

A Bat In The Box...

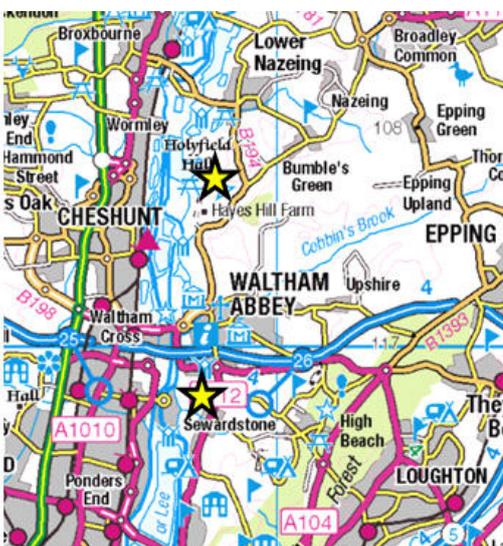
Andrew Palmer on the beginning of an important new bat box monitoring project



It has been known for a fair while that *Nathusius' pipistrelle* are regularly encountered foraging in in the Lee Valley Regional Park just north and south of the M25 in an area dominated by major reservoirs and old flooded gravel workings. These significant water bodies combined with a mosaic of river courses, flood relief channels, permanent conservation grasslands, riparian trees, wet woodland and housing estates of various ages make for pip nirvana. Add in to the mix a large area of nearby woodland (Epping Forest) and the Thames estuary migration corridor and it is no wonder a small bats' head might be turned.

With records of rescued *Nathusius'* including a juvenile from the area and advertising males nearby, a search of the area was bound to produce more detections. In April 2014 a walk along the flood relief channel near Sewardstone produced an abundance of *Nathusius'* activity. As a consequence and with the help of Daniel Hargreaves the bat group arranged trapping nights in Gunpowder Park and at Fishers Green in August and September and caught *Nathusius'* pips on both nights (5 males).

With a very positive and well established relationship with the site owners, the Lee Valley Regional Park Authority, we asked if it would be possible to establish a bat box monitoring



Trapping sites in Lee Valley Park

project, as part of the Essex *Nathusius' Pipistrelle* Project, along the lines of that run by Patty Briggs at Bedfont Lakes, west London. Patty regularly finds good numbers of *Nathusius'* pips in the bat boxes set in wet woodland. Not only were the Regional Park keen, but they were prepared to purchase the boxes. Following consultation with Patty, Matt Dobbs and Bob Cornes amongst others, we put together a list of boxes for three locations within the Park near to where we had caught bats.

The principle location is Osier Marsh, a wet woodland within Gunpowder Park. Here we have installed 36 boxes and we have another 15 split between two sites at Fishers Green, near Holyfield Lake.

Based upon the experience of others, we have chosen a variety of Schwegler woodcrete boxes, including 2F-DFP (the most used by Nathusius' at Bedfont), 2FN, 1FD and 1FF types. A number of these have been modified to deter nesting by coal and blue tits.

Prior to installation suitable areas were surveyed and trees selected based on a number of criteria including safe access, structural suitability, position and absence of natural roost features. This survey was undertaken last autumn when leaves were on the trees and again at the time of installation this winter.

Bat boxes were installed at a height of 4.0 - 4.5 metres on screw hooks which can be adjusted as the trees grow. Each box was numbered and the tree species and box orientation recorded. So



what do we hope to achieve? A project such as this involves a large commitment in time and effort for it to be meaningful. Removing bats from boxes to examine in the hand is a disturbing activity requiring licensed workers. Therefore, the project needs clear justification.

Our target species is Nathusius' pipistrelle (BatLife Europe's Species of the Year for 2015) and we are aiming to contribute to the national Nathusius' pipistrelle study. This involves ringing and fur clipping individuals to help determine migration strategies and origins. The fur is used for stable hydrogen isotope analysis which can provide clues as to the areas where bats fed before the last moult. If a bat has traveled from another part of Europe it is possible to detect differences in isotopes derived from its diet. This is still a developing tool, but it will become increasingly valuable as measurements become more precise. Ringing bats currently remains the only way of permanently marking a bat which, upon recapture, allows bat workers to know where it was ringed. A Nathusius' which Daniel had ringed in Somerset was recovered 600km away in Holland. This recovery, confirms long-distance migration, is the first definitive proof of bat migration between Britain and the Continent and demonstrates the potential value of ringing. Additionally bat box checks allow us to study seasonal occupancy, sex composition, body condition and certain insights into mating behaviour.

