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**LAMPROPELTIS CALLIGASTER CALLIGASTER** (Prairie Kingsnake). **THERMAL ECOLOGY.** Although the thermal ecology of some species of snakes has been studied, the thermal ecology of many more snake species has not. Kapfer et al. (2008. *J. Therm. Biol.* 33:174–179) attributed this lack of emphasis on thermal ecology to the decline in the number of publications reporting natural history or field-based research on herpetofauna. The thermal ecology of snake species deserves more attention because maintenance of body temperature is important for the ecology and fitness of snakes (Blouin-Demers and Weatherhead 2008. *Isr. J. Ecol. Evol.* 54:361–372). My main objective was to investigate diurnal variation in body temperature of *Lampropeltis calligaster calligaster* associated with sex of the snake, month of sampling, and behavior.

Temperature-sensitive transmitters (Models SB-2T and SI-2T; Holohil Systems Ltd., Carp, Ontario, Canada) were surgically implanted by veterinarians (after Reinert and Cundall 1982. *Copeia* 1982:702–705; Blouin-Demers and Weatherhead 2001. *Ecology* 82:2882–2896), into six male and four female *L. c. calligaster* caught at Jim Edgar Panther Creek (JEPC) State Fish and Wildlife Area, in Cass Co., Illinois, USA (40.01°N, 90.04°W, datum WGS84). Snakes emerged from hibernation in late March and entered hibernation mid-October (Richardson et al. 2006. *J. Herpetol.* 40:423–428), so I tracked snakes for periods ranging from 14 to 193 d (mean = 120 d) from 10 May to 16 October 2004 and 29 March to 3 May 2005 to complete one annual activity cycle. I located each snake every 2 d between 0550 and 2022 h to incorporate variation in diurnal body temperature. Upon locating a snake, I recorded its body temperature and behavior (i.e., exposed aboveground, under cover aboveground, or underground). Means throughout are reported  $\pm 1$  SE.

I measured the body temperature of snakes 526 times from

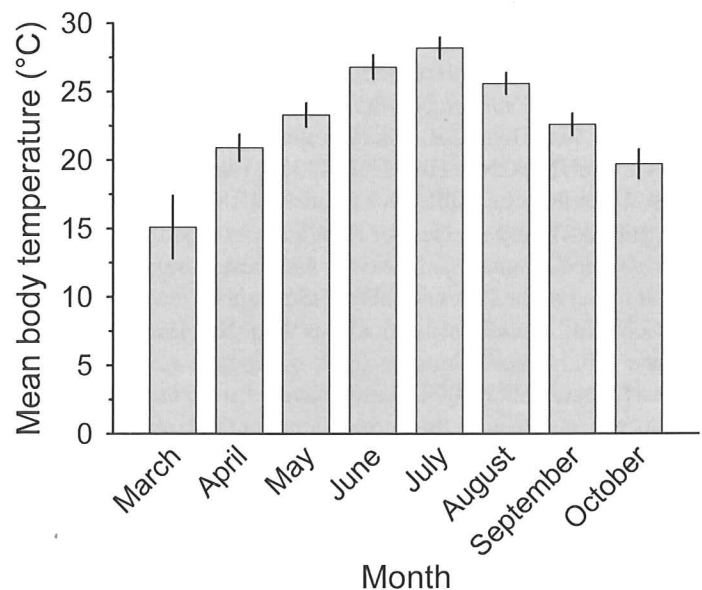


FIG. 1. Mean monthly body temperature ( $\pm 1$  SE) of radio-tracked *Lampropeltis calligaster* from Cass County, Illinois, USA.

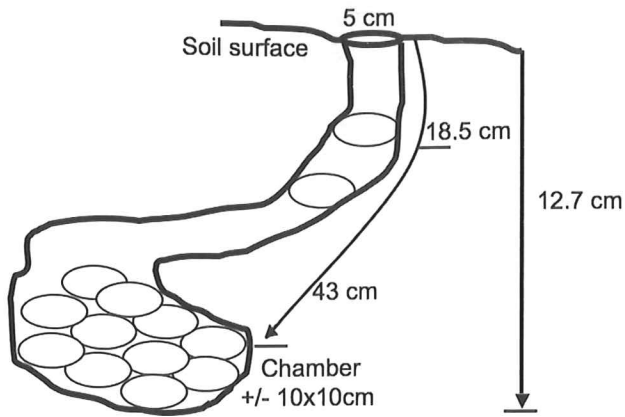


FIG. 1. *Heterodon platirhinos* nest cavity details after oviposition in central Texas, USA.

and Cebek (2005) with their report of 2–4 days for nest excavation to a depth of 10–15 cm. Our hatching success was higher (92%) than any Cunningham and Cebek (2005) reported from the wild (33–74%) or captivity (85%). As expected, our nesting dates were nearly one month earlier than their observations and, interestingly, our incubation times agree with two of their wild clutches, despite the dramatic difference in latitude between the sites.

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**HETERODON PLATIRHINOS** (Eastern Hog-nosed Snake). **PREDATOR/PREY MASS RATIO.** Snakes are renowned for their ability to consume large prey relative to their body size. However, a recent review indicated that reported anuran prey items were always smaller than the snake predator (Toledo et al. 2007. *J. Zool.* 271:170–177). Herein we report two observations in which prey mass was greater than predator mass.

On 26 May 2009, we captured a *Heterodon platirhinos* within a box trap (Burgdorf et al. 2005. *Herpetol. Rev.* 36:421–424) on Eglin Air Force Base, Okaloosa Co., Florida, USA, that regurgitated a live 36 g *Scaphiopus holbrookii* (Eastern Spadefoot), despite attempts by us to minimize disturbance. Several days after this event, the *H. platirhinos* weighed 34 g, yielding a prey/predator mass ratio of 1.06. On 24 September 2008, we captured a 6 g *H. platirhinos* along a drift fence at Fort Benning, Chattahoochee Co., Georgia, USA. This snake regurgitated an 8 g *Anaxyrus terrestris* (Southern Toad; AUM 34804), a prey/predator mass ratio of 1.33. Although colubrid snakes may often consume large prey relative to their body size, they rarely take prey larger than themselves; the predator/prey mass ratios presented here are considerable.

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