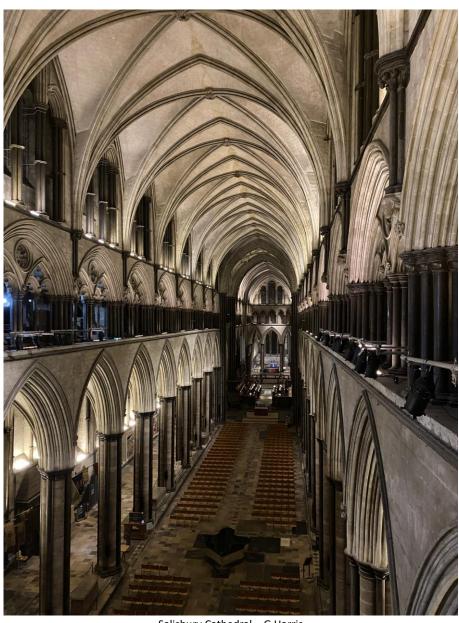


# **Annual Newsletter 2023**



Salisbury Cathedral – G Harris

This annual opportunity to provide a quick review of the activities and notable events from 2022. Hopefully this will give you a good view of some of the great things that have been going on in Wiltshire. We hope that you remain well and are looking forward to spring and the new bat season.

### A welcome from the Committee

We hope you enjoy our annual round-up of activities, project updates and events, and that you find the variety of articles interesting and inspiring. Although fieldwork and volunteering opportunities are still to get back to pre-Covid levels, there is a lot going on the county and we've been deliberately looking at other activities including online talks, training events and surveys to give everyone who wants it access to information and something different.

We had a real boost on the Committee over the last year, welcoming Laura as our new Secretary whilst, Kelly and Ollie as Events and NBMP coordinator respectively have given a lot of impetus to our aims and goals for surveys, engagement with our membership and more widely with the general public. You'll be able to see from Kelly's article below just how much has been achieved.

We were however sad to lose Ollie, as he leaves the county for pastures new, and stepped down from his role as NBMP Champion. Working alongside Kelly, Ollie achieved a huge amount for the group, and in conjunction with Kelly, has enabled a period of growth in the group's membership and enhanced public engagement. Huge thanks to Ollie and best of luck with the new job! If you, or someone you know, might be interested in getting involved in this aspect of work, please get in touch!

Having been a member of the Wiltshire Bat Group for nearly a quarter of a century all I can say is that every year has been different, and while we look forward to 2023 we are always looking for members to come forward and help run the group, remembering we are all volunteers giving what time we can.

We will be meeting face to face again for our spring members meeting / AGM on the 20<sup>th</sup> April in Potterne Wick. We've brought this one forward from May as a trial just prior to the main survey season kicking off. After bat group business and updates the main event will be a talk by Tom Kitching from the Vincent Wildlife Trust on horseshoe conservation. These meetings are always friendly and interesting, and it is always nice to catch up with old friends. There's also free tea, coffee and biscuits if you need additional incentive. We particularly like to meet new members and indeed anyone interested in bats, so please come along and

say hello.

I look forward to a bit of down time in the winter months, doing the final gear wash down, cleaning out the debris from my rucksack and even being delighted when I find some left over Werther's Originals. But a few weeks later I am itching to get going again and really enjoy the occasional opportunity to get underground in January and February. Doing these hibernation surveys in the old stone mines is always hard work as my knees will confirm, and although it is always fun and interesting, the key outcome is always the data. We've been doing fewer hibernation surveys due to the Covid guidelines, but with data continuity in mind whistle stop visits to the main sites have now been completed. If you follow @wiltsbg on Twitter you will have seen some great photos. The biggest contribution that most of us can make is through the data we collect, whether it is from an old stone mine, bat boxes, your back garden or while walking the dog, all records are welcome and make a difference.

On the same note, it was lovely to be able to say thank you to a few of our volunteers this year, there's a bit more detail below. I hope we will be able to do the same or similar in 2023. As a Committee we are always looking for innovative things to put forward or suggest so please keep your eyes on your mailboxes throughout the year.

If you are doing something interesting for bats in Wiltshire and want us to promote it, ask for volunteers or generally help out then please email wiltsbg@gmail.com. Additionally, we always put some funds from the reserve aside for small grants. You just have to send us an email and we will let you know how to apply.

Pandemic aside, 2022 was probably one of the most productive and interesting years for the bat group. Our membership continues to grow, so thank you to everyone who has contributed whether by joining, renewing your membership or helping us out in a myriad of ways. Your support is always gratefully received.

As always, a big thank you to the contributors for finding the time to write articles and Ben Mitchell for volunteering to edit the newsletter again this year. Here's to a good 2023. Hopefully I will see of few of you in the Cotswold Water Park this year, or at the April meeting.

Wiltshire

**Will Ponting** 

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### News, snippets and headlines in brief

#### 2023 spring members meeting / AGM

Put the 20<sup>th</sup> April 2023, at 1900 into your calendars. This will be an in person meeting at Potterne Wick Scout Centre. As always, there will be a full agenda, updates, speaker and free refreshments.

#### Acoustic surveys and detectors

In 2021 the committee bought two SongMeter Mini-Bat static detectors. These have been used constantly, but are available for members to borrow, we'll provide guidance, instructions and processing.

Anyone interested will also be required to either analyse their own data or to find a willing volunteer to do this for them. The deployment of the detectors is the easy part and a large volume of records and therefore effort can be required to identify the recordings in a meaningful way with an acceptable level of accuracy. There is the possibility of using the bat group's BTO Acoustic Pipeline account to aid in the analysis of data but, like any auto-ID platform, the outputs still require some checking and data handling to ensure accurate records.

That said, please do not be discouraged if you have a potential area that you would like to investigate further please get in touch.

We also have a number of heterodyne detectors that can be borrowed for bat walks. Contact us to book them and arrange collection. They are frequently used so please book them in advance.

#### **Acoustic pipeline**

The bat group will continue to fund the processing of data through the BTO Acoustic Pipeline Service in 2022. This supports the increase in data from the monitoring of fixed sites.

#### Wiltshire Bat Care

WBC has had another busy year! Committee member Caitlin McCann is managing and coordinating the service, closely associated with WBG, BCT and the county wildlife hospitals. If you fancy a career in bat care, or just find out more then please contact Cait on wiltshirebatcare@gmail.com

#### Support to projects

The WBG always sets aside funds each year for match funding to projects, including DNA sampling and this year the proposed bat house development (see below). Just send an email to <a href="wiltsbg@gmail.com">wiltsbg@gmail.com</a> and the Committee will have a look.

#### The Cotswold Water Park

#### Swindon bat boxes

We have done a bit of work over the winter to recommence box checks at Stanton and Lydiard parks. There's still much to do, but at least we know where they all are. Watch this space for more details in the coming months.

#### **Savernake Forest Project**

The project continued and we encountered the usual Barbastelle bats, Natterer's etc. We'll be setting dates for 2023 box checks soon.....if you're interested, contact the project leads and make sure you're on the list for 2023!

#### Get back in touch.

Obviously, the pandemic led to a reduction in the amount of fieldwork we could do. Things are improving so please get back in touch with the project leaders, make sure you are on their email lists and tell them you are still interested.

#### Data are always important.

Please send any Wiltshire bat records into the County Recorder. This is still the major way in which we all contribute to bat conservation in Wiltshire. Contact Gareth on wiltsbatsrecords@gmail.com.

#### Website

Our presence on the Wiltshire Mammal Portal has been refreshed and upgraded - huge thanks to Kelly Sheldrick (and her opposite numbers in Wiltshire Mammal Group) for her time and efforts on this.

# Events, training & people engagement – an update from 2022

## CONGRATULATIONS TO OUR COMPETITION WINNERS!

This year WBG ran a couple of competitions to recognise and show appreciation of those members that have gotten involved with WBG and bat conservation in Wiltshire.

Volunteers were nominated by fellow WBG members for their outstanding participation in bat group activities and volunteering throughout the year. All nominees were then voted on and shortlisted to the final 3.

