Lacconotus punctatus and the family Mycteridae (Coleoptera) newly recorded in Atlantic Canada

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Abstract—*Lacconotus punctatus* LeConte is reported for the first time from Atlantic Canada from a specimen collected in Bridgewater, Nova Scotia. This is the first record of the family Mycteridae in the region. The bionomics and systematics of the species are briefly discussed. The report is also situated in the context of the developing knowledge of saproxylic beetles in the region.

Résumé—On signale le *Lacconotus punctatus* LeConte pour la première fois au Canada atlantique à partir d'un spécimen trouvé à Bridgewater en Nouvelle-Écosse. C'est le premier recensement de la famille des Mycteridae dans la région. On aborde brièvement la bionomique et la systématique de l'espèce. On doit également situer le rapport dans le contexte des connaissances émergentes sur les coléoptères saproxyliques dans cette région.

The Mycteridae (palm and flower beetles) are a rather poorly known family of beetles in Canada. Only four species have been recorded: Lacconotus punctatus LeConte, 1862 and Mycterus scaber Haldeman, 1843 in Ontario and Quebec, and L. pinicola Horn, 1879 and M. concolor LeConte, 1853 in British Columbia (Campbell 1991). Consequently it is of some interest to report a specimen of L. punctatus collected by G. Selig in Bridgewater, Lunenburg County, Nova Scotia, on 16 June 2004. The specimen was in flight when found and was adjacent to a mixed forest on the west rim of the LaHave River consisting largely of *Pinus* strobus L., Abies balsamea (L.) Mill., Tsuga canadensis (L.) Carr. (all Pinaceae), and Acer spp. (Aceraceae). This is the first record of the family Mycteridae in Atlantic Canada. Mycterus scaber, adults of which are collected mainly at flowers, is found in neighbouring Quebec and should be looked for in Atlantic Canada.

The specimen is 5.4 mm long and has been deposited in the Nova Scotia Museum of Natural History. Photographs of it are available at http://www.chebucto.ns.ca/Environment/NHR/Lacconotus_punctatus.html (cited 15 July 2006).

Relatively little is known about *L. punctatus*. In the United States it has been recorded in

New Hampshire (Chandler 2001), Ohio, Pennsylvania, and Michigan (Downie and Arnett 1996). A specimen of a western *Lacconotus* species was collected under the bark of a dead poplar; specific habits of adults of *Lacconotus* spp. remain unknown. Most larvae in the Eurypinae, the subfamily in which *Lacconotus* is placed, live under dead tree bark (Pollock 2002) and are saproxylic.

The systematic and evolutionary relationships of the Eurypinae are equally poorly known. They had at various times been placed in the Melandryidae, Pythidae, or Salpingidae until Crowson and de Viedma (1964) placed them in a separate family, the Mycteridae. D. Pollock is currently engaged in an analysis of the genera and species of Eurypinae. The genus *Lacconotus* is restricted to the Nearctic region, with only three species (*L. punctatus*, *L. pinicola*, and *L. pallidus* Van Dyke, 1928) known, although the latter two western species are very different from *L. punctatus* and may have to be accommodated in a new genus.

The fundamental biodiversity of Coleoptera in Nova Scotia is still being discerned. Bousquet (1991) recorded 1320 species of beetles in the province, whereas currently in excess of 2320 species have been found (C. Majka,

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unpublished data). Studies have started on the saproxylic beetle fauna of the Maritime Provinces (Majka 2006; Majka and Pollock 2006; Majka et al. 2006) and have resulted in many new provincial records. The southwestern portion of Nova Scotia appears to have a distinct fauna, perhaps because of the warmer climate, the presence of relict stands of old-growth forests, the historic connections to the New England area via postglacial refugia and continental-shelf land bridges, or a combination of all these factors. In this context, the presence of L. punctatus in Nova Scotia is noteworthy and deserves further attention to assess this species' status, distribution, and potential vulnerability.

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