The Great Lakes Entomologist

Volume 22 Number 1 - Spring 1989 Number 1 - Spring 1989

Article 7

April 1989

Trimerotropis Huroniana (Orthoptera: Acrididae), a New Record for Wisconsin

Harvey E. Ballard Jr. The Nature Conservancy

Follow this and additional works at: https://scholar.valpo.edu/tgle



Part of the Entomology Commons

Recommended Citation

Ballard, Harvey E. Jr. 1989. "Trimerotropis Huroniana (Orthoptera: Acrididae), a New Record for Wisconsin," The Great Lakes Entomologist, vol 22 (1)

DOI: https://doi.org/10.22543/0090-0222.1664

Available at: https://scholar.valpo.edu/tgle/vol22/iss1/7

This Peer-Review Article is brought to you for free and open access by the Department of Biology at ValpoScholar. It has been accepted for inclusion in The Great Lakes Entomologist by an authorized administrator of ValpoScholar. For more information, please contact a ValpoScholar staff member at scholar@valpo.edu.

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 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.

ACKNOWLEDGMENTS

I am grateful to Park Naturalist Jennie Haen of Whitefish Dunes State Park for her help in selecting suitable search sites, to DNR District Naturalist Gene Tiser for his enthusiastic assistance in the field, and to two anonymous reviewers for helpful criticisms and suggestions on the manuscript.

¹The Nature Conservancy, Michigan Chapter, 2840 E. Grand River, Suite 5, East Lansing, MI 48823

THE GREAT LAKES ENTOMOLOGIST

Vol. 22, No. 1

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.

https://scholar.valpo.edu/tgle/vol22/iss1/7 DOI: 10.22543/0090-0222.1664

46