Congratulations to you all and to those who participated this year. We really appreciate your fantastic efforts!

#### **VOLUNTEER OF THE YEAR**

#### Winner - Louise Hartgill

First prize went to Louise Hartgill who has done an amazing job of learning how to use and analyse recordings from her EMT. Louise is often out in the evenings recording the bats in her local area and correctly analysing not only the more difficult species, but also social calls. Louise submits a vast number of records each year now.

Louise has been kind enough to write an article about her experiences this year which is included below.

#### Runner Up – Alicia Logan

Alicia was shortlisted for her dedication and passion throughout the year in all the projects and volunteering she's been involved in

#### Runner Up – Peter Thompson

Peter was shortlisted for his continual assistance in using static detectors to record bats across south Wiltshire as part of the South Wiltshire Greater Horseshoe Bat Project.

#### RECORDER OF THE YEAR

Any WBG member that submitted a record either via WBG/ county recorder or that participated in NBMP/ BiC was entered into the draw to win. The winner was

then selected at random.

#### Winner - Matthew Best

The winner of this year's Recorder of the Year was Matthew Best! Congrats Matthew!

# UKRAINE BAT REHABILITATION CENTRE (UBRC) FUNDRAISER

On 17th December Anton Vlaschenko from UBRC joined us for a fundraiser talk, which raised at least £170 for the UBRC. Thanks to everyone for joining and donating! You're awesome!

We've decided to share the talk to see if we can raise a bit more money for UBRC, so if you do watch the talk (link below), please drop them a few pounds via their PayPal account or consider offering your English skills and help them out with some academic proofreading (more details towards the end of the talk)!

It's a really inspiring talk, so I hope you enjoy it! The talk can be viewed here: <a href="https://youtu.be/zjCKGKkeIMc">https://youtu.be/zjCKGKkeIMc</a>

# LOOKING BACK AT TALKS AND EVENTS IN 2022!!

Neil Middleton from Batability joined us back in March 2022 and then again in Nov 2022 for some workshops and training on bat call sound analysis.

Fran Tattersall from Wildlife Acoustics (and also active WBG member) ran two fab detector sessions. The first was an in-person training session on using EMT detectors and the second was an online session on using Kaleidoscope.

We also ran some bat walk training, which included an online session on the Bats of Wiltshire which was delivered by Gareth Harris, County Recorder for bats and mammals in Wiltshire. The online session was recorded and is available to any beginner members keen to build their foundation knowledge on bats to help them lead bat walks and also to take part in the NBMP. Following this Kelly Sheldrick, WBG Events Officer, ran an in-person bat walk training session at Cotswold Water Park and a follow up bat walk with at Shaftesbury Lake in Swindon, which those new to leading bat walks were welcome to assist with.

Our then National Bat Monitoring Programme (NBMP) Champion, Ollie Ellis ran several events and training sessions to promote the NBMP. These included a couple of online sessions on the NBMP and some inperson mock waterway surveys. Ollie also provided a

lot of one-to-one support and help to members. Sadly Ollie left the county late last year, and understandably stepped down from his role. Ollie did an amazing job at supporting and engaging people in the NBMP and is already hugely missed. We encourage anyone that is interested in taking on this role or something similar to get in touch.

In addition to the winter talk and fundraiser with UBRC, we also had a winter talk with Stuart Newson (BTO Acoustic Pipeline) who joined us to talk about the acoustic monitoring of small terrestrial mammals. Penelope Fialas also joined us back in November to talk about her research into climate change and the ecosystem services of bats, specifically as pest control. And earlier in the year we had Emma Stone who joined us to talk about her work in African Conservation.

We also had two awesome speakers at our in-person meetings. Back in May, Matthew Terry, former Chair of Worcestershire Bat Group and a current Trustee of the Bat Conservation Trust gave a light hearted talk 'Carry On up the Bat Roost' about the bizarre sex lives of bats.

And in November, Elliot Petkovic joined us at our AGM to talk about the bats of Trinidad & Tobago and gave a brief overview of species ecology.

We had also planned to have a stall at two community events, however these events were sadly cancelled (a result of the proceedings surround the death of Queen Elizabeth II). We were however able to help with the Nature Day at St Sampsons church in Cricklade. Thank you Fran Tattersall, Jane Sheldrick, Joyce Grace and Sarah Jupp for running the bat stall. There were over 150 visitors that turned up on the day and lots of happy kids with bat cupcakes, masks and bat crafts.

Thanks to everyone that helped with the events and/ or delivered talks and training! We couldn't have achieved all we have without you and your efforts are really appreciated.

### LOOKING FORWARD... WHAT'S TO COME IN 2023??

We have a few more talks planned this winter including a talk about bats and woodlands with Jim Mulholland and fundraiser talk with Tom Kitching from VWT, which will help raise funds for the Sussex bat roost appeal.

Later in the year we plan again to have some sound analysis training with Neil Middleton from Batability. We also hope to run some more bat walk training in the summer.

Would you like to run an event or talk for WBG? If so, please get in touch.

There will also be the opportunity to help out with community bat stalls, bat walks and bat talks throughout the year. So, lots to look forward too!

**Kelly Sheldrick Jan 2023** 

# The County Recorders' Report and highlights for 2022

During 2022, survey and monitoring work continued to return to some degree of "normal" akin to pre-Covid19 levels. Although the guidance for mammologists and bat workers remains in place to manage and minimise risks of native mammals catching Covid19 from people, groups are now used to routinely wearing the necessary PPE at all times and managing the risks. Team sizes on survey events are typically smaller, and some surveys are undertaken less frequently, but conversely, landscape-scale acoustic surveys have been expanded and, if anything, the group is generating more data each year.

#### 2022 - THE WEATHER

2022 was characterised by extremes of weather, commencing with a series of named storms during January to March (which caused considerable disruption to woodland bat box schemes), a dry spring, a blisteringly hot summer drought, followed by an above-average warm wet autumn, before rounding the year off with extreme rainfall and flooding.

Climate change continues to be evident during our bat monitoring in the county, ranging from the impacts of extreme storms upon woodland bat box schemes and tree roosts, to the deaths of bats in bat boxes during extreme summer temperatures. Warmer and wetter winters also impact the numbers of bats using underground hibernacula in the county. This leads the group to reconsider how we deliver our monitoring in the face of climate change.

#### **COUNTY RECORDERS' REPORT 2022**

During 2022, Wiltshire Bat Group continued to see growth in the membership particularly of those with a more general interest in bats and natural history (rather than specifically consultants who are often the training opportunities). engaging for combination with the expansion in the provision of training events and online talks for members this resulted in an increase in records submission, often from general recorders and hobbyists many of whom walked many kilometres during 2022 with their EchoMeter Touch bat detector, generating hundreds of sound files. The bat group received several thousand records in this way, from infrequently visited parts of

the county, often resulting in records of pretty interesting species.

#### Savernake Forest

Monitoring of the bat boxes here continued and resulted in three encounters with the barbastelle maternity group and some brilliant ring recoveries – most of the colony is now ringed, and we are mostly just ringing juveniles now.

#### **Braydon Forest**

Monitoring of the original long term bat box scheme, where we have a ringing study on Bechstein's bat, continues with success. Elsewhere, monitoring of the



Bechstein's bat - Braydon Forest - Photo Credit: Gareth Harris

bat boxes in another nearby woodland continued with good numbers of brown long-eared bat, Natterer's bat etc recorded. The presence of batfly larval cases in the boxes offer tantalising evidence that Bechstein's (or Daubenton's bat) may be using the boxes, but we are yet to encounter one. The third bat box scheme also continued with brown long-eared bats, soprano pipistrelle and a splendid Noctule bat.

Engagement with a new landowner also enabled expansion of our work here, and we repeated some acoustic work on another site, having not visited it in some time, despite catching Bechstein's here when we did!

#### Bath & Bradford-on-Avon stone mines

The annual hibernation checks continued on all sites, including those in the bat SAC. Autumn swarming surveys continued on most key sites, albeit on a smaller scale in line with current Covid19 guidance.

