

Bats^{of the} Northwest Territories

Photos (left to right): Little Brown Myotis, Little Brown Myotis, Long-eared Myotis

Hanging upside down allows bats to literally fall into flight.

The estimated 1200 species of bats make up approximately 22% of all known mammal species.

Bats can consume their own body weight in insects each night.

Bats can live to be 30 years of age or more.

To locate prey, bats use echolocation. They send out sound waves to find objects in their path.



Little Brown Myotis

Myotis lucifugus

The little brown myotis is the most common bat in the NWT. It is known to hibernate here. This bat often lives in colonies in buildings but also roosts in trees and rock crevices.

Rank: May be at risk in the NWT
Status: Endangered in Canada



Northern Myotis

Myotis septentrionalis

The northern myotis looks similar to a little brown myotis but its ears are longer. This bat searches for its prey in more cluttered areas like forest edges and overgrown trails. Sometimes it catches insects sitting on twigs or leaves.

Rank: May be at risk in the NWT
Status: Endangered in Canada



Long-eared Myotis

Myotis evotis

The long-eared myotis is characterized by its distinctive long black ears. Its relatively quiet echolocation calls are good for sneaking up on prey and moving through cluttered areas.

Rank: May be at risk in the NWT



Long-legged Myotis

Myotis volans

The long-legged myotis looks very similar to a little brown myotis and is typically dark brown. It is a bat that lives primarily in coniferous forests.

Rank: May be at risk in the NWT

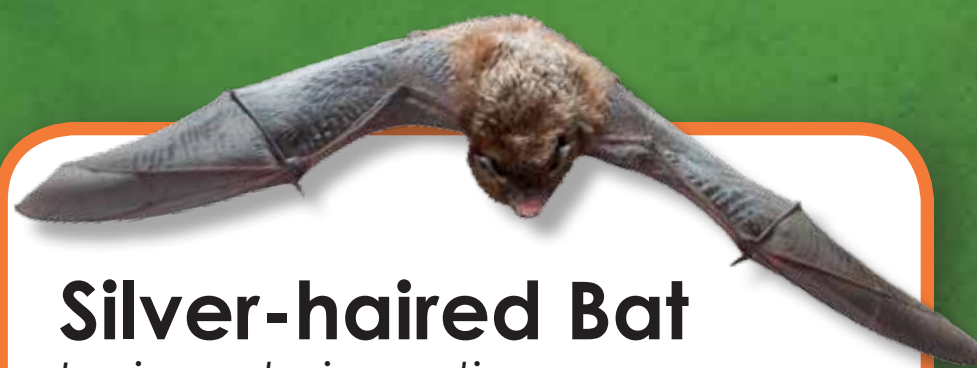


Big Brown Bat

Eptesicus fuscus

The big brown bat is a high flier and is easy to spot early in the night. This species lives in a variety of habitats and roosts in trees, rock crevices and buildings.

Rank: Undetermined in the NWT



Silver-haired Bat

Lasionycteris noctivagans

The silver-haired bat has black wings and dark, silver-tipped hair. It is thought this species migrates south for the winter.

Rank: Undetermined in the NWT



Hoary Bat

Lasiurus cinereus

The hoary bat, named for the frosted appearance of its fur, roosts among the leaves and needles of trees. It is the largest bat in Canada and migrates south for the winter.

Rank: Undetermined in the NWT



Eastern Red Bat

Lasiurus borealis

The eastern red bat's distinctive orange to red colouring stands out among other bats. This bat migrates south for the winter. Its unique ultrasound has been recorded in the NWT but there have been no captures.

Rank: Presence expected in the NWT



Range maps are based on confirmed observations and will change as new information becomes available. Photos © J. Scott Allenbach, Michael Durham/Minden Pictures, Merlin D. Tuttle (Bat Conservation International, www.batcon.org); Cori Lausen.

White-Nose Syndrome

White-nose syndrome is named for the distinctive white fungus found on a bat's face or wings. Since its detection in 2006, unprecedented numbers of hibernating bats have died in eastern Canada and the eastern United States.

White-nose syndrome has not been reported in the Northwest Territories but it could eventually spread north.

It is not thought to be a human health issue.

White-nose syndrome is most commonly spread from bat to bat. It can also be spread by humans from cave to cave on boots, equipment and clothing. You can help by staying out of caves that may contain bats.

