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#### DIPLOPLECTRON PEGLOWI, A NEW RECORD FOR MICHIGAN (HYMENOPTERA: SPHECIDAE: ASTATINAE)

#### Mark F. O'Brien<sup>1</sup>

#### ABSTRACT

Diploplectron peglowi is recorded from Michigan for the first time. Collecting data indicate that *D. peglowi* is probably bivoltine and widespread but not common within the state. This is only the second state east of the Mississippi River in which *D. peglowi* has been found.

Diploplectron peglowi Krombein is the only eastern member of a predominantly western North American genus. Krombein (1939) described this species from Oswego County, NY, and the only records from east of the Mississippi River cited in Parker's (1972) revision of the genus are from this county. Kurczewski (1972, 1975) has provided detailed accounts of the nesting behavior of *D. peglowi* in Oswego County.

The possible presence of *D. peglowi* in Michigan was first brought to my attention in 1982 by Mike Arduser who had been running Malaise traps at Pictured Rocks National Lakeshore in Alger County. Several specimens were sorted to *Diploplectron* and I determined these as *peglowi*. Since then I have gathered other specimens from different localities within the state. The collection data for existing Michigan specimens are as follows (unless otherwise indicated, all are in the University of Michigan Museum of Zoology collection):

MICHIGAN: ALGER CO., T 49, R14, Sec.15, 29 June–1 July, and 9–15 July 1982 (2 males), M. Arduser, coll.; KALKASKA CO., 21 July and 24 August 1966, window pane trap, (3 females), L. F. Wilson, coll., (Michigan State University); LIVINGSTON CO., E. S. George Reserve, 13–15 August 1983, Malaise trap, (male), M. & A. O'Brien, coll.; MARQUETTE CO., Huron Mountain Club, 5 August 1983, Malaise trap, (female), D. C. L. Gosling, coll.

The range of localities above reflects a wide distribution within the state although D. *peglowi* is probably not abundant at any given site. The small size (5–7 mm) and inconspicuous nature of these wasps precludes casual observations and may account for the paucity of collection records in the east and midwest (Parker 1972). The lack of records in the east may reflect a gap in collecting or inappropriate collecting techniques. Bohart and Menke (1976) suggested sweeping low mats of vegetation for the western species, a technique which may be appropriate for D. *peglowi*. Krombein (1939) noted that the wasps are reluctant to fly up into a net, but instead try to hide in the grass. Malaise traps and yellow pan traps when placed in areas of likely occurrence may be the easiest methods of collecting D. *peglowi* and other inconspicuous small sphecids.

There are similarities between the site at the George Reserve where *D. peglowi* was collected, and the study site at Selkirk Shores State Park, Oswego County, NY, described by Kurczewski (1972). Open areas of sand interspersed with mats of grasses, bordered by deciduous woods, or overgrown blowouts, are thus likely habitats for *D. peglowi*.

Although Kurczewski (1972, 1975) observed *D. peglowi* nesting in late June, specimens collected by Krombein (1939) were taken in late August and early September. Parker (1972) gave collection dates from April to November, with the bulk of the records being from the western U.S. In Michigan it appears that *D. peglowi* is bivoltine, with

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specimens collected from late June to late August. Fresh-looking (recently emerged?) individuals collected in June and August support this, but many more wasps should be seen to determine the actual voltinism of *D. peglowi*.

#### ACKNOWLEDGMENT

I thank Mike Arduser, Michigan State University, for the loan of the *D. peglowi* specimen in the MSU collection, and for recognizing the specimens from Pictured Rocks. I also thank D. C. L. Gosling for his perseverance in sorting out the Hymenoptera from his Malaise catches at the Huron Mountain Club.

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