

NERODIA SIPEDON PLEURALIS (Midland Water Snake).

REPRODUCTION. In southeastern Mississippi, *Nerodia sipedon pleuralis* is the most abundant snake associated with the upper Pascagoula River System, which consists of the Leaf and Chickasawhay Rivers and tributaries thereof. Although *N. sipedon* has been extensively studied in the northern and central portions of its distribution, few studies have been conducted on this species from the southern extremity of its distribution, and data are lacking on reproduction from *N. sipedon* in Mississippi. In Alabama, *N. sipedon* bears 12–30 young from July to early September (Mount 1975. The Reptiles and Amphibians of Alabama. Auburn, Alabama. 347 pp.).

As part of a study that required the use of neonatal snakes, gravid females of *N. sipedon* were collected from the Leaf River in Forrest and Jones Counties, Mississippi, USA, during the first week of July (nine individuals each collected in 1999 and 2001). These snakes were maintained in captivity until they gave birth, and were thereafter released at their capture sites. Snakes collected in 1999 and 2001 gave birth from 5 July to 12 July and from 25 July to 10 August, respectively. Data (expressed as means \pm 1 SE) collected from these snakes (N = 18) were the following: prepartum mass (g) = 245.2 \pm 15.9 (177.6–436.7), postpartum mass (g) = 171.3 \pm 12.5 (111.4–319.1), number of offspring = 15.3 \pm 0.8 (10–22), and relative clutch mass (RCM) = 30.5 \pm 1.5 (19.6–37.3). A correlation analysis indicated a significant positive relationship between prepartum mass (g) of snakes and the number of offspring they produced ($t = 3.231$, $df = 16$, $P = 0.005$; Fig. 1).

Relative to *N. sipedon* in Alabama, snakes from this study produced very small litters early in the birthing season. In fact, the 10 offspring produced by an individual of *N. sipedon* from this study is among the smallest litter size published for this species, with the exception of *N. s. insularum*, which may bear as few as six young (Camin and Ehrlich 1958. Evolution 12:504–511). However, although *N. s. insularum* attains a total length that is comparable to that of *N. s. pleuralis* (56–145 cm versus 61–150 cm [Tennant and Bartlett 2000. Snakes of North America. Eastern and Central Regions. Gulf Publ. Co., Houston, Texas. 588 pp.]), the former taxon may bear far more young (50 versus 30 [King 1986.

Copeia 1986:757–772]). Thus, as is typical for most other widespread species of reptiles whose reproductive patterns have been studied in different climates, it appears that individuals of *N. sipedon* from warmer climates produce fewer offspring than do individuals from cooler climates. Further studies on the demography of *N. sipedon* in southeastern Mississippi are needed to determine if the small litter size is offset by an earlier age at maturation or a larger size of individual offspring.

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OPHIOPHAGUS HANNAH (King Cobra). **JUVENILE DIET.**

Although the diet of *Ophiophagus hannah* is known to constitute snakes and large lizards, especially varanids (David and Vogel 1996. The Snakes of Sumatra. An Annotated Checklist and Key with Natural History Notes. Edition Chimaira, Frankfurt am Main, 260 pp.; Smith, 1943. The Fauna of British India, Ceylon and Burma, Including the Whole of the Indo-Chinese Region. Vol. III. Serpentes. Taylor and Francis, London, xii + 583 pp.), and no specific information is available for the diet of juveniles. A hatchling *O. hannah* from the village of Webbi, near Mayabunder, Middle Andaman Island, Bay of Bengal, India, that was collected on 25 July 2001 as a road kill (USDZ 2.5176; 400.5 mm SVL), contained a recently-ingested juvenile *Lycodon capucinus* (USDZ 2.5177; 255 mm SVL, body width 8.1 mm, and tail length 54 mm). The prey was swallowed head-first.

We thank the Andaman and Nicobar Islands Environmental Team for support of field researches and collection from the Andaman Islands, Alok Saxena and Mr. Ghramduhari of the Andaman and Nicobar Forest Department for permission and facilities, Harry Vasanth Andrews for encouragement, and Kelvin Kok Peng Lim (USDZ) for curatorial assistance.

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PSEUDECHIS PORPHYRIACUS (Red-Bellied Black Snake).

DIET. The 1935 introduction and subsequent rapid spread of the toxic giant toad (*Bufo marinus*) in Queensland, Australia is well-documented (Sabath et. al. 1981. Copeia 1981:676–680; Eastal et. al. 1985. J. Herpetol. 19:185–188). It has been suggested that apparent density and range declines in anurophagous reptiles (especially varanid lizards and snakes) are directly attributable to attempted predation on *B. marinus* (Covacevich and Archer 1975. Mem. Qld. Mus. 17:305–310), including *P. porphyriacus* in north Queensland (Shine and Covacevich 1983. J. Herpetol. 17:60–69). Such claims are unsubstantiated and recent attempts to quantify this phenomenon have failed to find any direct impact on anurophagous reptiles by *B. marinus* (Catling et. al. 1999. Wildlife Res. 26:161–185). Dead snakes with partially ingested toads

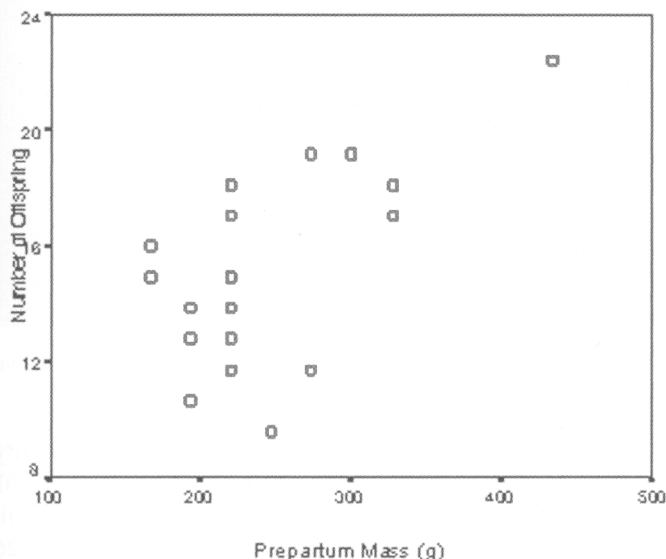


FIG. 1. Scatter plot of the prepartum mass of gravid *Nerodia sipedon* (N = 18) and the number of offspring they produced.