

MATERNAL CARE OF NEONATES IN THE PRAIRIE SKINK, *EUMECES SEPTENTRIONALIS*

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ABSTRACT.—Maternal care of neonates has been documented in relatively few species of lizards representing four families. This study documents the occurrence of maternal care of neonates in the prairie skink, *Eumeces septentrionalis*. Observations made herein indicate that individual variation in maternal behavior exists in this species.

Maternal care of neonates has been documented in relatively few species of lizards. Parental protection of neonates and assistance during parturition or hatching, however, does occur in some lizard species in the families Gekkonidae (Robb 1986), Anguidae (Guillette and Hotton 1986), Scincidae (Tanner 1943, 1957, Evans 1959, Rose 1962, Hikida 1981, Slavens 1983, Hammond 1985, Mehaffey 1986), and Xantusidae (Cowles 1944). Initial observations on maternal care in *Eumeces septentrionalis* have been made by Somma (1985). The observations presented herein represent a more detailed description of maternal care of neonates by *E. septentrionalis*.

Five gravid females were obtained from Douglas County, Nebraska, during May 1984 and placed in separate plastic terraria with a soil substrate. A 14L:10D photoperiod was maintained for the duration of the study. Each terrarium contained a 15 × 15-cm plate of transparent, red acrylic under which the skinks could brood their eggs and be observed. Lizards were fed mealworms and crickets ad libitum. Eggs were oviposited between 18 and 30 June and brooded until hatchling emergence (14–23 July).

The type of maternal behavior expressed toward neonates was highly variable, although no attempt was made to quantify it. One female did not express any behavior toward its single surviving hatchling. Two females nudged their young while they emerged and then groomed them by licking the embryonic fluids from their bodies. These and two others each constructed small burrows extending 5–7 cm from their nest cavi-

ties during hatchling emergence. Most of the neonates remained in these burrows with the adults for two days. All four adults followed their young around the nests while constantly directing tongue-flicks toward them. One female remained tightly coiled around its neonates at all times. These maternal behaviors lasted for two days before the adult skinks ignored their neonates and left their nests. At this time, both adults and neonates made attempts to escape their respective terraria.

The maternal behaviors of the skinks observed in this study were not as pronounced as those reported earlier for this species (Somma 1985). In that study, the females remained with the hatchlings for three days and attempted aggressively to defend their young. The results of past and present observations on maternal behavior in *Eumeces septentrionalis* indicate that much variation exists. Further studies are required to evaluate the significance of this behavior.

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