# "MICROBATS ARE IN MY HOUSE"!

#### Answers to frequently asked questions about microbats in houses.

Bats are ancient animals that have been around for about 50 million years. Australia has six families of microbats containing 58 species. Because microbats are small, nocturnal animals most people are unaware of this native Australian mammal. They are specifically adapted for flying and can have a wing span measuring up to 25cm. These little mammals use both eyesight and echolocation to fly at night in search of food. Microbats are gentle mammals but may bite if they feel frightened, threatened or are injured. Please be mindful that they have very delicate finger bones in their wings.

## "WHAT ABOUT MY HEALTH? DON'T THEY CARRY DISEASE?"



*Photograph:* In the veranda support beams; *Nyctophilus gouldi* ~ Gould's long-eared bat. Photo- © Dr Les Hall. A good location, happy bats and happy humans.

Microbats are not a threat to human health if you do not handle them, especially not with **BARE** hands. Only three species of microbat have been identified with <u>Australian Bat Lyssavirus</u> (ABLV). There have only been two fatal cases of Lyssavirus in Australia affecting humans, one in 1996 and one in 1998; the 1996 case was associated with a bite from a microbat to a wildlife carer. Since then all bat carers must have pre-exposure vaccinations to enable them to rescue and care for bats safely. ABLV is an extremely rare, but fatal disease. It is completely preventable and treatable with vaccinations. To date no other animals have been infected by bats. Including dogs and cats.

Microbats **DO NOT** carry the Hendra Virus. Flying-foxes do, however it is yet to be proven how or even if horses are directly infected by flying-foxes. It is important to stress that Humans cannot get Hendra Virus directly from bats, wildlife carers are proof of this.



It's best to be safe and not handle any bats. It is unusual behaviour to find a bat alone through the daytime. As colony mammals they seek the company of others, so live in colonies. If you see a bat alone during the day please seek help as quickly as possible. Specialist bat carers are vaccinated and trained in handling bats. Call the RSPCA on 1300 animal or if in Greater Brisbane call Bat Conservation & Rescue Qld on 0488 228 134.

#### THE IMPORTANCE OF MICROBATS

Microbats are fully protected by law in all States of Australia, some of these bat species are so rare they are threatened with extinction. They suffer from the constant loss of habitat by land clearing and the loss of old growth hollows is having a devastating consequence on many native species, most especially bats. With so much competition for hollows, microbats are often evicted or targeted by birds and snakes for food. Many people have no idea of their existence; they are often forgotten and unappreciated.

These harmless little mammals are vitally important for their nightly job in our environment. They are the pest insect exterminators. It's thought one little bat can consume 1,200 mosquito sized insects in one hour. So they are good to have around, the more bats, the less poisons, the less poisons the better our health and that of the environment. They eat a large variety of insects including moths, beetles, grain weevil beetles, lawn grub moths, flying termites, disease carrying mosquitoes and some will even come to the ground to eat cockroaches. So it's in your best interest to do the right thing and their best interest to relocate them humanely. You must ensure that no



microbats are injured or killed in the relocation process. Help conserve these forgotten species and we are all better for it. We also recommend you contact a licensed spotter catcher authorised by the Department of Environment and Resource Management for all relocation attempts.

#### A MICROBAT IS FLYING INSIDE THE HOUSE!



If you find a bat inside your house it will be disorientated and looking for a way out. It most likely followed some insects inside. If you can confine it to one room, close the doors to other rooms then open the windows as well as any external doors, as wide as possible. Pull back curtains or blinds and remove any obstructions. Dim the lights to give the bat the best chance of finding its own way out. To avoid any injuries to the bat, please keep all domestic animals in another area away from the bat. Never try to catch a flying bat. If will eventually tire and land on curtains, furniture or on the floor. Please give the bat a little time to recover and orient itself to find a way out. It will be able to detect the fresh air and the direction of escape. If you think it may be injured, please call the

Photo: Terry Reardon

rescue line for assistance.