We Humans Have Lots in Common With Bats!

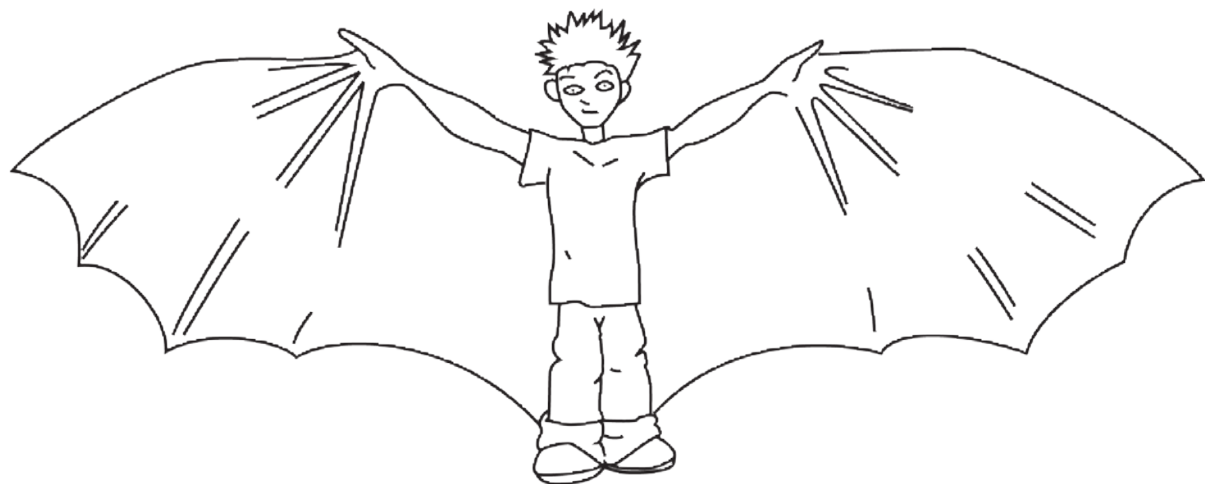
Wow! What a Wingspan!

Like us, bats come in many sizes! Some humans are over 2 metres tall while the wingspans of some bats are 1.5 metres. Some humans are only 59 cm tall and the smallest bats have a wingspan of only 12 cm.

Bats have large wings compared to the rest of their bodies. Imagine you are a bat and the same size you are now; how big would your wings be?

- Materials:
- Tape measure
 - Craft paper, flip chart paper, cloth (optional)

- Directions:
- Measure how tall you are.
 - Multiply that by 3.
 - That's how big your wingspan would be if you had bat's wings.
 - Make yourself a pair of life-sized wings. (Hint: easy Hallowe'en costume!)



Home Sweet Home!

