



BATMANN

the newsletter of the Manx Bat Group

Bat care and rehabilitation

On 20th April, 18 members attended a highly informative training day on bat care organised and funded by the Manx Bat Group. The training was led by Lancashire-based consultant bat ecologist Gail Armstrong, assisted by Liz Higgs.

Gail started with advice on health and safety when handling bats, and covered the European bat lyssavirus (EBLV), which is related to rabies. In the UK, EBLV has only been found in Daubenton's bats, and a very small number have tested positive for the virus. Even though the risk is very low, people regularly handling bats should be vaccinated against rabies and should wear gloves or use a cloth while handling bats, to minimise the risk of being bitten.

We then moved on to the basic kit needed for rescue, collection and care of bats, and this includes gloves, a ventilated box with a piece of cloth for the bat to hide under, a paintbrush to administer water, a supply of mealworms to feed the bat and small, shallow containers for water and worms.

When a bat is first collected it is important to identify whether it is a young bat, underweight, dehydrated, torpid, moribund or injured. Around 80 per cent of bats rescued in towns are cat victims and typical injuries include puncture wounds to the body (identified by blood-matted fur) and rips and tears to the wing membranes. Gail gave examples of her more unusual bat rescues, including



bats stuck between double glazing panes, a bat caught on a cactus, one in a tin of paint, another stuck to fly paper and one caught on a fishing hook up a tree.

Sadly, not all bats can be saved and released, so in some instances it is kinder to euthanise the bat, particularly if it has a major injury or will be unable to roost, eat or groom. We were informed of the types of injuries a bat had a good chance of recovering from and serious injuries that would require euthanasia.

The majority of grounded and injured bats are dehydrated when they are found and it is important to give them a drink immediately. Injured, sick and young bats should be kept warm and Gail recommended using a seed germinator tray with a heat source. Bats in care are fed on mealworms and may need to be encouraged to try this unusual but nutritious food source by removing the head of a mealworm and squeezing out the innards!

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specified otherwise.

Contributions for the newsletter may be sent
for consideration to the editor at:
info@manxbatgroup.org

Members can also submit stories via our
website. Just log in then choose 'Submit an
article' from the user menu.

www.manxbatgroup.org

Manx Bat Group Committee 2012/13

Chairman: Bob Moon
chairman@manxbatgroup.org

Treasurer: Nick Pinder
treasurer@manxbatgroup.org

Secretary: Margaret Hunter
info@manxbatgroup.org

Recorder: Nick Pinder
records@manxbatgroup.org

DEFA representative: Richard Selman

Other committee members: Vera Barber,
Jill Dunlop, Richard Fryer, Sue Moon

Get involved!

There are lots of opportunities for you to
get involved in Bat Group activities, and
at the same time learn more about bats
and help promote their conservation:

Bat surveys

We get asked to survey properties subject
to planning proposals/building work for
any potential issues that may affect bats.
We usually visit twice and need lots of
volunteers to cover all angles!

Educational activities

We visit schools, youth and community
groups and workplaces to give talks about
bats, run awareness-raising activities or
lead private bat walks.

Your bat stories and records

Tell us your bat-related news or stories of
your encounters with bats and we may
include them in *BatMann* or the website.
Submit your bat sightings or roost records
for inclusion in the island database.

Bat boxes

Help build bat boxes and check on those
already placed around the island.

Roost checks and surveys

Help us monitor bat activity and habitat
during checks of known roost sites,
looking for new roosts, eg bridge surveys,
and by helping with structured surveys,
such as car surveys and Bat Search.

Bat care

Become a bat carer so you can rescue and
rehabilitate grounded and injured bats,
or bats disturbed during building works.
Full training and support is available.

Bat Helpline

**If you find an injured or grounded bat
or have a bat query, please call:**

366177

continued from page 1



Bats in long-term care should ideally be kept in specially designed cages that provide a variety of natural roosting opportunities. Record forms should be completed for each bat showing progress, and baby bats must be regularly weighed to ensure they are progressing.

