

# THE NORTHERN NATTERER

## CENTRAL SCOTLAND BAT GROUP NEWSLETTER

Issue 47 November 2006



### AWARD FOR OUTSTANDING CONTRIBUTION TO BAT CONSERVATION

We are delighted to announce that, at the National Bat Conference, John Haddow, founder of CSBG, was given the prestigious Pete Guest Award for his many years of service in the cause of bats. This is an Annual Award presented by the Bat Conservation Trust to someone who is deserving of their highest accolade. Many congratulations, John!



### DRAFT PROGRAMME FOR 2006/7

**December 8<sup>th</sup>**: Social evening at the Allan Park Hotel, Stirling from 7.30 pm

**Late January**: Talk on "Bats and Trees" (*to be confirmed*)

**February 10<sup>th</sup>**: Ochils Expedition to visit Hibernaculum sites (*NB rough and slippery see NN46 for this year's expedition*).

**February 25<sup>th</sup>**: Doune and Aberfoyle Hibernaculum sites

**April 26<sup>th</sup>**: AGM at Culcreuch Castle Hotel with wine and cheese and a chance to watch bats.

**May 4<sup>th</sup>**: Visit to Aberfoyle Bat House to check on Natterer's Bats

**June July and August**: counts and surveys for the National Bat Monitoring Programme

**August (early)**: Bat talk and Walk at Mugdock Country Park

**August (late)**: Bat Walk at Dunblane

**November** Scottish Bat Conference, at Battleby

*(All dates to be announced/ confirmed later)*

### ROOST VISITOR TRAINING

Several members have shown an interest in training for a roost visitor licence. BCT will be holding a training session in Dunblane on 22-24<sup>th</sup> May. Anyone interested, please contact Anne Youngman.

### CSBG ACTIVITIES THIS SEASON

#### Car bat survey.

Once again the intrepid team of John Haddow, Anne Youngman, Fay and Ian Pascoe and Roger Maskell, with occasional help from other CSBG members and friends, roamed the countryside in the dead of night, complete with flashing lights, and various IT instruments, to record passing bats and register their habitat preferences, completing six separate surveys. Other mammals – dead or alive – are also recorded visually, being mainly rabbits and the odd deer, but including a sighting of a brown hare feeding its leveret in the middle of the road and an excellent view of a badger lolloping (the only word for it) in ungainly fashion near the Carron reservoir. The photograph shows John Haddow and Anne Youngman, all ready to go.



## **Out of hours helpline**

We really do need more volunteers for this programme (something you can do at home without standing outside providing food for the midges!) The Pascoes dealt with 78 calls over the first weekend in July! This is of course the busiest period of the summer, because the young are just starting to fly – anyone who has dealt with a human toddler will understand the problem. Most of the callers are concerned because they have found a grounded or injured bat (cats being the main culprit), and just want to know the best thing to do for the bat's welfare. These calls are easy to deal with. More difficult are the folk who phone at 3:00 am to wonder if their cat has been damaged by the bat, or the guy (at 4:00am) whose wife had gone home to mother because there were five bats flying round the bedroom! This year we did have to deal with a case of reported bat crime, where a roost entrance was said to have been blocked up by someone wanting to sell a house, (did they not think the buyer might be more put off by the smell of several hundred dead bats?) and another case where a somewhat aggressive caller was obviously trying to use a possible - but unlikely sounding - bat habitat to block a development he could see from his garden. Fortunately, these sorts of cases are dealt with by BCT, so the helpline volunteer does not have to be involved in contentious issues.

## **Roost monitoring and other NBMP surveys**

These were carried out by several CSBG members and roost owners as usual – see Roost count report

## **SNH Contract work**

Several members carried out a number of SNH contract visits, unfortunately a few of these led to roost exclusions for a variety of reasons, although, thankfully many roost owners remain very tolerant of their batty guests.

## **Fame**

On Monday 30th October Anne Youngman and John Haddow were filmed by Wendy Robertson for a programme on volunteers, nature conservation and other things, to be screened on BBC TV in 2007. Alan Titchmarsh will be fronting this. The Aberfoyle Bat House and Bat Tunnel (SWT Reserve) both featured in the programme. The tunnel was not searched thoroughly, but John found a brown long-eared bat which was filmed and may appear in the programme. All this was, of course, done with the appropriate permission and licence.

Fay Pascoe has also given a radio interview on the joys of volunteering.

