



Summer 2017



Swanton Novers Woodland Bat Project Summer Newsletter

Discovering the connection between natural heritage and cultural influences in Swanton Novers woodland

Welcome to the summer issue of the Swanton Novers Woodland Bat Project. We are now over halfway through the survey season and this year has been more challenging than usual due to the unsettled weather we have been experiencing. The constantly changing weather and heavy downpours have meant that we have had to cancel several transect surveys and reschedule them.

In addition, we had to cancel our trapping surveys in early June, due to reports coming in of heavily pregnant bats being caught and some giving birth early. The risk of catching a heavily pregnant bat in one of our nets and causing it a lot of unnecessary stress was too high. As a result, we decided to cancel and reschedule trapping for the end of July. However, at the end of July we learnt that barbastelle bats in some areas of Norfolk had only recently had their young, with some pups estimated to be 7–10 days old. As it takes 6 weeks before a pup is fully independent, it was too risky to trap, again because we didn't want to cause any unnecessary stress. And as we would like to focus on the barbastelle bat— a woodland specialist that we would like to learn more about—we decided not to do any trapping at the end of July. This means we haven't done as many trapping surveys as planned. However, the wellbeing of the bats we are catching is more important. We hope weather permitting we will be able to trap some-time in September.



Volunteers getting ready of a recent transect survey
© Sonia Reveley

date deployed static detectors 21 times giving the project 420 nights of recordings. In addition, transect and trapping surveys have been carried out by our volunteers from May to August. This means to date the project has collected 453 nights of data.

Information about the project aims and objectives can be found on the Bat Conservation Trust Website – www.bats.org.uk/swanton. Events, blogs and newsletters are uploaded onto the website and are readily available. On the website a Swanton News page has been created, providing a site where we can update you on our work, highlighting the activities carried out by the project team and volunteers.

In regards to the ecological surveys undertaken by the project, we have to



Volunteer on a recent transect survey
© Sonia Reveley

Bat Walk at Swanton Novers National Nature Reserve



Bat Walk © Jamie McDonald

On the 3rd of June, we ran our first bat walk of the year at Swanton Novers National Nature Reserve. In total, 9 people came on the walk. The evening started with an introduction about bats. We then walked down the road from the village hall to the edge of the woodland, where we waited for dusk to settle. As grew darker we heard our first pipistrelle call. Not long afterwards we saw our first noctule bat flying high in the sky, which was shortly joined by another noctule bat.



Bat Walk © Jamie McDonald

Further into the wood we successfully heard a couple of soprano pipistrelles, a myotis bat and a barbastelle bat.

Bat spotlight— Daubenton's bat

Daubenton's bats usually feed within about 6km of the roost, but have been recorded following canals for up to 10km (at speeds of up to 25kph). They usually take insects from close to the water and have even been seen taking prey directly from the water surface, using their large feet as a gaff or the tail membrane as a scoop.



Daubenton's bat © Hugh Clark - Bat Conservation Trust

The majority of known summer colonies are in humid, more or less underground sites near water. These may be tunnels or bridges over canals and rivers, or in caves, mines and cellars. They are only occasionally found in buildings, usually old stone structures such as moated castles and waterworks. Tree-holes are probably much more widely used than the recorded evidence suggests. Summer colonies are often quite noisy throughout the day, especially at sites where they are close to human activity. A variety of temporary night roosts are used, often in trees or tunnels

close to the feeding sites. Daubenton's bats have been found clustering with pipistrelle, noctule, Natterer's and brown long-eared bats. In the winter, many Daubenton's bats will hibernate in caves, mines and other underground sites. In extensive tunnel with large numbers of bats present, Daubenton's are often the most numerous species. They enter these winter sites in October, but only small numbers are present in the early part of winter. Numbers can increase dramatically towards the end of January and February, and individuals often remain at these sites until the end of March or even early April.

Daubenton's bats diet consist of small flies (especially chironomid midges), caddisflies and mayflies.



Daubenton's Cluster © RE Stebbing - Bat Conservation Trust

©Bat Conservation Trust



Daubenton's bat © Hugh Clark - Bat Conservation Trust

Into the Canopy by Jim Allitt, a Swanton Novers volunteer

I have been involved with Swanton Novers NNR since I started as a volunteer with Natural England in 2008. I subsequently secured a full time job as a warden for Natural England on sites throughout North and West Norfolk including Swanton Novers woods. Having since left Natural England to work as an Arboricultural Consultant for Norfolk Wildlife Services I've continued to volunteer for the Swanton Novers Woodland Project helping when I can. I have an arboricultural background so the woods have always fascinated me and as the years have gone by they have opened up an interest in Ancient trees and landscape history as well as how species interact within these very special habitats. In 2012/13 methodologies were drawn up and ideas started to come to fruition about a large scale monitoring program for the woods. This mainly revolved around the bat communities and how they interact within the woods. In the past bat transects and data collection focussed on the easily accessible rides running throughout the woods. This project was focussing on the interior of the compartments that were densely vegetated, hard to get to and little (if any) data had ever been collected - and it involved climbing large majestic Oak trees! I jumped at the opportunity to be involved!



Due to time pressures and constraints the forty trees were chosen by Ecological consultants according to certain criteria. They had to be 50m from any ride side, spread throughout Great Wood and Little Wood and within different stand types and compartment classification. A bracket was designed to secure the SM2+ recording devices to the trees and a bracket to take the canopy microphone secured on a southern aspect of the tree to record activity above the understorey. Once everything was in place data collection could start and the logistical complications of the project would inevitably become apparent.