#### Trowbridge Woodlands

Keith Cohen et al continued with the studies at these woodlands including the bat box monitoring and regular monitoring of the transect of tree roosts. Bechstein's bat were encountered as well as other bat species, such as Noctule bat and Brown long-eared bat, plus horseshoe bat monitoring in nearby buildings.



Hibernating Natterers and Daubenton's bats Photo Credit: Gareth Harris

#### The Farmer Groups

Several of the farmer groups continued with their landscape-scale acoustic surveys, notably Simon Smart's coordination of work with the Pewsey Downs and Chalke Valley Farmer Groups. This work is generating large volumes of data (and thankfully the resource to fully quality check and verify the extensive outputs!).

#### South Wiltshire Greater Horseshoe Bat Project

This project, coordinated by myself and Simon Smart, received further funds in 2022, enabling further work, including further acoustic surveys, dung beetle surveys, roost monitoring and some practical works.

Acoustic surveys delivered a large amount of data along the Woodford Valley (thank you to volunteer Peter Thompson), Chalke Valley and Pewsey Downs, The Donheads, Westbury, and elsewhere too.

Dung beetle surveys were delivered on a series of sites, continuing to generate novel data on a number of species and locations. Our thanks to Marc Arbuckle for his considerable work on the ID of these samples amounting to several thousand beetles. A joint event was held on Salisbury Plain in conjunction with Defence Infrastructure Organisation, the DELTA Salisbury Plain farmer group, and the Porton to Plain farmer group,

with Dung Beetles for Farmers, in relation to the extensive dung beetle and bat surveys undertaken on the training area.

Perhaps most excitingly, construction of the new bat house was commenced and completed in the spring – monitoring through the summer and current winter, indicate it is already being visited, e.g. by roosting greater horseshoe and brown long-eared bat, and acoustic monitoring suggesting visitation by Natterer's and perhaps also Barbastelle bat too.



Teffont Evias Lake Photo Credit: Gareth Harris

Roost monitoring as part of the horseshoe project including monitoring of the key hibernation sites of Chilmark Quarries SSSI and Fonthill Grottoes SSSI (resulting in counts of several hundred bats) as well as a series of smaller hibernation sites such as small quarries, grottoes, a lime kiln and church crypts, together resulting in small numbers of horseshoe bats, Natterer's, Daubenton's, Barbastelle, whiskered bat and brown long-eared bat.

Media work relating to this project included live interviews with BBC Radio Wiltshire in October 2022, and interviews with TisTalk (a Tisbury-based podcast) in December; a series of talks, presentations and guided walks were also delivered in 2022.

As part of this work we continued with further research at Salisbury Cathedral, yielding further tantalising results (!) but also confirming a roosting site of Brandt's bat in the roof space.

#### Cotswold Water Park

The monitoring of bats in the Cotswold Water Park continued, encountering the frequently encountered maternity group of Natterer's bat and the mating groups of Soprano pipistrelle. Monitoring of the bat house showed continued usage by Lesser horseshoe

bat and brown long-eared bat.

#### Barbastelle bat, PhD study

The bat group continued supporting the work of **Kieran O'Malley, PhD researcher** from the University of Sussex, Brighton, studying Barbastelle bat. A number of WBG members supported his work in 2021 deploying static detectors to selected sites. During the autumn of 2021 and then in 2022, his methodology was tested further by trapping and radiotracking Barbastelle bats to locate their roosts. In Wiltshire, this resulted in confirmation of 2 new maternity groups.

#### Species highlights

2022 was a great year generating new records/locations for our rarer bat species, including greater horseshoe, lesser horseshoe, Bechstein's and Barbastelle bat. A Bechstein's bat was trapped at a new site near Tisbury, whilst barbastelle bats were trapped or recorded at several new locations. A Barb was also retrapped at a new swarming site near Salisbury, a bat ringed there 2 years ago.

2022 produced a number of new records of Nathusius' pipistrelle, notably along the Avon south of Salisbury, but elsewhere too. Widespread use of static detectors is likewise generating a few records too, typically at times of the year associated with migration.

One of the roles of the bat group, and of the county recorder is, surely, to flag up records and species of note. So, I'll end this report by shouting about two species in particular.

Leisler's bat is a typically under-recorded species in any county, largely because it is typically scarce and overlapping call parameters with Noctule bat and Serotine bat lead to difficulties in acoustic ID. The good news is, that widespread use of static detectors, and the <u>careful ID</u>, <u>analysis and verification</u> of records is leading to something of a surge in records. A pattern in distribution is beginning to emerge (and not just the geographic spread of recording activity!).

So a nudge to those undertaking acoustic surveys – please look out for Leisler's bat, it is seemingly more widespread than previously considered in the county, and whilst I would encourage some vigilance in areas of open grassland and downland, urban areas (such as Devizes!) are also generating records. There remains some difficulty in ID of this species however, and for the time being at least, I will continue to request sound files to accompany records in most cases (so it would greatly help if you can submit those files with your

records please).

The second bat worth shouting about is Brandt's bat (but also, by extension Whiskered bat and Alcathoe bat). I have stated previously that Brandt's bat remains a rare bat in wiltshire, poorly known and barely studied. Away from swarming sites and hibernation sites, there are still (almost?) no known, and confirmed, maternity roosts.....so a plea to consultant ecologists and other fieldworkers; ANY records and roosts of Brandt's bat, if confirmed, are probably more significant than Bechstein's bat these days! If you record a suspected Brandt's bat, please take a DNA sample to get it confirmed, and please record the biometrics and features you use to make your ID because I will be in touch for further information to get the record verified. DNA confirmation is always welcomed because of the high potential for confusion with whiskered bat and also Alcathoe bat.....you don't want to be the person who overlooked the Alcathoe bat!

It's also worth reminding recorders and consultants that Brandt's bat in 99% (or 100%) of cases cannot be identified with confidence from acoustic records (regardless of what your EchoMeter Touch or auto-ID platform is telling you). If you submit such records, I will ask for supporting information and unless you do so, will "reduce" the record to a "small Myotis" record.

Anyone who knows me will know that I like to end with Barbastelle bat! I still encounter ecologists and bat workers who still think that this species is so rare that its unlikely to be recorded during surveys! And so, I will keep mentioning how frequently we record Barbastelle bat to continue raising the profile of how widespread this species is in Wiltshire. It is indeed typically found at a low density, but it is widely spread, and I don't know of anywhere in Wiltshire I wouldn't expect to encounter one (I have seen them foraging around streetlights in Trowbridge). It remains concerning that few fieldworkers (outside of WBG's projects) submit many, if any, Barbastelle records – so they ARE being overlooked. Please look harder.

#### **INCOMING RECORDS**

As in previous years, 2022 is looking like another productive year, and the bat group is on course to generate several thousand records once again. The acoustic surveys of the South Wiltshire Greater Horseshoe Bat Project are perhaps responsible for a sizeable chunk of this but the combined efforts of all of

the bat group projects and its membership, and the Farmer Groups, is generating thousands of records each year too.

It is also worth noting that increasing numbers of records are arriving via apps and online recording platforms, most notably iRecord, with this platform being favoured by consultants in particular. Many consultants now submit screenshots of sonograms to support some bat records (such as horseshoe bats and barbastelle) and this is a great way to improve the value of your records.

Verifying the records mentioned above is typically straightforward, being generated by experienced bat workers and with an abundance of supporting evidence such as sound files, DNA confirmation, biometrics etc.

Finally, a growing area of interest is the acoustic recording by bat workers of terrestrial small mammals, typically as bycatch in static detector surveys. Recent work by Stuart Newson and the BTO Acoustic Pipeline, and the forthcoming book from Neil Middleton et al, and the recent talk to Wiltshire Bat Group by Stuart Newson, is really raising the profile of the value of these records. The South Wiltshire greater Horseshoe Bat Project is generating a small number of such records each year now, including of common & pygmy shrew, and occasional water vole and harvest mouse.