## **BatML**

These days Bats and the Millennium Link is largely autonomous but its leaders and founders are CSBG members, Chris Gould sends this report: 'The 2006 season has been another busy one for BatML, with over 30 volunteers involved in a number of surveys, including a large number on foraging behaviour at canal sites in the Lothian and Falkirk areas. Chris Gould and other volunteers repeated six of the original "BatML" surveys to maintain the baseline of data from the original project. The team started radio tagging bats this year and two tagged bats, "Ethel" and "Cleopatra", revealed three new roost sites, all in trees, bringing the total number of sites found throughout the project to 11. Harp trapping was also carried out, with assistance given to the annual rabies monitoring work. The team also held three courses in Linlithgow with 56 delegates, covering topics including basic bat information, Field surveying techniques, and Insects and Bats. The BatML website "[www.batml.org.uk](http://www.batml.org.uk)" was also updated - for further information please visit the website.

The project team would like to particularly thank **Neil Middleton** whose constant enthusiasm and drive really make the project what it is.'

## **JUNE ROOST COUNTS 2006**

Eight of the nine roosts which were counted, and hosted bats in both 2005 and 2006 showed an increase this year. Totals: 3430 in 2005, 3839 in 2006 – an increase of 409 or almost 12%. This reverses most of the 13.7% decline which was recorded last year.

Culcreuch Castle Hotel continues to house both 45 and 55 pipistrelles, both increasing this year, from 14 to 61 and 424 to 440 respectively. They emerge from different parts of the roof, the 45s being particularly difficult to count as they emerge from different places in the highest parts of the roof.

Three roosts counted last year had no bats in 2006. One had bats in May, but not in the counting period, another had declined from 300 in 2004 to 123 last year, with none present in 2006. The third declined from a peak of 702 in 1997 to 42 last year and none this year. In all three cases the owners are co-operative, and disappointed that 'their' bats have moved elsewhere.

The one brown longeared colony counted increased from 64 to 80 bats. Given the small average size of BLE roosts, this is now a major colony. The two Natterer's roosts showed a net decrease of one bat. The champion roost this year, which continues to increase, is at Old Kippenross, which had 1491 pipistrelles (55s) in 2006. We should congratulate the owner, Patrick Stirling-Aird on his receipt of an MBE, though this was for his work on raptors rather than bats. Sometimes his interests conflict, as peregrines have been seen near the roost exit eyeing up emerging bats!

Many thanks to all counters, especially new members Andy Nyul and Helen Dunlop, and most especially to those who needed no reminder (or two!) to send in their results! *Ian Pascoe*

#### **EXTRACT FROM A STATEMENT FROM BCT, 9th October 2006**

##### **'Daubenton's bat tests positive for European Bat Lyssavirus type-2'**

A bat found in Oxfordshire has tested positive for European Bat Lyssavirus type-2 (EBLV2), a strain of rabies occasionally found in bats.

The immature female Daubenton's bat was found by two members of the public on 12 September 2006 on a canal path close to the River Thames at Abingdon. The bat was passed to an experienced member of the Oxfordshire Bat Group on 13 September 2006. The bat died on 15 September and was submitted to the Veterinary Laboratories Agency for rabies testing as part of the routine passive surveillance programme. On 6 October 2006, tests confirmed the presence of EBLV2. As a precautionary measure, all those involved in the handling of the bat have received post-exposure rabies vaccinations, even though none of them recalled being bitten or scratched.

More than 6000 bats of many species have been tested for rabies since 1987, but this is only the fifth occasion a bat has tested positive for the virus in the UK -the other cases being in Sussex (1996), Lancashire (2002), Surrey (2004) and Lancashire (2004). All have been Daubenton's bats, a species that rarely roosts in houses.

*(Readers will recall the sad death of David Macrae in 2002, which was almost certainly due to infection from a Daubenton's bat whose roost he was working with. No live bats which have been tested so far have been found to be carrying the virus,*

*though some have been found with EBLV2 antibodies)*

Whilst the number of bats testing positive has now reached five, it is important to remember that many more bats are being tested and that the vast majority of these have been shown to be negative for this virus. The five bats that have tested positive were all submitted for testing by the unique network of more than 1,000 volunteer bat workers, who work to ensure that the small risk presented by this virus is minimised further through following good practice.

