

## Long-standing bat myths debunked

By ANGELA BAYER

One of the requirements of my Algonquin Park field course this past summer was the observation of live bats in their natural environment. Since my prior knowledge of bats was based on Hollywood's suspense theatre, I was not looking forward to handling those bloodthirsty, rabid, disease ridden rodents. Fortunately, it turned out to be a fascinating experience with clean, intelligent, small mammals.

Entering an abandoned corundum mine, I found a little bat hanging from the ceiling by its thumbs. It was covered with ice crystals so I thought it was dead. Plucking it off the ceiling removed most of the ice crystals and contact with my hands warmed. It then began to scream. I had awoken it from a partial hibernation. It's body, about three inches in length, was covered with soft brown fur, and partially enclosed in a soft, leather-like wing.

Two ears pointed straight up from the top of its head and two brown eyes fixed upon me.

Its mouth contained two even rows of tiny teeth which were not strong enough to puncture my skin even though it was desperately trying to do so. The most amazing feeling occurred when I stopped examining it and felt its heart beat, and saw it gaze up at me. It was feeling of compassion juxtaposed with power. I stuffed it into my pocket with the



**BAT LIPS:** "Contrary to popular belief, bats are not blind, but can see quite well."

hope of smuggling it home with me.

A common fallacy is that bats are rodents. They are not. They belong to the order Chiroptera. This name was given to them because the bones in the bat's wing are essentially the same as those in human arms and hands. Chiroptera literally means,

"hand-wing." Bats are the only flying mammal.

Contrary to popular belief, bats are not blind but can see quite well—except in total darkness. So much for being blind as a bat.

Another misconception is that bats are rabid. An organization

called the Bat Conservation International found that less than one half percent of bats contract rabies, and unlike most mammals, they rarely become aggressive. Only ten people in the US and Canada are believed to have contracted rabies from bats in the past forty years.

In Ontario there are eight species of bats, all of which are insectivorous (eat insects). Of these, four reside in Algonquin Park; the little brown bat, Keen's bat, the silver haired bat, and the hoary bat. The most common is the little brown bat, which was the variety I stuffed into my pocket. Common roosting places for these species are nooks and crannies of buildings, under loose bark, in caves and in old mines. At dusk, bats leave their roosts and begin to prey on flying insects. With the help of its sonar the bat scoops the insects into a pouch formed by a continuation of the wing membrane, located from the hind feet to the tail. The insect is then transferred to the mouth and eaten in transit. Strickland and Rut-

ter (1983), found that the grey bat consumed 3,000 insects in one night. Should the supply of insects become scarce, or the weather suddenly becomes cold, these bats have the ability to hibernate at will until conditions improve.

Female bats carry their single offspring of their night feeding flights. The baby bat hangs across its mother's breast and feeds.

There are many families of bats in the order Chiroptera: nectar, insect, fish, fruit and pollen eaters, as well as the infamous blood sucking bat. Seventy percent of these are insectivorous. Fruit eating bats are important for seed dispersal, and nectar eating bats are responsible for the pollination of countless tropical and sub-tropical trees and shrubs.

Unfortunately, bats are in danger of extinction. Their natural habitats are being destroyed poisoned by insecticides. What is needed is a greater, general awareness of the importance of bats in our ecological system.

## Bat Fax

By GISELE WINTON

Echo location, used by some species of bats to locate prey, is not always exercised by bats that have this ability.

Dr. Brock Fenton, a professor at Carleton University, said in a seminar at York last Wednesday that not all bat use echo location because some of their prey, namely mice and moths, are able to detect the echo location calls and thus escape from the nocturnally pursuing bats.

Echo location is a series of high frequency calls beyond the hearing capacity of humans

found only in carnivorous bats. Using it bats can locate prey up to 40 body lengths ahead and to within .1 millimetre of the prey.

Fenton and his associates also found, from detailed study of mechanically recorded echo location signals, that each bat's echo location calls were unique. Individuals could therefore be recognized.

When not using echo location bats can use other senses to locate prey. Some bats depend more on eyesight, some on sense of smell and some hearing with which to perceive and catch their prey.

## New building named for veteran BOG man

By GISELE WINTON

The new Life Sciences and Environmental Studies building will officially open October 7, although it has been operational since the second weeks of classes.

The building located behind the Farquharson Life Sciences is named after Leonard G. Lumbers, a long-standing member of York's Board of Governors (BOG) and present chairman of the BOG's Property and Building Committee.

Dean of Science Kenneth Davey, together with Dean of Environmental Studies Ted Spence, decided to name the building after Lumbers because of his long-term service to the University.

Because the building is shared by environmental studies and science Spence and Davey felt it should be named after a person unrelated to either field, so as not to offend either department by picking one over the other.

The first floor of the Lumbers building houses all teaching labs including biology, chemistry, physics, natural science and physical education. The second floor houses Environmental Studies and Ecology as well as a small teaching museum. The third floor is occupied exclusively by Environmental Studies. There are no more floors.

According to the York Alumni

News, the fifth floor of the Scott Library, which was once the home of Environmental Studies, will be restored for library use and will even serve as the new home for the Roberts Centre for Canadian Studies.

"The free space in Farquharson Life Sciences will be rented out to companies that are related to our interests such as a biotechnology company," Davey said. Davey also stated that "although the new building has been built for less money than the norms of this day, York has incurred a debt of \$750,000 and the renting out of Farquharson first floor space is necessary to pay that off. Otherwise we would like to keep the space for ourselves."

A committee called Invocation York has been set up to screen potential tenants who want to rent the Farquharson space. The director will be responsible to "increase the interaction of the University and the business world," Davey said, "and to identify those ideas at York which have commercial value."

According to Davey, this is not the first time space has been rented to outside companies. From 1979-81, Bio-Logicals, a company based in environmental studies, operated out of Farquharson. "We want to get back to this model of faculty and business constructively interacting," Davey said.