

## Farmers' Nocturnal Friends

### EASTERN RED BAT

*LASIONYCTERIS NOCTIVAGANS*

### SILVER-HAIRED BAT

*LASIURUS CINEREUS*

### HOARY BAT

*LASIURUS BOREALIS*

### LITTLE BROWN MYOTIS

*MYOTIS LUCIFUGUS*

### NORTHERN MYOTIS

*MYOTIS SEPTENTRIONALIS*

### TRI-COLORED BAT

*PERIMYOTIS SUBFLAVUS*



## Main Benefits for Agriculture

**Insect pest control** : Bats eat the equivalent of their own weight in insects every night, most of which are pests that damage crops, such as the European corn borer, the cucumber beetle, and the cutworm.

**Cost savings** : A study found that in the United States, bats provide an important service to agriculture by eating these pests. Their contribution is valued at around \$22.9 billion a year (\$74 per acre).

**Economic impact** : The same study found that the loss of bats could cost the agriculture industry anywhere from \$3.7 to \$53 billion a year due to higher costs and lost yields.

## Habitats

- Caves and mines
- Riparian buffers, windbreaks
- Forests and woodlands, including snags
- Wetlands and waterbodies
- Pastureland and permanent grassland
- Man-made structures

## Did you know?

Bats in Quebec weigh between 4 and 40 grams. A colony of 500 little brown myotis can consume some **450 kg of insects** every summer (90 nights).

#### Legal Status:

Since 2014, the little brown myotis, northern myotis, and tri-colored bat have been listed as endangered on Schedule 1 of the Species at Risk Act. The eastern red bat, silver-haired bat, and hoary bat are currently under consideration for addition.

Recovery strategy for the little brown myotis, northern myotis, and tri-colored bat:

[https://publications.gc.ca/collections/collection\\_2018/eccc/En3-4-308-2018-eng.pdf](https://publications.gc.ca/collections/collection_2018/eccc/En3-4-308-2018-eng.pdf)

# What You Can Do To Help Bats

## Preserving Habitat

Maintain **biodiverse woodlands**, avoid the formation of overly dense stands, and preserve small openings in the forest canopy

Do not remove **dead trees**

Maintain **wetlands** and create **riparian buffers** with a variety of trees

Plant **windbreaks** along farmland and waterways

Maintain **unplowed pastureland and permanent grasslands**, as they are an important source of prey

Conserve **old buildings** used by bats

## Encouraging Breeding

Create new habitats: **artificial bat boxes**

## Reducing Mortality

Limit the use of **pesticides**

Avoid **clear-cutting** large areas of forest

## If You Discover a Bat Colony

Avoid disturbing the colony, especially during the breeding season (June to August).

Contact the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs to report the presence of the colony at 1-877-346-6763.

Participate in monitoring and research programs to help conserve bats. Register the colony at [batwatch.ca](http://batwatch.ca)

Bat guano is an excellent natural fertilizer. To collect it, set up a plastic tarp or other recovery system under the colony site before they arrive in the spring.

### References:

Fabianek, F., Froidevaux, J., and M.-C. Provost (n.d.). Guide pratique pour la conservation des chauves-souris en milieu agricole. Groupe Chiroptères du Québec (GCQ). [www.agrireseau.net/documents/Document\\_91959.pdf](http://www.agrireseau.net/documents/Document_91959.pdf)

Boyles, Justin G., et al. (2011). "Economic importance of bats in agriculture." *Science* 332(6025):41-2. DOI: [www.researchgate.net/publication/50939997\\_Economic\\_Importance\\_of\\_Bats\\_in\\_Agriculture](http://www.researchgate.net/publication/50939997_Economic_Importance_of_Bats_in_Agriculture)

Government of Canada (2024). "Species at risk public registry." [www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html](http://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html)

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