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## Alloparental Care in the Prairie Skink, *Eumeces septentrionalis*: A Case of Mistaken Identity?

Louis A. Somma

Florida State Collection of Arthropods, [somma@ufl.edu](mailto:somma@ufl.edu)

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*Alloparental Care in the Prairie Skink,  
Eumeces septentrionalis:  
A Case of Mistaken Identity?  
Louis A. Somma*

Department of Zoology  
223 Bartram Hall  
University of Florida  
Gainesville, FL 32611

Alloparental care, or one individual caring for the eggs or young of another, has been documented for a variety of vertebrate organisms (Coyne & Sohn 1978; Frame *et al.* 1983; Gowaty & Karlin 1984). In this article I document an instance of alloparental care in the prairie skink, Eumeces septentrionalis.

During the summer of 1984, I had 18 captive female E. septentrionalis housed in a lab while conducting research for my MA Thesis on brooding behavior and egg mortality (Somma 1985a, b; Somma & Fawcett *In prep.*). In that study I had separate plastic terraria arranged adjacent to each other, each containing a clutch of incubating skink eggs (oviposited June 14-23). Nine clutches had a brooding female and 9 had the parent removed.

One of the attended clutches had 11 out of 18 eggs hatch successfully on July 14. This terrarium was adjacent to one which contained an unbrooded clutch. The unbrooded clutch had 9 out of 11 eggs hatch on July 19. The female in the first clutch expressed some parental behavior toward her young for two days before ignoring them and leaving the nest (Somma, *In prep.*). I also have observed a brood of week-old young (numbering 13) in a nest cavity with a female in the wild (July 26, 1984). The captive female had her young removed from her terrarium on the third day. On July 21, this female escaped from her terrarium and entered the adjacent one with the unattended hatchlings. She was found coiled around 5 of the hatchlings in the nest cavity. Tongue-flicks by the female were directed toward some of the young skinks.

The adult was removed and placed in her original terrarium. The next morning she was again found in the other terrarium coiled around the hatchlings. She attempted to bite me when I removed her. This skink did not make any further attempts to escape her terrarium for the duration of her captivity.

While no known instances of female Eumeces brooding the eggs or young for the purpose of "helping" another parent have been documented, there are records of multiple clutches being brooded by several females (Blanchard 1922; Noble & Mason 1933; McCauley 1939; Fitch 1954). These observations are believed to represent a condition caused by the limited availability of next sites. Several studies suggest that a female Eumeces cannot distinguish any differences between the eggs of her own clutch and those of conspecifics (Noble & Mason 1933; Somma In press). Eggs of the ground skink, Scincella laterale, also have been found mixed in a clutch of E. fasciatus eggs (Fitch 1954). These were apparently brooded by the female.

It seems likely to me that the prairie skinks in this study had strong maternal instincts and could not distinguish the nest of unattended hatchlings from those of

her own. In the genus Eumeces, there may not be any selective pressure for brooding females to distinguish her progeny from those of conspecifics, congeners or possibly other lizard species.

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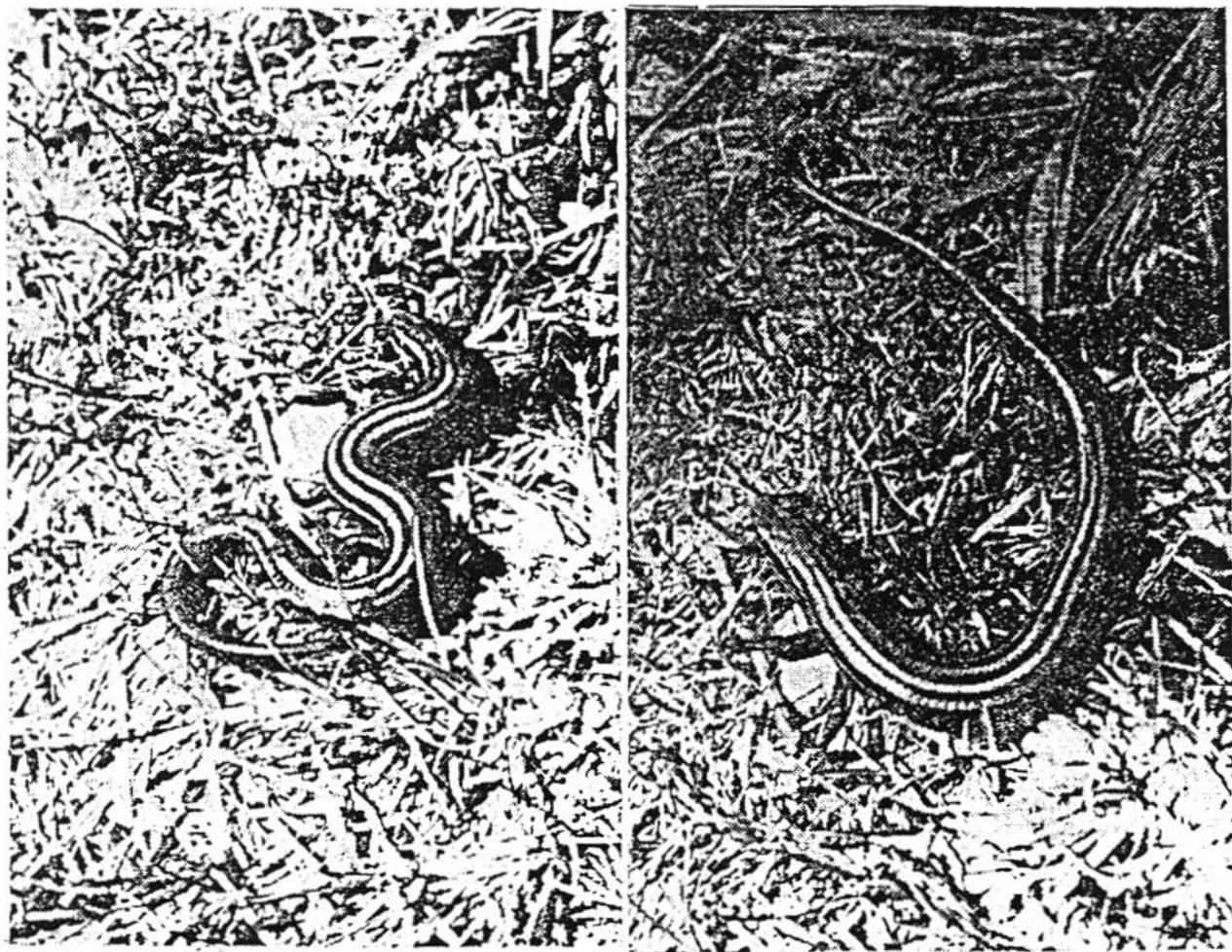
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### Errata

The citation in the first paragraph should read "(Coyne & Sohn 1978; Frame et al. 1977; Craig 1980; Emlen 1982, 1984; Patterson et al. 1982; Price et al. 1983; Gowaty & Karlin 1984)".



Eumeces septentrionalis