*You may be aware that there has been considerable discussion, sometimes acrimonious, about DEFRA's planned active research programme which will involve the killing of 50 Daubenton's bats. Daubenton's are the third most common species in the UK with a total of about 560,000. Please let Ian Pascoe or John Haddow know if you would like more information on this subject, or go to the BCT website.*

#### **BATS USE GUIDED MISSILE STRATEGY TO CAPTURE PREY**

The American big brown bat, studied at the University of Maryland, has been found to work out in advance how it will catch an insect. Using infra red video and sound recordings, the research team found that the bat constantly changed its bearing angle and speed in response to an insect's rapid movements. The bat locks its head on to its target and maintains this even when the target changes direction, the whole process typically taking less than a second. The strategy used is called 'parallel navigation' – a system used by engineers in the 1940s working on the problem of how to program guided missiles to hit their targets.

*Just another example of how the animal world got there first!*

#### **ABERFOYLE BAT RESERVE**

The tunnel in the old slate quarry in the Trossachs has been a Scottish Wildlife Trust reserve for hibernating bats since 1972 and John Haddow has been its voluntary warden since the mid-80s. In the early years of his wardenship an automatic monitoring device was put in the tunnel over the winter, which showed that there was movement of bats in and out of the cave throughout the hibernation period, with a peak in March. Other studies have shown that this is common behaviour,

as bats come out of torpor periodically, in order to eliminate waste products, and perhaps feed on mild nights. Since 1988, detailed records have been kept of the bats seen on regular visits by John and other CSBG members and interested parties. Pipistrelles are never seen within the tunnel and this reflects experience elsewhere in areas as far apart as Poland (where out of 33,000 hibernating bats in a series of tunnels, there were *no* pips!) and Wales where few hibernating pipistrelles are found. Indeed, very few bats of any kind are observed in the reserve, though on one memorable visit seven bats of three species were discovered! Brown long eared bats are most commonly seen, with a total to date (since 1988) of 21. There have been ten Daubenton's sightings and two Natterer's. During this period, the temperature noted on visits to the hibernation area, well within the tunnel, varied from 3°C to 6°C, with 5°C being most commonly recorded. "Tinytag" temperature data recorders were left over the winter in the 1990s and confirmed that the temperature remains between 2°C and 6°C. The external temperature is sometimes higher, sometimes lower, than the ambient temperature within the tunnel confirming that bats seek out an area with a constant temperature. The first few feet of the tunnel are always under water, thus providing another hibernation requirement – a constant high humidity. But – where are all those thousands of pips which we count in the summer?

The photograph shows member Catarina Rei emerging from the tunnel.



### **BAT SLATES WORK!**

Dollarbeg Castle in Clackmannanshire was built by a rich Glasgow merchant nearly a century ago.

Over the last two years it has been turned into 10 expensive apartments, but it also has a large roof space which has been left for the brown long-eared bats that have been living there for some years. This has all been done under a licence from the

Scottish Executive, required by European legislation. The original entry point to the roof for the bats was uncertain, but since the roof was stripped and replaced in 2005 the only entry has been via eight specially fitted "bat slates". These provide narrow entrances in the roof slope and the sarking boards behind have been cut to provide a way into the roof void. During summer 2006 there has been more bat activity in the roof than before, and it is likely that there was a nursery roost of 10 to 20 females there this year. There was also evidence that these bats were still active at the beginning of November. *John Haddow*



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For those of you who were unfortunate or importunate enough not to attend the Scottish Bat Conference, here are extracts of some of the talks.

### **ABSTRACTS FROM THE SCOTTISH BAT CONFERENCE:**

#### **Roosting Ecology of Daubenton's bat Thongchai Ngamprasertwong, Iain Mackie, Stuart Piertney, and Paul Racey (Aberdeen University)**

To investigate roosting ecology of Daubenton's bat, a radio-tracking study was carried on the rivers Don, Inverurie and Dee, Aboyne. Twenty-one bats, 14 females and 7 males, were radio-tracked from May to October 2005. The results confirmed the faithfulness of Daubenton's bat to roosting areas. A total of 27 day roosts were found within 1 km of the water body. Most day roosts of Daubenton's bat, including two main maternity roosts at Inverurie, were in trees. However one major maternity roost at Aboyne was in an old granite house. Except during lactation, Daubenton's bats switched their roosts frequently. The surface temperature of the bats, determined by temperature-sensitive transmitters,

varied according to their reproductive status, roost category and roost type. In social roosts, especially the pre-maternity and maternity roosts, the temperature of female bats seemed to be higher than in other roosts.

