

### Visual Bat Monitoring (Colony Count) Surveys

1. It is best to conduct colony counts on warm nights without high winds or rain, bats may chose to remain in the roost when conditions are poor.
2. There are two important periods during the summer for monitoring maternity colonies:
  - a. Before the young of the year bats take flight (*pre-volant period*);
  - b. When the young of the year bats start foraging with their mothers (*post-volant period*).The timing of these periods varies from year-to-year, and by location. The pre-volant period will generally occur between May – June, and the post volant period will occur from July – September.
3. Check the sunset time for the Parry Sound region on the Environment Canada website ([https://weather.gc.ca/city/pages/on-103\\_metric\\_e.html](https://weather.gc.ca/city/pages/on-103_metric_e.html)). About 10-20 minutes before sunset to get comfortable and ready for your count. If multiple observers are present, position people at different angles to the roost. Each observer should carry out his/her own count.
4. Before emergence, quickly walk below your bat box to look for signs of guano (bat feces). The amount could help give an idea of the population inside the house.
5. Observers should situate themselves such that bats emerging from the roost will be silhouetted against the night sky. You can use a light to see your notes, but avoid shining it on the roost entrance. Bright and direct lighting can prevent the bats from emerging from the colony. Bats will typically begin emerging soon after sunset, although they may not come out until it seems quite dark. It is recommended to use a red light.
6. Count all of the bats that come out of the roost you are monitoring using a click counter or make ticks on a notepad each time you see a bat come out. Avoid counting bats that just fly around the opening. Often bats from another roost will come to visit and investigate. In some instances, bats may re-enter the roost while the others are leaving. Attempt to count the re-entering bats and subtract the number of these individuals from your tally. If it becomes too difficult to follow bats exiting and entering, or if there are too many emerging, try to get an approximate count, and note this in the comments section.
7. End the count approximately 10 minutes after the last bat has exited the colony. Large colonies may exhibit multiple waves of emergence, and intervals with no activity could last for more than 20 minutes. Record the time of the last exit and the temperature at the end of the count.
8. To complete the data sheet, record the name of each observer and the number of bats that each observer counted. Feel free to video record the emergence, and please include and recordings or pictures when submitting the datasheets.
9. Submit your data to a local conservation group, Bat Watch, or the Georgian Bay Biosphere Reserve: [info@gbbr.ca](mailto:info@gbbr.ca).

### Bat Colony Count Datasheet

#### SECTION A

Primary Observer Name: \_\_\_\_\_ Survey Site: \_\_\_\_\_

Date (dd/mm/yyyy): \_\_\_\_\_ Bat House : Rocket Box 4-Chamber

Temp. (°C) at start: \_\_\_\_\_ Temp. (°C) at end: \_\_\_\_\_

Sunset time: \_\_\_\_\_ Photos/recordings taken: Y N

Time at the start of the survey: \_\_\_\_\_ Time at the end of the survey: \_\_\_\_\_

Time of first exit: \_\_\_\_\_ Time of last exit: \_\_\_\_\_

#### Sky at start

- Clear (0 to 10%)
- Partly cloudy (10-50%)
- Cloudy (50-90%)
- Overcast (90-100%)

#### Wind at start

- Calm
- Light
- Moderate
- Windy

#### Guano

- None
- Scattered
- Abundant
- Large Mounds

#### SECTION B

	Name	Years' Experience	Number of Bats Counted
	<i>Ex. Joe Smith</i>	<i>1 year</i>	<i>45</i>
Observer 1:			
Observer 2:			
Observer 3:			
Observer 4:			

#### COMMENTS

(Ex. Dead bats, species identified, identification confidence, disturbance to roost, evidence of predation, significant weather)

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