A plea from me – even when platforms such as BTO Acoustic Pipeline suggest with confidence that a file may contain a small terrestrial mammal species, they are often incorrect, and so such records will only be verified and accepted if submitted with the original sound file. But please do submit these records, because they DO make a difference, particularly for species like pygmy shrew, where we receive few other records.

**Gareth Harris, January 2023** 

### South Wiltshire Greater Horseshoe Bat Project – 2021 Update

This is an abridged version of the 2022 project update, which can be downloaded from the website here <u>South Wiltshire Greater Horseshoe Bat Project</u>

#### **INTRODUCTION**

The South Wiltshire Greater Horseshoe Bat Project (SWGHBP) was launched in October 2020, to focus

conservation action upon greater horseshoe bats in South Wiltshire, as well as other rare bats.

Further information on the aims and objectives of the project may be <u>found on the website here</u>. This is the second year of this project.

## SURVEY & MONITORING & ENHANCEMENT OF ROOSTING SITES

### Chilmark Quarries SSSI & Fonthill Grottoes SSSI (the SAC)

Monitoring of these important hibernation sites continued in winter 2021-22 and winter 2022-23. In addition, we have been able to include a number of other hibernation sites in the area in this monitoring work, including 2 ice houses, a new stone mine, a church crypt and historic features such as stone arches and grottoes. In winter 2022-23, over 750 bats were recorded in hibernation.

#### Standlynch Farm bat house.

The bat house was completed in May 2022, and by July there was evidence of use by Greater horseshoe bat, and then by long-eared bats. No bats have been found in hibernation as yet, although large parts of the building are not fully visible during inspections.



The Completed Bat House Photo Credit: Gareth Harris??

Our thanks to Natural England for funding the bulk of this work (Species Recovery Funding), and a small grant from Wiltshire Bat Group provided by wildlife photographer, Paul Colley.



Lloyd wishing to leave Photo Credit: Gareth Harris

#### **DETECTOR SURVEYS**

Thanks to equipment purchased by Wiltshire Bat Group, Defence Infrastructure Organisation (DIO) and Chilmark Estates/Natural England, we initiated large scale detector surveys in south Wiltshire. This continued in 2022 with acoustic surveys of several locations in the area, including Cranborne Chase AONB, the Woodford Valley, the Avon valley at Downton, The Donheads/Higher Coombe/Middle Coombe and sites along the Wylye Valley too.

 Simon Smart also conducted similar surveys with his farmer groups in the Chalke Valley and Pewsey Downs.
 This volume of work was once again supported by the project's subscription to the <u>BTO Acoustic Pipeline</u>. I'm grateful once again to Stuart Newson, BTO for all his help and advice this year.

#### **DUNG BEETLE SURVEYS**

An important food source for greater horseshoe bats (and indeed other bat species that depend upon grasslands and pastures) are the various species of dung beetle. These will be particularly important for greater horseshoes in close proximity to their hibernation sites, as winter foraging opportunities are important.



Typhaeus typhoeus, the minotaur beetle Photo Credit:Gareth Harris

Dung beetle surveys continued through 2021-2022 and into 2023, surveying year-round to assess species assemblages in all seasons (since dung beetles remain active year-round). This included further surveys on Salisbury Plain military training area (thanks to further funding from DIO).

As before, fieldwork was undertaken by Simon Smart, Pete Thompson, and I, with Marc Arbuckle (county recorder for Coleoptera in Wiltshire) delivering the identification work.

Highlights in 2022 include Nationally Scarce species like *Agrilinus constans*, (and for Wiltshire) locally scarce species like *Acrossus depressus*, *Acrossus luridus*, *Limarus zenkeri* and *Nimbus obliteratus*. Although not especially uncommon, we also had our first Minotaur beetle, a very impressive and exciting specimen!

# PROMOTING THE IMPORTANCE OF DUNG BEETLES IN SOIL HEALTH & PASTURE MANAGEMENT

Another important aspect of our work with dung beetles, is engaging with the farming community to promote the importance of dung beetles in soil health, nutrient cycling, carbon sequestration, and crucially their role in management of livestock endo-parasites. Many of the veterinary products used to combat "worms" in livestock have long-lasting affects in the environment once excreted in dung.



Signs of burrowing by Geotrupid beetles adjacent to a small cow pat Photo Credit: Gareth Harris

In September 2022, we delivered a dung beetle workshop on Salisbury Plain, a joint event presented by Defence Wiltshire Bat Group, Infrastructure Plain Organisation, Conservation (https://plainconservation.co.uk/) and the Porton to the Plain Farmer Group. Speakers included Sally-Ann Spence and Max Anderson from Dung Beetles for **Farmers** (www.dungbeetlesforfarmers.co.uk/), introduced by Gareth Harris, Wiltshire Bat Group.

Twenty farmers joined us for the day. With thanks to Jemma Batten (Plain Conservation) & Andrew Grant, Shrewton Farm for hosting this event, Simon Smart & Heather Dixon (Porton to Plain Farmer Group) and Lisa Wade & Jenny Bennett (DIO).

#### **COMMUNITY ENGAGEMENT**

People engagement included a presentation to the Avon Valley Farmer Group (facilitated by GWCT and covering the Hampshire Avon Valley between Salisbury and Ringwood) on 6<sup>th</sup> October 2021, a presentation to Tisbury Parish Council (December 2022), promoting the importance of the nationally and internationally important bat populations in the area around Tisbury, and supporting the development of the neighbourhood plan; and finally a presentation to the Wylye Valley Farmer Group (September 2022), to highlight the importance of their landholdings for bats, particularly the Greater horseshoe bat, and to invite their involvement in the project going forwards.

The project also disseminates considerable feedback to the farmers and landowners we work with, comprising feedback upon the bat acoustic surveys, roost visits and dung beetle surveys.

#### **NEXT STEPS**

Year 3 (2023) will see further acoustic surveys of new areas of the county, and further expansion of the dung beetle surveys. As word spreads of the success of this project, we are invited to survey an ever-growing number of sites, not necessarily linked to the horseshoe bat hibernation sites.

#### **THANKS**

This project, and its successes, are the result of collaboration between many organisations, landowners, farmers, and volunteers. All are warmly thanked and are listed in full in the online update.

Photographer, Daniel Hargreaves, is thanked for supply his images to promote bat conservation.



Further information: <u>South Wiltshire Greater</u> Horseshoe Bat Project

Gareth Harris southwiltsghbproject@gmail.com

### Barbastelle PhD study update

It has been half a year since I brought my fieldwork to a close, and I am now facing the rather daunting road to reach the end of my PhD. I still have a lot of work ahead of me, including data analysis, writing up, and bringing everything together to finally submit my thesis. However, despite the challenges, I am proud of what has been accomplished and feel that there are already reasons to celebrate the work done so far. A large portion of this success can be attributed to the many volunteers, including those in Wiltshire Bat Group, who have assisted in the data collection for this research over the last few years.



Harp Trapping in Wiltshire Photo Credit: Kieran O'Malley

The main objective of my PhD was to develop a new method for locating barbastelle colonies, which I first started work on back in 2019. My approach focused on the idea that the level of barbastelle activity recorded around sunset, using acoustic bat detectors, could provide evidence on whether a colony was roosting locally. This method was subsequently used by Vincent

Wildlife Trust volunteers across the country to survey woodlands. This was a huge success, with nearly 80 woodlands being surveyed, a number of which showed evidence for colonies.

Last year, we re-visited some of these sites to confirm the presence (or absence) of colonies identified through the acoustic work. We surveyed 17 woodlands using mist nets and harp traps to catch barbastelle bats, attach tags to them, and radio-track them back to their roost sites. By using an infra-red camera set-up, we were able to film their emergence and accurately count roost size. A total of 34 barbastelles were caught across all the sites, 13 of which were suitable for attaching radio tags. This led to the discovery of over 150 bats and five new colonies, one of which was located in Wiltshire.



Bat Processing Phot Credit: Kieran O'Malley

None of this work would have been possible without the help of the Wiltshire Bat Group, who have assisted in the acoustic surveys and radiotracking work. A special mention should go out to Gareth Harris, who has been supportive throughout the project and helped with much of the organizing and woodland access in Wiltshire.



