

## Texas Gone Bats

by Ursula Nanna, Bell County Master Gardener

Texas has a rich medley of 32 species of fascinating and beneficial bats. That's 32 species out of the 42 species in all of North America! Bats are a diverse group of mammals very important to the balance of nature. Many devour millions of insects during their nocturnal summer flights while other species are essential for desert plant pollination. Some bats are spotted and colorful while others appear almost prehistoric; some have large graceful wings while others fly like a helicopter; some have small ears or noses while others have large floppy ears or protruding a nose.

Whatever their appearance bats have gotten a "bum rap" and are associated with many myths. For example, bats are NOT blind. They have excellent sight and fly at great speeds able to detect an object as small as a human hair. Bats send out high frequency sounds and listen for echoes to pinpoint their next meal. They see everything except color. Bats will NOT entangle themselves in your hair unless trapped or mistreated or scared while resting. They do not transmit diseases and are NOT rampant carriers of rabies. More people die in bicycle accidents, deer accidents, dog attacks or lawnmower mishaps than from bat transmitted diseases. Purported bat transmitted diseases have killed as few as 40 people in 50 years. Bats are NOT aggressive, as a matter of fact, they are a most peaceful and non-aggressive neighbor.

Bats are long-lived mammals of up to 30 years and like humans, they court, mate, and give birth to helpless young nursing them with milk. They usually give birth to one pup a season and the pups are nearly adult sized and flying in 3 - 5 weeks.

In Texas, bats are known to live in foliage, abandoned caves, rock crevices, tree cavities, and bat houses especially designed for them.

As food becomes scarce in winter, bats will migrate to warmer climates while some hibernate or enter a resting state called "torpor". In torpor, they reduce their metabolism and allow their body temperature to meet that of their environment. Bats can hibernate for up to 8 months on stored body fat, but if disturbed in torpor, they may deplete their fat reserves and die of starvation.

There are vegetarian bats consuming fruit such as bananas, avocados, mangos, peaches, guavas - even nuts like cashews. While feasting on fruit or sipping nectar, bats disperse the seeds and pollinate many plants. Other bats are insectivores consuming large quantities of moths, mosquitoes, beetles, leaf-hoppers, and other insects. They aid farmers and gardeners by consuming corn earworms and armyworm moths. Statisticians estimate 100 million Mexican free-tailed bats devour about 1,000 tons of insects EVERY summer night.

The big brown bat feasts on beetles, especially the cucumber beetle, while other species consume the pine-bark beetle that poses a threat to our timberlands. A colony of big brown bats can consume enough cucumber beetles each summer to prevent them from laying 33 million eggs.

Our small pipistrelle and myotis bats can eat 2 or more mosquito-sized insects every second - about 1000 or so per hour. This has a favorable impact in our wet-land areas and areas of high humidity where bats can eat about 11 tons of mosquitoes per year.

In 1995, the USA and Mexico collaborated and created a program called the Program for the Conservation of Migratory Bats. This collaboration educates the public to overcome ignorance and fear, and establishes native reserves to protect key bat caves.

Think about trying to attract bats to your yard. Habitat destruction has created the need for human-made sanctuaries. Bat houses are very simple and inexpensive to make. For instructions, visit Bat Conservation International on the Internet or contact the Texas Parks and Wildlife Department in Austin at 512-912-7011 or 1-800-BATS. I'd be happy to share bat house-building instructions...but this site will ensure more a favorable outcome!!

To help maintain and increase the bat population in Texas, please DO NOT disturb bats while they

are resting or hibernating. If you have bats in your attic, try to provide a way outside for them and then wire-mesh the entrance hole after they have left to feed for the evening. If you must, catch them in a net...wearing heavy gloves...then free them outside.

With bats as allies, backyard living will be a lot more fun, watch them deplete your insect population without the use of pesticides...