One of the most exciting possibilities is finding juvenile Nathusius' pip of potentially local origin in the checks in July and August. To date there are no known maternity roosts for the species in the United Kingdom other than in Northern Ireland. At present it is speculated that although largely migratory some female Nathusius' remain and breed in Britain. What exactly the species does remains unknown.

This project is open to all members of the Bat Group. It offers an excellent opportunity to participate in the monthly checks (April -October excluding June). Without the help of a good number of people this project would not have been possible. In particular thanks are due to Lee Valley staff including Dawn, Cath, Andy, Dan, Helen and Ges who helped with procurement and installation and to the team of EBG installers: Pat, Steve, Claire, Stuart and Katrina.



Bats at Thurrock Libraries

Ella Barnett takes bats to the people

As Publicity Officer for Essex Bat Group I am trying to think of different ways of spreading the word about bats and the Group. Pat, the Chairman, and I came up with the idea of contacting libraries in Essex to see if we could put our display boards to use and help put a good name out there for bats as well as educating members of the public. As I live close by I contacted Grays library; a large and busy library in the centre of Grays town. The librarians there were more than happy to be contacted by us and thought that there would be a lot of interest from their regular customers. But it didn't stop there.



Ella giving a talk at Belhus Library

Initially, Pat and I thought that we could just put the display boards up and leave them for a while but then I suggested giving a talk about bats before taking the display boards down, and not just a talk but an exhibition of live bats. The librarians loved the thought of this, so much so they suggested doing the displays and talks, not just at one library but at three across Thurrock! Three displays, three talks, three exhibitions of bats!

At the beginning of March the display boards went up and tickets went on sale for the talks in three libraries - Belhus, Corringham and Grays. As the libraries were limited for space, tickets were limited to 30 per library (not including adults escorting children) which soon sold out! The talks were aimed at families and so there was a huge range of ages right through from babies to toddlers, teenagers to pensioners and all in between. It was brilliant to see such a variety of people interested in finding out more about bats.

The talks were held at the beginning of April, during the Easter school holidays, and the displays were on show for a whole month. The turnout was amazing and the audience at Grays and Corringham libraries were even treated to a story called *Bat Mouse* (by Steve Smallman). The children loved it and I think the adults did too! It was a good warm up for my talks teaching them about bats; what they eat, where they roost, what they sound like and how they catch their prey. But of course, the most exciting bit, for young and old, was the opportunity to see a live bat up close! I was lucky enough to borrow a couple of permanent captive brown



Corringham Library event

long-eared bats from Emily, a member of the bat care team; a very featureful species which is enjoyed by an audience - especially those who have not seen a live bat before! Thankfully 'Pockthorpe' behaved and everyone got a good look at her long ears, brown fur and pointy teeth. Emily helped me out at the third and final display at Corringham library although unfortunately 'Upminster' wasn't so amenable to being shown, although Emily's expertise soon had her calm.

This event was also attended by local hip hop artist Scroobius Pip who, judging by his name, must be quite a fan of bats (definitely nothing to do with Edward Lear!).

A donation pot was filled by attendees at the end of each talk with a total of just over £42 raised, which will go towards the care of the bats shown. This event was mainly to raise awareness of bats and the Bat Group and everyone seemed to be on a bat high by the time they left. There was lots of interest in attending bat walks by members of the public and the library staff themselves! One of the librarians at Grays library even bought a bat costume to wear whilst reading *Bat Mouse* to the children.

All in all it was a great success and I'm very grateful the libraries allowed us to put on such an event. They were very excited by the attention that it brought into the library and are now thinking of asking more wildlife groups to host talks. I will be looking to contact libraries elsewhere around the county in the hope of getting the same reception from other Essex towns so maybe I'll see you at a library near you!

Special thanks to Rachel Gallehawk (Senior Librarian at Thurrock Libraries) and Emily Holt.

Projects update **Chigborough Lakes** Ten new boxes have been installed at this EWT nature reserve near Maldon. Nathusius' pipistrelle, which has been found in checks of older boxes, is the target species. The boxes were funded by the Maldon Local Group of Essex Wildlife Trust. Tim Sapsford is organising surveys of these and other boxes in the Maldon area. tim.sapsford@sky.com

Essex Nathusius' Pipistrelle Project - Trapping EBG has purchased two new harp traps and an acoustic lure, partly funded by a grant from Essex & Suffolk Water. Our first trap was successful at its first attempt, catching a male Nathusius' at Hanningfield on 9th May. This year we will trap at sites visited last year as well as some new locations, including Abberton reservoir, Hatfield Forest and Belhus Woods. Contact Pat: pathatch@live.co.uk.