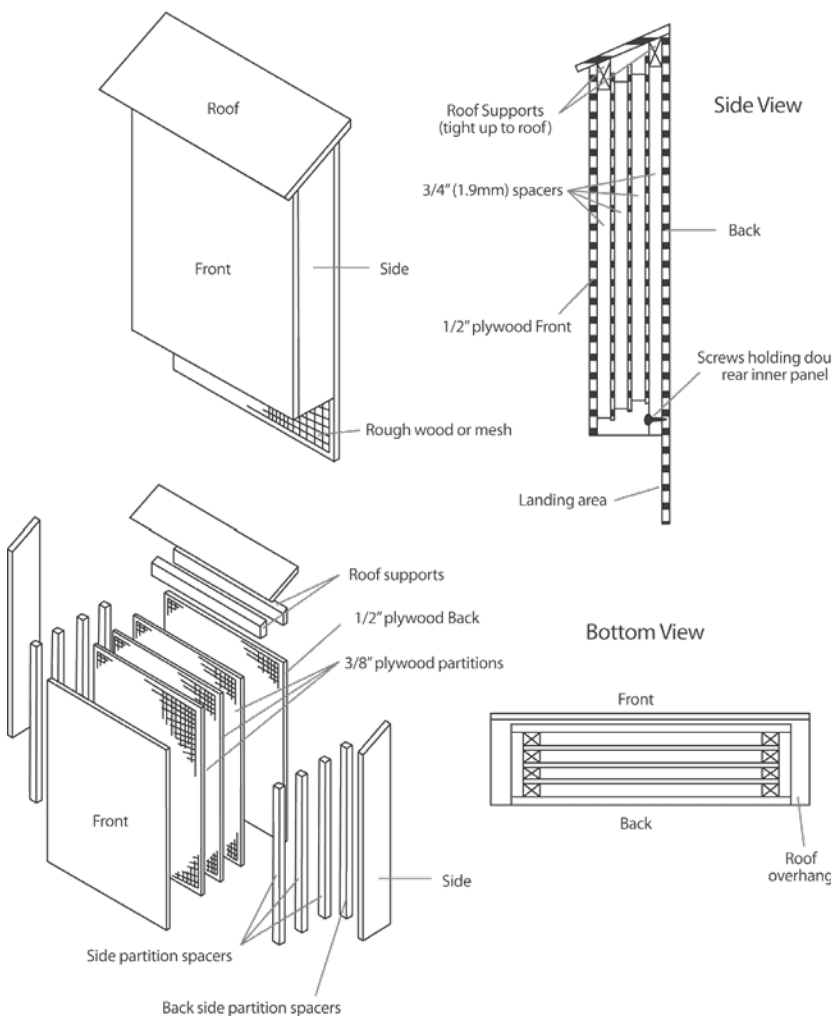
Not all humans live in houses. Some live in apartments, some live in condominiums. Bats are similar. Some roost in trees, some roost in caves, some roost in cracks and crevices in cliffs. But some like to live in houses.

If you want to attract local bats, why not build a bat house? Remember though, to meet the needs of bats in our cool climate, houses should be:

- Fully caulked and unvented
- Multi-chambered
- Painted or stained a dark colour to absorb sunlight
- Mounted high on the south facing wall of a building

Be patient. It may take a year or two for bats to discover and live in a new house, but the wait will be worth it. Happy bat viewing!

Find out how to build your bat house at: www.batcon.org.



Bats Make Sense!

Like us, bats have eyes, ears, teeth, a mouth, a nose and body hair (fur). Bats use their hearing to locate objects through a process called echolocation; they send out sound waves using their mouth or nose. When the sound hits an object, an echo comes back to the bat's sensitive ears. The bat can identify an object and can even tell the size, shape and texture. Most bats use echolocation to find their way in the dark and to find food.

- Materials:
- Blindfold

- Instructions:
- Choose someone to be the "bat".
 - Blindfold the child.
 - The rest of the group will be "insects" (bat food).
 - Insects spread out randomly around the bat within the designated boundaries.
 - Bat calls out "beep, beep".
 - The insects respond with "buzz, buzz" as they walk around the area.
 - The bat continues to call out and the insects continue to respond while changing positions.
 - The bat tries to tag an "insect" by listening for the sounds they make and moving in the direction of those sounds.
 - A tagged "insect" must go sit in the "bat cave" (designated area) until the next round.
 - The last person tagged becomes the new "bat".

What's for Dinner?

Bats, like humans, enjoy a varied diet. We wouldn't want to eat green beans every day for every meal. Bats like a range of foods too. Bats are found around the world and different species eat foods such as fruit, nectar, insects, and even fish, frogs and small mammals. In Canada, most bat species prefer insects: moths, wasps, beetles, gnats, midges, mayflies and - lucky for us! - mosquitoes.

- Materials:
- Pencil/pen, paper, calculator

- Directions:
- Find out how many mosquitoes a little brown myotis can eat during one summer.
 - A little brown myotis eats approximately 4 grams of insects in one night.
 - About 20% of a little brown myotis' food consists of mosquitoes.
 - A mosquito weighs approximately 2.2 milligrams.
 - The mosquito season lasts approximately 90 days.

- Hint:
- You need to convert grams to milligrams.

Answer:
• 4 g of food per night x .20 (% of mosquitoes in diet) = .80 grams eaten/night
• .80 x 1000 (1000 milligrams per gram) = 800 milligrams
• 800 milligrams / 2.2 = 364 mosquitoes eaten/night
• 364 x 90 (# of nights) = 32,760 mosquitoes eaten each summer! Thank you, Bat!

I Can Smell You!