Gail was licensed by DEFA to bring some bats she cannot release because of their injuries. They now regularly accompany Gail and perform a very useful educational role. They were certainly invaluable training tools for us as we were all given the opportunity to handle a bat. We identified the species and sex, checked for injuries, practised weighing a bat and measuring the length of the forearm. We also practised feeding bats mealworms.

Gail also covered rescuing and caring for baby bats. Every attempt should be made first to reunite a baby bat with its mother. Gail recommended placing the baby on a warm hot-water bottle in an open box on top of a car close to the roost. The baby will call to the mother, which may come and carry the baby back

to the roost. This method should be tried for three consecutive nights, while hand feeding the baby in between as necessary. If this fails then care can be considered, though this is not easy with babies. Baby bats in care are reared on warm formula puppy milk that is fed four times a day. It is very important that baby bats are kept warm to enable them to digest the milk. At three weeks they can be weaned onto mealworms. Baby bats should be housed together as they develop better and need to socialise. A flight cage is essential for rearing baby bats to enable their muscles to strengthen sufficiently before they are released into the wild.

Finally, Gail covered the release of rehabilitated bats. Bats should be released at the same location they were collected from. The bat should be warmed up and then held at height, and it should fly off when it is ready.

The training day was extremely useful and we all benefited from Gail's and Liz's extensive knowledge and experience of bat caring. We all particularly enjoyed the bat handling session and this was really worthwhile as there is definitely a technique to handling bats. The day closed with Bob Moon thanking Gail and Liz for a highly successful training day.

Louise Samson



Photos © M Hunter

Bat Search 2012 – the results



The Manx Bat Group launched Bat Search in 2012 as a way to mark International Year of the Bat while raising public awareness of bats and their conservation in the Isle of Man. Inspired by the Dundee City Bat Project in 2007, our concept was to engage people from all parts of the island in a practical project to survey the activity of our bat populations.

The aims of Bat Search were to:

- raise awareness and appreciation of Manx bats among island residents;
- raise awareness among residents of their local wildlife through bats;
- encourage the involvement of people new to bats and new to wildlife;
- attract new Bat Group members;
- lay the foundations for future bat monitoring.
- mark 2012 as Manx Year of the Bat.

During the summer months, 51 volunteers, most of whom were new to bat conservation and survey work, did 140 surveys of one-km squares in their local area. Of the 35 locations surveyed, seven were found to have a high activity rating for bats and 15 showed 'hotspots' of bat activity. Funding for the project came from a generous bequest from the estate of the late Mrs Anita Mary Cannell.

Background

Bat numbers have declined over many years and, as a result, bats have been legally protected in the Isle of Man since 1990. Although some species are showing some signs of recovery across the British Isles, their secretive nature and lack of widespread and accurate survey data means that conservation measures and land-use planning decisions are often based on insufficient information.

Surveying for bats does not need expensive equipment and even simple survey methods can produce good-quality information. Bat Search was launched with the hope that the project would continue annually, subject to a successful first year and ongoing volunteer availability.

Extensive use was made of local media channels to publicise the project and encourage volunteers to come forward. Everyone who responded to the publicity was given an initial information pack and invited to attend one of four training evenings held at various locations around the island. At each training evening the attendees were given an introductory talk about the project and the role that Bat Search volunteers would perform. The survey method was walked through, the equipment was explained and demonstrated, and attendees then had the opportunity to use the bat detectors in a live situation with passing bats.

The surveys

Each volunteer who completed training was loaned a survey kit including a bat detector, high visibility vest, thermometer, clipboard and pen, sunset times, data recording sheets and a printed aerial map

of their one-km square area. They were asked to plot a survey route with ten sample points, and then to survey their squares at least three times throughout the summer on given weeks. Some volunteers did more than three!

