



Canadian Bat Box Project Newsletter, October 2021

Welcome to the second newsletter for the Canadian Bat Box Project! This past summer was the first of three field seasons (2021 – 2023) for the project, and we plan to produce newsletters twice a year with updates. Swabbing the interior of bat boxes and collecting guano started this fall, and soon we will receive our first microclimate logger data from bat boxes. Once spring arrives we will be contacting many of you about installing a logger for summer 2022.



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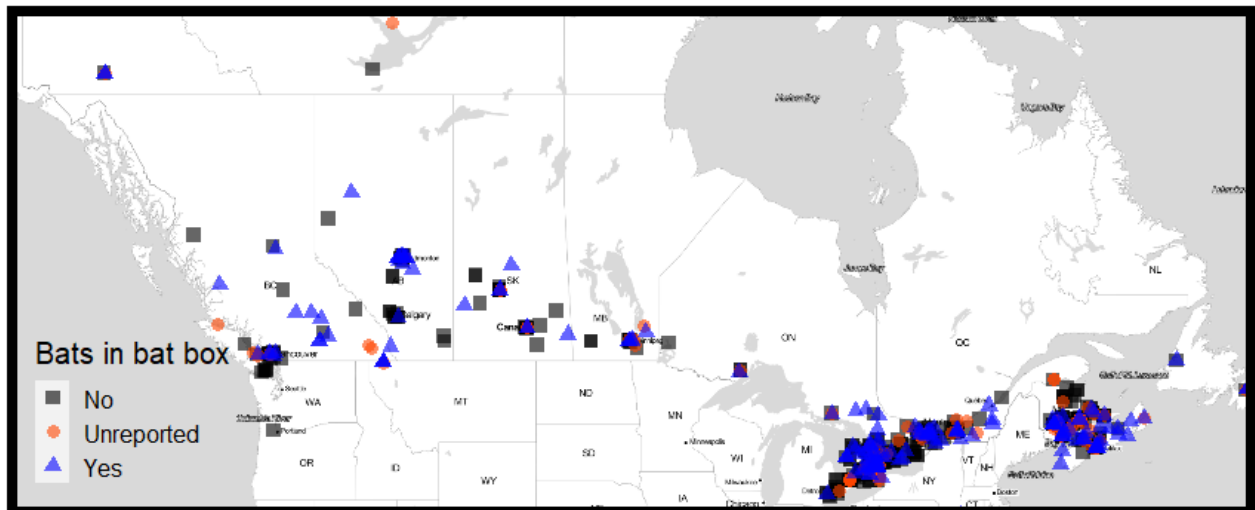
To date we have received almost 1,100 survey responses from across Canada, including all provinces and almost every territory. For those who filled out the survey, please do not forget to update your survey responses with any information that was missing or has changed. For example, some participants could not provide exact bat box dimensions either because the box was hard to access during winter, or the box is located at a summer residence. You can either fill in the survey again using the same contact information, or email [kjvanderw\[at\]gmail\[dot\]com](mailto:kjvanderw[at]gmail[dot]com)

For those who have not yet [registered](#) their bat box with the [program](#), you are welcome to do so! If you would like to contribute an article, pictures, or an idea for an article to this newsletter email Karen Vanderwolf at [kjvanderw\[at\]gmail\[dot\]com](mailto:kjvanderw[at]gmail[dot]com)



CANADIAN WILDLIFE
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Map of Study Participants





Thanks to our supporters and partners:



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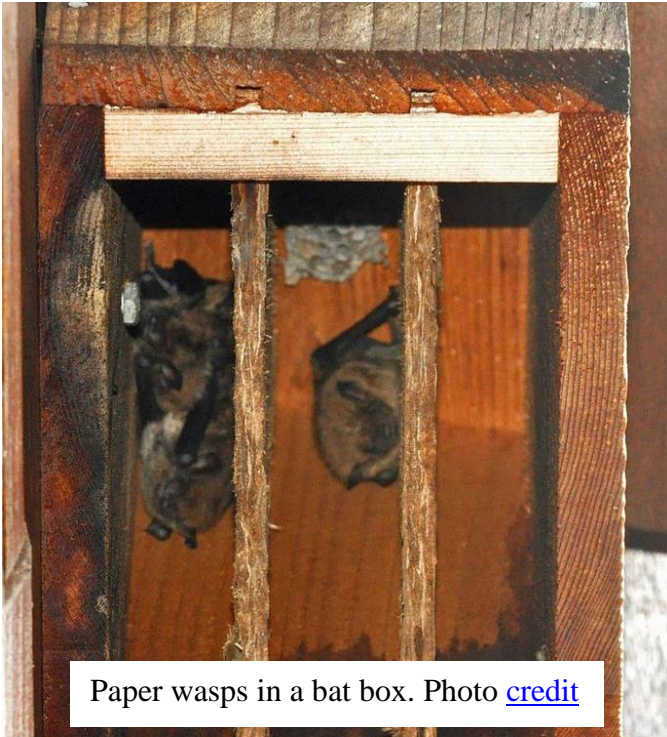
Other Wildlife in Bat Boxes by Karen Vanderwolf

Sometimes wildlife other than bats find bat boxes a cozy place to live. Of the 560 people who answered this question in our survey, most had never seen other wildlife in their box, or they noticed various types of insects.

Wildlife Type Found in Bat Boxes	Number of Participants
Birds	4
Tree swallow males investigate it in the spring but it doesn't meet their approval	1
Squirrels	3
Clay hornets	1
Cocoons	11
Wasps	43
Spiders	4
Other Insects	6
None	488

It's best to [maintain your bat box](#) in the fall or winter after bats have left. You can recaulk joints and repair roofs if needed and scrape out any wasp nests. Spiders can be left alone. Cocoons should also be scraped out if there are many, but if there are only one or two they can be left alone.