One of the discovered Barbastelle bat roosts Photo Credit: Kieran O'Malley

The discovery of these new colonies was the last stage in my PhD, but not for my work. The methodology I developed will be used in the future by Vincent Wildlife Trust in their collaborative project *Natur am Byth*, to better understand the distribution of barbastelles in Wales. The project will continue working with volunteers to identify crucial areas for woodland management, so that these habitats can be improved for barbastelles and other woodland species.



Kieran O'Malley, University of Sussex Brighton & Vincent Wildlife Trust (ko255@sussex.ac.uk)

## The Savernake Forest – project update 2022

The 2022 season started with some concern as to how well the Forest, and our bat boxes, had survived the series of named storms in winter 2021-22....We undertook a visit in March to do a pre-season check of bat boxes to find out. The veteran trees of the Savernake took a battering from these storms and unfortunately, a number of old trees were blown over or limbs lost. Our bat boxes were largely fine, with one box found on the ground, which was repaired and returned to its tree later in the summer.



July 2022, Barbastelle bats in the Savernake Forest Photo Credit Gareth Harris

The March visit was also worthwhile, producing our first encounter of the year with some of the ringed maternity group of Barbastelle bats — two of the breeding females were found together — they are an interesting pair, as they are only ever encountered when they are together. The older of the pair is also our oldest female in the maternity group at present, and the last of the bats ringed by Steve Laurence all those years ago!

During the July bat box check, the highlight was 7 female Barbastelle bats and their pups (with a supporting cast of 51 Natterer's bat, plus Common pip, Soprano pip and Brown long-eared bats).

By September, the Natterer's bats were dispersed into creches of young ones whilst the adults formed mating groups, with 33 bats using the boxes. Eight of the barbastelle bat maternity group were encountered, comprising 6 adults and 2 juveniles of the year. Two additional barbastelle bats were encountered elsewhere in the Forest, whilst a few Brown long-eared and Soprano pips were also found.

The Savernake Forest project is one of the longest running of the bat group's projects — Steve Laurence

and early members of the group established these bat boxes in the mid 1990's and they've been checked regularly ever since.

If you'd like to get involved, join the bat group and contact Lisa Wade via the details supplied to all bat group members!



Savernake Forest Photo Credit: Paul Colley

We were also invited to deliver a bat walk one evening at Ramsbury Estate, for the local farmer group. Gareth and Emily were joined by a group of 15 or so farmers on the banks of the river Kennet, and treated to a spectacular display of bats along the river, including an obliging Barbastelle bat which foraged passed us several times and afforded good audible passes and even a visible fly-past!

**Lisa Wade & Gareth Harris** 

#### The Cotswold Water Park

Maybe you've seen the road and motorway signs directing visitors to the Cotswold Water Park? Maybe a few of you have visited not really knowing what to expect? It is probably better than you imagined, once off the beaten track.

So, what is it? The Cotswold Water Park is an area of 40 square miles of the Upper Thames valley, lying mostly in east Gloucestershire and north Wiltshire (and a little in Oxfordshire). Today the floodplain is characterised here by over 180 gravel pits of which many have become mature lakes supporting a variety of water sports and recreation but also supporting a huge diversity of wildlife.

It is a continually developing and evolving biodiversity hotspot, as well as being used by people to live, work and enjoy. The recent SSSI review & renotification recognises its importance to local people and

#### biodiversity.

In 2005, in conjunction with the then Cotswold Water Park Society, a new project was launched to study and survey the otherwise poorly surveyed bats of the region. The Cotswold Water Park Bat Initiative was launched to study the bats and find out what was there, and how the CWP was being used. We ran this project for 10 years (and it continues today), doing countless transects, trapping sessions, bridge and church surveys (before they were a thing), emergence counts and more, culminating in a ground-breaking bat atlas (which can be downloaded here).

The project received considerable funding, including for bat boxes (nearly 180) which we put up in various places and monitored for many years. Over recent years these box schemes have been reduced down to a few core areas which I have continued to monitor each year.

Since 2011 I have been concentrating on the bat boxes in two areas of the Lower Mill Estate, primarily Pike Corner but also Freeth mere, where I have been studying and recording the soprano pipistrelles. The boxes at Freeth mere are located in a small damp woodland on the edge of a lake, these were the very earliest boxes we monitored back in 2006, but there are now only 7 boxes in-situ. Pike Corner is about 300m further down the track, it is an SSSI with a strip of woodland bordering the Swill brook and has 20 boxes.

So why am I looking at soprano pipistrelles here? The answer is that we still have a lot to learn and find out about this common bat. At the time no one else appeared to be studying pips and I wanted to collect enough data to enable me to answer a few basic questions, so a ringing study was started in 2011.

The bat boxes are a mixture of Schweglar designs that will be familiar to most of you. They have been put up at heights between 3 and 4 meters and in various orientations. We have also put a few up at head height as well to offer alternate roosting conditions.

So, without delving too deeply into the data or looking at it too critically here are a few headlines from Pike Corner. We all like a stat, so here goes.

#### HOW MANY BATS HAVE BEEN RINGED?

Since August 2011 160 individual soprano pipistrelle bats have been recorded, processed and ringed over 55 survey visits at Pike corner. This breaks down to 45 males, and 115 females.

The number of overall captures and recaptures since 2011 is over 1000.



Soprano pipistrelle Pike Corner 2022 – Photo Credit: Will Ponting

#### **ANYTHING ELSE?**

A few male natterer's, a Nathusius' pipistrelle and the odd whiskered, but these aren't part of the study.

# WHAT WAS BOX OCCUPANCY TAKE UP RATE?

In 2007 12 of the 20 boxes had been used, either live bats or droppings.

By 2008 it rose to 16 of 20.

In 2009 it was 19 of 20.

In 2010 by the time the ringing study started all the boxes had been recorded as being used.

## HOW MANY TERRITORIES ARE THERE IN PIKE CORNER?

Most years there are four distinct territories held by male soprano pipistrelles, this does rise to five on occasion, and there appears to be some overlap. I assess most territories as being between 100 and 200 square meters in size.

## WHAT IS THE RECOVERY OF PREVIOUSLY RINGED BATS?

65% of bats ringed are recaptured at least once. This is the crucial statistic as this allows some reasonable deductions to be made. The more often we recover a bat the more we can learn about its life history.

#### HOW FAR ARE THEY MOVING?

Difficult to ascertain. What I can say is that there is virtually no movement in either direction of ringed bats between Pike Corner and Freeth mere, (where I have also been ringing the soprano pipistrelles). Freeth mere is approximately 300 meters away. They are well connected by mature hedgerow and ditch, but so far only one male has been recorded making this daring



Low bat box at Pike Corner Photo Credit: Will Ponting move to the most outlying box.

# WHAT TYPE OF ROOSTS ARE THE BOXES BEING USED FOR?

The boxes are used very infrequently as occasional night roosts during winter, but they are largely unoccupied. In spring single males take up residence and counts are low until July when post breeding females and juveniles appear. Peak counts occur in August, September and early October as mating roosts are established. The mating roosts are generally small with one male and up to 5 females.

# DO THE SAME FEMALES MATE WITH THE SAME MALE IN SUBSEQUENT YEARS?

Good question and one that I haven't looked at in detail yet, but a quick dip into the data showed two

immediate examples, not statistically significant I know but interesting, nevertheless.

Male L00235 – ringed 21/08/2011 was seen with female L00237 in the Septembers of 2012 and 2013.

Male L03792 – ringed 02/07/17 was seen with female L03801 in the Septembers of 2018 and 2022, however in 2017 she preferred male L03779 and in the other years she went missing.

There is a lot of analysis work to be done on this data to see what is actually happening.

#### HOW OLD DO THEY GET?

A male soprano pipistrelle L00289 was ringed as an adult in breeding condition on 01/07/2014. He was recovered on the 23/07/2022 fit and well. We can assume he is around 9 years old. We have run into him 14 times, so he must be used to us by now. This is the oldest known bat at Pike Corner but L03792 and L03793 were ringed on 02/07/2017 and were both seen in 2022 so they are getting on for 6 years old.

