

HOW TO COUNT BATS



Presented by the Mersey Tobeatic Research Institute

A GUIDE FOR BAT EMERGENCE SURVEYS

FREQUENTLY ASKED QUESTIONS

What is an Emergence Count?

An emergence count is a survey where one or more observers watch a bat roost and count how many bats exit the roost. Emergence counts are the easiest and best way to count the number of bats at a roost.

Why do an emergence count?

Emergence counts help scientists estimate the population at a roost. Multiple surveys can help estimate bat population size and provide information on the status of bat populations in response to challenges bats face, such as threats and stressors that drive decline.

What month is best for emergence counts?

A survey count between June 1st and July 31st is ideal and if possible, you can do another count between August 1st-August 31st, as this provides information on the new babies (pups) born that summer.

MATERIALS

- ✓ Flashlight/headlamp
- ✓ Bug protection
- ✓ Notepad or data sheet
- ✓ Pen/pencil
- ✓ Tally counter or equivalent
- ✓ Lawn chair

RECOMMENDED GEAR

- Clipboard
- Snacks
- Blanket
- Bug net
- Extra layers
- Hat or gloves

LITTLE BROWN BATS

Are the only bats to make use of bat boxes in Atlantic Canada and are the most commonly sighted species!



BAT BOXES

Interested in a bat box? Check out the Canadian Wildlife Health Cooperative for recommendations!



SAFETY

Do not touch bats or enter bat roosts. If you are in contact with a bat, contact Public Health.



1-866-727-3447

Report any and all bat sightings to...

WWW.BATCONSERVATION.CA



INSTRUCTIONS

Unsure if you have bats? Check for guano (bat poop) under roosts. Popular and active roosts will have lots of guano underneath!

1

PREPARE

Determine what time sunset is for your location. Bats typically start emerging shortly after sunset, but every roost is different, be prepared. Give yourself at least 15 minutes to set up before sunset time, or longer depending on site accessibility. Check the weather! Ideally it should be calm and warm, with low wind and no rain; bats are like us, they don't want to be out in bad weather either!

2

SET UP

Find a good vantage point around the exit of the roost, close enough so you can clearly see any bats emerging, but far enough away so you don't disturb emerging bats. We recommend at least 2 meters away from the exit point. Some roosts, usually buildings, may have multiple exit points.

3

WRITE

We have data sheets you can print off from this link, or make your own. You should try to include: the location, date, weather, and sunset time. If you see anything else interesting, include it! The more details the better!



4

WAIT

Bats are sensitive to light and sounds, so try to stay quiet when near their roost. Do not use light unless needed or it is too dark to see without. Also, try not to shine the light directly into the roost, as this can dissuade the bats from exiting.

Fun fact: bats are NOT blind, and they do not like having a bright light shone into their eyes!

5

COUNTING

Count each bat that exits from the roost. If you see a bat go back into the roost, subtract that individual from your total.

It is important that observers only count bats emerging from their exit point; otherwise the same bat may be counted twice. Do not count individuals flying around, because you might not know which roost you came from. We recommend using a tally counter, as it is easiest, but pencil and paper works as well.

Record the time when the first bat emerges for each roost being monitored.

6

FINISH

When a bat hasn't emerged from the roost for at least 10 minutes after the last bat OR if an hour after sunset no bats have emerged OR if you are unable to see bats emerging. If possible, do a quick visual estimate of how many bats remain in the roost (for bat boxes). Record the number of bats that did not emerge as a separate count.

7

RECORD

Record the number of bats you saw on your data sheet! If you had multiple people counting the same roost, take the average number between them and round it to the nearest whole number. Make sure to record the time the last bat emerged too!

Tip: It is helpful to have multiple people watching one spot, to corroborate the count and for company!

8

SUBMIT

Submit as a bat report to www.batconservation.ca or send us a copy of your data sheet to bats@merseytobeatic.ca



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