### **Inspired by bats**

**Dr Dean Waters (Leeds University)**

Bats have always aroused curiosity, by flying at night, disappearing in winter and being generally highly secretive. This air of mystery has inspired two strands of human endeavour, that of literature and art, and that of science. Bats are prominent in the arts as symbols of the underworld, or, more rarely, of good luck, but it is their role in scientific endeavour which is especially notable. The skin in the wing membranes grows remarkably quickly, and is inspiration for new methods of grafting skin for burns victims. The mechanisms by which bats slip in and out of torpor may lead to ways of putting humans into suspended animation. The way that bats use flexible dynamic structures to fly is leading to new ideas of wing design in aircraft. It is echolocation however that may provide the most fruitful areas of research, not least by allowing people with limited vision to move around more confidently by sensing the world around them using ultrasound. The development of one such system, the “Ultracane”, is described from the initial idea, through prototypes to the final manufactured product. The problems of working with ultrasound are described, as are the ways that information gained from ultrasound can be sent to the users of such a device.

### **Are British bats at risk from wind farms?**

**Dr Steve Betts (Baker Shepherd Gillespie)**

Wind energy is one of the best developed of the renewable energy options currently available, with the result that Britain has experienced a huge growth in the number of wind farm developments over recent years. Figures published by the BWEA show that there are currently 129 operational onshore wind farms in Britain, with a further 18 under construction. In addition there are 82 consented projects where construction has yet to start, and planning applications have been submitted for over 174 additional projects.

Data collected from operational wind farms in Australia, USA and Europe show that bats can be affected by this type of development. A number of

mechanisms have been identified, which can potentially result in impacts on bats using wind farms sites. However, the significance of these impacts is likely to be dependent upon the species of bat present and the habitats within the wind farm site.

In the absence of guidance on how to assess the impacts of wind farm proposals on bats, Baker Shepherd Gillespie has devised a three stage assessment. Stage 1 involves a desk study, where pre-existing data are collected on local bat populations and habitats within the site and in an appropriate buffer area. The site is then assessed in general terms using published information on bat habitat preferences as a guide. Stage 2 involves a site visit, where habitat features are checked and their importance to bats confirmed or discounted. The results of Stages 1 and 2 are then used to define the scope of Stage 3, which comprises a series of bat activity surveys using transect and fixed point survey methods.

Mitigation and compensation measures typically involve the avoidance of sensitive habitats, for example by relocating turbines and including buffer areas. However, other measures might include habitat creation or manipulation, with the objective of encouraging bats to forage away from wind turbines.

### **The Scottish Bat Project 2003-2006**

**Anne Youngman, Scottish Bat Officer, BCT**

The Scottish Bat Project was a three year project funded by Scottish Natural Heritage (50%) with remaining funding from Mammals Trust UK, Peoples Trust for Endangered species, bat groups and other bodies.

The project was successful in promoting greater awareness of bats in Scotland with an average of at least one media mention of bats per month. These included TV, radio and press items initiated by or involving input from the Project Officer. A new Scottish display, beautifully illustrated children’s quiz and bat costumes were used at over 50 events and increased photo opportunities at these.

Over 800 members of the public enjoyed took part in “Batty about Bats” events in Glasgow Science Centre and Edinburgh Zoo in 2004.

BCT Information sheets on Bats and Planning and Bats and Trees were re-written to make them specific to Scotland and an Introduction to Bats information sheet translated into Gaelic.

Information and input into training has been given to other interested parties ranging from arboriculturalists to vets. There has been considerable input into the training of Police Wildlife Crime officers and NTS staff.

The public have been encouraged to appreciate and enjoy bats through promotion of European bat night, a bat detector loan scheme and promotion of the National Bat Monitoring Programme.

Over 60 people attended training courses developed by the Project officer on "How to organize and Lead a Bat Walk". The number of bat walks recorded for Scotland increased from 6 in 2002 to 59 in 2003 (the first year of the project).

Networking opportunities for bat groups are provided by the Scottish Bat workers Conference which attracts 100-120 delegates each year. In May 2004 a day of practical training workshops (Spring into Action Day) was fully booked with around 60 participants and received excellent feedback.

Central Scotland and Clyde bat groups undertook car surveys in 2005 and 2006 giving a total of around 600 volunteer man hours towards bat conservation. In addition 23 Sound Analysis volunteers were training in 2005 -2006 and giving over a thousand hours volunteer effort analyzing the survey results.

## NEWS FROM AMERICA

Tireless as ever in the pursuit of all things batty, I report from a recent visit to Arizona that there is much interest shown, and much work being done, on our furry friends on the other side of the pond.

The photographs show bat boxes in the Arizona-Sonora Desert Museum (a must see if you are over there) and a poster at the Lowell Observatory in Flagstaff. Unfortunately there was also a dried, mounted and framed little brown bat in one museum shop! *Fay Pascoe*



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