MATING BY FEMALE SCORPIONS WHILE STILL CARRYING YOUNG

Mating and courtship behavior are reported for 29 species of scorpion in six of the nine families of extant scorpions (Polis and Sissom 1990). However, recently post-partum females from only a few species were reported to court during the period (1-51 days) that they carry their newly born young (e.g., *Centruroides, Isometrus* and *Tityus* spp). All these species are in the family Buthidae, a taxon that is quite different in phylogeny, life history and behavior from scorpions in the other eight families (Polis 1990; Sissom 1990). Here, we report a courtship by *Vaejovis eusthenura* (Wood), a species of Vaejovidae in which a post-partum female mated while still carrying her young.

The mating occured at 2330 hours on June 9, 1989 and was located 20 km east of Cabo San Lucas, Baja California del Sur, Mexico. The male and female were observed under ultraviolet light. When first observed, the male was leading the female in the courtship dance (promenade) by grasping her pedipalp chelae fingers with his own. She was carrying 14 first instars (only first instar scorpions do not fluoresce under UV). This indicates that birth had occurred within 7-17 days, the period that vaejovids (9 species reported in the literature) are known to spend before their first molt. The pair moved together for about 12 min before the male deposited a spermatophore on a small rock. He subsequently pulled the female over the spermatophore. She arched over and descended upon the spermatophore, presumably aspirating the sperm into her gonopore. Thus the mating was apparently successful. They separated immediately after the female descended on the spermatophore (See Polis and Farley 1979, and Polis and Sissom 1990 for a full description of courtship).

Since scorpions are iteroparous, courtship by post-partum females is not surprising and has been reported previously for several species (Polis and Sissom 1990). However, courtship so soon after birth has not been reported for non-buthid scorpions. Such behavior may be common but simply unobserved. This is particularly plausible in sub-tropical and temperate scorpions because the general periods of courtship (May through October in the northern hemisphere) and birth (June through September) overlap. Nevertheless, the described behavior by recent post-partum females is the first in approximately 40 observed courtship of vaejovids (*Vaejovis, Vejovoidus, Paruroctonus*), and Iurids (*Hadrurus*) that we have observed in the field.

We thank David Sissom and Michael Soleglad for making suggestions to improve the manuscript. D. Sissom kindly identified the courting pair.

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Gary A. Polis and **Mark Mohnac**, Department of Biology, Vanderbilt University, Nashville, Tennesses 37235 USA.

Manuscript received March 1990, revised May 1990.