Why monitor?

Join our "Help the Bats" project on iNaturalist.ca. You can participate as a citizen scientist by using iNaturalist.ca or the iNaturalist app (Android and iOS) to monitor your roost. The information allows us to track roost preferences and assist in a study to determine what bat house designs are optimal for Canada’s bats. To help you along, check out our step-by-step “How to Monitor Your Bat House Using iNaturalist.ca or the iNaturalist app” documents available at HelpTheBats.ca.

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
How to monitor?

1 | Join the "Help the Bats" project on iNaturalist.ca (if you don’t already have an account, you will be prompted to create one).

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 | Familiarize yourself with the datasheet and the “How to Monitor Your Bat House Using iNaturalist.ca or the iNaturalist app” documents to know what information you will need to collect and how to record it.

5 | 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.

6 | Begin monitoring at sunset and continue for roughly 60 minutes.

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

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

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

10 | Record the information via iNaturalist.ca or the iNaturalist app. Or use the datasheet provided in this document to e-mail the results to conservation@cwf-fcf.org.

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 should be conducted over a one-hour period at sunset, until you haven’t seen a bat exiting the house for at least 10 minutes. This should be done once in early June and again in early August. The latter session will account for new pups.

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

Observer name:  
Location:  

**Bat Count:**  
Number of bats seen:  

**Roost Type (check one):**  
<table>
<thead>
<tr>
<th>Bat house</th>
<th>Barn/shed</th>
<th>Home</th>
<th>Bridge</th>
<th>Cave</th>
<th>Other (specify):</th>
</tr>
</thead>
</table>

**Bat House Characteristics (what makes the roost attractive?):**

<table>
<thead>
<tr>
<th>Roost dimensions (height x width x depth in inches)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Roost height (height of the roost from the ground in feet)</td>
<td></td>
</tr>
<tr>
<td>Bat house type (the brand or type of bat house)</td>
<td></td>
</tr>
<tr>
<td>Number of chambers (bat house only)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Structure the Bat House is Installed on (check one):**  
<table>
<thead>
<tr>
<th>Building</th>
<th>Pole</th>
<th>Tree</th>
<th>Other (specify):</th>
</tr>
</thead>
</table>

**Installation Date:**  
Year bat house was installed:  

**Direction the Roost is Facing:**  
<table>
<thead>
<tr>
<th>N</th>
<th>NE</th>
<th>E</th>
<th>SE</th>
<th>S</th>
<th>SW</th>
<th>W</th>
<th>NW</th>
</tr>
</thead>
</table>

**Date & Time Observed:**  
Year:  
Month:  
Day:  
Time first bat seen:  
Time last bat seen:  

**Weather Conditions:**  

<table>
<thead>
<tr>
<th>Wind condition (check one):</th>
<th>Moderate</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sky condition (check one):</th>
<th>Partly cloudy</th>
<th>Fog</th>
<th>Rain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear or few clouds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloudy or overcast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drizzle</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Temperature (C):**

**Additional Comments:**

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