Humans and bats are mammals and share a number of traits. Both bats and humans give birth to living young and feed them on milk from mammary glands. Many mother mammals use sight, sound, taste and smell to recognize their young. But in a dark cave environment, mother bats probably identify their young by using sound and scent.

Can you 'sniff' out your young?

- Materials:
- Cotton Balls
 - Blindfolds
 - A variety of scents:
 - Cinnamon
 - Cloves
 - Mint
 - Vanilla
 - Lemon
 - Other scents

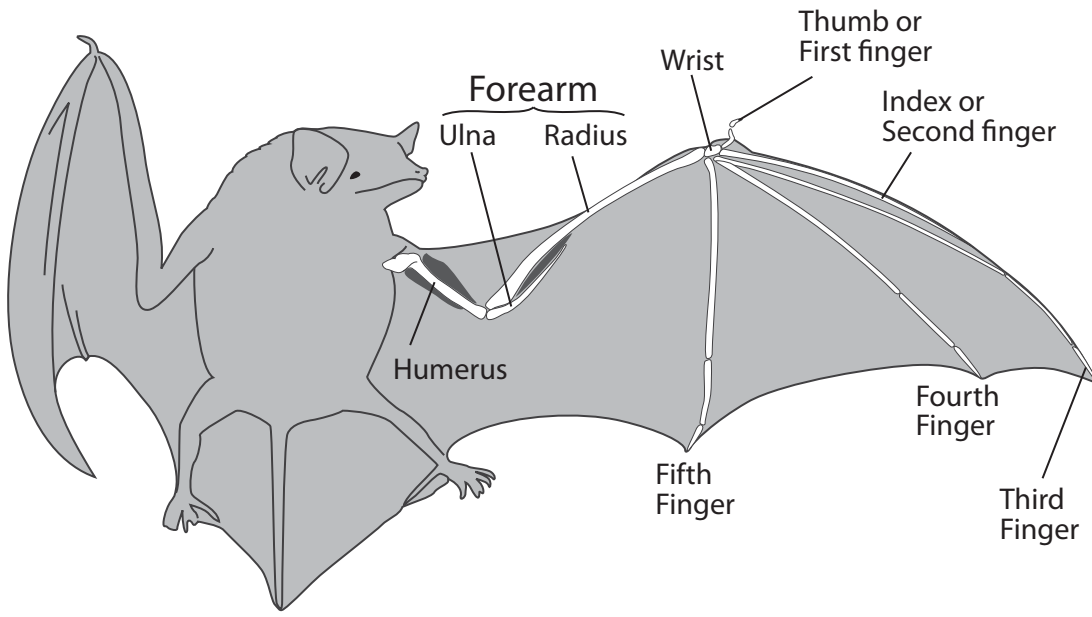
- Directions:
- Select five people to be mother bats and five people to be pups.
 - Give each pup a cotton ball with a different scent.
 - Give each pup a different call (such as a simple tongue-click).
 - Mothers and pups should practice smelling, calling and hearing.
 - Mothers are blindfolded.
 - Pups are scattered around the room and remain stationary.
 - Only mothers can move.
 - Extra people play the part of pups but without a smell or call.
 - Mothers enter room and try to find their babies who call for them and place cotton balls up to the nose if any mother bat comes close.
 - Winner is the first mother and pup to find each other.
 - Keep game going until all pairs find each other.
 - Reverse their roles and let others try the activity.
 - Discuss how the mothers were able to find their pups.

Let's Give Bats a Hand!

Like us, bats have hands and fingers! Bats belong to the order Chiroptera, which means "hand-wing" in Greek. A bat's wing consists of an arm that ends in a wrist with a thumb and four separate fingers which are webbed with skin and form the ribs of the wing. When bats extend their arms and spread their fingers, their wings are ready for flight. By shaping their "hands" they control the shape of their wings. Make a bat mobile to see what a bat's wing is like!

- Materials:
- Pine cone
 - Construction paper
 - Thin wooden skewers
 - Googly eyes
 - String/yarn/fishing line
 - Glue

- Directions:
- Cut out wings from construction paper.
 - Tape or glue sections of skewer stick onto wings to make fingers.
 - Glue wings on to the pine cone body of the bat.
 - Glue googley eyes on.
 - Attach string/yarn/fishing line to hang.



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