Late summer use of patio umbrellas and other non-traditional roosts of bats in Canada through community science

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Bats use a variety of natural and human-made roosts, including trees, caves, buildings, bat boxes, and mines. Recent research has expanded to include less conventional roosts like bridges and culverts, but anecdotal observations of these are often undocumented. In this study, we compiled non-traditional roost sightings across Canada from various sources, including public reports, experts, wildlife centers, and conservation databases. A total of 435 observations covering over 35 roost types from 1980-2023 were collected, with most occurring in August (54%) and primarily in Nova Scotia (64.8%). Patio umbrellas were the most frequently reported roost (71.2%), followed by wood piles (20), processed wood (10), tarps (12), signs (6), trailers (6), and watercraft (6). Less common roosts included hot tub covers, BBO covers, lobster traps, plant pots, and buckets. Species identified included Little Brown Myotis, Silver-haired Bat, Big Brown Bat, Hoary Bat, Eastern and Western Red Bats, and Eastern Small-footed Myotis, though species were unknown for most reports (87.1%). The opportunistic use of these structures by bats is likely more common than previously documented. Bats may perceive structures such as umbrellas and utility poles as analogous to trees, though the reasons for selecting these roosts are not fully understood. Observers often noted that bats used these roosts only briefly, suggesting short-term availability and selection. To enhance our understanding of the diversity of bat roosts, we need to better document anecdotal observations, which can provide valuable insights into bat roosting behaviors and needs.

Keywords: bats, roosts, unusual, Canada, community science, umbrella

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