BATS NEED PROTECTION

South Africa has 56 recorded species of bats. Of the 74 species found in the sub-region of southern Africa, 20 species of insectivorous bats and 2 species of fruit-eating bats are listed as Threatened in the IUCN Red List of Threatened Animals. Of these 9 are listed as either Critically Endangered, Endangered or Vulnerable, meaning that they face a high risk of extinction in the wild.



The Survival of Bats is Threatened

Because bats have low reproductive rates, populations are very susceptible to elevated mortality or depressed recruitment. There is scientific concern about the conservation status of bats as many species of bats are increasingly affected by multiple actions of humans such as ignorance, suspicion, pesticide poisoning, roost destruction and closure, habitat loss, overexploitation, and extermination as pests. Avoid disturbance of bats in caves, including the lighting or use of fires in caves.

Some bats have moved into residential areas because human expansion has resulted in the loss of habitat, forcing bats to look for alternative roosts in which to live and raise their young.

Dispelling the Myths About Bats

An uncontrollable, irrepressible fear of bats may exist, but it is often the result of centuries of prejudice, misinformation and ignorance about bats. Dracula and other horror stories have contributed greatly to these misconceptions causing people to fear them and therefore be unconcerned about their conservation. In some parts of South Africa it is believed that bats are linked to superstitions and acts relating to witchcraft which often lead to the bats being killed.

- The incidence of rabies is rare.
- Bat droppings in buildings usually are not a source of Histoplasmosis.
- Bats are not filthy and will not infest homes with dangerous parasites.
- Bats are not aggressive and will not normally attack people or pets.
- South African bats do not feed on blood. (Vampire bats, which do feed on blood, live in Latin America.)

BAT PROBLEMS

Human-Bat Conflict

Although bats are extremely beneficial and help maintain balance in our delicate ecosystem, there are times when bats become a problem or nuisance to home or business owners. An understanding of the habits of these beneficial animals can help solve problems that sometimes develop when bats roost in buildings. Bats living in buildings do not cause structural damage nor do they chew on wires or wood.

Why Not Exterminate Bats?

Hiring an exterminator or "doing it yourself" may seem like a simple solution. Consider these thoughts before attempting any exterminating:

- Chemicals that kill bats are also hazardous to humans and pets. All chemical usage on bats is illegal.
- Some bats will assist in insect control like devouring mosquitoes.
- It will ultimately fail because the roost is still available for other bats.
- Bats are protected by provincial legislation.
- It is inhumane when better options exist.
- Some services will offer to catch and release bats far away, but bats have been proven to return from up to 600 kilometres away a few weeks later they will be back.
- Sealing the structure while providing an alternate roost (a bat box) is the permanent solution.

Should You Bat-proof Your House?

There is little reason to evict bats from buildings where they are not causing a nuisance. However, bats should be prevented from entering human living quarters and in some instances, noise or odours from large colonies of bats can become a nuisance.

Before Deciding, Make Sure That Your Fears are not Unwarranted!

Never try to evict bats from their roosting places until the species has been identified and you can be certain that the species are not hibernating or have pups to care for.

It is best to obtain species specific information from an expert in the field before there are attempts to evict and implement exclusion methods.

Always be sure to provide the bats with an alternative roosting area such as bat boxes in your garden weeks before the exclusion is performed.

Bat-Proofing Materials

1. One-Way Valves

An excellent way to plug an entrance hole is to install a bat-proofing valve. This device, which consists of a rigid base tube with a pliable outer sleeve attached, is placed over the entrance hole, allowing bats to exit the dwelling but not to re-enter.

2. Using 'One-Way' Netting to Exclude Bats

Bats sometimes enter buildings through openings on smooth surfaces of exterior walls or through louvres. In such cases, plastic or lightweight, flexible netting with 0.4 cm mesh or smaller, should be secured to the building along the top and sides of the opening to allow bats to exit the building, but not return. After this has been done, watch to make sure the bats are able to exit safely. If they

After this has been done, watch to make sure the bats are able to exit safely. If they do not appear to be exiting, or appear to be having trouble doing so, make adjustments or add new valves as needed.

