



Red-listed species

are those that have been legally designated, or are being considered for legal designation, as Endangered or Threatened.

Keen's Long-eared Myotis

Myotis keenii

At a Glance

Keen's Long-eared Myotis is a small bat with large ears. At two centimetres long, the ears are about one-quarter of the length of its entire body. Its wings and most of its fur are dark brown. The belly is lighter brown and there are darker spots on the shoulders. This species looks so similar to other closely related bats, such as the Western Long-eared Myotis, that the only way we can tell them apart is by differences in their teeth.

Home Sweet Home

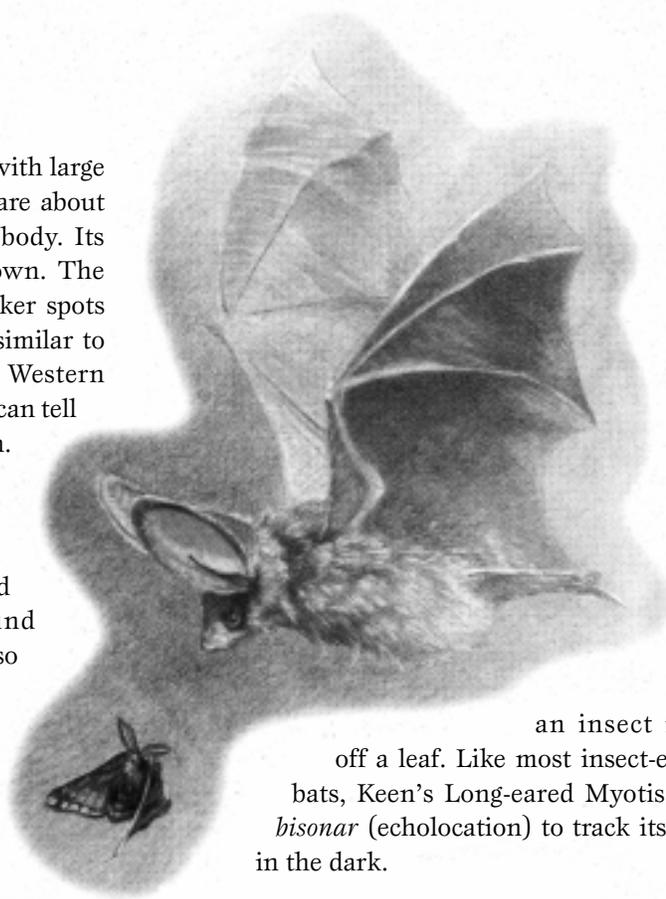
During daylight hours and in winter, Keen's Long-eared Myotis hides away and hangs upside down. It has been found roosting in rock crevices and probably also roosts in hollow trees, since other long-eared myotis bats do this. In winter, it probably looks for hibernation sites, or *hibernacula*, that are cool, but protected from large temperature changes. These sites must also be humid, to prevent the bats from drying out due to evaporation. Mine shafts and large natural caves are the most likely choices. Keen's Myotis have been found hibernating in caves found on Vancouver Island.

This is the Life

Females give birth to one baby each year in June or early July. Babies stay with their mother for several weeks. Males do not help raise the young. It is thought that Keen's Long-eared Myotis can live for 15 to 20 years.

What's on the Menu?

Like all B.C. bats, Keen's Long-eared Myotis feeds on insects. Night-flying moths, beetles and flies make up most of this bat's diet. It catches many of its prey on the wing, but is so agile it can snatch



an insect right off a leaf. Like most insect-eating bats, Keen's Long-eared Myotis uses *bisonar* (echolocation) to track its prey in the dark.

Where and When

Almost all members of this species live along the coast of British Columbia. They have also been found on the Olympic Peninsula in Washington and in south-eastern Alaska. The majority of known colonies are on the Queen Charlotte Islands. Like many other B.C. bat species, Keen's Long-eared Myotis hibernates during winter because there are not enough insects around for it to feed on at this time.

How They're Doing

Unfortunately, we don't really know how this species is doing, but there is some cause for concern. These bats are usually found near or in old-growth coastal western hemlock forests, so



BRITISH COLUMBIA'S Wildlife at Risk

NO KIDDING!

Keen's Long-eared Myotis adults weigh in at 4 to 6 grams. This is about the same as a spoonful of medicine – without the spoon!

When a baby bat is born it weighs about one-quarter of its mother's weight!

During the time a mother bat is producing milk for her young, she may eat her own weight in insects every night. That's a lot of bugs! Could you eat 50 large pizzas in one evening?

One group of Keen's Long-eared Myotis have proved that humans aren't the only ones who enjoy saunas. They have discovered a spot on the Queen Charlotte Islands where water from a natural hot spring trickles over large boulders and warms the space below to 22-27°C. This cozy cavern is used by at least seventy Keen's Long-eared Myotis for roosting and as a nursery. It is not a perfect home, though. At the highest tides the cave fills with seawater and the bats have to leave until the tide drops.

they probably depend on these forests for food and roosting sites. Logging in the coastal western hemlock zone may be depriving Keen's Long-eared Myotis of important habitat. Increased tourism on the Queen Charlotte Islands is causing more human activity at some known roost sites, which may also affect the bats. We need to find answers to these questions.

Researchers are not sure how many Keen's Long-eared Myotis there are. Because they seem to be quite rare and very little is known about them, Keen's Long-eared Myotis has been placed on the British Columbia Red List.

How We're Helping

Gwaii Haanas National Park Reserve in the Queen Charlotte Islands, together with certain provincial parks along the coast, provide protection for some areas of apparently suitable habitat. Recently, when a cave on Vancouver Island was found to be a hibernation site for this species, it was also protected.

More research is required to tell us more about how and where these bats live. A few biologists are currently studying coastal bats and some of these studies will reveal new information about Keen's Long-eared Myotis.

Keen's Long-eared Myotis is protected under the British Columbia *Wildlife Act*.

How You Can Help

Since Keen's Long-eared Myotis is an uncommon bat, many of us may never have a chance to see one. However, there are things you can do to help bats. If you find a bat roost, remember that bats do not like being bothered by humans. Report the roost to a Ministry of Environment office or to the Conservation Data Centre in Victoria, then leave the bats in peace. Disturbing bats in a nursery roost can cause them to abandon the site. A bat that is awakened in winter will rapidly use up

Present range of the Keen's Long-eared Myotis in British Columbia



as much stored fat as it would normally burn during two months of hibernation. This could prevent it from surviving until spring.

If you find a bat that is on the ground or active in daytime, it may be sick. Do not go near the bat and keep pets away from it. It is always best not to touch wild animals.

There are many interesting books about bats. Some will tell you how to build a bat box. If you give bats a place to roost in your yard, they will reward you by eating lots of mosquitoes, along with the other insects they eat.

You can find out more about the Wildlife Branch and Conservation Data Centre at:

<http://www.env.gov.bc.ca/wld/>

Conservation Data Centre
Resources Inventory Branch
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