Our Beacon for Bats

Please come along and help out at our tree-planting days on the 9th & 12th of January 2013. Contact Jane Sedgeley for further details.



Welcome to the second e-newsletter of the Our Beacon for Bats Project.

The Our Beacon for Bats Project is a three year project, funded by the Brecon Beacons Trust and the Heritage Lottery Fund. The project builds on conservation work carried out by The Vincent Wildlife Trust in the upper Usk Valley over many years.

The project takes the conservation of the bats one step further, beyond the roost and into the wider landscape, working with local people to achieve a sustainable bat-friendly environment, and engaging the community and visitors to the area in learning about the bats on their doorstep.

Happy Christmas 2012 to all who have been involved and taken an interest in the project. We wouldn't have achieved so much without you. It's been a busy bat season. We were involved with 16 events which included public talks, a training workshop, roost visits, surveys, agricultural shows and bat walks. A total of 673 volunteer hours were clocked up between May and September. A huge thank you to all involved, with a special mention of Margaret, Charlotte and Peter who put in an inspirational 391 hours on their lesser horseshoe bat and hedgerows project.

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Vincent Wildlife

2012 and beyond!

By Jane Sedgeley, Project Officer Our Beacon for Bats

We began in earnest in May with a Bat Detector Workshop and training day aimed at re-enthusing existing volunteers and recruiting new ones. The VWT's Conservation Programme Manager and long-time lesser horseshoe bat expert, Dr Henry Schofield, led the day assisted by OB4B Project Officer Jane Sedgeley.

The workshop started with indoor presentations on lesser horseshoe bat ecology, a fascinating introduction to bat echolocation from Henry and a session on how to survey for bats using various types of bat detectors. This was followed by an outdoor practical session. Despite the chilly weather we successfully recorded a number of bat species along the canal at Talybont-on-Usk and a lesser horseshoe bat on some adjacent land.

To follow on from the bat detector day, we ran a series of survey events aimed at discovering how lesser horseshoe bats are using the landscape between two of the largest maternity roost sites the Trust manages. Surveys on the A40 identified eight new crossing points where bats brave the highway to move to favoured foraging areas to the north and east of the road. Lyndon and Colin saw 14 lesser horseshoe bats cross the road at head-height using an overgrown hedge on one side and a tree line on the other to partially bridge the gap.



Fig.1: Henry Schofield with attendees at our bat detector workshop in May 2012

We also surveyed around 22 km of the Brecon and Monmouthshire canal between Llanfrynach and Llangattock.

Lesser horseshoe bats, along with good numbers of more common bat species, such as Daubenton's bat, common and soprano pipistrelles, and Natterer's bats, were found throughout. Information from these surveys is already being used to inform roadside and towpath management helping to ensure green corridors are maintained and so enable the bats to move between their roost sites and foraging areas.



Fig.2: Lesser horseshoe bat



Fig.3: Jane Sedgeley and Dai Jermyn with volunteers at the end of the 2012 bat survey season

We rounded off the bat detector surveys for the 2012 summer season with an invitation to volunteers to watch an evening bat emergence at our lesser horseshoe bat reserve at Pencelli. All bat records collected this summer will be submitted to the The Biodiversity Information Service for Powys and Brecon Beacons National Park.

Bats are largely inactive during winter, but we plan to have a busy winter as the OB4B project

moves into its next stage. The winter months are ideal for tree planting. We will be planting new hedgerows on several farms over the next few months including one large project we are undertaking in collaboration with Environment Agency Wales and Brecon Beacons National Park.

We'll be running volunteer days with some of the BBNP regular midweek and weekend volunteers to go and plant up two large woodland blocks on a farm near Talybont-on-Usk.

These are planned for January 9th and 12th 2013. If time permits, we are also hoping to search a range of WWII pill boxes, ice houses, and unheated cellars to see if any are used by lesser horseshoe bats for night roosting, non-breeding sites and possibly hibernation sites. It may be possible for a limited number of volunteers to assist with these surveys, but it will be site dependent.



Fig.4: Roosting lesser horseshoe bats

Please get in touch if you would like to join in with either our tree planting scheme at Talybont-on Usk or our assessment of WWII pill boxes. Both present good opportunities to get outside into the fresh air and work off some of the Christmas over-indulgences!

Another record year

By David Jermyn, Reserves Officer

Summer 2012 was the wettest in 100 years, with some parts of the country in June receiving a month's rain in a single day - weather more favourable for animals with webbed feet you might think.

Despite these soggy conditions, our lesser horseshoe bat colonies faired particularly well, with around 60% of the roosts The VWT manages throughout Wales and The Marches having record emergence counts.