Guidelines for conducting the surveys included:

- Choose nights conducive to bat activity, avoiding temperatures below 10° C or heavy rain or high wind.
- Start surveys 20 minutes after sunset.
- Record the temperature and weather conditions at start and end of survey.
- Tune the detector to 50kHz.
- Stop at each sample point and monitor all bat activity for two minutes.
- Record the number of bat passes at each point and whether or not feeding buzzes are detected.
- Record any other observations or general commentary.
- Volunteers were not asked to attempt identification of bat species.

The results

All the survey results were put into a spreadsheet and analysed to provide a numeric index of bat activity. Each survey was indexed on the number of sample points for which bat activity was recorded. The survey was then assigned an activity rating of Low (0–3), Medium (4–6) or High (7–10). The one-km square was assigned an overall rating based on the highest activity achieved on any survey. If more than 12 bat passes were recorded for a sample point (equating to more than one per ten seconds) then that point was recorded as a ‘hotspot’.

The maps on the following pages show bat activity levels in the main locations surveyed.

In the Douglas, Braddan and Onchan area, the highest activity rating was in the square that includes the river and Nunnery estate. In the East, the highest activity was in between Ballaglass, Cornaa, Ballajora and Dreemskerry. Overall, the northern surveys returned the highest average activity ratings. Several of the locations around Peel demonstrated bat hotspot activity. And the squares containing Rushen Abbey and Silverdale shared the honours for the highest activity rating in Bat Search 2012.

Conclusion

Through the summer of 2012, 51 volunteers endured cold, wet conditions to complete an impressive body of survey work to a very high standard. The results provide a snapshot of bat activity in a variety of locations, urban as well as rural, across the Isle of Man, and form a suitable base on which future monitoring can be built.

That this initial data set exists at all is a testament to the stamina and fortitude of the volunteer surveyors – the overwhelming majority of whom have expressed a desire to continue surveying in future years.



Charlotte assembling the Bat Search equipment packs

In short, Bat Search met the objectives we set ourselves for the project and so should be regarded as a success.

- A significant number of island residents now have an increased awareness of bats and their local wildlife scene through participation in Bat Search.
- Most of the volunteers participating in the project did not have any prior involvement in bat conservation or wildlife survey work.

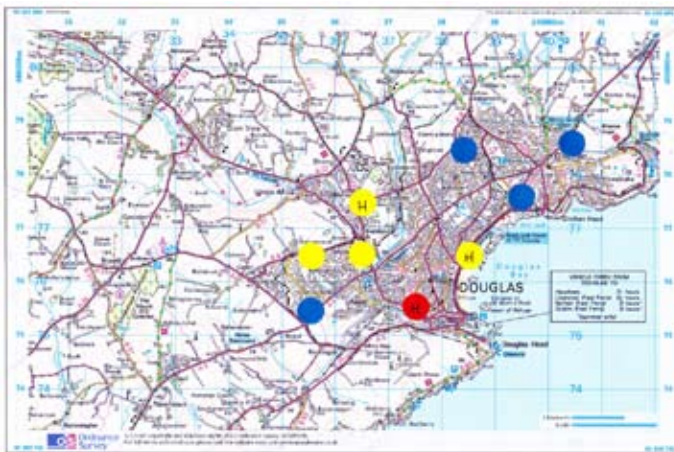
- The Manx Bat Group has benefited from some new members who have joined following participation in Bat Search.

So, bat monitoring will continue in future years based on the Bat Search model. Moreover, Bat Search was a fitting way to mark 2012 as International Year of the Bat in the Isle of Man.

If you'd like to be involved this year, get in touch!

