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**TRIMEROTROPIS HURONIANA (ORTHOPTERA: ACRIDIDAE),
A NEW RECORD FOR WISCONSIN**

Harvey E. Ballard, Jr.¹

Trimerotropis huroniana Walker (Subfamily Oedipodinae), is a distinctive species first described by Walker (1902) from a small area of open dunes near Southampton, Ontario. Studies by Cantrall (1968), Hubbell (1929) and Otte (1984) have suggested that *T. huroniana* is endemic to the sand dune communities of the northern Great Lakes region. Until now, its recorded range included northern Michigan and four localities in Ontario (Vickery & Kevan 1983). As a consequence of its restricted range, narrow ecological tolerance and threatened habitat, the species is currently listed as "Special Concern" in Michigan, and has been recommended to the U.S. Fish & Wildlife Service for consideration as a federally listed species.

Since the summer of 1987 I have searched for *T. huroniana* throughout northern Michigan's dunes and made observations on its autecology. I recently confirmed my suspicions that the species also exists in Wisconsin's limited Lake Michigan dunes. At Whitefish Dunes State Park, Door County, Wisconsin on August 17, 1988, DNR District Naturalist Gene Tiser and I discovered an estimated 150 individuals of *T. huroniana* at a half-acre perched blowout south of the park headquarters. We captured four individuals for vouchers. One of these was an uncommon "burnt orange" color morph found occasionally over the range of the species with the typical silver-gray morph.

Like Michigan populations, the Whitefish Dunes population was concentrated in the barest sand where the characteristic dune grasses *Ammophila breviligulata* and *Calamovilfa longifolia* were sparse. Other locusts rarely associating with *T. huroniana* were *Dissosteira carolina* (L.) and *Melanoplus foedus* Scudder. The latter was restricted to the immediate vicinity of dune shrubs such as *Prunus pumila*, while the former was probably accidental from its nearby haunts along paths and in heavily degraded dunes.

Bad weather eliminated searches of other similar blowouts in the park. Nevertheless, *Trimerotropis huroniana* is now confirmed as an established species of Wisconsin's insect fauna. Further searches of suitable dune sites north of the tension zone in Wisconsin will likely yield additional populations of this handsome species in the state. I have notified the Natural Heritage Program of the Department of Natural Resources of the discovery and have recommended that the species be listed as state-threatened in Wisconsin.

Specimens of *T. huroniana* from the Whitefish Dunes State Park population are deposited at the zoological collections of the University of Wisconsin, Madison and at Michigan State University, East Lansing.

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LITERATURE CITED

- Cantrall, I. J. 1968. An annotated list of the Dermaptera, Dictyoptera, Phasmatoptera, and Orthoptera of Michigan. Mich. Entomol. 1:299-346.
- Hubbell, T. H. 1929. The distribution of the beach-grasshoppers *Trimerotropis huroniana* and *Trimerotropis maritima interior* in the Great Lakes region. J. New York Entomol. Soc. 37:31-38.
- Otte, D. 1984. The North American Grasshoppers. Vol. 2. Oedipodinae. Harvard University Press, Cambridge. 366 pp.
- Vickery, V. R. and D. K. McE. Kevan. 1983. A monograph of the orthopteroid insects of Canada and adjacent regions. Vol. II. Lyman Entomol. Mus. and Res. Lab. Mem. 13:1-1462.
- Walker, E. M. 1902. The Canadian species of *Trimerotropis*. Canadian Entomol. 34:1-11.