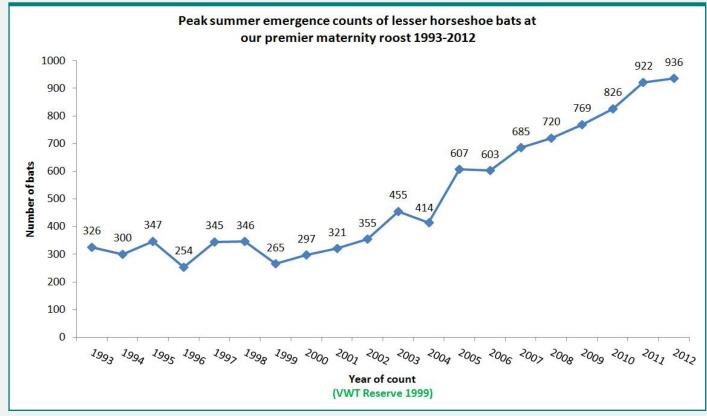
All four of the maternity roost sites we manage within the OB4B Project area showed an increase, with our premier roost in the upper Usk Valley notching up a huge 936 bats in residence.

Fig.5: Members of the U3A Strollers Group enjoying a bat emergence at our premier lesser horseshoe bat maternity roost

However, the effects of the dreadful weather this past summer may have resulted in poor birth rates along with poor juvenile survival rates within the lesser horseshoe bat colonies. These effects may only become apparent in the future. Only time will tell!







Bats at Brecon Prom

By Jane Sedgeley, Project Officer Our Beacon for Bats

On 1st August 2012, the OB4B Project, Brecon Beacons National Park and Brecknockshire Wildlife Trust ran a family friendly bat walk at Brecon Promenade along the River Usk. Around 30 people attended the event which started off with an introductory talk on bat ecology and a description of the species we were likely to encounter from mammal expert Rob Strachan. Rob was ably assisted by local bat carer Eleanor Jones who

very kindly brought along two pipistrelle bats she was rehabilitating to give an opportunity for people to see live bats at close hand.

The talks were timed to perfection so that as we wandered down to the river bank we were immediately greeted by a cacophony of bat calls on the detector and the sight of flying bats silhouetted against the darkening sky.

With 15 bat detectors to share,

everyone had a good chance to see and hear bats. We encountered noctule bats flying high above the river, Daubenton's and Natterer's bats feeding low over the water, common and soprano pipistrelles around the trees and houses, and most excitingly; a serotine bat. The serotine is a very under-recorded species in this area, so we're very keen to go back and make some detailed sound recordings when the weather warms up next year.



It was certainly a special evening, and one we would like to repeat next year. Thank you to everyone that helped to organise the event and to those who participated on the night - especially Rob and Eleanor.

Fig.7: Serotine bat - one of the less common bat species we heard on our bat walk

This is an extract of some feedback we received from a participant:

"Thank you very much for the Brecon bat walk last night. I thought it was one of the best outdoor family natural history presentations I have attended. The surprise factor was superb. Dreading rain, not enough bat detectors to go round and that [my 14 year old daughter and her three friends] might be bored it was fantastic to be greeted with lots of help and bat detectors, live bats, box-bat, the star Rob Strachan, information that's not in books, rich bat habitat and an unexpected bat species!......
Thank you again for a memorable evening we all enjoyed, Vicky".

The BBC comes to the Usk Valley

By Hilary Macmillan, Communications Manager

We've had some good publicity for the OB4B Project thanks to two BBC Programmes: Radio Four's The Living World and BBC One's Countryfile. Both pieces were recorded at one of the VWT's lesser horseshoe bat roosts in the upper Usk Valley, where Henry Schofield and Jane Sedgeley discussed the Trust's conservation work with the species.



Fig. 8: Henry Schofield and John Craven with the Countryfile Team



The Living World piece was first aired on 12 May 2012 and can still be listened to on the BBC iPlayer and the Countryfile piece was first aired on 30 September 2012.

Unfortunately, the Countryfile episode is no longer available on iPlayer but is summarised on the Countryfile website.

Hits to our own website www.vwt.org.uk increased substantially in the days immediately following the broadcasts.

Fig.9: Jane Sedgeley and Henry Schofield with Radio Four's The Living World Team

Reaching out to schools

By Hayley Sharp, Brecon Beacons National Park Education Team

The VWT's OB4B Project is collaborating with the Brecon Beacons National Park Authority education team to raise awareness in schools of the lesser horseshoe bats in the upper Usk valley. Hayley Sharp reports on their progress this year.

