

**NOTE****First record of *Buprestis consularis* (Coleoptera: Buprestidae) in New Brunswick and Atlantic Canada**

Jake H. Lewis

*Buprestis consularis* Gory 1840 (Coleoptera: Buprestidae) is distinguished from similar *Buprestis* spp. occurring in the Atlantic Provinces by the presence of 3-4 transverse elytral maculae, a dark bronze integument and five impunctate longitudinal stripes along an otherwise punctate pronotum. Some authors considered *Buprestis consularis* an infraspecific form (e.g., Chamberlin 1926) of *Buprestis nutalli* Kirby, while others have elected for synonymy (e.g., Bright 1987). However, more contemporary (and some earlier) workers split these taxa on the basis of differing genitalia and thoracic coloration (Knull 1947; R.L. Westcott, Oregon Department of Agriculture (ODA), personal communication). A recent comparative analysis of DNA barcodes supports this latter taxonomic arrangement (J.R. deWaard, Biodiversity Institute of Ontario (BIO), personal communication). *Buprestis consularis* has hitherto remained unrecorded from the Atlantic Provinces of Canada, although the species is known from Québec and Ontario (Paiero et al. 2012; Bousquet et al. 2013) and occurs throughout eastern United States (Nelson et al. 2008).

An adult specimen of *Buprestis consularis* in the Biodiversity Institute of Ontario (BOLD Systems; Process ID: BBCECo64-09; Sample ID: 09BBECO-0064) was collected in a mixed forest setting by BIObus surveyors on 19 August 2009 along Osprey Trail, Kouchibouguac National Park, Kent County, New Brunswick (46.836°N, 64.939°W). The author collected a second adult specimen of *Buprestis consularis* (1♀; Figure 1) on a coniferous log on 4 August 2014 at Johnson's Lumber Supplies sawmill yard, Browns Flat, Kings County, New Brunswick (45.467052°N, 66.138806°W). The above records of *Buprestis consularis* represent the first for New Brunswick and Atlantic Canada. Additional conifer-associated Coleoptera collected at the sawmill yard site included *Stictoleptura canadensis* (Olivier), *Neoclytus leucozonus* (Laporte and Gory), *Xylotrechus integer* (Haldeman) (Cerambycidae); and, *Chrysobothris* spp. and *Buprestis maculativentris* Say (Buprestidae).

Larval *Buprestis consularis* develop in dead or dying (Bright 1987) members of the pine family (Pinaceae) including the New Brunswick natives *Picea glauca* (Moench) Voss, *Pinus resinosa* Aiton (Paiero et al. 2012) and possibly *Abies balsamea* (L.) (Chamberlin 1926; Bright 1987). Wellso et al. (1976) found that Michigan occurrences of *Buprestis consularis* ranged from July through the first half of August. The species is rarely observed (Frost 1915; Paiero et al. 2012). Paiero et al. (2012) recorded *Buprestis maculativentris* Say, *Buprestis striata* Fabricius and *Buprestis fasciata* Fabricius from New Brunswick. *Buprestis sulcicollis* (LeConte) has since been added to the provincial list along with eight buprestid species from other genera (Webster and DeMerchant 2012). Despite this recent work on buprestids in New Brunswick, future surveying efforts may yet reveal the presence of additional species in the province.

**ACKNOWLEDGMENTS**

I express my thanks to the following contributors: Johnson's Lumber Supplies, for allowing me the opportunity to collect insects on site during working hours; R.F. Miller and M. Hebert, New Brunswick Museum, for figure preparation; R.P. Webster, for reviewing the manuscript and confirming specimen identification; J.R. deWaard and A. Telfer, Biodiversity Institute of Ontario, for specimen collection and DNA barcode data; R.L. Westcott, Oregon Department of Agriculture, for providing an authoritative perspective on the taxonomy and morphology of *Buprestis consularis*; D.F. McAlpine, New Brunswick Museum, for helpful comment on the manuscript; and an anonymous reviewer, for a constructive assessment of the manuscript.