Bob Moon

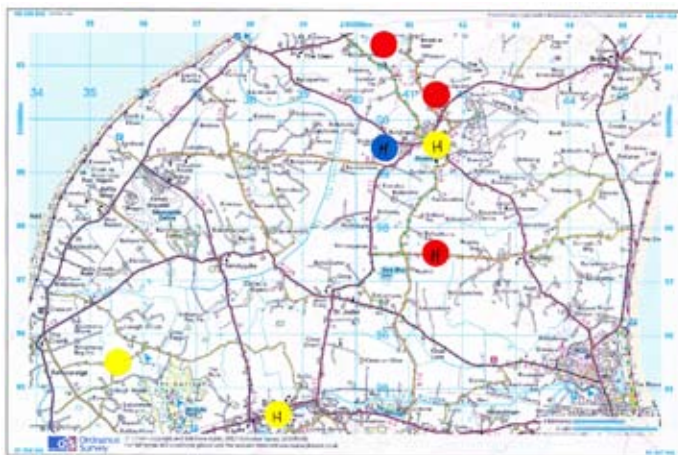
Bat Search 2012 survey area maps showing levels of bat activity monitored. Blue = Low, Yellow = Medium, and Red = High



Douglas, Braddan and Onchan, with highest bat activity around the Nunnery and river.



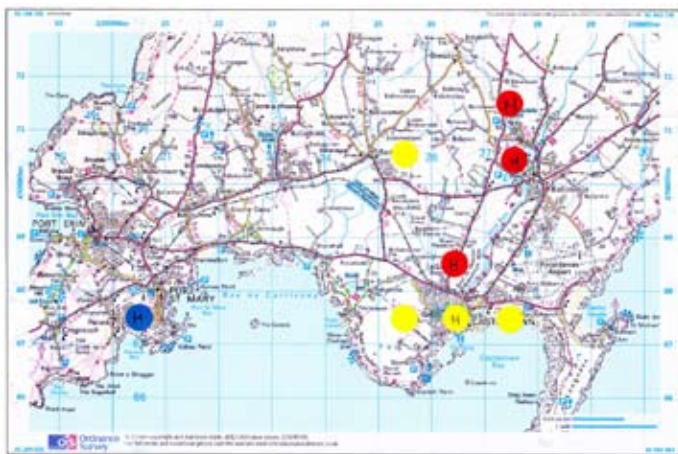
In the east highest activity was between Ballaglass, Cornaa, Ballajora and Dreemskerry.



The northern surveys returned the highest average activity ratings.



Bat hotspot activity in several locations around Peel and the west.



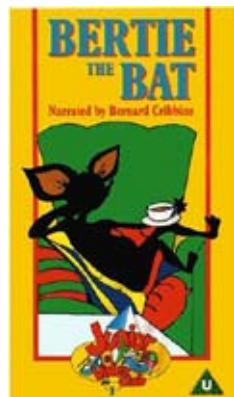
Bat Search 2012 highest recorded activity around Rushen Abbey and Silverdale in the south.

Learning about bats – resources for bat activities

Do you work with children or a community group? Would they like to learn about bats? The following websites provide excellent starting points and some have more comprehensive information and resources for you to use.

Topics you might cover in bat learning activities include:

- General information on bats, including habitat and echolocation.
- Species of bat on the Isle of Man.
- How bats help us.
- Dispelling the myths about bats.
- Where and how to observe bats.
- What to do if you find an injured or stranded bat.
- Bat boxes and bat detectors.
- How to find out more about bats.



Manx Bat Group

On the bat group's own website you'll find information on Manx bat species and the best places around the island to see them.

We also have a good library of general and in-depth bat books,

information leaflets, DVDs and slides, and general activity materials that can be consulted or borrowed by bat group members, including some children's story books and *Bertie the Bat* on video. Information on becoming a member is on the website.

www.manxbatgroup.org

Bat Conservation Trust

The BCT site is a good place to start for lots of information on British bats. It also has ideas on fun things to make and do, with printable activity sheets like the long-eared bat finger puppet opposite, recorded bat sounds to listen to, plus information on how to help bats. A free educational resource pack can be downloaded on the Bats for All page.

www.bats.org.uk/pages/batsforall.html

www.bats.org.uk/pages/fun_batty_things_to_do.html

Bat Conservation International

Bat conservation body based in Texas, with information on world bats, book and media lists, and ideas for activities. It also sells DVDs and bat goods, some of which we have in the MBG library, such as *Bat Talk* and *The Secret World of Bats*.

www.batcon.org/index.php/all-about-bats/intro-to-bats.html

www.batcon.org/index.php/all-about-bats/kidz-cave.html

Enchanted Learning

A US site with lots of printable activity sheets on a bat theme. www.enchantedlearning.com/themes/bat.shtml.