Last summer term (2012) was busy with education staff and wardens working with 718 pupils from six schools (Crickhowell High school and primary schools in Crickhowell, Llanbedr, Llangattock, Llangynidr and Llangors). The lessons introduced the concept of mammals, food chains, habitats and lifecycle. Using the school grounds and resources such as maps of the Brecon Beacons National Park, bat puppets, sound bites, chalk, bubbles and blindfolds the pupils undertook a variety of activities to inspire their interest and improve their understanding.

Older pupils also had the opportunity to study a typical local landscape in the form of a detailed 3D model. The model with cave, farm, houses, stone barns, shed, pond, trees and hedges allowed the pupils to investigate how the life of the lesser horseshoe bat could be enhanced or disadvantaged by making changes to the landscape. This encouraged lots of discussion about what they had already learned about the way bats live. Does it make a difference to the lesser horseshoe bats if the hedges

are taken away/their roosting place falls down/ a new road is built/ the houses have new outdoor lighting? The pupils showed great interest and insight into what could be done in their local areas to help lesser horseshoe bats. The schools all received a Bat Conservation Trust Education Pack funded by The VWT.

On 30th June, Llangattock beech woods provided the venue for an event for family and friends with live rescue pipistrelle bats and a bat trail quiz through the woods. Follow up information and links will be maintained via the National Park education newsletter and through future community events.

As part of their annual Science day organised by Careers Wales, over 100 Year 9 pupils at Crickhowell High School had the opportunity to study a simulated bat count watching a video recording of bats emerging from a roost site. This certainly promoted discussion when they compared their tallies! How best might they improve the reliability and accuracy of their data? Their suggestions included slowing the video to recount and taking an average of their data. The pupils also came face to face with a mummified Lesser Horseshoe bat to observe its features first hand and to appreciate its small size. They also had a chance to interpret data and graphs and to identify different bat calls using

sonograms. Using the 3D local landscape model then pupils also gave suggestions of how the conservation and management of the landscape might impact on lesser horseshoe bats.

It has been rewarding to meet pupils whom I have taught through the OB4B Project over the summer who have remembered the sessions and who have been inspired to learn more!

This winter we are doing outreach for Dark Skies campaign for BBNPA and are including lesser horseshoe bats as part of the session - using our light sensitive bats as a storyboard session about who is affected by light pollution. It'll be great if we crossover with our previously visited OB4B upper Usk valley schools, but even better if we can reach out to other schools with the good news about the OB4B project as well as the Dark Skies campaign.



Fig.10: Hayley Sharp & Francesca Bell show off their 3-D landscape model

'The Chaps' putting lesser horseshoe bats on the map

By Charlotte Smith, Margaret Seaman & Peter Seaman, The Chaps.

One of the aims of the OB4B Project is to produce a Bat Map of lesser horseshoe bat hotspots in the upper Usk Valley. This will include roost sites, foraging areas and important hedgerows that the bats use as commuting routes to connect between them. Peter Seaman recounts his experiences in a small but dedicated team of surveyors that became fondly known as 'The Chaps'.

Earlier this year, Charlotte,
Margaret my wife and I were
approached by Jane Sedgeley, of
The VWT, and asked if we were
interested in carrying out a
lesser horseshoe bat survey
along hedges and tree lines of a
large farm near Talybont-on-Usk,
Brecon as part of the Our
Beacons for Bats Project. The
farm is located approximately
midway between two major
lesser horseshoe bat maternity
(breeding) roosts The VWT
manages in the upper Usk valley.

As volunteers we were given basic training by Jane in the use of 'Anabat' bat detectors and Analook software. We carried out a site training visit and with Jane we produced a field record sheet and three spreadsheets for data recording. Our chosen method was to survey hedge and tree lines on the farm using Anabats to record two nights at each location. To simplify the installation of Anabats, we used hanging baskets which were suspended in the hedges/on the trees and then placed the Anabat and a battery inside the basket.

A detailed record of various features at each location was kept, together with digital photographs and a 12 figure grid



reference. After two nights, the anabats were collected and the data cards analysed on our home PCs using the relevant software. Other bat species and the time of every lesser horseshoe bat pass were recorded onto the record sheet. We started our survey in early June and completed in September 2012, during which time we surveyed on 135 nights at 86 locations. Lesser horseshoe bats were not recorded on every night or in every location. Sometimes poor weather affected recording or there were other technical difficulties. We recorded a total of 793 lesser horseshoe bat passes with the

Fig.11: 'The Chaps' at work describing hedgerows and habitats

highest number at one location on a given night being 71 passes. We have now submitted a full report with a large spreadsheet of data to Jane and The VWT. The whole experience was fantastic. We loved visiting the farm and exploring its hedges, trees and the hidden corners near ponds or the river. We certainly learnt a lot! Charlotte thank goodness, has a methodical and scientific approach. There was guite a lot to remember each time we started a survey and it was, I confess, more than once my fault for leaving behind something important in the boot of the car!

