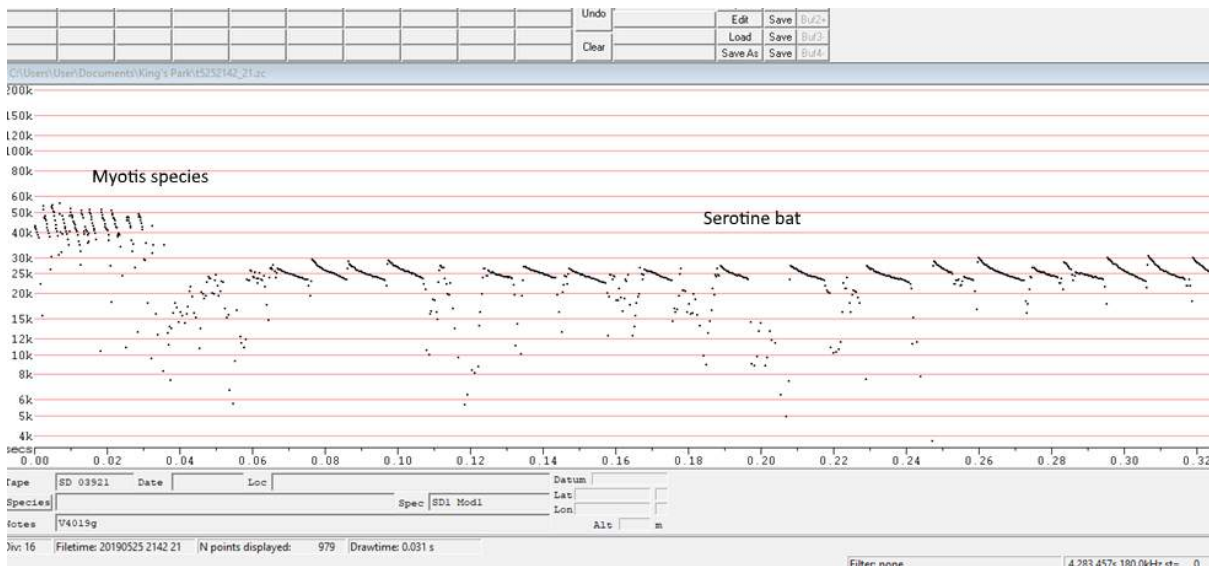
By this time, Serotine bats were picked up on the bat detectors. This species is relatively common in and around Bournemouth, the older houses with clay roof tiles and long established large gardens seeming to provide the conditions which this bat species prefers and it was nice to know the Serotines are still around.

Not far from the walk start point, Pipistrelle bats were picked up flying and feeding round a large Sycamore and the group had the thrill of hearing and seeing Pipistrelles bats feeding just above their heads with Serotines feeding in the background.

All in all a very satisfactory evening with an invitation to return to carry out more bat surveys, including the cemetery, probably commencing with acoustic surveys using Audiomoths to see what other bat species may be present and hopefully some catching sessions. The sonograms did pick a *Myotis* species of uncertain identity.

This bat walk demonstrates the value of relatively isolated greenspace in urban areas for bats and it was nice to know that small numbers of the common bat species are still hanging on in there.





Jan Freeborn

Notes on Pipistrelles

Nathusius' Pipistrelle

Our trapping surveys over the last couple of years have shown that *Nathusius pipistrelle* can be found in a number of places in Dorset, in good numbers, and Adrian's work with static detectors has shown that the coast is a key migration route for the species, but the results of this, and other work, also suggest that we may have animals present over the summer. A migrating species, leaving their eastern European breeding grounds to spend the winter in 'warmer' climates, such as the UK, we know that *Nathusius pipistrelle* mate at their breeding sites, but also on migration. It is, therefore, possible that these 'summer occurring' animals may simply be males, having a relaxing time here in the UK, waiting for the females to return in the autumn. That makes perfect sense, after all, why expend all that energy flying back to eastern Europe to find a mate when, if you just sit tight, and wait, they will come to you! That also gives you the chance to find the best advertising site and also get into really good condition, which may well give you an advantage in the 'mating game'! It is also possible, however, that these summer animals are females from a breeding site and, as there are only 3 known in England, that would be quite a coup for Dorset! So, what has all this got to do with you? Well, at least one of the three sites known in England the *Nathusius' Pipistrelle* was found roosting with soprano pipistrelle, and was only discovered when the people counting the colony of soprano pipistrelle recorded the bats and found that some of

them were echolocating at 39 kHz, which is too low for the latter, but bang on for the former, a great, non-invasive way of finding a colony. So, if you count a soprano pipistrelle roost, please record it and let us know if you find any 39 kHz pips, you may have found the first maternity colony of Nathusius Pipistrelle in Dorset!

Pipistrelle Hibernation Sites

A few years ago there was an amazing presentation at the national bat conference telling the story of how the Dutch authors (Eric Jansen, Erik Korsten and others) had found significant numbers of pipistrelle hibernation sites, by 'simply' walking around their towns, in the middle of the night, on warm, calm nights in August, with a bat detector! They discovered that pipistrelles 'swarm' around tall buildings during this period, with dozens and dozens of bats involved in this swarming behaviour and, when the same sites were checked in winter they found hundreds of hibernating pips. They also checked out these sites in winter and found the bats active, moving site as the weather changed from freezing to cool and back again, even recording bats flying in temperatures of -2°C to -7°C (yes, that is minus two to minus seven!). Perhaps the most amazing thing was that, although some of the buildings they found these in were old stone buildings (churches for instance) many were modern apartment and/or office blocks, almost exactly the sort of place that you would not 'dream' of being used by bats. It was really interesting when pictures of these buildings were shown, as you could hear the collective drawing in of breath from all the consultants in the room, as these were just the sorts of buildings that could, so easily, be 'written off' as having no bat interest! The bats were using the expansion cracks that are often such a feature of these high rise concrete buildings, as well as crevices around frames and other similar locations. While the checking of the buildings as hibernation sites might be a challenge, and may even need a licence, finding which ones are being used could not be easier, all you need is a bat detector, some warm clothes and a willingness to talk a walk in the middle of town when most folk are asleep on bed! If you haven't got a bat detector then the group has some you can borrow, at both Brooklands (Dorchester) and Beacon Hill (Broadstone). If you fancy giving this a go (and I'd recommend pairing up with someone to walk around) and would like to read more, I have the full text of the article that appeared in Bat News in 2016 if you are interested, and am sure the group would love to hear the results of your wander!

Nick T

Dorset Bat Group Committee

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