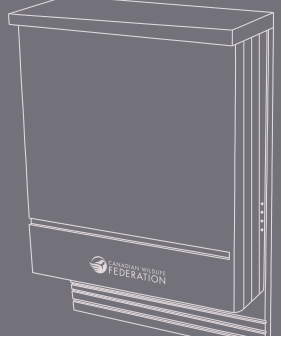
BAT ROOST MONITORING



MONITORING

Report individual bats

Report individual bats by adding an observation using the free iNaturalist app or online at iNaturalist.ca. These could be bats you spot while they're roosting (like in a patio umbrella, a bat box, a tree, or side of a building) or flying by in the evening (if you can get a photo!). This information helps researchers and the public alike to know what species of bat are in an area, where they are roosting and species distributions. You can also join **CWF's Help the Bats project on iNaturalist.ca** to be part of a citizen science bat community.

Monitoring your Roost

By monitoring a bat box and reporting on its use, you can take part in the **Canadian Bat Box Study** to contribute to research on the extent of bat box use in Canada and optimal designs. Even if a bat box isn't being used, we still want to know about it.

You can also report bat box and other roost monitoring results to **Batwatch.ca** to help in their ongoing efforts in monitoring and conserving roost sites.

GET TO KNOW CANADA'S BATS

Benefits of bats:

There are 19 species of bats in Canada and they play a vital role in our ecosystem:

- Bats are the primary predators of night-flying insects, including moths, beetles, flies and mosquitoes.
- Bats consume hundreds of insects per hour and can eat 30 to 50 per cent of their body weight in insects in a single night.
- A pregnant female bat can consume 100 per cent of her body weight every night.
- Bats save the agriculture industry tens of millions of dollars each year by acting as nature's insect control and a source of natural fertilizer.

Bats face several threats:

- White-nose syndrome is an invasive fungus that has killed millions of bats in North America and continues to spread.
- Pesticide use decreases food availability and contaminates the insects that bats feed on.
- Windmills can kill bats that come in the vicinity of turbines.
- Loss of habitat has made bats more reliant on human-made structures for annual roosting sites, including homes, garages, barns and buildings.
- Extermination or eviction of bats from structures can have direct and indirect consequences.

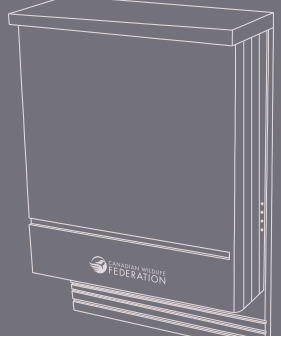
Living with bats:

Many people live harmoniously with bats in their homes or outbuildings and may not even know they have guests. Bats can sometimes become a concern if they gain access to the living area of your house. If you have bats in your home, you are in a position to make a real difference.

For additional information on bats: HelpTheBats.ca | info@cwf-fcf.org

CANADIAN WILDLIFE FEDERATION

BAT ROOST MONITORING



MONITORING

Be a citizen scientist!

Without the participation of community groups and homeowners, CWF's bat house program would not be successful.

Monitoring bat roosts is as simple as identifying the entry/exit points of the roost and counting how many bats emerge. Checking the roost during the day with a light is a good way to know if bats are present, but avoid shining lights at the entrance often or while bats are emerging.

When to monitor?

Monitoring sessions start at sunset and can last up to an hour or until you haven't seen a bat exiting the roost for at least 10 minutes. Ideally roosts should be monitored four times per summer (spread out from late may to October). But at minimum once in June and again in early August. The latter session will account for new pups.

How to monitor?

1 | Familiarize yourself with the following steps and the datasheet below to know what information you will need to collect and how to record it.

2 | Identify entry/exit points prior to your survey night and plan to have one person monitor each point.

3 | Select an evening in early June and another in early August to monitor — ensure weather is favourable (no rain or high winds and clear skies).