Fig.12: Anabat detector cleverly positioned in its hanging basket and waterproof box

At times it was a 'love hate' relationship with the Anabats when, for example, they were not connected to a fully charged battery, or when we forgot to check the sensitivity level and ended up recording every single drop of rain over a two night period.

However, the joy of downloading the results and discovering lesser horseshoe bats was very motivating. Walking the field boundaries of the farm also gave us opportunities to appreciate other wildlife. The meadow and hedge flowers, a hunting peregrine falcon and the butterflies of an area near the canal are etched in our memories. There is no doubt that our Anabat skill levels improved with time, although we feel we still have much to learn. We would also have



wished to identify the many Myotis species records that we have but both lack of time and knowledge meant that this was not possible. We had a very good relationship with the farmer who had allowed us onto his land. He was most helpful. We do hope we were not a nuisance to him and we tried to work on his farm in a way which was low profile and respectful of his property and stock.

On occasions we were assisted by Mr Doug Cox who at 92 years of age must surely be one of the oldest 'anabat operators! We are also grateful for the help of Anne-Marie Rhys Evans. Finally we are most grateful indeed to Jane for her enthusiasm, volunteer management skills and advice. We have hugely enjoyed this work and Jane has been a pleasure to work with! We can certainly recommend this voluntary work.

To follow on from this fabulous work we have received some generous funding from Environment Agency Wales and input from Brecon Beacons Park Authority to enable us to hold tree planting days. On the 9th and 12th of January 2013 we're aiming to try and plant up to 1 ha of land to create wet woodland that will benefit wildlife and link up lesser horseshoe bats foraging areas and commuting routes across the farm.

Please contact Jane Sedgeley (0)1874 623724; 07584 416502; janesedgeley@vwt.org.uk for further details if you would like to come along and help.

Bats v Moths - what's the score?

By Chris Evans, Volunteer

Chris Evans is a moth enthusiast and keen recorder. Chris comments on past and present encounters with bats and his recent experiences volunteering on OB4B Project surveys.

How did I first get involved with bats? It goes back to May 2010 and a bat and moth event at Penpont. I'd had an interest in moths since my schooldays but had never done any overnight trapping or taken it too seriously. At Penpont there were a number of moth traps set although the weather was very cold for May. With no action at the traps, people wandered off trying to spot bats emerging from the roost and listening to the sounds from the various detectors set at different frequencies.

There was what seemed to me a lot of activity, but how successful the bats were at feeding I couldn't say. There were bats flying up and down the river that were probably having more success judging by the ripples on the surface. Things died down after a while, bats either flying off to find better feeding sites or heading back to the roost for a guiet night in so as not to waste energy. Back to the moth traps for a final look before packing up: total number in 5 traps = zero. Even as I put a newly acquired moth trap in the car I wondered if I was doing the right thing, bat detectors are so much smaller.

Now I had a moth trap, it was time to find out what was in

the garden, so with the aid of the right field guides for identification, I set it at least once a week. Trapping moths is easy, turn the light on and go to bed. The taxing part starts in the morning trying to prevent escapes and putting them into pots for a closer look. Identification seems an endless task until frustration makes you call for the County Recorder. After a while it becomes easier, but never actually easy.

Things were quiet on the bat front, apart from a biodiversity weekend in our local wood where bat detectors were deployed by Jane Sedgeley the OB4B Officer with mixed success. caused by the bad weather. We did detect three bat species, including the lesser horseshoe presumably passing through. At any rate they didn't hoover up all the moths as the traps had plenty in when examined later. As a result of this experience I began turning out for the lesser horseshoe surveys being carried out in the Usk valley.

Until then I hadn't paid much attention to bats and their feeding habits, so was surprised to learn how far they would travel if need be. The investigation into routes from roosts to feeding areas and the effects of hedge lines and open ground on these were also something I hadn't really thought about. Twilight strolls along the canal, not a new experience in itself, but never done before with bat detector in hand. The best bit was kept until last with a visit to a roost with

Fig.13: Chris Evans and Alison Heath listening out for lesser horseshoe bats along the Canal



infra red cameras set up. This really displayed the flying skills of the bats, when so much activity was going on in such a small space. All in all an interesting and worthwhile experience which I will be happy to repeat. In the meantime, while bats are hibernating some moths are not, so no let up to trapping. What better way to spend a morning than trying to find your trap in a snowdrift.