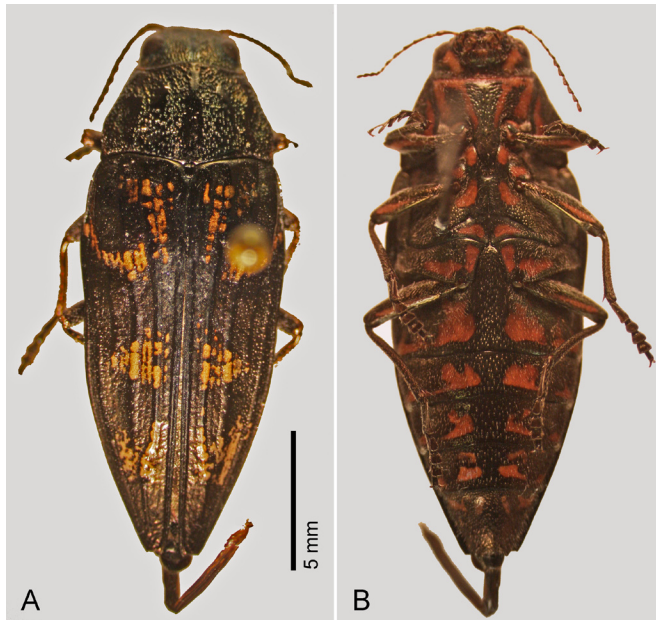
---

Received 13 February 2015. Accepted for publication 31 March 2015. Published on the Acadian Entomological Society website at [www.acadianes.ca/journal.html](http://www.acadianes.ca/journal.html) on 21 May 2015.

**Jake H. Lewis:** New Brunswick Museum, 277 Douglas Avenue, Saint John, New Brunswick, Canada, E2K 1E5

Corresponding author (email [warblerlife@gmail.com](mailto:warblerlife@gmail.com))

**Figure 1.** Dorsal (A) and ventral (B) views of *Buprestis consularis* (NBM 44755) collected 4 August 2014 at a sawmill yard in Browns Flat, Kings County, New Brunswick (45.467052°N, 66.138806°W).



## REFERENCES

- BOLD Systems: Public Data Portal - Record List [online]. Available from [http://www.boldsystems.org/index.php/Public\\_BINSearch?searchtype=records](http://www.boldsystems.org/index.php/Public_BINSearch?searchtype=records) [accessed 9 January 2015].
- Bousquet, Y., Bouchard, P., Davies, A.E., and Sikes, D.S. 2013. Checklist of beetles (Coleoptera) of Canada and Alaska. 2<sup>nd</sup> Edition. Pensoft Publishers, Sofia, Bulgaria.
- Bright, D.E. 1987. The metallic wood-boring beetles of Canada and Alaska (Coleoptera: Buprestidae). The Insects and Arachnids of Canada. Part 15. Research Branch, Agriculture Canada Publication 1810.
- Chamberlin, W.J. 1926. Catalogue of the Buprestidae of North America north of Mexico. Corvallis, Oregon.
- Frost, C.A. 1915. June collecting in Maine – (Coleoptera). The Canadian Entomologist 47: 141-145.
- Knull, J.N. 1947. New Buprestidae with notes (Coleoptera). The Ohio Journal of Science 47: 174-176.
- Nelson, G.H., Walters, Jr., G.C., Haines, R.D., and Bellamy, C.L. 2008. A catalog and bibliography of the Buprestoidea of America north of Mexico. The Coleopterists Society, Special Publication No. 4.
- Paiero, S.M., Jackson, M.D., Jewiss-Gaines, A., Kimoto, T., Gill, B.D., and Marshall, S.A. 2012. Field guide to the jewel beetles (Coleoptera: Buprestidae) of northeastern North America. Canadian Food Inspection Agency.
- Webster, R.P., and DeMerchant, I. 2012. New Coleoptera records from New Brunswick, Canada: Buprestidae. ZooKeys 179: 55-65.
- Wellso, S.G., Manley, G.V., and Jackman, J.A. 1976. Keys and notes on the Buprestidae (Coleoptera) of Michigan. The Great Lakes Entomologist 9: 1-22.