



NEW RECORDS

Elaphropus vivax (LeConte) (Coleoptera: Carabidae) newly recorded in the Maritime Provinces

Christopher G. Majka and Vernon R. Vickery

Several recent studies (Majka et al. 2007, 2008; Webster and Bousquet 2008) have reviewed the ground beetle (Carabidae) fauna of the Maritime Provinces, providing records of many species and adding substantially to the knowledge of the distribution, zoogeography, and bionomics of this diverse and species-rich family in the region. It is, therefore, of interest to report another species of carabid new to the Maritime Provinces.

On 14 May 1952, V.R. Vickery was collecting Coleoptera in Kentville, Kings County, Nova Scotia. Amongst the material collected was a specimen that proved, on recent examination, to be *Elaphropus vivax* (LeConte, 1848), the first record of this species in the Maritime Provinces. *Elaphropus vivax* is a small (2.40–2.90 mm), pale, rufous-coloured ground beetle (Fig. 1). Many of the members of the genus *Elaphropus* are superficially similar in appearance but can readily be distinguished by employing the keys provided by Lindroth (1966). Eleven species have been recorded in Canada, seven of which have previously been found in the Maritime Provinces (Bousquet and Larochelle 1993; Majka et al. 2007; Webster and Bousquet 2008). *Elaphropus vivax* is found on moist, sandy, open ground with sparse vegetation along embankments and shores of rivers, brooks, lakes, and ponds. It is diurnally active, sheltering under stones, dead leaves, or in cracks in the ground at night or on cool days. It is macropterous, an occasional flier, and a fast runner (Larochelle and Larivière 2003).

In Canada, *E. vivax* has previously been recorded in Ontario and Québec. In the United States it occurs widely across the eastern portion of the country from Maine south to Georgia and west to Texas, Missouri, Illinois, and Wisconsin (Bousquet and Larochelle 1993). In Canada, two of the eleven species in the genus *Elaphropus* are myrmecophilous and are associated with various species of ants (Ball and Bousquet 2000). This behaviour has not been noted in *E. vivax*. Although the Kentville environs have received a great deal of entomological attention over the past century due to the work of the staff of the Atlantic Food and Horticulture Research Centre, as well as of private collectors such as Kenneth Neal, David Webster, and Susan Westby who have collected Carabidae there, it is noteworthy that 56 years have elapsed without any additional specimens of *E. vivax* having been collected. Due to the small size of *E. vivax* and close similarity to other more abundant *Elaphropus* species, this species has probably been overlooked.

Despite the considerable attention that this family has recently received in the region, there are still additional discoveries to be made. Further fieldwork is required to better determine the status of *E. vivax* in Annapolis Valley and across Nova Scotia.

ACKNOWLEDGEMENTS

Sincere thanks to Yves Bousquet (Canadian National Collection of Insects, Arachnids, and Nematodes) for identifying the specimen; to two anonymous reviewers for their constructive comments; and, to Calum Ewing, David Christianson, Andrew Hebda, and the Board of Governors of the Nova Scotia Museum for their support.

Received 6 August 2008. Accepted 4 September 2008. Published on the Acadian Entomological Society website at <http://www.acadianes.org/journal.html> on 6 September 2008.

Christopher G. Majka¹: Nova Scotia Museum, 1747 Summer Street, Halifax, Nova Scotia, Canada, B3H 3A6.

Vernon R. Vickery: 47 Wade Street, Kentville, Nova Scotia, Canada, B4N 1B5.

¹Corresponding author (email c.majka@ns.sympatico.ca).

Fig. 1. Habitus photo of *Elaphropus vivax* (LeConte). Photo credit: Christopher Majka, Nova Scotia Museum.



REFERENCES

- Ball, G.E., and Bousquet, Y. 2000. Carabidae Latreille, 1810. In *American Beetles*. Volume 1. Archeostemata, Myxophaga, Adephaga, Polyphaga: Staphyliniformia. Edited by R.H. Arnett, Jr. and M.C. Thomas. CRC Press, Boca Raton, Florida. pp. 32-132.
- Bousquet, Y., and Larochelle, A. 1993. Catalogue of the Geadephaga (Coleoptera: Trachypachidae, Rhysodidae, Carabidae including Cicindelini) of America north of Mexico. *Memoirs of the Entomological Society of Canada* **167**: 1-397.
- Larochelle, A. and Larivière, M.-C. 2003. A natural history of the ground-beetles (Coleoptera: Carabidae) of America north of Mexico. Pensoft, Sofia, Bulgaria. 583 pp.
- Lindroth, C.H. 1966. The ground-beetles (Carabidae, excl. Cicindelinae) of Canada and Alaska. *Opuscula Entomologica Supplementum* **29**: 409-648.
- Majka, C.G., Bousquet, Y., Noronha, C., and Smith, M.E. 2008. The distribution, zoogeography, and composition of Prince Edward Island Carabidae (Coleoptera). *The Canadian Entomologist* **140**: 128-141.
- Majka, C.G., Bousquet, Y., and Westby, S. 2007. The ground beetles (Coleoptera: Carabidae) of the Maritime Provinces of Canada: review of collecting, new records, and observations on composition, zoogeography, and historical origins. *Zootaxa*, **1590**: 1-36.
- Webster, R.P., and Bousquet, Y. 2008. New ground beetle (Coleoptera: Carabidae) records in New Brunswick, Canada. *Journal of the Acadian Entomological Society* **4**: 14-24.