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WOLF SPIDERS OF THE GENUS *PARDOSA* (ARANEAE: LYCOSIDAE) IN MICHIGAN

Robert J. Wolff¹

ABSTRACT

Distribution, life history, and habitat information is given for 11 species of *Pardosa* which occur in Michigan.

Pardosa are small wolf spiders abundant on the soil surface of fields and other more open habitats. They are a dominant member of the wandering guilds of spiders in temperate regions. Wolf spiders do not build webs, but are active hunters which wander in search of prey.

Michigan distribution is mapped (Figs. 1–11) and life history data are presented for each species of *Pardosa* (Figs. 12–19). Both mature males and females were recorded. Females which were captured with an egg sac attached to the spinnerets or the young spiderlings holding on to her abdominal hairs are recorded in a separate category. For each category and time period, data for a maximum of 25 specimens are included. As specimens were taken by general collecting and pitfall trapping over all seasons, except under snow cover, the data should accurately reflect life histories. It is apparent that *Pardosa* have one generation a year and overwinter as immatures. Females may live for several months as adults and produce more than one egg sac.

Kaston (1948) may be used for the identification of Michigan *Pardosa*. Levi and Field (1954) presented figures for identifying *fuscata* and *groenlandica*, and Chamberlin (1908) figured *hyperborea*.

GENUS *PARDOSA* KOCH 1848

distincta (Blackwall) 1846. (Fig. 2). Maturity is reached in the second half of June, with egg sacs appearing in late June, July, August, and into September (Fig. 12). Young overwinter as immatures. Habitats include beach, shore outcrop, old field, gravel pit, pine plantation, oak woods and maple woods.

fuscata (Thorell) 1872. (Fig. 3). Mature males are found from late April to early June. A female with an egg sac was collected 16 July. They have been found on a sand beach, at the edge of a pond, and in a *Typha* marsh.

groenlandica (Thorell) 1872. (Fig. 4). Females were collected from rocky beaches on 28 May, 24 June, 4 July, 17 August and females with egg sacs 27 June and 30 July. A male was taken 25 June.

hyperborea (Thorell) 1869. A single male from a shore outcrop was taken 26 June on Isle Royale, Keweenaw County.

lapidicina Emerton 1885. (Fig. 5). Found in a fir climax forest and on rocky beaches, this species matures in late August and September. Egg sacs appear throughout the summer, particularly in July (Fig. 13).

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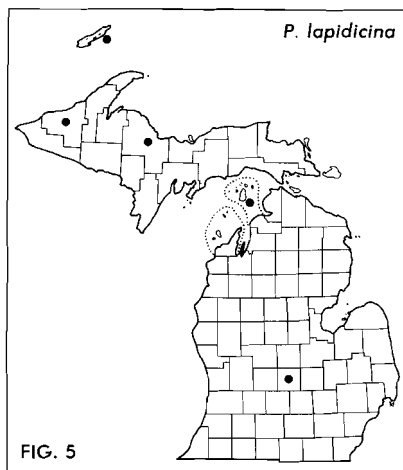
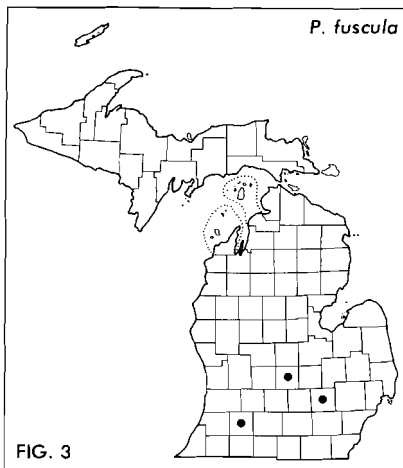
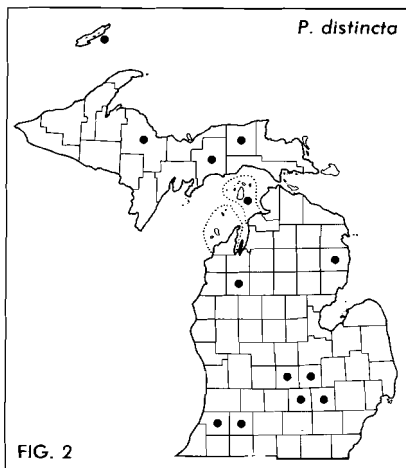


Fig. 1. The counties of the State of Michigan.

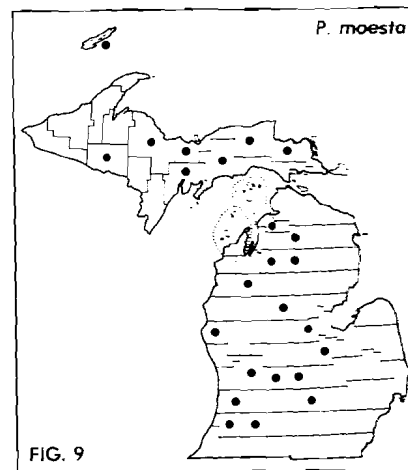
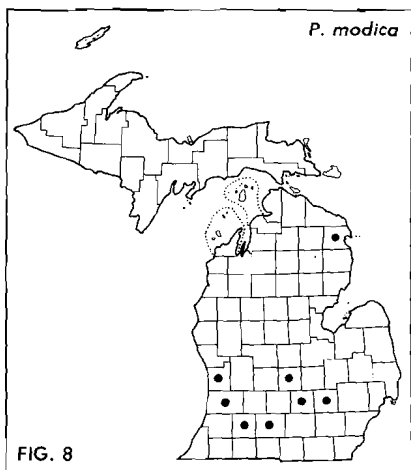
mackenziana (Keyserling) 1876. (Fig. 6). Maturity is gained in May and June. Females with egg sacs have been collected in July, August, and September (Fig. 14). This species has only been taken on rocky shores.

milvina (Hentz) 1844. (Fig. 7). Maturity is gained in May and June (Fig. 15). Females with egg sacs have been collected in July, August, and September. Habitats include corn and vegetable fields, old field, lawn, mud flat, and swamp.

modica (Blackwall) 1846. (Fig. 8). Maturity is reached in late fall and early spring (Fig. 16). This may be the only Michigan species of which some adults overwinter. Collections are from old fields, oak forests, marsh, and lake shore.

