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## *Elaphe bairdi* (Baird's Rat Snake): Drinking Behavior.

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I am indebted to John F. Lokke for providing me with the snake and its breeding history.

Submitted by **LOUIS A. SOMMA**, Department of Zoology, University of Florida, Gainesville, FL 32611, USA

**ELAPHE BAIRDI** (Baird's Rat Snake). **DRINKING BEHAVIOR.** On 13 February 1988, at 1600 h, a captive-bred (hatched July 1985) male *Elaphe bairdi* (TL = 136.9 cm, SVL = 89.54 cm), maintained in a 50.5 x 25 x 30 cm terrarium was accidentally splashed with water. As beads of water on the snake's head rolled down to the upper labial scales, swallowing was observed. The water on the labial scales was drawn into the mouth while it was closed. This behavior lasted 42 sec.

This behavior was repeated 23 out of 24 trials conducted during the next 24 days. The duration of swallowing was 9-62 sec ( $\bar{X}$  = 35.8, N = 25). Swallowing was observed when water touched the head, even though it did not always reach the mouth. During two of the trials the snake tilted its head and rubbed its labial scales along its dorsum, sucking water droplets off its body.

A bowl of clean water was always present and the snake has been observed drinking from it. Water falling on the head seems to stimulate swallowing regardless of the snake's hydration state. This may be a stimulus-response behavior that is an adaptation to living in an arid environment with limited standing water (e.g., west Texas). It would allow the snake to utilize water in the form of precipitation or condensation.

More complex variants of this behavior have been observed in the lizards *Moloch horridus* (Gans and Blumer 1982. *Amphibia-Reptilia* 3:57-64), *Phrynosoma cornutum* (Sherbrooke 1981. *Horned Lizards*. Southwest Parks and Monuments Assoc.) and *P. douglassii* (pers. obs.), and the snakes *Bitis peringueyi* (Louw 1972. *Symp. Zool. Soc. Lond.* 31:297-314; Robinson and Hughes 1978. *Ann. Transvaal Mus.* 31:189-193), *Bothrops asper* (Greene 1986. 99-108. *In: Predator-Prey Relationships*. Univ. Chicago Press), and *Nerodia fasciata compressicauda* (Miller 1985. *Herp. Review* 16:71). Unlike *E. bairdi*, these species have or appear to have scales modified to collect water.