

**ONTARIO RECORDS OF *SPERCHOPSIS TESSELLATA*
(ZIEGLER), A RARELY COLLECTED LOTIC WATER
SCAVENGER BEETLE (COLEOPTERA, HYDROPHILIDAE)**

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Scientific Note

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Sperchopsis LeConte is a distinctive monotypic eastern North American genus of water scavenger beetles including only *S. tessellata* (Zeigler), a rarely collected species restricted to the margins of cold, clear, rapidly flowing streams where it prefers undercut sandy or gravelly banks. Spangler (1961) reviewed the distribution and biology of *S. tessellata*, recording it from the Canadian provinces of Nova Scotia and Quebec as well as from localities throughout eastern United States. Smetana (1988), in his important review of the Hydrophilidae of Canada, provides only three Canadian collection records for *S. tessellata*: one from Nova Scotia, one from Quebec and one from New Brunswick. Roughley (1991) used Smetana's review as the basis for a checklist of Hydrophilidae of Canada, but gave the known Canadian distribution of *S. tessellata* as Nova Scotia, Quebec and Ontario instead of Nova Scotia, New Brunswick, and Quebec. There are no Ontario specimens of *S. tessellata* in the Wallis-Roughley Museum of Entomology (University of Manitoba) so Roughley's listing of *Sperchopsis* from Ontario was probably a *lapsus*. The relatively large (about 7 mm long), strikingly convex, pitted adults of this species are easily distinguished from other water scavenger beetles, so it is unlikely that it would be overlooked in collections or samples from aquatic insect surveys. The new Ontario records of *Sperchopsis* given below are based on the only known Ontario collections of the genus.

I first collected and identified this species from Ontario in 1976, from the Credit River near Belfountain in Wellington County. Despite subsequent searching in apparently suitable parts of other streams and rivers in southern Ontario (including the Eramosa, Saugeen, Speed, Grand, Sauble, Rankin and Crane Rivers), no further *Sperchopsis* specimens were found until 2007 and 2008, when one beetle was found on rotting wood embedded in an undercut sandy bank in the Credit River near Erin, and another was collected in the Credit River very close to where the first Ontario specimen had been collected 31 years earlier.

Data for the Ontario specimens of *Sperchopsis*, all deposited in the University of Guelph Insect Collection, are as follows (latitude and longitude are not on the original label): Ontario, Wellington County, Belfountain, Credit River, 43°48'6.56"N 79°59'47.10"W, April 3, 1976, S. A. Marshall; Belfountain at the fork of the Credit River, May 5, 2007, Adam Brunke; Ontario, Wellington County, Credit River at the crossing of highway 124 near Erin, 43°50'6.01"N 80° 1'20.04"W, May 1, 2008, S. A. Marshall.

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FIGURE 1. Adult *Sperchopsis tessellata* from the Credit River, Ontario. Body length approximately 7 mm.

In view of the general rarity, taxonomic distinctness, and restricted habitat of this beetle, it is of potential importance as a species of conservation concern in Ontario.

Acknowledgements

Thanks to Miles Zhang for confirming that there are no Canadian *Sperchopsis* specimens in the J. B. Wallis museum.

References

- Roughley, R. 1991. Hydrophilidae. Pp. 130–135 in Bousquet (ed), *Checklist of beetles of Canada and Alaska*. Agriculture Canada publication 1861/E.
- Smetana, A. 1988. Review of the family Hydrophilidae of Canada and Alaska (Coleoptera). *Memoirs of the Entomological Society of Canada* **142**: 1–316.
- Spangler, P. 1961. Notes on the biology and distribution of *Sperchopsis tessellatus* (Ziegler) (Coleoptera: Hydrophilidae). *The Coleopterists Bulletin* **15**: 105–12.