

possible radii, and 18 more or less circular sticky lines. Many lines were lax (Fig. 1). One ant (*Acromyrmex* sp.) was placed onto the sticky lines. The prey stuck but the male failed in its capture. However, this male captured another ant in a female web (Viera and Costa 1985) and also mated normally.

This irregular orb-like web resembles webs constructed by young *Zygiella x-notata* (Witt 1956, in Foelix 1982:141) and drugged adult females of *Araneus diadematus* (Witt 1971). Both drugs and sexual maturity in males modify the expression of the innate program of orb web building.

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NORTHERN RECORDS OF *MICROBISIUM BRUNNEUM* (PSEUDOSCORPIONIDA, NEOBISIIDAE) FROM EASTERN CANADA

The range of pseudoscorpion species in Canada is poorly known (e.g., Hoff 1958; Dondale 1979; Sharkey 1987). When collecting invertebrates with pitfall traps and by sieving *Sphagnum* moss in bogs in eastern parts of Canada, 1978 and 1985, the senior author captured the pseudoscorpion *Microbisium brunneum* (Hagen) both in the boreal forest zone and in northern forestline, forest tundra, areas.

M. brunneum was found in samples of *Sphagnum* moss at the following sites in eastern Canada:

1. Ontario; Copetown (43°14'N, 80°04'W), Summit Hill muskeg, 11 July-26 September 1978, 2 exx.

2. Quebec; Parc Jacques Cartier, bog at Lac Barette (47°27'N, 71°15'W), 18 July-14 September 1985, 3 exx.
3. Quebec; Schefferville (54°50'N, 66°50'W), swamp, 21 July 1978, 1 ex.
4. Quebec; Schefferville, open *Sphagnum* bog, 22 July 1978, 1 ex.
5. Quebec; Kuujjuarapik (Poste-de-la-Baleine) (55°15'N, 77°50'W), swamp, 9 July - 29 August 1985, 1 ex.
6. Quebec; Kuujjuarapik, palsa bog, 5-28 August 1985, 1 ex.

It is worth mentioning that *M. brunneum* is the only pseudoscorpion species found at the bogs studied and mentioned above. The habitat fits with the previous data about the ecology of the species: occurring on bogs (Hoff 1946; Sharkey 1987).

According to Hoff (1946), *M. brunneum* has a wide geographical range in eastern Canada and the northern United States. However, no records from eastern Canada (Ontario, Quebec or the Maritime provinces) were included in the list of North American pseudoscorpions by Hoff (1958). Three records have been published for *M. brunneum* in eastern Canada. Nelson (1984) mentioned the presence of the species in Ontario and Quebec, and Sharkey (1987) in Cape Breton Highlands National Park, Nova Scotia. Kaisila (1964) wrote in his paper on pseudoscorpions collected from Newfoundland in 1949: "*Microbisium* sp. (spp.?). These, 11 samples in all, constituted the bulk of the material. Finds were made in all parts of the island". This material, sent to J. C. Chamberlin (Kaisila 1964), probably included *M. brunneum*. In addition, Hoff (1958) listed *M. brunneum* just at the forestline area in Churchill, northern Manitoba (about 59°N), based on the report by McClure (1943) as "near *M. brunneum*".

Besides those specimens collected by the senior author the most northern *M. brunneum* in the Canadian National Collection was taken 40 miles west of St. John's, Newfoundland ex muskeg at about 47°50'N. The present samples of *M. brunneum* from Schefferville and Kuujjuarapik are clearly the northernmost known in the eastern part of Canada. Although the latitude of these sites is more southern than that of Churchill, the environmental conditions are comparable: all these three areas are situated in the forestline region or forest tundra (see e.g., Danks 1981).

M. brunneum is not the pseudoscorpion with the most northern distribution in North America. An undescribed species of *Wyochernes* (presently being described by W. B. Muchmore) was discovered by V. Behan-Pelletier in the Yukon Territory at the following locality: British Mountains, 350 m, Sheep Creek, 69°10'N, 140°18'W, 23 June 1984, collected under stones on fine gravel about 1 m from edge of creek.

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**PREDATION OF *ACHAEARANEA TEPIDARIORUM*
(ARANEAE, THERIDIIDAE) UPON
SPHODROS FITCHI (ARANEAE, ATYPIDAE)**

Sphodros fitchi Gertsch and Platnick is a recently described purseweb spider inhabiting the central plains states from Nebraska to Oklahoma and Arkansas (Gertsch and Platnick 1980). Although some aspects of the natural history of members of this genus have been observed (Coyle and Shear 1981; McCook 1888; Morrow 1985; Teeter 1984), little information exists concerning predation. A female *Sphodros rufipes* (Latreille) was taken from the stomach of a frog (Gertsch 1936). Observations in eastern Kansas indicate that males of the same species often fall victim to female conspecifics and females of *Sphodros niger* (Hentz) during the mating season (Morrow 1985). The present note records predation of *Achaearanea tepidariorum* (C. L. Koch) upon *S. fitchi*.

On 10 July 1987, remains of an adult male *S. fitchi* were discovered in the web of a female house spider, *A. tepidariorum*, located in a metal storage building on the University of Kansas Rockefeller Experimental Tract in Jefferson County, Kansas. The web was situated below a wooden shelf against a wall, and was approximately 0.5 m above the concrete floor. The *Sphodros* was wrapped in silk and suspended in the lower portion of the web.

A. tepidariorum is well known for its ability to overpower and consume relatively large prey, including vertebrates (Gertsch 1979). Due to the shriveled condition of the abdomen, the total length of the victimized *Sphodros* was not measured; however, the length of the carapace was 4.1 mm. Since the male holotype of this species has a carapace length of 4.2 mm and a total length of 12.7 mm (Gertsch and Platnick 1980), the estimated length of the prey item is less than 13 mm. The total length of the female *Achaearanea* was 7.4 mm.