The answer to the question 'Bats v Moths, what's the score?' It's a draw, as there is a need for both to prosper.

Now another question. Does walking along the towpath in the dark waving a bat detector, and not falling in the water or walking into a tree count as multi-tasking? If so I've finally made it!

A year in the life of a lesser horseshoe bat - summer and autumn

By Jane Sedgeley, Project Officer Our Beacon for Bats



Fig.14: Pale buff coloured adult female with grey coloured young bat

From April onwards, female lesser horseshoe bats begin to form maternity colonies, usually in warm roost sites such as loft spaces in stone buildings with slate roofs, or heated cellars.

Male bats are found less frequently in lesser horseshoe bat maternity colonies, and when present they are typically found roosting down in the cooler areas of the building away from the nursery cluster. Males more commonly roost as single individuals at alternative roost sites.

In addition to maternity roosts, the lesser horseshoe bat colony may also occupy satellite roosts away from the nursery roost. The numbers of bats using these can fluctuate greatly. Heavily pregnant bats may choose to stay at these sites, particularly if they are close to favoured feeding areas, at times when flight is becoming more difficult with the increased weight of the growing foetus.

increased weight of the growing foetus.

In Wales, births occur over three weeks in late
June - early July. New born pups attach to their mother by holding her pelvic nipples with their teeth and grasping fur at her neck with their claws. At c. 10 days young bats practice flying, often holding onto their mothers head with their feet. First flights outside the roost occur at c. 23 days and young bats become independent at 4 - 5 weeks old.

In late summer/autumn, adult females leave the maternity roosts but young bats can stay until end of September. The adult male lesser horseshoes set up territories in the autumn and attract females to mate with them. Mating can occur from September to April.

By November, the majority of lesser horseshoe bats will have left their summer breeding sites to seek refuge from the frost in their hibernation roosts.



Fig.15: Group of adult females clustered together in maternity roost

Our Beacon for Bats Project receives funding from Environment Agency Wales

By Jane Sedgeley, Project Officer Our Beacon for Bats

We are pleased to announce Environment Agency Wales is supporting the OB4B Project by providing funding of £15,000 for hedgerow and tree planting to enhance habitats for lesser horseshoe bats and a range of other wildlife.

The proposed tree planting of native species such as alder, black poplar and willow along the river valleys will also create much needed riparian shading of the watercourses. This in turn will ensure Climate Change Resilience of the River Usk and its tributaries, benefiting Atlantic salmon, sea trout and species such as otters alongside connecting the habitat for bats.



Fig.16: Rob Strachan from the Environment Agency Wales with David Jermyn The Vincent Wildlife Trust's Reserves Officer talking with local farmer Mr Charles Weston

"This is putting joined-up thinking into practice. Environment Agency Wales is very keen to support the Our Beacon for Bats project as it will encourage landowners in the Usk valley project area to adopt more environmentally friendly land management practices that will help manage soil run-off and diffuse pollution to protect water bodies".

Rob Strachan, Biodiversity Technical Specialist for the EAW.

Did you know the upper Usk Valley is a hotspot for lesser horseshoe bats? The VWT manages five lesser horseshoe bat reserves in this area, including one site that is thought to be home to the largest breeding colony for this species in Europe.

Winter hibernation counts

By Lizzie Croose, Projects Support Officer

In early December, VWT staff joined with members of Brecknock Bat Group and a member of Countryside Council for Wales to undertake the annual winter count of lesser horseshoe bat hibernation sites in the Usk Valley.

In the ice house adjacent to the Trust's largest lesser horseshoe bat maternity roost near Bwlch, there were an impressive 893 lesser horseshoe bats- a record count!

A separate ice house nearby had 51 lesser horseshoe bats, another record count which reflects the continuing success of this site which was used by only one bat before the VWT restored the building in 2007. Another two of the Trust's local reserves were home to 26 and 27 hibernating lesser horseshoe bats respectively.



Fig.17: Surveyers at a hibernation site in the Usk Valley

Suitable hibernation sites are vital for bats to survive through the winter and it is very encouraging to see such high numbers of lesser horseshoe bats hibernating at the Trust's reserves.

WANTED

A lack of hibernation sites may be a limiting factor for lesser horseshoe bats in the upper Usk Valley. Please get in touch if you know of any ice houses, unheated cellars, or WW2 pillboxes in the area.

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