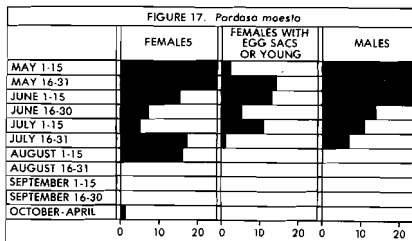
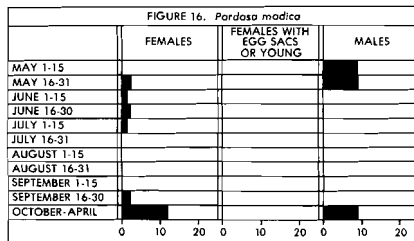
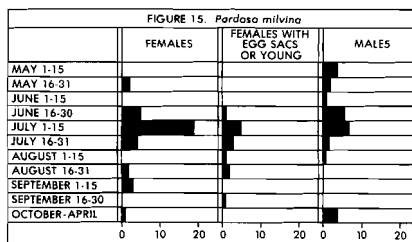
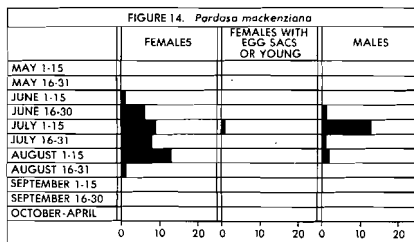
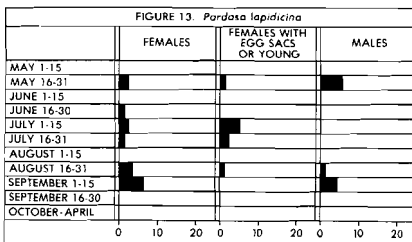
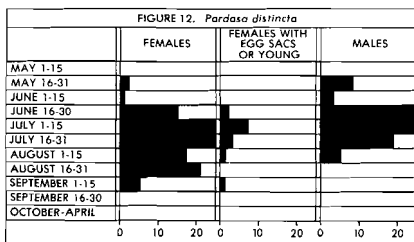
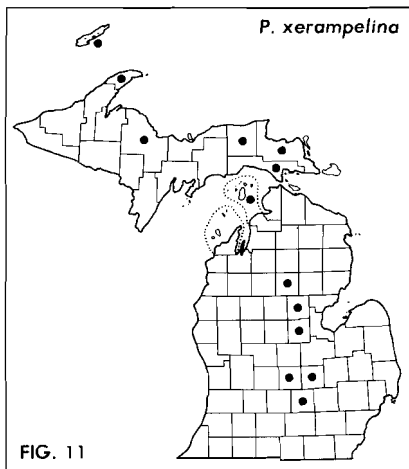
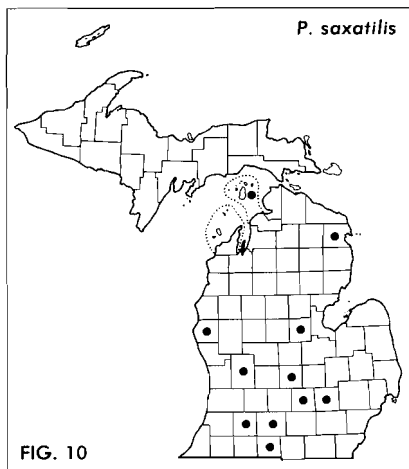


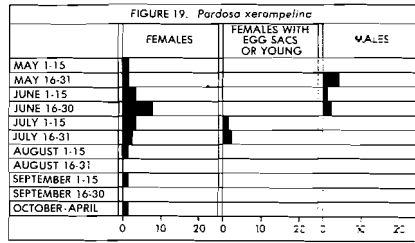
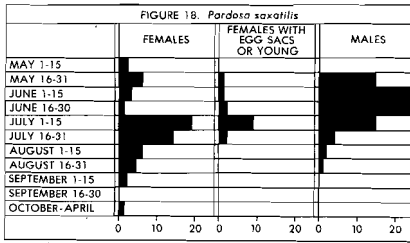
moesta Banks 1892. (Fig. 9). This species matures at the very beginning of May. In 1975, no mature specimens were collected in the first week of May (most were penultimate), while in 1976, after a warm spring, approximately 80% of the spiders collected in Kalamazoo County were mature. Less than 8% were immature in the last week of May in 1976. Egg sacs are produced in May, June, and July, indicating that at least two egg sacs are made (Fig. 17). Habitats include a mowed field, old field, corn field, garden, gravel pit, rocky shore, *Typha* marsh, and oak forest.



saxatilis (Hentz) 1844. (Fig. 10). Mature specimens are found in late May. Egg sacs are carried in June and July, with probably two sacs produced by each female (Fig. 18). This species is known from corn fields, old fields, mowed field, gravel pit, *Typha* marsh, and oak woods.

xerampelina (Keyserling) 1876. (Fig. 11). Maturity is attained in May, with egg sacs collected in July (Fig. 19). Habitats include rocky shore, birch-maple forest, and a roadside.





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