Bat Detective

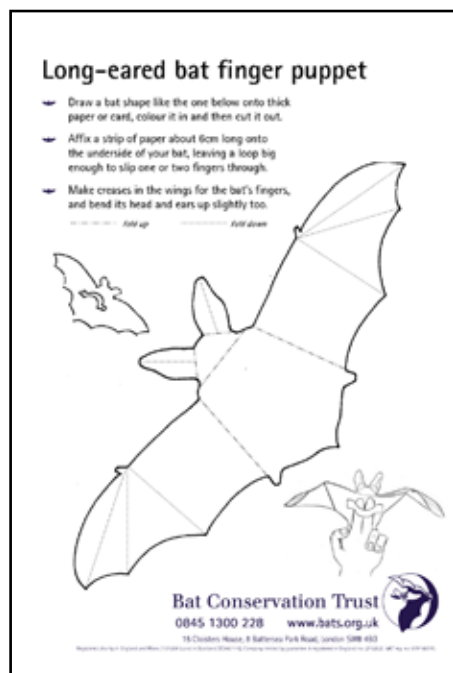
This site provides an opportunity to join in a Europe-wide Citizen Science research project on identifying bat sounds. Chris Lintott from Oxford University, presenter of *The Sky at Night* programme, led the team which designed this website. On the site are further examples of exciting interactive projects.

www.batdetective.org

Some bat activities to try

Search the internet for bat activities and you will find lots of useful bat facts, quizzes, songs, instructions on creating bat boxes and bat-friendly gardens, video clips, plus live-streamed film of bat roosts. Here is a selection of some fun batty things to do and make with sources.

- Colouring in pictures and join the dots (Enchanted Learning / Activity Village).
- Bat quiz (there's one on BCT website).
- Bat puppets (BCT).
- Bat masks (BCT).
- Crafts such as balloon bats or egg box bats (see page 15).
- Make bat cakes or biscuits (Dr. Oetker does a bat cookie mix pack with a bat-shaped cutter and black icing).
- Papier mâché bat cave.
- Build a bat box (the Kent bat box is a simple design).



- Bat bingo (try the bingo generator at <http://bingo.saksena.net/bingo> to make up your own game).
- Bat collage (eg what bats eat).
- Plant some seeds to encourage insects, and therefore bats.
- Bat treasure hunt – cut out paper bats and hide them around the garden; use clues featuring bat facts to find them.
- Learn a bat poem or bat song and perform it at a local event.
- Ask the bat group to show your group a real bat skeleton and do some internet research on how bats fly.
- Find out about echolocation and which other animals use it as well as bats. Try listening to bats using a bat detector.
- Watch a film or slideshow about bats or read a bat story book.

Useful websites

www.manxbatgroup.org
www.bats.org.uk
www.batcon.org
www.batdetective.org
www.activityvillage.co.uk
www.enchantedlearning.com
www.classroomclipart.com
www.essexbatgroup.org.uk
<http://science.hq.nasa.gov/kids/imagers/intro/intro1.html>

Jill Dunlop & Margaret Hunter

Flying mice?



Small bats have a similar body size, fur colour and ear shape to mice. It is therefore understandable why they have in the past been called 'flying mice'.

It also explains why bats are named after the mouse in many languages: 'fledermaus' (flying mouse) in German, 'chauve souris' (bald mouse) in French, 'ratones viejos' in Mexican Spanish (because they thought mice grew wings as they got older!), 'vlermuis' (winged mouse) in Afrikaans, and charmingly 'flittermouse' in old English.

In fact, a whole genus of bats, the *Myotis* bats, are named after their mouse-like ears. Although bats resemble mice they are not rodents. Unlike mice they reproduce slowly – generally only one baby per year and they do not use their teeth to gnaw.