These bats however do seem to be the exception. I will work out the average age at a later date.

### WHERE DO THE BATS GO WHEN NOT USING THE BOXES?

Unknown. The trees in Pike Corner offer a lot of natural roosting opportunities, and there are large soprano pipistrelle maternity colonies in the adjacent villages, but so far, no recoveries outside the two small study areas have been made.

#### WHAT ARE THE NEXT STEPS?

Carry on for a few more years, catch up from data lost during the pandemic, then have a good look at all the data collected and see what can usefully be done with it.

As always a big thank you to everyone who has come out to help, it has mostly been good fun. Thanks to the WBG volunteers, the Lower Mill team particularly Phoebe for allowing us access, and the CWP Trust and Rangers who are always willing to lend a hand.

#### **Will Ponting**

### Bats in Churches – Wiltshire Survey Results for 2021 and 2022

During the 2021 and 2022 seasons Phil Atkin and I surveyed 13 Wiltshire churches for the Bats in Churches Project (https://batsinchurches.org.uk). At eight of those churches, we did Bat Detective (BD) surveys, which were one-off visits looking for visual evidence of bats in the church. The remaining five churches had been designated as National Bats in Churches Survey churches, which required a more comprehensive approach. For those surveys, we had to collecting droppings for DNA analysis and also leave static detectors in the chancel for two nights to record bat activity.

Both types of Bats in Churches surveys required permission from a church representative (usually the churchwarden), who had to fill in a form which included questions about the church's architecture and setting, the presence (or absence) of bats and also the community's attitude to the bats. Because the Bats in Churches Project had been designed as a citizen science effort, the surveys did not include roost counts nor did they require return visits to the site. As a result, the information gathered from these surveys, although extremely useful, does not provide a complete picture of bat activity at the churches.

Table 1 below shows the results of our 2021 surveys. Interestingly, only one of the five Wiltshire churches we surveyed in 2021 had no evidence of bats, which differs significantly from Bats in Churches' preliminary results. By the end of the 2022 survey season the Project had surveyed 753 churches throughout England. Of those 753 churches, 55.8% showed evidence of bats and 44.2% had no bat evidence at all (https://batsinchurches.bats.org.uk/Results.aspx).

In 2022 we adopted a slightly different methodology for our church surveys. Claire Boothby, the Training and Survey Officer for Bats in Churches, decided that she would like to trial Phil Atkin's π•pistrelle bat recorder (https://www.omenie.com/pipistrelle.html) alongside the Peersonic in our Wiltshire National BiC Survey churches, to test its performance compared to the known qualities of the Peersonic. She was also interested in seeing whether two recorders sited in different parts of the church would pick up different bat sounds during their two nights of recording. So, our National BiC survey results for 2022 include data from

two types of bat recorders. In addition, Phil also decided to leave a  $\pi \bullet$  pistrelle recorder in St John the Baptist in Stockton for two nights, in the hope of supplementing the basic Bat Detective data (i.e. the presence of bats) found there.

Table 2 shows our 2022 results. As in 2021, our 2022 Wiltshire surveys differed from the national figures for bat presence; 100% of the churches we surveyed had evidence of bats. Interestingly, Serotines were present in all five of our National BiC churches (Serotines were only recorded in 45 Bats in Churches survey churches around the country).

The lack of audio in St Mary the Virgin in Wylye indicates that there were no bats in the church at the time of our survey. Church representatives confirmed that historically bats had been using the church but had not been seen lately. Recently completed building works (replacement of the organ and a new fitted kitchen) were suggested as the cause for their disappearance.

At All Saints and St Mary in Chitterne, we found discarded Small Tortoiseshell butterfly wings throughout the nave, which may have been dropped by bats as they fed.

Having compared the Peersonic with Phil Atkin's  $\pi$  pistrelle, we were able to establish that the  $\pi$  pistrelle recordings were sufficiently reliable and high quality to use for these sorts of surveys. The experiment of placing two recorders in different parts of the church yielded interesting results; in the case of St Mary, Shrewton, the two recorders did pick up different bat species. But perhaps the most intriguing result from the  $\pi$ •pistrelle trials was the recording from St John the Baptist in Stockton, which showed the presence of Lesser Horseshoe bats. Without that recording, all we would have known about St John the Baptist was that it had evidence of bats.

2022 was the final year of the Bats in Churches surveys; we are now waiting to receive the full results and analysis from the Project. We are especially keen to learn the results from other Wiltshire churches, which would have been surveyed between 2019 and 2022 by other volunteers. In the meantime, if you are interested in preliminary results from the Bats in Churches Project, they can be found here: https://batsinchurches.bats.org.uk/Results.aspx.

#### **Ilene Sterns**

Table 1 2021 Bats in Churches Survey Results

2021 Wilts BiC Surveys	Bats present?	DNA results	Peersonic results
St Leonard's, Minety	Yes	N/A	N/A
(BD)			
All Saints, Crudwell	Yes	N/A	N/A
(BD)			
Holy Cross, Hankerton	Yes	N/A	N/A
(BD)			
All Saints, Oaksey	No	N/A	N/A
(BD)			
St Michael and All Angels,	Yes	Serotine; Brown long-eared	Serotine; long-eared sp.
West Overton			
(National BiC)			

Table 2 2022 Bats in Churches Survey Results

2022 Wilts BiC Surveys	Bats present?	DNA results	Peersonic results	π•pistrelle results
St Peter's, Winterbourne Stoke (BD)	Yes	N/A	N/A	N/A
St James, Berwick (BD)	Yes	N/A	N/A	N/A
All Saints, Steeple Langford (BD)	Yes	N/A	N/A	N/A
St John the Baptist, Stockton (BD)	Yes	N/A	N/A	Lesser horseshoe; Common pipistrelle; Serotine/long-eared
St Mary the Virgin, Wylye (National BiC)	Yes	Serotine	No bats detected	No bats detected
St Mary, Stapleford (National BiC)	Yes	Serotine; Soprano pipistrelle	Soprano pipistrelle	Soprano pipistrelle
All Saints and St Mary, Chitterne (National BiC)	Yes	Serotine; Brown long- eared	Common pipistrelle; long-eared bat sp.	Common pipistrelle; long- eared bat sp.
St Mary, Shrewton (National BiC)	Yes	Serotine; Common pipistrelle,	Common pipistrelle; Soprano pipistrelle; long-eared bat sp.	Common pipistrelle; Possible long-eared bat sp.; Possible serotine

### On a Wing and a Prayer: The Bats in Churches Art Installation

In late 2021, the Bats in Churches Project (batsinchurches.org.uk/) commissioned me to create a large-scale, multimedia art installation celebrating the long-standing relationship between bats and churches. As a volunteer with the Project, I had surveyed quite a few churches and spoken with members of their communities, so I was excited about the opportunity to turn those experiences into a piece of art.



A Wing and a Prayer - the full installation view- Photo Credit: Ilene Sterns

For many years my art projects have been collaborative. Working closely with others, I create installations that tell stories which might otherwise have gone untold. For my Bats in Churches commission, which is called "On a Wing and a Prayer", my collaborative partners were the church community of St Michael the Archangel in Compton Martin, Somerset.

St Michael's is a Grade I listed, largely Norman building in the Chew Valley, and it is one of Bats in Churches' project churches. Surveys carried out in summer 2021 found at least six bat species using the building, with Natterer's bat maternity roosts and individual Daubenton's bats in the north and south aisles, brown long-eared bats, common and soprano pipistrelles in the roof, and lesser horseshoe bats in the porch.

Bats in Churches have been helping St Michael's with various mitigation measures. They have also been educating the community by offering roost count training, bat walks and other events. My primary contact at St Michael's was their volunteer "bat

champion" Jean Luckett. Jean told me that although at first the community had not been keen on the bats, over time their attitudes had changed. So, I had no idea what to expect when I asked Jean to gather words from the community (children as well as adults), expressing their feelings about their church bats.

