BATS in 2023 Update

Denman Hornby Bat Project dhbatproject@gmail.com part of BC Community Bat Program BCbats.ca

This is just a quick up-date and initial bat activities for 2023!

- 1. ANY DEAD BATS Please Call 250-335-2151, or 250-897-6257.

 This is still the key White Nose Disease-testing Window 'Nov 1 to May 31'
- **2. BAT BOXES**: As soon as a bit better weather prevails, some bat houses will be moved and when painting weather returns, other new houses will be created for those who still wish them.
- 3. For those who are **really Bat Keen**; the **Western Bat Working Group is hosting their Biennial** bat Conference in Victoria, BC this April 19-21, 2023.

The Western Bat Working Group "consists of agencies, organizations and individuals passionate about bat research, management and conservation from fifteen western states; the provinces of Alberta, British Columbia and Saskatchewan; the Northwest and Yukon territories and northern Mexico."



4. 'Where did the bats go' A very cute, 8 min, kid-oriented puppet-bat video from the UK shows the trials and tribulations of UK bats, both the problems and solutions, in a way that's easily appreciated by all.

 $\frac{https://vimeo.com/778536169?fbclid=IwAR27N83IeDiayMirm7SPc1GGneYtlVLO03GrtvCYNjE2tGEL0}{8dnod49goM}$

Of note **BC** has at least 15 bat species, 9 of which are on rare lists and the status of 1 is unknown. So only 5 of our 15 BC bat species are known to have reasonable numbers. We have work to do!

5. UBC MSc Thesis about bats in Vancouver by J. Craig 2019 https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0417416 See summary on next page.

Prime real estate: how urban landscape variables influence bat presence in Vancouver, Canada

Craig, Julia

Summary:

As natural habitats shrink and cities grow, urban areas displace some species but remain important habitats for others. With more knowledge about how wildlife use urban spaces, we might enable a greater diversity of species to thrive in a city. This is the first study to look at urban bats in the Pacific Northwest and investigate how Vancouver's landscape influences them. It is also the first to use the advantages of a bicycle to thoroughly explore the urban environment to collect bat presence data. We found ten species of bat, including the endangered Little Brown Myotis. Our findings showed that bats have a strong aversion to light pollution, intensive urban land use, and distance from freshwater, but are drawn to greenness and—for most groups—tall vegetation and parks. Informed by studies like this one, city governments might prioritize strategies that support larger and more diverse bat communities in Vancouver and other cities.

formal Abstract:

Understanding how wildlife use urban landscapes is increasingly important as cities grow and impact the world's biodiversity. Bats are a critical part of urban ecosystems, but little is known about which bat species live in cities, how urban variables affect their presence, and at which spatial scales. To answer these questions, we acoustically sampled Vancouver and Richmond, Canada, in 2021 via mobile bicycle transects. We found a diversity of bats (10 species) in the city, including rare and endangered species, which responded to the urban landscape at all tested spatial scales. Using Bayesian models, we found that bats were overall attracted to greenness, parks, and tall vegetation. But they were negatively affected by light pollution, intensive urban land use, and increasing distance from freshwater, which we suggest might be abiotic filters on bat presence. While all bats responded similarly to the aforementioned variables, we found nuances between low- and high-frequency functional groups that suggested spatial partitioning to avoid competition. To boost bat abundance, cities might improve or create parks and freshwater sources to increase roosting and foraging opportunities, and introduce traffic and light-pollution mitigation strategies to reduce sources of mortality and disturbance.

6. The Report from our Bat Project's 2022 summer student Ryann Rudderham, from U Vic is completed. This report details her experience in monitoring many of the Denman bat houses during 2 visits to Denman over the past summer. Note while this report is based Ryann's relatively brief observations and not a summary of all Denman bat boxes or habitats, it adds to our overall bat knowledge. We hope to involve more folks in monitoring our bats this summer! A full overview of last summer's batty activities was presented last fall and the results of the various activities will be reported as we start the new season.

Also:

Our bats are hibernating during the winter somewhere... new research suggests at least some may be close....possible deep into cavities in large old trees, or some in Denman caves, as well as a we know few are found in wood piles etc...??