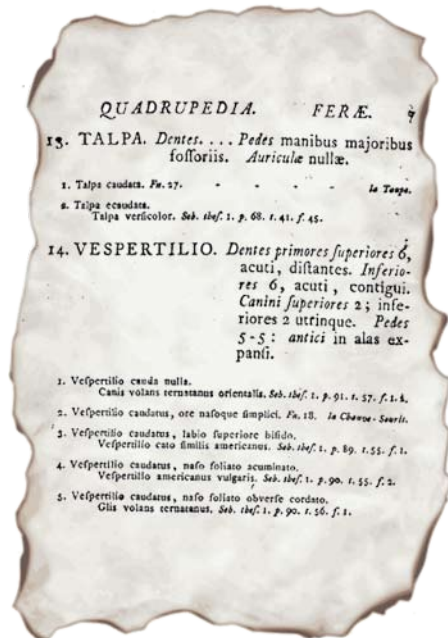
Where to place bats within the classification of animals puzzled early zoologists. Edward Wotton (1492–1555) was the first to classify bats as mammals. However, how to position bats within the class was uncertain.

The renowned Swedish naturalist Carl Linnaeus (1707–1778) at first decided bats were rodents because they have very

sharp teeth. At that time the number of bat species known to Linnaeus was very limited. He made many modifications to his system of animal classification and later placed bats among the primates, which were further subdivided into *Homo* (man), *Simia* (ape), *Lemur* (lemuroid) and *Vespertilio* (bat). He based his classification on the position of the lacteal glands.

There are now some thousand species of bat known to man and expeditions continue to find more. Genetic studies have now placed bats in the superorder Laurasiatheria, being those mammals believed to have originated on the ancient northern continent of Laurasia. This diverse group includes carnivores, pangolins, most hoofed mammals and cetaceans.

Sue Moon



Eden Park hosts box making

© R Fryer



On 16th February Eden Park kindly hosted a bat box making day. As the weather wasn't great, we set up our workshop inside among the garden furniture and parasols. Our first keen box maker and his dad were already waiting to get started before we finished setting up, and we soon had a good stream of people keen to learn how to construct a bat house.

Braving the snowy peaks of Poortown

We usually hold at least one bat group outing a year just for socialising and getting to know each other better. In April 24 members had a lovely (if challenging!) walk, followed by Sunday lunch with all the trimmings at the Glen Helen Inn.

Our initial plans for a gentle stroll around Glen Helen were thwarted by the Glen's closure because of tree damage following the unseasonal weather that hit the island. Undeterred, we moved location further down the glen, setting off from Tynwald Mill, along the Brack-a-Broom road and up the hill at Poortown.

Then we hit the snow drifts, which made for some interesting walking!

Box Brownies

On 24th April three bat group members, Margaret Hunter, Richard Fryer and Richard Selman, led a Douglas Brownie pack in a bat box making evening.

We divided the girls into three groups and everyone had a go at some part of the box making. The finished boxes will be put up in a suitable batty location. The Brownies appeared to relish the opportunity to whack nails into the wooden planks, and soon honed their hammer skills after a few attempts.

A question and answer session provided an opportunity to discuss Manx bats and how they perceive their world. The girls had lots of interesting questions, including where do bats live, what do they eat, how do they have babies, and is there such a thing as a vampire bat.

Richard Selman

Everyone managed to stay cheery, if a bit puffed out at times. The combination of deep snow trudging and sunshine was an unexpected pleasure, though some opted for the quick route back when we rejoined Poortown Road. Or maybe they just wanted to get to the bar first...

Margaret Hunter





New genus in South Sudan



A new genus of bat with striking badger-like markings has been identified in South Sudan by DeeAnn Reeder from Bucknell University and Adrian Garside from Fauna & Flora International working alongside staff from the South Sudanese Ministry of Wildlife Conservation and Tourism. The bat is the same as a specimen captured in Democratic Republic of the Congo in 1939 and named *Glauconycteris superba*, but Ms Reeder and colleagues confirmed the new find did not fit with other bats in that genus.