Yellow jacket/Bald-faced Hornets: These very aggressive insects build conical nests that can be as large as a volleyball. Some stealthy varieties also build nests inside the bat house. If insects are routinely entering and exiting the bat house in the summer, it may be overrun with yellow jackets. Bats will abandon the box if these insects take up residence. Carefully knock out nests in winter when insects are less aggressive. People sensitive to bees or wasps should avoid this, as a single yellow jacket will sting multiple times. Do not use wasp or insect spray inside a bat box as the poison can affect the bats.



Wasp nests

Paper wasps form gray honeycomb shaped nests on the ceiling of bat houses. These insects are not aggressive and can coexist with bats. However, sometimes the nests become large and eventually consume real estate inside the bat house. Remove nests in the winter using a long, thin rod or stick only when bats are not present.

Birds

Woodpeckers or Northern Flickers sometimes drum on bat houses. The damage can be repaired by filling holes with roofing sealant when bats are not present. Birds will also build nests on top of bat boxes which is not a problem and can be left alone. The photo to the right shows a bird nest on a bat box in Saskatchewan.





Guest Writer



My name is Lucas Haddaway, and I am from Cambridge, Ontario. I recently graduated from the University of Waterloo with a Bachelor of Science in Biology. My interest in bats and their conservation began in my final year, when I conducted a thesis project aimed at understanding the behaviour and ecology of migrating bats. I recently enrolled in the Canadian Wildlife Federation's [Canadian Conservation Corps](#) (CCC) program, where I heard about the Canadian Bat Box Project. The CCC program consists of a two-week wilderness trip (stage 1), a conservation-related work placement (stage 2), and a community conservation project (stage 3) which I am currently undertaking. My hope is to

provide education and outreach regarding the conservation of bats in Canada through my involvement with the Canadian Bat Box Project!

Batwatch.ca by Lucas Haddaway

As community scientists interested in the stewardship of bats and bat conservation in Canada, you may have heard of the Neighbourhood [Bat Watch](#), an initiative similar to the Canadian Bat Box Project, whose objective is to monitor bat populations throughout Canada. Despite the shared purpose of bat conservation and stewardship, there are some key differences between the Neighbourhood Bat Watch and the Canadian Bat Box Project. Batwatch.ca encourages community scientists to map the location of bat sightings, bat boxes, and bat colonies in any structure, as well as conduct counts of bats, and enter this information into an online database. The purpose of this data collection is to aid in the long-term monitoring of Canadian bat populations. In contrast, the Canadian Bat Box Project is a shorter-term project (2021 – 2023) and focuses specifically on bat boxes. The data collected from community scientists for the Canadian Bat Box project will be used to develop recommendations to guide the design and placement of suitable bat boxes.



Your participation as a community scientist is not constrained to either one of these two initiatives: in fact, participation in both is encouraged, as both projects collaborate and share the overarching goal of bat conservation in Canada! In addition to registering your bat box with our



project, you can add your bat box and any bat sightings to the batwatch.ca database, and with provincial community bat programs if you live in [Alberta](#), [British Columbia](#), and [Nova Scotia](#).

Overheating Bat Boxes by Karen Vanderwolf

We are particularly interested if bats show signs of heat stress in bat boxes. Several participants reported heat stress incidents this summer, especially during the unusual heat waves in western Canada. Bats were seen roosting at the bottom of the box, bulging out the bottom, or even roosting outside of boxes. To prevent this from happening, we recommend installing multiple bat boxes in different locations, with some located in the sun and some in the shade. This allows bats to pick their roost depending on the weather.

Another effective strategy is to provide shade for bat boxes during heat waves. Several participants have done this in the past. In the photos below, you can see a white plastic sheet has been installed to shade bat boxes in Alberta this past summer. Other strategies include [installing a blind](#) that can be rolled up and down.



It is important to avoid any physical contact with bats, especially any contact with bare skin. If you find bat carcasses or bats that are unable to fly under your bat box, please contact your regional [Canadian Wildlife Health Cooperative office](#). If you are concerned about bats in your house, information and advice about resolving this issue is available [here](#).



Bat Condos by Lucas Haddaway

Like bat boxes, a bat condo is a housing structure designed to increase available roosting habitat for bats. Bat condos are typically much greater in size and come the closest to replicating the high-quality roosting conditions of other human-made structures such as buildings (attics are a good example). The larger size of bat condos allows them to provide roosting habitat for potentially thousands of bats, whereas a well-designed bat box can house numbers ranging from 50 to several hundred.

The drawback to bat condos is they can be quite costly to design, build, and implement, however they are a great option for conservation groups and areas looking to support bat populations. We are aware of several bat condos scattered throughout Canada (links and pictures below) and are interested in finding out more. If you have any further information about bat condos, such as locations of condos not mentioned, or whether they are being used by colonies of bats, please contact us at [kjvanderw\[at\]gmail\[dot\]com](mailto:kjvanderw[at]gmail[dot]com)



Bat condo at [Pinery Provincial Park](#), Grand Bend, Ontario



British Columbia

[Kitimat](#) by [Kitimat Valley Naturalists Club](#)



[Duck Lake Protected Area](#)



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Port Elgin Ontario

[MacGregor Point Provincial Park](#)



Port Coquitlam, British Columbia

[Colony Farm Regional Park](#)



Huron Natural Area, Kitchener, Ontario



Bat Boxes Across Canada



Jared Clarke, Saskatchewan



Ontario



Bruce, Prince Edward Island



Karen Rosenfeldt, Alberta



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John Saremba, British Columbia



Kim Ferguson, Ontario



Nicki Brockamp, British Columbia



Nick Ackerley, Ontario