If you are finding microbats frequently in your home then there may be a crack or entry point in your ceiling. Baby bats can sometimes fall through these spaces when their mothers leave to feed at night. Seal these areas early in the day with water-based products so that they dry completely before the bats become active. When juveniles are learning to fly they may mistake the bathroom vent for the exit to outside. If this happens regularly you may need to place mosquito netting between the fan and the ceiling to stop them falling through vents or ceiling fan openings.



## "WE HAVE HEARD CHEWING NOISES AND THERE ARE HOLES IN THE PLASTER".

Make sure that what is in your roof or walls are truly microbats. There are lots of other animals that will share your house like possums, mice, rats and carpet pythons. Microbats do not build nests or bring nesting material into the roof space and they do not gnaw at wood, wires or insulation. The accumulation of droppings and urine from any animal can cause stains on ceilings or walls as well as an odour. It's a good idea to find out what animal is truly responsible for the odour and the noises you hear. Always contact licensed builders or electricians for any works undertaken in your home. If you find microbats remember they are protected species and it is illegal to harm them. Put up nest boxes for other wildlife to attract them out of your roof cavity.

### DROPPINGS, STAINS, SMELL OR NOISE IN THE HOUSE?

The dropping from bats are tiny and elongated, they can look like mouse droppings. You can easily test the droppings to determine if they are mice or bats. Using disposable gloves roll a dropping between your fingers and thumb. If it fees hard then it's probably mice, if it crumbles to dust, it's most likely to be microbat droppings. Bat droppings consist of indigestible insect parts. You may be able to see the shiny body parts of insects. Bat droppings dry quite quickly and can be safely swept into the garden. You cannot get ABLV from the droppings only from a bite so don't handle bats with bare hands. If you have stains on the walls and can smell the urine, this would indicate the bats or other animal tenants have been in the building for years, perhaps decades. It will be difficult to move them on. It's safe, it's warm and it's home to them. You may have to replace the plaster or the cladding and have a wildlife spotter catcher on call when you do any building repairs. Professional help will be needed



to help relocate the bats. Remember you cannot handle them so seek professional help.

#### CLEANING ROOF SPACES

It is best to prevent exposure to dust from deposits of bat droppings by avoiding it becoming aerosolised and subsequently inhaled. For example, instead of sweeping dry material carefully wet it with water spray to reduce the amount of dust aerosolised. The best method of removal is the use of an industrial vacuum cleaner with a high-efficiency filter to bag the material. It is recommended to use a dusk mask to prevent inhaling any dried excrement.

#### THERE REALLY ARE BATS IN MY ROOF - HOW

#### DO | EVICT THEM?

There are a few things you need to know before trying to evict microbats.

How do you remove these bats without injuring or killing them? There are some relatively simple guidelines that may be followed:



When you hear microbats in your walls or ceiling it is more likely when they have babies. The mother may return several times through the night to breast feed them and this is when you may hear little squeaking noises. It's best to attempt the relocation of microbats in the Autumn months when they no longer have dependent young and are most active. With no young present they are more likely to leave the roost each night to forage for insects.

During September to December, many Australian bats breed and may have dependent young at that time of year. This is also a least preferred time to attempt an eviction as many baby bats will be left behind in the roost and will die as a result of your activities.

If you follow this strategy step by step, you should be able successfully evict the bats:



- 1. When you first notice the microbats try to get as much information about them as possible. What species are they, take a photo of any that you find, we can try to identify them for you.
- 2. Build and put up as many as 15 nest boxes especially designed for microbats. This is vital they need to have a safe alternative to your house. Get helpful advice and box plans or already made boxes from <a href="https://www.hollowloghomes.com">www.hollowloghomes.com</a> the bats must have somewhere else to go and it is critical you site the boxes close to the exit so they know they are there. Microbats can have winter and summer preferences so it's best to get professional advice about type and location of these.
- 3. Most of the bats in the colony will fly out at dusk to forage on insects in the local area. They will start to return after a few hours and then there will be intermittent arrivals and departures at the roost throughout the rest of the night. The first step is to identify where the bats are gaining access to the roost. There may be multiple access points you need to find them all.
- 4. Step two is to work out a means of sealing off all access points except for their main exit/entry point. There are many options including expanding foam for small gaps and fly wire for exposed eaves. In some cases it may be necessary to lift the roofing iron to place exclusion netting. When you have worked out your strategy, buy the necessary materials and muster the tools so that you are ready to do the job.
- 5. Step three is to make sure you achieve a bat-free roost. You will need to allow the bats to exit the roost safely on their nightly foraging expedition and to then ensure that no other bats are left behind in the roost. The best technique is to tape a strip of plastic (like the clear table cloth plastic sold by the metre at Spotlight) over the top of the hole so it hangs down like a flap above the exit hole. Exiting bats can then drop down out of the exit. When they return to the roost they will be unable to due to their path being blocked by the plastic strip.
- 6. Leave the strip in place for several days before sealing the last remaining exit/entry point.
- 7. Monitor the roof line for any bats entering or exiting any other places over successive nights. Bats are very good at finding alternative entrances to favourite roosts! If you do identify the annoying fact that bats are continuing to use the site, you need to repeat the above process. Be patient and you will succeed.

Just in case you are wondering about alternative strategies, many have been tried and none have been found to be truly effective! Ideas that have failed:

- Installing lights in the roof
- Using naphthalene or other smelly substances (often replaces the guano smell with something more insidious!)
- Using noise generating devices

In Australia, the main species that colonise houses are the tree-dwelling bat species. If you are a true conservationist and are interested in having insect-eating bats around your area, you could install some bat boxes to replace their excluded roosts.

#### **MICROBAT BOXES**

Please consider the benefits to you and to the environment by putting up a microbat box. For further reading please see the links below.

Bat Conservation & Rescue Qld Inc: <u>www.bats.org.au</u>

Hollow Log Homes: http://hollowloghomes.com/NESTBOXES.html

Tweed Valley Wildlife Carers: http://www.tvwc.org.au/help/article14/building%20a%20microbat%20nestbox.pdf

Bat World US: http://www.batworld.org/bat-house-pup-catcher/

Bat Conservation International – A Guide to Safe & Humane Exclusion <u>http://www.batcon.org/pdfs/education/fof\_ug.pdf</u>

## THERE ARE BATS IN MY POOL SIDE UMBRELLA!



Open the umbrella overnight, or for a few nights, until the little microbats find a new home. This must only be done after dusk as bird can find them and kill them.

Remember their tree hollows and natural roosting homes have been removed from the landscape. So have a family bat box building weekend and have a happy, healthy coexistence with one of Mother Nature's best natural pest insect terminators' – the microbats!

The last words go to Canadian, Allan Kempert, author of the BatHouseGuy book - make up a concoction of what I like to

call "Bat Butter Slurry." If you have bat guano from bats in the area, mix it with water. Next, turn the bat house upside down and pour in the "Bat Butter Slurry." Swish the house around and get the slurry spread around.

Place the bat house on the side of a building as high as you can get it. The heat from the building transfers to the bat house later in the day, keeping the bats nice and warm. Most people won't do this because of unfounded fear of bats, so another option is to erect the bat house on a 4" x 6" (10.16 x 15.24 cm) beam or pole. When placing the bat house on a beam or pole, try to get the bat house as high as you can so as to be in the normal flight path of bats and to protect them from predators. Ensure there is a clear flight path in front of the bat house of at least three metres to allow for easy entry and exit.



Rescue Helpline: 0488 228 134

If you would like to volunteer with Bat Conservation & Rescue Qld Inc. by becoming a member please visit our web site for membership information.

If you would like to make a donation to Bat Conservation & Rescue Qld. Inc. you can make a direct deposit into our account. Unlike other iconic wildlife we get very little support. These donations are greatly appreciated and help in the recovery of injured and orphaned bats who are our true forest heroes.

#### All donations \$2.00 and over are fully tax deductible.

ABN: 99 789 706 217 Web site: www.bats.org.au Email: info@bats.org.au Address: PO Box 1727, Capalaba, Q 4157 Westpac Bank: Bat Conservation Fund BSB 034070 Account no. 427443 (Please identify your deposit & email our treasurer treasurer@bats.org.au)