

DISTRIBUTION AND SEASONALITY OF *MEGISCHUS* SPP. (HYMENOPTERA: STEPHANIDAE) IN CALIFORNIA¹

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ABSTRACT: New distributional data is presented for *Megischus bicolor sickmanni*, *M. californicus*, and *M. texanus* in California. Seasonal data representing three years of collecting of *M. californicus* from a hydroelectric - water flume in the lower Sierra Nevada, Tulare County, California is presented.

Stephanid wasps are represented in America north of Mexico by two genera and six species (Carlson 1979) though the family attains its greatest abundance and diversity in the tropics. These wasps are thought to be parasitoids of wood boring Coleoptera or aculeate Hymenoptera that nest in wood. Because of their host's association with wood, they are usually collected on dead or fallen tree trunks. Adults are relatively large (9 to 32 mm), elongate wasps that are slow in their movements and flight, and awkward in walking. These wasps are not commonly collected and are rare in collections.

Megischus californica Townes, 1949

Townes (1949) recorded the distribution as California, including Trinity, Tulare, Contra Costa, Los Angeles, and San Diego counties. In Tulare County, one female paratype was recorded from the Greenhorn Mountains, 7 May 1931.

Additional locality data for Tulare County are presented in Figure 1. All specimens were collected near Kaweah at Ash Mountain by R.D. Haines, D.J. Burdick, and J.A. Halstead. The late July, August, and October collection dates are the latest known to the author. The latest date Townes (1949) noted in the type material was for a male, 4 July 1946, from the Santa Rosa Mountains, San Diego County, California.

As shown in Figure 1, *M. californicus* is present at the Kaweah site over a period of several months. In 1982, specimens were collected from July to October and in 1983 from June to October. In 1984, specimens were collected only during May and June. The earliest collection date at this site varies between different years (Figure 1). In 1982 the earliest date was 3 July, in 1983, 5 June, and in 1984, 20 May.

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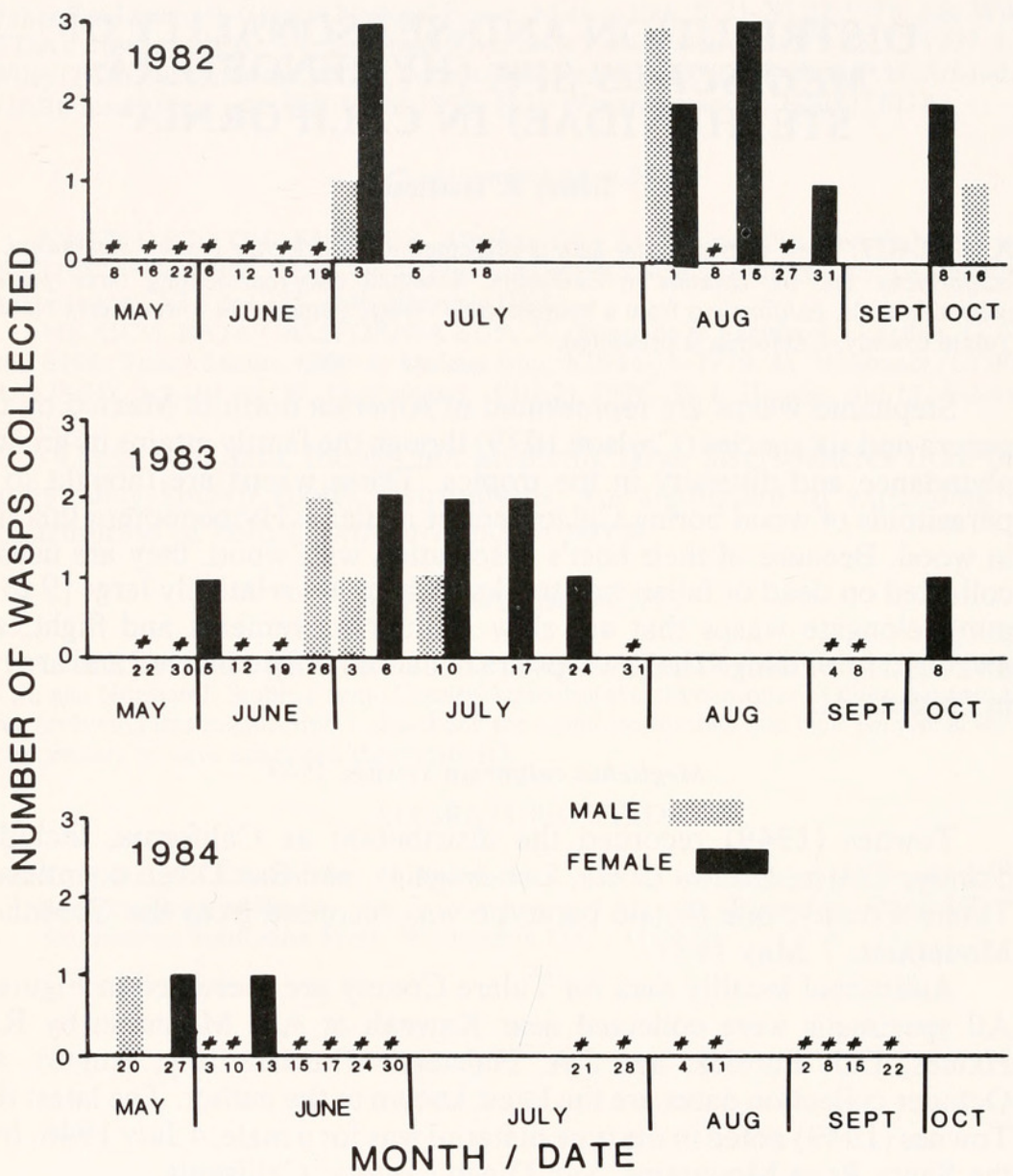


Figure 1. Seasonal data for *Megichus californicus* collected near Kaweah at Ash Mountain, Tulare County, California. An asterisk (#) indicates a collecting trip where no wasps were collected.

Megischus bicolor sickmanni (Schletterer, 1889)

Townes (1949) and Carlson (1979) recorded the distribution of this subspecies as Ontario to Florida, west to Iowa, Texas, Arizona, Utah, and southern California.

Two females and three males extend the range in California north to Tulare County and a single female north to Tehama County. The five specimens from Tulare County were collected near Kaweah at Ash Mountain by R.D. Haines. Females were collected 27 August 1982 and 28 July 1984; males 27 August 1982, 17 June 1983, and 11 August 1984. The female from Tehama County was collected by D.L. Wilson at Red Bluff, 17 September 1970 from Oak Foothill habitat.

Megischus texanus Cresson, 1872

Carlson (1979) reported the distribution as southern Texas, southwestern Oklahoma, Arizona, southern California, and northwestern Mexico.

A male in the California State Collection of Arthropods, California Department of Food and Agriculture, extends the range in California north to Sacramento County. It was collected by M.S. Wasbauer at Fair Oaks on 26 December 1959, having emerged from Interior Live Oak, *Quercus wislizenii*. This is also the first rearing record for a North American *Megischus*.

The stephanid specimens collected near Kaweah were from a six mile long by eight foot wide, hydroelectric-water flume that winds through Foothill Woodland and Chaparral communities (2800-2200 feet) (Halstead and Haines, unpublished).

This information is significant in extending the ranges of these species and showing when the adults are active at the Kaweah location (Figure 1).

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