Weald Bat Project Participating in this long-running survey is the best way to get regular experience and guidance in detector and other bat surveys and sound analysis. We also run training workshops and other members' events here. Contact Graham: thehart@btinternet.com.

Langdon Hills The Living Landscape survey team has recorded *Nyctalus* already this year and is continuing to explore the bat community of the local area. This happy band of beginners would welcome some more experienced help. Contact Pat: pathatch@live.co.uk.

Writtle Forest Bat Project The second year will include a concerted effort to find tree roosts in this unusually well wooded part of the county. Contact Martin: martinp@essexwt.org.uk

Conservation Plans are afoot to work with Natural England farm advisers and farmers' groups, spreading the word about bat conservation and providing advice on habitat enhancement.

Roost Monitoring In addition to the established counts at the soprano pipistrelle maternity roost at Hanningfield reservoir, regular monitoring has begun of a soprano roost in Layer-de-la-Haye and noctule roosts in trees in Leigh-on-Sea and Colchester.

Remote Roost Monitoring Project

Andrew Palmer on an innovation in Voluntary Bat Roost Visits

It is frustrating when you leave a bat roost without knowing for sure what species were involved. Every Natural England volunteer bat roost visitor (VBRV) will have completed visits, disappointed that they have missed species. Even with real time surveys, such as those done during the emergence period, species will remain undetected. This is especially the case with large and complex churches, where there are multiple exit points and when various species are flying. Did they emerge from a dark corner of the building or were they just passing through? If you do not have the opportunity to survey bats as they depart or return then often you only have circumstantial evidence. Droppings and feeding remains are notoriously difficult to identify without resorting to expensive DNA tests. As a result many important bats roosts are not identified to species level, sometimes not even to the correct genus. As a result we effectively lose records and miss opportunities to learn more about species distribution and behaviour. This ultimately undermines our efforts to protect species and their roosts.

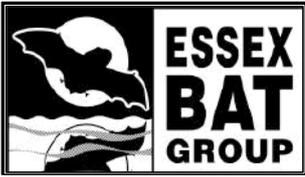
It is therefore good to know that when you leave an unresolved situation, there is a piece of technology that can keep on monitoring the roost, potentially filling in the gaps. Keen to take advantage we have purchased a state-of-the-art recording detector that can be programmed to record for up to two weeks at a time when we cannot be present. After careful consideration, we chose a Wildlife Acoustics SM3Bat detector which records full spectrum ultrasonic bat calls using highly sensitive microphones. Calls are recorded on to SD media cards with enough storage for many weeks of unattended recording. The recorded sonograms will be analysed and the resultant bat records used to advise Natural England and roost owners and contribute to our own records database. The purchase was made possible through a generously awarded grant from the Essex Field Club.

The project, known as the Remote Roost Monitoring Project (RRMP), was originally suggested by Roger and Sylvia Jiggins. It has been prepared by Andrew Palmer and will be administered by Ralph Cordey, who very successfully organised the car survey project. From this May, the new detector will be available for VBRV's to deploy, with the permission of the owner, in churches and domestic premises, for up to two weeks (although typically a few days to a week) in order to remotely monitor bat activity within roost buildings. The detector uses two microphones which can be almost 60 metres apart (more than enough to cover the extremities of our largest churches). If successful, we will seek funding to buy similar detectors for future deployment in other habitats, such as woodlands, and this technology could contribute to a future bat atlas. We also have plans, working with Essex Wildlife Trust, to deploy their SM2Bat detectors at coastal nature reserves in the hope of detecting Nathusius' pipistrelle.

It looks like a lot of future bat surveys might allow you to be in more than one place at the same time....



Testing the equipment - the real deployment will include secure housing and tamper-free locations



Committee members and other contacts

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Partner Group



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Membership Form

You can use this form to renew your membership
or recruit a friend

Send to: Helen Miller, 176 Abbotsbury Road, Morden, SM4 5JS

Name Address

Email Telephone

Using e-mail means we can send your newsletter and other correspondence electronically. Your e-mail address will not be passed on to any other organisation or used for any other purpose.

How did you hear about EBG? (internet, local bat walk, EWT, friend etc):

Please tick as appropriate:

Standard membership of the group is just £5 for 1 year

or £12 for 3 years

I would also like to make a donation of £

I enclose a cheque for £ (made payable to Essex Bat Group)

*Your first year's membership will run until 31st December 2015.