

Another Record of Foliage Roosting in the Little Brown Bat, *Myotis lucifugus*, in Canada

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Another record of foliage-roosting behaviour in little brown bats (*Myotis lucifugus*) is reported. This is only the second such observation ever recorded for this species and the first for Atlantic Canada.

Key Words: Little Brown Bat, *Myotis lucifugus*, behaviour, foliage roosting, Nova Scotia.

At approximately 20:00 h on 8 July 2009, I discovered a solitary bat roosting under a Sugar Maple (*Acer saccharum*) leaf approximately 3.5 m above the ground in a mature mixed forest adjacent to the campus of Acadia University, Wolfville, Nova Scotia. The leaf was green, and it was located near the distal end of the branch. Upon capture, the bat was identified as an adult male Little Brown Bat, *Myotis lucifugus*, the most common bat in eastern Canada (Peterson 1966) and probably the most common species of bat in Nova Scotia (Broders et al. 2003). During handling, the bat became active and emitted distress calls. The bat had one ectoparasitic mite on the right ear and some old scars on the left wing, centred near the posterior edge of the plagiopatagium. Overall, it showed no signs of poor health.

This is only the second record of daytime foliage-roosting behaviour for *M. lucifugus* and the first for Nova Scotia and Atlantic Canada. The first occurrence of such behaviour for this species was observed on 18 July 2004, during a bat survey in Algonquin Provincial Park (Ontario, Canada); that bat (sex unknown) was also observed roosting in *A. saccharum*, near a maternity colony (Davy and Fraser 2007). A subsequent search for additional bat activity near the site of the Wolfville capture before and after presumed bat emergence at dusk on 8 July revealed no other conspecifics or colony nearby. However, bats have previously been observed flying in the area near the forest on several occasions. The fact that the bat reported here was found roosting singly conforms to the species' known life history: male *M. lucifugus* typically roost alone or in small groups, segregated from the females during the reproductive season (Peterson 1966; Fenton and Barclay 1980; Broders and Forbes 2004). Another bat species has also recently been found to roost in foliage in Nova Scotia. The Tri-Coloured Bat, *Perimyotis subflavus*, has been observed roosting in epiphytic beard lichen (*Usnea* sp.), a roosting medium previously unrecorded for the species (Quinn and Broders 2007*).

Myotis lucifugus is generally considered to roost in cavities (Fenton and Barclay 1980). Observations of foliage roosting suggest that *M. lucifugus* may be more adaptable than previously recognized in terms of roost-

ing behaviour. As Davy and Fraser (2007) note, no other North American myotis is so far known to roost in foliage. It is perhaps this adaptability that is responsible for the abundance and widespread distribution of *M. lucifugus* in North America, but more field-based studies would be required to better understand the dynamics of foliage roosting in this species. Observations such as this illustrate that there is still much to discover about the roosting ecology of even common, relatively well-studied bat species.

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