

## The Little Brown Bat

by Barbara Calvert

Residents of Alberta are blessed to have as neighbours eating machines that can consume 500 mosquitoes in one hour. Say hello to the little brown bat (*Myotis lucifugus*). The little brown bat is the most common bat found in our province. Bats spend the daylight hours in a torpid state hanging upside-down in colonies of 50 to 300 and leave at dusk to gorge on insects. Returning to the colony later in the night, they leave again to feed in the hours before dawn. Bats hunt with a system called echolocation. They utter high-pitched squeaks, and the sound vibrations bounce off prey to help the bats locate their dinner in the dark. A small object thrown high into the air can attract curious bats and you can enjoy watching them flitting silently through the night.

Little brown bats have a body mass of about 8.5 grams (0.3 oz.) and a wingspan of up to 20 centimetres (8 inches). Their bodies are brown and they have black ears, faces, and wings. Mating occurs during the winter in mountain caves where large numbers of bats migrate. The females store sperm during the winter months for fertilization in the spring. After returning to their colonies, the females give birth to one baby in June. The baby is helpless and is nursed for three weeks, after which it is able to fly and feed by itself.

Although many of us have spent enjoyable evenings watching little brown bats swoop through the sky disposing of pesky mosquitoes, some cottage dwellers are more familiar with these creatures than they care to be. Bats colonize in occupied and unoccupied buildings and the scuffling and squeaking of a colony of bats in an attic can drive residents "batty." Although bats in a shed or cottage can be annoying, they rarely come into contact with humans because of their nocturnal habits, and are little threat to our safety. The most common worry about bats is their ability to carry rabies. The prevalence of rabies in bats is considered low in Alberta, but nevertheless, anyone finding a sick or dead bat should handle it with gloves and contact the local veterinarian.

Little brown bats are protected under the Wildlife Act, and it is illegal to disturb bat hibernacula (winter quarters) from September 1 to April 30. The best way to rid a building of unwanted bat inhabitants is to wait until they have left for their winter migration in October. Check carefully for any entrances into the building, looking for any opening that has a dark brown oil smear caused by bats rubbing against the entrance when they enter and leave. When you are fairly certain that most bats have left for the season, seal all holes with screening or caulking. Leave one entrance open and attach a plastic bag with both ends cut out to create a flap. Any remaining bats can exit the building, but will be unable to return. Bats trapped in an attic will search for a new way out, sometimes coming into the interior of the cabin. Female bats return year after year to their roosts, so sealing all entrances is essential to keep them out when they return in the spring.

Bat houses are a great way to encourage bats to roost away from buildings. Bats thrive in warm, sheltered roosts close to water. The best location is on a south facing pole or branchless tree about 7 metres off the ground. The bat house should be painted black to attract heat. Bat houses are easy to construct and make a good family project, but to be successful, they must satisfy strict design specifications. Detailed plans are available on the Internet from the Bat Conservation International website. For more information search Google for Alberta Sustainable Resources Bat House.