When the community's words finally arrived, they were genuinely inspirational: not just positive but also very poetic. In fact, some of the words and phrases were so lyrical that I decided to incorporate them (as text) into the images. I used the remainder of the words to write a poem about bats, which I created entirely from community contributions.



On a Wing and a Prayer - Single panel close-up view- Photo Credit: Ilene Sterns

"On a Wing and a Prayer" was designed as a multimedia experience. The piece consists of four large-scale panels printed on transparent fabric, accompanied by a bat soundscape. I created the images in a photo editing application by layering my own selective-focus photos of church interiors with photos of bats and text. Those files were digitally printed onto sheer silk and cotton blend fabric using a reactive printing process. Each of the final images, which are approximately 120cm wide x 185cm high, represents a different aspect of the relationship between bats and sacred spaces

The audio component of the installation uses bat calls

recorded by Phil Atkin during our 2022 church surveys. By slowing the calls down 16x via time expansion, they become audible to human ears. The final soundscape sounds much like birdsong – it echoes through the church, immersing the viewer in an unheard world.

"On a Wing and a Prayer" is a tribute, not just to bats and the historic churches they inhabit but also to the communities who share their space with these remarkable animals. My aim was to bring people and bats together into a greater understanding — an understanding based on emotion and empathy, rather than hard science. When bats choose our sacred spaces as their homes, they become our neighbours. They also become unintentional ambassadors for the natural world. Church bats remind of how important it is for us to live in harmony with other beings, no matter how different to us they may be.

"On a Wing and a Prayer" premiered at St Michael the Archangel in Compton Martin in October 2022. In January 2023, it travelled to St Sampson's Church in Cricklade, which was its only stop in Wiltshire. St Sampson's organised a fun-filled Bat Weekend, which attracted over 500 visitors. On Friday the church hosted almost 200 pupils from the local primary school, who were excited to learn more about bats. Many of them returned with their families on Saturday, to meet Griff, the superstar noctule education bat, and to enjoy the batty crafts and educational materials provided by the Wiltshire Bat Group. We are grateful to everyone at the WBG who shared their expertise and enthusiasm with our visitors and helped to make the weekend such a success.



Wiltshire Bat Group Stall - Photo Credit: Ilene Sterns

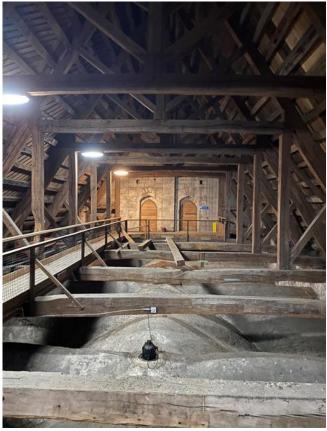
The next stop for "On a Wing and a Prayer" will be St Peter's Church in Wintringham, North Yorkshire. It will then travel to Holy Trinity Church in Tattershall, Lincolnshire before moving on to churches in Norfolk

and Cornwall. In each of those places, it will offer visitors an opportunity to be inspired by bats and also to learn more about the Bats in Churches Project, which concludes in September 2023.

Ilene Sterns (www.corydora.co.uk)

### Salisbury Cathedral - 2022 update

Wiltshire Bat Group began working with the Salisbury Cathedral team in 2019 (which was reported in previous newsletters and <a href="here">here</a>). This work has included a series of walked transects of the cathedral grounds, and several visits to survey the complex roof voids too. Roof void inspections in 2022 allowed us to collect further droppings for DNA analysis. Many of these samples related to Natterer's bat, Brown long-eared bat and Serotine, but also to Brandt's bat, a species which is only infrequently recorded in the county (away from hibernation sites/swarming sites). At this time, we know of at least 13 bat species using the cathedral



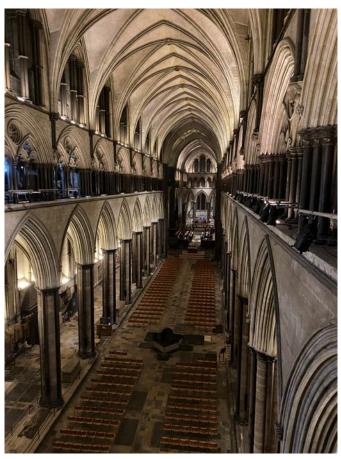
Salisbury Cathedral – Roof void above the main nave Photo Credit: Gareth Harris

for roosting and foraging. Previously we have confirmed Serotine and Noctule bat roosting in the Cathedral too.

In studying the gathering of mating pipistrelle bats each autumn, we made some additional discoveries worthy of further investigation.

We discovered in 2021 that both horseshoe bat species were utilising parts of the cathedral, apparently for night roosting and as a feeding perch. This was demonstrated again in 2022. This is a new discovery for the cathedral team and one they are all delighted with.

There is also tantalising evidence of something else going on too – but I'll explain that once we've confirmed it!



Salisbury Cathedral - The nave viewed from the galleries Photo Credit: Gareth Harris

The bat group also supported an event with the Cathedral's youth wildlife group, delivering a talk and guided walk in the cathedral grounds on the 27<sup>th</sup> September, where the Daubenton's bats performed well, and we even glimpsed an otter!

Our thanks as always to the Cathedral personnel who support our work, especially verger. Kate Stubbings. and Marie Thomas, and to the bat group volunteers who assisted with these surveys. More to follow in 2023!

#### **Gareth Harris**

# The Trowbridge Bat Mitigation Strategy – update from project officer, Sam Davies

This article aims to provide information on bat habitat creation from planned development around Trowbridge.

The landscapes surrounding Trowbridge are known to support at least 14 of the 18 UK bat species including Greater and Lesser Horseshoes. The woodlands to the east and southeast of Trowbridge are particularly special as they support a surprisingly large population of Bechstein's bat. This species is considered generally rare throughout its range in Great Britain, with strongholds in southern England. The bats typically spend the summer and breed in roosts within woodlands, using cavities such as woodpecker holes. In the woodlands near Trowbridge, large maternity colonies have also been found roosting in mature trees hundreds of metres from the woodlands themselves. Bechstein's bats mainly forage in deciduous woodland with a closed canopy, preferring areas with a predominance of oak and ash in the canopy, a dense understory, and large contiguous woodland areas.

Wiltshire Council, as with other local authorities, is legally required to plan for sufficient new housing in their area to meet projected demands. As the housing needs of Trowbridge grow, so does the need to mitigate the impact of developments on the area's special bats. Several bats here have been linked to the Bath and Bradford on Avon Bats Special Area of Conservation (SAC) which gives the populations strong protection. To get permission to build, developers need to show that their plans won't harm SAC features, in this case, SAC bats.

The Trowbridge Bat Mitigation Strategy (TBMS) has been written for the Wiltshire Housing Site Allocation Plan to provide developers, consultants, and planners with a clear approach to consider and avoid adverse impacts on SAC bats.

The TBMS has divided the area around Trowbridge into different zones based on the level and nature of bat sensitivity within each area. The red zone closest to woodlands has the most sensitivity, and new development is unlikely to be granted permission here. Further from woodlands, the yellow zone requires appropriate bat surveys, development proposals must mitigate all impacts on target bat species on site, and

there is a developer contribution for delivering strategic habitat mitigation. A target of at least c.6 hectares of woodland and c.11km of new hedgerow will be provided from the funding and these will be created close to important areas for bats. Developer contributions are also collected over a wider area, the grey (hatched) zone, to improve existing greenspace and create new greenspace for the residents of Trowbridge so that they have alternative spaces to visit away from important roosts. These new habitats will be beneficial for a whole host of wildlife.

I was employed in 2021 as the Bat Mitigation Project Officer. The council has created an information pack which was sent to landowners around Trowbridge. Since then, I have been meeting with landowners and farmers to talk about planting and enhancing hedgerows. Meeting local farmers has been great and worthwhile, they are keen to help create more habitat for wildlife, and we are planting some hedgerows this winter very close to the Green Lane and Picket and Clanger woodlands. We have more hedgerow and parkland planting planned next Autumn. We have also been exploring opportunities for new woodland planting and have a six-hectare site in a brilliant location ready for planting next winter.