'After careful analysis, it is clear that it doesn't belong in the genus that it's in right now,' Reeder said. 'Its cranial characters, its wing characters, its size, the ears – literally everything you look at doesn't fit. It's so unique that we need to create a new genus.'

The bat has been named *Niumbaha superba* – Niumbaha means 'rare' or 'unusual' in the local language Zande. www.fauna-flora.org/news/striped-like-a-badger-new-genus-of-bat-identified-in-south-sudan/

Could bats provide design for mini surgical robots?

Biologists at Brown University in the USA believe bats could hold the key to developing mini robots to help in medical procedures.

They have discovered that the Pallas's long-tongued bat engorges its tongue with blood to erect tiny hair-like structures that help it drink nectar faster and more efficiently.

The bat's tongue extends by 50 per cent when it is feeding, but the tiny hairs on the tip are also inflated with blood, increasing the surface area of the tongue, so that it acts like a brush or mop.

While this behaviour is known in hummingbirds, this is the first time it has been witnessed in mammals, and it could provide an important model for developing new medical equipment and techniques, such as endoscopes that adapt to keep blood vessels open during medical treatment.

See the video of the bat drinking at: www.wired.co.uk/news/archive/2013-05/7/bat-tongue-blood

British bat calls guide



This useful guide, published last year, presents the latest findings on the hows and whys of bat calls. As well as in-depth information on species identification, it explains what echolocation is and how bats use it; looks at the different facets of sound used by bats; and covers different types of bat detectors and sound analysis software.

Available from www.pelagicpublishing.com for £29.99, or the usual book outlets.

Adopt a roost

Can you give some time to help us monitor known bat roosts around the island? We are looking for volunteers to 'adopt' a local roost site and do some regular monitoring of bat numbers leaving the roost. It's up to you when and how often you visit the site.

We are also keen to distinguish the two types of pipistrelles at roosts – common and soprano – so if you have species identification skills, or want to learn, then please get in touch.

Please contact Nick Pinder on 897499 or email records@manxbatgroup.org.

Hibernation sites hunt

Adam Denard and Bob Moon began a hunt earlier this year for hibernation sites of overwintering bats, an area we know little about. They surveyed various likely locations and luckily managed to find one confirmed site so far in the south.

Anyone interested in helping with this in the future should contact Bob on 612067 or chairman@manxbatgroup.org.

Indestructible bat house

The Bat Can is an innovative long-lasting bat house designed to need no ongoing maintenance. It's built from thick inert plastic with a bat-friendly plywood interior consisting of a series of baffles, where the bats can move around to find the location and conditions they prefer. One bat can holds about 200 bats, and they are designed to be modular.

It's made in Pennsylvania and sold by the manufacturer as well as Bat Conservation International's shop partner, Bat Goods. <http://batmanagement.com/Ordering/batboxes/batcan/batcan.html> and www.batgoods.com/item/Bat-Can-848



Photos © Bat Conservation and Management, Inc.

Committee round up

Bat care

Calls to the bat helpline, plus bats passed on by the MSPCA, have revealed bats in some interesting places. A hibernating female pipistrelle was found behind some business signage that was being replaced, and was successfully put back once the new sign had been erected. Others have not been so fortunate and we continue to receive bats who have been caught by cats or disturbed during hibernation.

Following our successful training day on bat care and rehabilitation (see the front page) we now have a good number of members who want to become bat carers. This will help greatly with the work of rescuing and looking after grounded and injured bats, hopefully to be released back where they were found once well.

Equipment audit

We are trying to complete an audit of bat group resources and equipment that has been stored by members or lent out over recent years. Nick Pinder has sent out a form to list anything lurking in your garage or study that may belong to the group. If that's you, please return the audit form to Nick as soon as possible.

Membership pack

We are developing a membership pack for new members and would welcome ideas about useful information to include. It will have a welcome letter, events list, latest *BatMann*, committee contacts, website resources and login details, how to find out more or get training, and how to renew next year. If there's anything else you'd like to see please let us know by emailing info@manxbatgroup.org.

