

#### White-Nose Syndrome

WNS has killed millions of bats across North America. It's caused by the fungus *Pseudogymnoascus destructans* which thrives in cold, humid environments similar to those used by hibernating bats. The disease causes bats to wake up more often during hibernation, depleting the fat reserves they require to survive the winter. Infected bats commonly display white fuzz on their faces and wing membranes. It spreads mainly by bats and also by humans who pickup fungal spores on clothing and gear and introduce it to new areas.

#### Wind Turbines

Although wind turbines offer a great renewable energy resource, they are one of the leading causes of bat mortality in North America. Fatalities occur through direct collisions, and as a result of pressure changes experienced as bats fly very close to turbines which lead to life-threatening internal injuries.

#### **Habitat Loss**

Urban development, deforestation, and conversion of land for agriculture have reduced available roosting, foraging, and hibernation sites for bats. Removing maternity colonies from humanmade structures during the nursing/rearing season (late May to late July) can kill baby pups that are unable to fly yet.

#### **Pesticides**

Insectivorous bats are exposed to pesticides after ingestion of contaminated insects, which can lead to illness and death. Pesticides also reduce insect populations, lowering food availability.



#### Become a Bat Ambassador!

Take part in **Neighbourhood Bat Watch** by registering at **batwatch.ca** to report any bat sightings and activity. Stay informed and follow them on Facebook too - **@NeighbourhoodBatWatch** 

Help restore and protect natural areas on your property by tree planting, creating a pollinator garden or a riparian buffer, and reducing pesticide use. Contact us for more information on available programs and incentives for participating in restoration work.

Spread the word! Tell your friends and family and members of your community why bats are important and encourage them to become bat ambassadors too!

Download the *iNaturalist* app on your phone so you can easily report any bat sightings. It's also a great resource for learning about the diversity of wildlife in your local area!

### visit us!

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## SPECIES R

There are 4 species at risk in Ontario:



Tri-Coloured Bat Photo: Brock Fenton

## SPECIES risk not yet assessed

A species may be reassessed at any time. Always refer to the SARO list for up to date information on Species that are currently at risk.



(Lasiurus cinereus) Long distance migrants Photo: Sherri and Brock Fenton





**BIG BROWN BAT** (Eptesicus fuscus) Sedentary year-round Photo: Jason Ondreicka, **Getty Images** 



**SILVER-HAIRED BAT** (Lasionycteris noctivagans) Long distance migrants Photo: Sherri and Brock Fenton



**EASTERN RED BAT** (Lasiurus borealis) Long distance migrants Photo: Sherri and Brock Fenton



TRI-COLOURED BAT

LITTLE BROWN BAT

Photo: Sherri and Brock Fenton

(Myotis lucifugus)

Regional migrants

**EASTERN SMALL-**

**FOOTED MYOTIS** 

Regional migrants

(Myotis leibii)

Photo: Daniel Riley

(Perimvotis subflavus) Regional migrants Photo: Jordi Segers



**NORTHERN LONG-EARED BAT** 

(Myotis septentrionalis) Regional migrants Photo: Jordi Segers

# BAT MYTHS debunked

#### Bats will get caught in your hair - MYTH!

This myth was created to deter women from going out at night. Canadian bats are very agile flyers, thanks to their ability to echolocate. They can detect objects in their surroundings that are smaller than a human strand of hair!

#### All bats have rabies - MYTH!

Less than 1% of wild bats are estimated to have rabies and it is very rare to get bitten by a bat. In fact, you have a greater chance of being struck by lightning! However, if you or someone you know gets bitten by a bat, they should seek medical attention as soon as possible to find out whether a vaccination is required.

#### Bats are flying rodents - MYTH!

Bats are the only mammal capable of true flight, but they are not rodents! In fact, they are more closely related to humans than they are to rodents.

#### Bats are bloodsuckers - MYTH!

There are only 3 species of vampire bats that feed on blood. All are found in tropical locations and prefer to hunt sleeping livestock and birds. All Canadian bats are insect-eating, so there is no need to fear!



Little Brown Bat Photo: Brock

## BUGS BE-GONE

Did you know insectivorous bats save the agricultural industry billions of dollars worldwide in pesticide costs? Canadian bats are primary predators to night-flying insects such as beetles, mosquitos, and moths, many of which are agricultural pests or carry diseases! A single little brown bat can eat up to 600 insects per hour! Bat poop is also a great fertilizer due to its high nitrogen and phosphorus content - a bonus for farmers.

#### **AGING**

Did you know the oldest bat in Ontario was a Little Brown Bat that lived to 35 years old? In the world the oldest known bat lived to 41 years old, which is also the oldest age of any small mammal! Bats live 3x longer than scientists would predict based on their small size and high metabolic rates that are typical of small mammals. In fact, bats may hold the key to our understanding of aging

#### **ECHOLOCATION**

Did you know that, in addition to their great eyesight, bats use echolocation for orientation and to find prey in their surroundings? Bats emit ultrasonic calls that bounce off nearby objects and return to their ears like an echo. Their hearing is turned to recognize the echoes of their own calls and allows them to identify objects by distance, size, direction of movement and texture. They even use echolocation to communicate with other bats.

#### **HIBERNATION**

Regional hibernators survive winter by hibernating in caves and mines, relying solely on fat stores. To conserve energy, their body temperatures drop from 36° to 3 – 4°, just above freezing! Periodically, they wake up to drink and urinate but the energy used in a single arousal is equivalent to 30 - 60 days of hibernation! This is why it is so important not to disturb hibernating bats because if they are woken up too often they will die of starvation and dehydration.