4 | Just before sunset, situate yourself at least 10 metres from the roost so you don't disturb the colony's activity.
Tip: use the sky as a backdrop behind the bats to increase your visibility.

5 | Begin your tally as soon as you see the first bat leave the roost. This is typically at sunset, and your monitoring may take up to 60 minutes for all bats to leave the roost.

6 | Count each bat that emerges. If bats re-enter the roost, be careful not to count them again.

7 | If bats emerge quickly and simultaneously, do your best to estimate how many emerged.

8 | End the survey once you have not seen a bat emerge for 10 minutes.

9 | Record information on bat boxes to the **Canadian Bat Box Project**.

There are two online surveys to fill out:

- **The Participant Survey**: to provide the details of your bat box (this only needs to be done once)
- **The Monitoring Results**: to submit the results of your monitoring (this needs to be submitted each time you monitor).

To take part in a separate long-term initiative, you can also submit results of bat boxes and all other roosts through **batwatch.ca**.

For additional information on bats: HelpTheBats.ca | info@cwf-fcf.org

CANADIAN WILDLIFE FEDERATION

Bat Monitoring Datasheet

*This is a sample datasheet of the type of information to collect. Please enter and submit your results directly through the **online form**.*

Observer name:	
E-mail Address:	
Address (or postal code) of the roost	

Bat Count:

Number of bats seen: _____

Roost Type (check one):

☐ Bat house ☐ Barn/shed ☐ Home ☐ Bridge
☐ Cave ☐ Tree ☐ Other (specify): _____

Roost Characteristics:

Roost or Bat House dimensions (height x width x depth in inches)	
Roost or Bat House height (height of the roost from the ground in feet)	
Bat house type (the brand or type of bat house)	
Does the bat house have vents (on the front, side or both)	
Material of bat house (ex. wood type, concrete, plastic)	
Bat House colour	
Number of chambers (bat house only)	

Structure the Bat House is Installed on (check one):

☐ Human Occupied Building ☐ Pole ☐ Other (specify): _____
☐ Unoccupied Building ☐ Tree

Installation Date:

Year bat house was installed: _____

Direction the Roost is Facing (N, NE, NW, S, SE, SW): _____

Do your neighbours have bats boxes? ☐ Yes ☐ No

Date & Time Observed:

Date (mm/dd/yyyy):		Time first bat seen:		Time last bat seen:	

Weather Conditions:

Weather (clear, overcast, raining):	
Wind condition (no wind, breezy, strong winds):	
Temperature (C):	

Have there ever been signs of heat stress? (bats roosting near the bottom of the bat house, bulging out the bottom, outside the roost, or on the ground underneath the roost?) ☐ Yes ☐ No

Additional Comments:

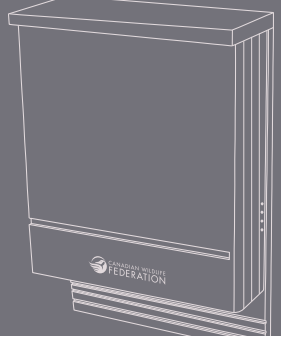
Submit your data using the online form

If you are unable to submit your results using the online form, you can save this sheet and email it to **jamesp@cwf-fcf.org**.

For additional information on bats: HelpTheBats.ca | info@cwf-fcf.org

CANADIAN WILDLIFE FEDERATION

BAT ROOST MONITORING
Reference protocols



MONITORING

- **Monitoring Bats at Roosts in Nova Scotia** – Protocol for Volunteers
- **Southeast Alaska Bat Monitoring Program** (weather codes used were from their protocol)
- **Vermont Bats Summer Maternity Roost Monitoring** (sky codes used were adapted from their protocol)
- **Wisconsin Bat Program: Bat Roost Monitoring** (site includes an instructive video)
- **Kootenay Community Bat Project**
- **Bat Conservation Trust: Roost Count** (site includes an instructive video)
- **North American Bat Monitoring Program**
- **Batwatch.ca**