Bat education

We have been receiving more requests for bat talks and activities from community groups. If you are interested in helping with this sort of activity then please get in touch. Recent visits have included bat box making with a group of Brownies in Douglas; a talk to Ramsey Gardening Club on bat-friendly gardens; and a talk on bats to Kirk Michael WI. Forthcoming visits include Patrick allotments; Onchan Library's summer activities, when children will be reading a book featuring a bat; and talks to Douglas Townswomen's Guild and the British Legion.

Can you site a flight cage?

We would like to set up a flight cage facility to help with rehabilitation of injured bats and are looking for a suitable (free!) location. Before bats can be released back into the wild we need to know that the bats can fly well and can feed themselves. There are limitations to testing this in your bedroom or livingroom!

We would need an area about the size of a polytunnel. If you have suitable land, or know someone who does, please let us know on info@manxbatgroup.org.


Committee membership

Shem Allanson has now resigned from the committee because of her work commitments. We would like to thank Shem for her participation.


We now have two committee places unfilled, so if you'd like to help with steering the bat group please let us know. We usually meet monthly and try to vary the location of meetings around the island.

Just for fun!

Have a go at making these fun bats from egg boxes. Thanks to Essex Bat Group.





Egg Box Bats



Bats are amazing mammals. They can fly and they use their brilliant hearing to find their way in the dark, as they listen for the echoes of their squeaks. You can make your own amazing bat model out of an egg box.

You will need: an empty egg box, glue, scissors, ribbon or string, a pencil, 2 googly eyes, poster paint (optional)

1. Cut out 3 separate cups from the empty egg box.
2. Cut 2 of the cups in half and then cut a zig-zag pattern from the bottom to look like bat wings.
3. Cut out 2 small triangles from the waste bits of egg box and bend them on one edge. These will be the ears.
4. Use a pencil to carefully poke a very small hole in the top of the body section bit of egg box.
5. Glue the wings and ears to the body and then paint it if you wish. To make it look like a real bat, paint it black on the wings with brown on the body and ears. When the paint has dried, glue on the googly eyes and thread ribbon or string through the hole.
6. Hang your bat up and show all of your friends!



You could make lots of different models! Try a long-eared bat with huge ears or a horseshoe bat with a special 'nose leaf'.

find out more about bats at www.essexbatgroup.org.uk

Summer programme 2013



Bat walks

Join us for our ever-popular bat walks over the summer. Each walk is prefaced by a short introductory talk on bats and walks last for about an hour. Bat detectors will be available to borrow. Please wear warm clothes and sturdy shoes. Children under 16 should be accompanied by an adult.

- **18th May 9.10pm:** Kerrowdhoo reservoir, north of Douglas. Meet at the Cypse car park (take Ballacottier Road opposite Glen Dhoo campsite).
- **22nd June 9.45pm:** Ballachurry Wetlands, on Church Road, Ballakillowey, Port Erin (near church).
- **20th July 9.25pm:** Kionslieu reservoir, Foxdale. Meet at west end of Archallagan plantation.
- **24th August 8.20pm:** International Bat Night at Union Mills and Snugborough. Meet opposite Union Mills shop.

Summer shows

Find us at this year's summer shows, for advice on bats, leaflets, instructions on how to build a bat box and our bat shop selling cards, toy bats, t-shirts, pencils, stamps and other batty goods. Younger visitors will have the chance to play our popular Find the Bat game.

- **Tynwald Day Fair:** 5th July at St John's.
- **Southern Agricultural Show:** 27th–28th July, Castletown.
- **Royal Manx Show:** 9th–10th August, Knockaloe.

National Bat Conference

Booking is now open for the national bat conference on 13–15th September 2013 at Warwick University, billed by BCT as 'the biggest event in the bat calendar'.
www.bats.org.uk/pages/national_bat_conference.html (+ bats.org.uk/events.php)