3. Using PVC Pipes to Exclude Bats

There are a number of situations in which tubes work best as bat exclusion devices. Examples include openings used by bats on buildings constructed from materials that

do not create smooth exterior walls, such as those found on brick or stone houses and log cabins. Tubes also work best for holes located at corners where walls meet and on horizontal surfaces.

Exclusion tubes should have a 5 cm diameter and be approximately 25.4 cm in length. Exclusion devices can be made from PVC pipe or flexible plastic tubing. Use of a flexible plastic tube makes it easy to either squeeze one end of the tube so that it fits into a crevice, or cut one end of the tube into flaps that can be fit over an opening and stapled, nailed, or taped to the building. Bats are unable to cling to the smooth surface of these tubes. Once the tube has been inserted over the hole, a piece of lightweight, clear plastic can be taped around the end of the tube that projects to the outside to further reduce the likelihood of bats re-entering, though this is typically not necessary.

Bat-proofing has Two Potential Drawbacks

One is that exclusion can be stressful for a maternity colony. When prevented from using their usual roost, the bats may move into a nearby building, where they may be expelled again, or even exterminated. Also, research has shown that displaced colonies will not relocate into buildings that already house other maternity colonies. In other words, an excluded colony cannot just move down the road into a barn or church that already has bats. If a displaced colony cannot find a new roost, it may leave the area. In fact, researchers have found that expelling bat colonies can contribute to serious declines in local bat populations.

A second drawback is that homeowners may find it difficult to bat-proof their home completely. Bats can crawl through cracks as small as 0.5 - 1cm, so persistent bats may find a way to re-enter their former roost. This could be frustrating to home owners who find it difficult to find a solution. It is always advisable to seek expert advice and assistance.



Bat boxes can solve both of these problems because they provide alternative roosting sites for maternity colonies. When constructed properly, bat boxes can serve as suitable places for females to raise their pups. With bat boxes, the bats get a safe roosting site outside the home, while homeowners benefit from the bats' control of insects.

WHAT TO DO IF YOU FIND A BAT

Many people come across young, injured or grounded bats and wonder what to do with them. Care and caution should be exercised and such cases should be referred to the nearest bat interest group, rehabilitation centre or the SPCA.

It must be stressed that bats should not be handled by the general public.

A bat found indoors is most likely to be a crevice-dwelling species. These bats are often lost youngster or babies that cannot fly or migrating bats that do not know how to find their way outdoors. They may be roosting somewhere in a small part of your home, most likely up high, like a crawl space, attic or perhaps between the crawl space roof.

DO NOT KILL THE BAT – IT MAY BE THE LAST ONE OF HIS SPECIES.

The following steps will help your bat guest find its way outdoors:

- 1. Close any doors you can to contain the bat in a single room or space.
- 2. Open all the doors and windows as wide as you can in that room or area.
- 3. Turn any outside lights on, e.g. the porch light.
- 4. Turn the lights in the room off or down.
- 5. Stay in the room, sit down, relax, and watch the bat. If you don't, you will not know if it actually left or has landed and is resting somewhere.
- 6. Do not try to guide the bat with a broom, tennis racket etc. You do not need to cover your head; it does NOT want to get in your hair.
- 7. The bat, if allowed to, will navigate its way out using the light outside and the draft created by the open window or door. This may take 20 minutes.

 If the bat has landed somewhere, it may be captured and released outside after sunset. Approach your visitor very slowly and quietly. NEVER TOUCH THE BAT with your bare hands. Gently place a can or box over the bat, slide cardboard underneath and release your visitor out of doors at dusk, placing it on a high surface where it will be able to take off.

Bats that are in good health should be released as soon as possible (during dusk) and as close to their area in which they were found as possible. Enquire from your local Nature Conservation offices where necessary on whether the bat species is an endangered species and where it should be released. If a bat has simply fallen out of its roost after being disturbed, it can be placed straight back into the roost. Bats cannot take off directly from the floor but need to be able to drop down for a distance before beginning to fly.

With acknowledgement to the Gauteng and Northern Regions Bat Interest Group (http://www.batsgauteng.org.za/)