Alongside this work, the council is working on additional initiatives which should benefit Wiltshire's wildlife, including a local nature recovery strategy and work funded by the Woodland Creation Accelerator Fund. If you have any further questions or would like to get in touch, please feel free to contact me at sam.davis@wiltshire.gov.uk

# The Rise of 'Batty Grandma!' AKA Our Volunteer of the Year 2022

I was totally surprised and feel really humbled to receive the award of volunteer of the year and thrilled to receive Neil Middleton's book on Social Calls. Thank you all so much.

It all started with a Bat walk led by Gareth on the Coombe Bissett Reserve which encouraged me to listen all summer to bat calls on a Heterodyne detector. Right outside my house is the River Ebble together with woodland and pasture so I had regular access to many species of bats. Hearing the echolocation is one thing but knowing the ID is another, so I ventured into the world of spectrograms with an EMT2. It has been a big

learning curve and so grateful for the many Zoom lectures available. It seems the more you know the more you realise there is to learn. I have been hugely helped by the mountain of knowledge that Gareth sent with each request for a file ID. That encouragement gave me confidence to keep going and explore further. I shall always remember his comment, 'but Louise Myotis bats are meant to be difficult.'

I was recording down by our river and heard a musical sound not unlike a Horseshoe bat but at a much lower frequency. The auto ID came up as a Noctule, but it definitely wasn't. It was fascinating and there were harmonics too. It was identified as a brown rat and quite close. You never know what you will discover each time out and that is what is so exciting. Plus of course being retired and having plenty of time to go through hundreds of files generated.

I have the first Bat Book at home by Brian Vesey-Fitzgerald published in 1949 when the general thought by majority of countrymen was a bat was a bat. In those days identifying the various species was difficult and so little research had been done. It is good to remember how far we have come in recording and documenting the different species and understanding the lives of these unique mammals, and still it is an emerging science with so much more to discover.

It is now official I am called "Batty Grandma" by my grandchildren!

**Louise Hartgill – Volunteer of the Year 2022** 

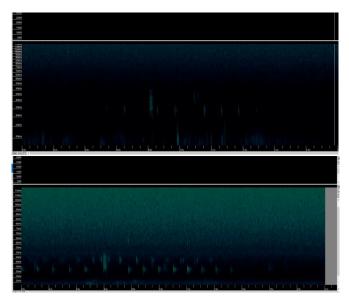
### **Volunteering by Carol Evans**

Twenty odd years ago I moved to Nottinghamshire but I'm a Moonraker born and bred and, as such, I still visit family regularly in the county I love more than any other. I miss Wiltshire for the rolling chalk downs, the open landscape of Salisbury Plain and the clear flowing streams and rivers but most of all I love and miss the wildlife (especially the bats!).

We're blessed with twelve bat species in Nottinghamshire, some not as abundant as they are in Wiltshire and some not seen at all up here so, whenever I visit, bat detecting is always a must on any suitable night (armed with my EchoMeter Touch and Magenta 4 detectors) anywhere that looks even remotely 'batty' is on the cards. My eldest daughter usually accompanies me, and we've never been

disappointed. After a very successful night detecting along the River Avon near Downton in April, I contacted the Wiltshire Bat Group asking if my recordings were of any use — Gareth said yes and so now I send my Wiltshire recordings whenever I record some.

We've had some amazing results with all the usual suspects in high numbers, Nathusius where they've not been recorded before, Serotines in numbers never recorded in Nottinghamshire and, this year, I recorded a large enough number of Barbastelle passes in the hour after sunset for Gareth to think we were very near a roost!



Barbastelle sonograms - foraging (above) and feeding buzz (below) Photo Credit: Carol Evans

I'm no expert with sonograms but I'm learning fast and, with the information Gareth kindly sends me back from my Wiltshire recordings, who knows, maybe one day a call I've become familiar with from my Wiltshire escapades will eventually pop up in Nottinghamshire for the first time!

I am a member of the Wiltshire Bat Group and love hearing about the abundance and diversity of bats and projects in my 'old' county, I will continue to record and send information to the Wiltshire Bat Group and hope one day to meet up with some of you, if space allows, during one of my visits.

I'm also a member of, and bat carer for, the Nottinghamshire Bat Group - during the 2022 baby bat season, I had Common Pips, Soprano Pips, Whiskered/WABs and a Brown Long Eared in care and, for a short time, a Leisler's baby which was subsequently taken on by Maggie Brown at the West Yorkshire Bat Hospital. I volunteer most of my spare time caring for injured bats (especially during baby bat

season), helping with projects and monitoring bats in Nottinghamshire and I've been lucky enough to visit areas not usually open to the public, including some beautiful historic buildings and churches along the way

#### WHAT'S NOT TO LOVE?



Back from the edge - lucky Quaker! Photo Credit: Carol Evans

This is Quaker, a Brown Long Eared Bat I picked up, from a member of the public in Nottinghamshire, at the beginning of September covered in glue and garden debris, emaciated and severely dehydrated. The two photos were taken three weeks and four baths apart he was successfully released at a weight of 11.26gm twenty-two days after coming into my care.

#### **Carol Evans**

### And finally....

Thanks again for your support. More members and champions for bats and other wildlife are always welcome!

We are on all the social media platforms, Facebook, Twitter and Instagram, and on the Wiltshire Mammal Portal where we post minutes, newsletters and notices.

https://wiltshiremammals.wordpress.com/

#### **Our sincere thanks**

As always there are a host of people to thank, especially our members who continue to donate,

renew and fund raise, thank you! every penny this year has gone towards good causes, equipment and bat conservation in Wiltshire.

None of our surveys or events can happen without a lot of cooperation. Businesses, Statutory Bodies, multiple land owners, individual donors, farmers, consultancies, interest groups, project leaders, invited speakers and members of the Wiltshire Bat Group, all played a major part in supporting our conservation efforts in 2021.

In no particular order we gratefully acknowledge the help, funding and support of:

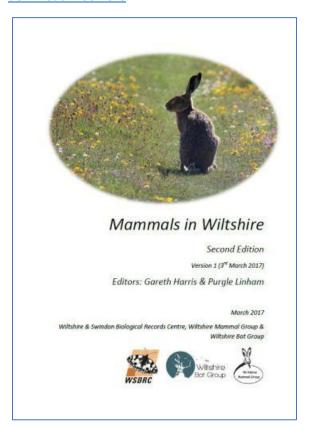
- Forestry England
- Natural England
- Black Sheep Countryside Management
- Wiltshire Wildlife Trust
- Cotswold Lakes Trust & Lower Mill Estate
- Swift Ecology / Ecotype Genetics
- Bat Conservation Trust
- Pewsey Downs, Nadder Valley and Chalke Valley farmers groups
- The Southern Streams Farmer Group and Ramsbury Estate
- Cranborne Chase AONB
- Wessex Water
- Defence Infrastructure Organisation
- Tisbury & District Natural History Society
- Salisbury & District Natural History Society
- Sustainable Warminster community group
- And the vast number of landowners and farmers and roost owners who support all of our projects.
- Daniel Hargreaves and Paul Colley for the use of their photographs

### Mammals in Wiltshire (2<sup>nd</sup> Edition)

New members may not be aware of the county mammal atlas, published in 2017, which details our current knowledge of mammals in Wiltshire. We are working towards an update of this document, but in the meantime, if you want to read more about the county's bat populations, please download the atlas here:



### Mammals-in-Wiltshire 2nd-edition available to download free here



#### The Committee & contact details

Thank you, and until next year.

#### **Your Committee**

Position vacant - Chair

Laura Loncar - Secretary wiltsbg@gmail.com

Gareth Harris – County Recorder wiltsbatrecords@gmail.com

Caitlin McCann – Wiltshire Bat Care coordinator wiltshirebatcare@gmail.com

Will Ponting – Membership and Treasurer wiltsbgmembership@gmail.com

Kelly Sheldrick – Events Officer eventswiltsbg@gmail.com