**Little Brown Bat**

**COOL FACTS:**
- **Scientific name:** Myotis lucifugus
- **Average weight:** Half an ounce (about as much as a Canadian loonie or toonie)
- **Average length:** 2.5 inches to 4 inches
- **Average wing span:** Up to 11 inches
- **Did you know?** The study of bats has been extremely valuable in medical research due to their navigation abilities.

**PHYSIOLOGY**
The Little Brown Bat’s fur is glossy, ranging in colour from dark-brown to golden-brown to reddish or olive-brown. The fur on their belly is lighter than the fur on their back. There is almost no hair on their wings or on the membranes between their legs. These areas are dark brown or black. Little Brown Bats have small ears and large hind feet. They have long hairs on each hind foot which extend to, or just beyond, the claws on their toes. They have relatively short ears that, when pressed forward, extend slightly beyond the nose. Bats are the only mammals capable of true flight.

**HABITAT/BEHAVIOUR**
Little Brown Bats eat a variety of insects including: mosquitoes, tipulid, moths, wasps and other flying insects. They can eat on average 1000 insects per night, or half their body weight. They feed at night and are most active in the two or three hours after sunset. They fly near the surface of water and drink while in flight. The use of echolocation (a sophisticated sonar for communicating and navigating), allows them to easily find their prey in the dark. Because of their small size and nocturnal habits, bats are nearly impossible to identify in flight. They fly at speeds between 6 and 34 km/hr; their wings moving at a rate of 15 strokes per second for intermediate speeds.

Bats hang by their hind feet, head down, while roosting (at rest). They do this by flying near a perch, braking with their wings, and reaching up with their hind feet to grasp the perch with their long, clawed toes. The average sleep time for Little Brown Bats in captivity is 19 hours per day. A long roost time is thought to be a way of conserving energy. Little Brown Bats choose buildings, caves, trees, rocks and wood piles as roost sites. They roost in colonies from a few up to hundreds of bats.

The Little Brown Bat begins its hibernation in September. Before hibernation bats will eat greater quantities of insects and increase their weight by over 30%. Its young are usually born between June and late July. The female Little Brown Bat usually gives birth to only one offspring which is able to fly and obtain its own food at just three weeks of age.

**THREATS**
There is a decline in the population of bats due to the loss of habitat, disturbance of hibernation, White Nose Syndrome and predators. Raccoons, hawks, owls and snakes are a few of the predators that feed on Little Brown Bats. Bats roost in rotting tree trunks or under loose bark. With the management of forests now in practice, the old dead trees are being cleared out. Bats also like to hibernate in abandoned caves. With the interference of man, many caves have been sealed while others have human visitors that disturb the hibernation of the bats. This disturbance causes the bats to use up their stored fat supplies that they have for the winter hibernation. Therefore, they may not have enough to get them through to the spring foraging time. White Nose Syndrome is a white fuzzy fungus that grows on the bats’ nose, wings and any non-furred skin during their hibernation. This causes the bats to wake more often than usual due to dehydration, and possibly to groom the fungus off. This causes hibernation disturbance and reduction in fat reserves which can result in starvation.