Firstly, finding a green tree in a very green wood with a piece of green cord dangling from the canopy presents its obvious difficulties. Once the point tree had been found setting up the canopy microphones involved hoisting them into the canopy bracket. With a careful flick of the wrist the microphone sat comfortably in its bracket sheltered from the elements by a funnel. It didn't take too long to learn that to retrieve the microphone the other end of the cord had to be tied securely on so a continuous loop was created. Lesson learnt it was time to break out the climbing kit. I always find it a privilege to see sights that others rarely get to view and looking across the canopy layer and down on the coppice compartments and over the field boundaries fills me with appreciation of scale in a wider landscape setting.



Once the recording equipment has been set to record for two nights and the canopy and understorey microphones have been plugged in its time to retrace your steps back to the vehicle. It's funny how perception works inside dense undergrowth with no horizon or landmark to

focus on - many times I thought I had been walking (stumbling) in a certain direction only to be utterly bemused and convinced that I had discovered a previously uncharted ride that is on no maps and in the middle of an unexplored compartment, only to find after a few steps of admiring this untouched (well-managed) ride that it was in fact one of the main rides in the woods. After nursing my ego and the inevitable bramble rash it was time to find another 4 green trees in a green wood with a green cord hanging from a branch.



Sorting out the species

There are so many species of plant and animal in the world that centuries ago scientists tried to work out a system of putting them into some kind of order. Taxonomy is the name given to the science of classifying, or sorting, forms of life. It gives plants and animals Latin names which are used all over the world, and arranges them in groups according to how people believe they are related.

As new plants and animals are discovered and more is learnt about them, this grouping has to be updated, and sometimes scientists disagree about details.

Bats, like us, are mammals, one of five groups or **CLASSES** of animal called vertebrates because they have a backbone. Run your finger down the middle of your back and you will feel a row of bumps. Each is part of one of your vertebrae, the bones that make up your backbone.

Follow the numbers on this page to see where bats fit into the **ANIMAL KINGDOM**.

1

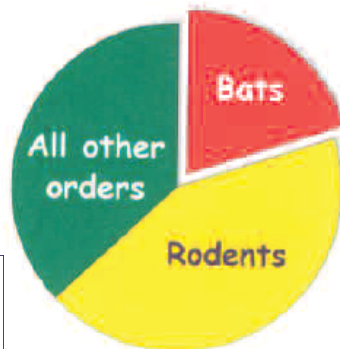
The table below shows the five **CLASSES** of vertebrate. Can you add to it by filling in the gaps?

fish	amphibians	reptiles	birds	mammals
cod	frog			bat

2

Each **CLASS** is then sorted into **ORDERS**. There are over 5,000 mammals in the world and these have been sorted into 27 **ORDERS**. The order of rodents has the largest number of species, and includes animals such as mice, rats and squirrels.

The order of bats - **CHIROPTERA**, (meaning 'hand-wing') is the second largest group. Over one-quarter of all mammal species are bats!



CROSS BAT

Cross out every letter in the grid that appears more than once.
Rearrange the remaining letters to spell on of the UK's biggest bats.

F	O	A	L	T
K	H	Q	N	S
A	S	U	F	A
W	M	K	C	M
E	H	W	Q	M

3

Each **ORDER** is then sorted into **FAMILIES**. There are 18 bat families in the world. Each head below represents one family.



Only bats in the **VESPER** family or the **HORSESHOE** family are found in the UK. Bats of both these families are also found in many other parts of the world.

4

Each **FAMILY** is then sorted into **GENERA**.

There are six genera in the Vesper family. One of these is the **PLECOTUS** genus.

Sometimes there are lots of species in one **GENUS**.

Several new *Plecotus* species have been recognised recently in other parts of the world, but there are only two known in the UK.

5

Each **GENUS** is then sorted into **SPECIES**.

The species is the basic unit of classification. The Latin name of a species is made up of the genus name and the unique species name.



brown long-eared bat
Plecotus auritus



grey long-eared bat
Plecotus austriacus



Events

To keep updated have a look at the events page on the Bat Conservation Trust website at www.bats.org.uk/swanton.

Bat Walk at Swanton Novers National Nature Reserve

Saturday 9th September 2017, 7.00pm

FREE

Meet outside the Swanton Novers Village Hall

(St Giles Road, Swanton Novers, Norfolk, NR24 2RB)



Come on a guided bat walk in Swanton Novers National Nature Reserve and learn about our UK bats. We will be using detectors which will allow us to listen out for bats and open up a hidden world.



Limited places. Booking essential



To book email Sonia Reveley at Sreveley@bats.org.uk or ring 07788226528

- Please wear warm clothes and wear wellies, as we may walk on uneven and wet terrain.
- Children should always be accompanied by an adult at all times.
- Bring a torch



1,2,3 Snap your Woodland

We have shortlisted some photos for the 1, 2, 3 Snap your Woodland Photo Competition and we need YOUR help! Please go onto Facebook at <https://www.facebook.com/BatConservationTrust/posts/10155882573882922> to vote for your favourite picture. Voting deadline: 17th September at midnight

Looking for a project which you can contribute to?

We are always looking for people to help us with a range of activities from bat surveys to walks and events.

If you are interested and would like to join our team on a journey of discovery then please contact Sonia Reveley by email at SReveley@bats.org.uk or ring 07788 226528. *In addition, we are able to provide talks to Scout groups over the winter this year, so do get in contact if you're interested.*

More information including blogs can be found at www.bats.org.uk/swanton.

