CONIOPHANES IMPERIALIS (Black-striped Snake). DIET. Coniophanes imperialis is a small, terrestrial snake that can be active day or night. Coniophanes spp. are known to have a broad diet that includes insects, salamanders, frogs, frog eggs, lizards, snakes, reptile eggs, bird eggs, insects, and earthworms (Köhler 2003. Reptiles of Central America. Herpeton Verlag, Offenbach, Germany. 367 pp.; Savage 2002. The Amphibians and Reptiles of Costa Rica: A Herpetofauna Between Two Continents, Between Two Seas, University of Chicago Press, Chicago, Illinois. 934 pp.), although C. imperialis has only been reported to consume lizards, frogs, and insects (Campbell 1998. Amphibians and Reptiles of Northern Guatemala, the Yucatan, and Belize, University of Oklahoma Press, Norman. 380 pp.). We report two prey items for C. imperialis on the island of Cayo Cochino Pequeñio in the Cayos Cochinos Archipelago (Islas de la Bahía, Honduras).

On 27 May 2006 at 1700 h we captured a small female (177 mm SVL, 29 mm tail, 4.0 g) C. imperialis with an obvious prey bulge, crawling through the leaf litter. We forced the snake to regurgitate and identified the food item as a single lizard egg suspected to be Noreps lemurinus, based on size and shape of the egg and that N. lemurinus is the most common polychrotid lizard on the island. Although Coniophanes spp. are known to feed on reptile eggs (Köhler, op. cit.) our observation represents the first report of C. imperialis preying on lizard eggs (Campbell, op. cit.).

On 21 June 2006 at 1600 h we observed a large male (245 mm SVL, 115 mm tail, 11.0 g) C. imperialis in the leaf litter that contained a very large food item. After capturing the snake and forcing it to regurgitate we identified the partially digested prey item as an adult male (65 mm SVL, 9 mm tail, 6.0 g) N. lemurinus. The lizard represented 54.5% of the snake’s mass and a 43.1% of its length. Coniophanes imperialis is known to consume lizards, but our observation represents the first report of N. lemurinus in the diet of C. imperialis. Our observation is also the largest reported meal by mass or length for C. imperialis (Alvarez de Toro 1960. Los Reptiles de Chiapas. Inst. Zool. Estado, Tuxla Gutierrez, Chiapas, 204 pp.), although C. fissidentes was reported to consume an Eleutherodactylus rufusus that weighed 76.4% of snake mass (Seib 1985. Biotropica 17:57–64).

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Submitted by JULIUS A. FRAZIER, Department of Zoology, Southern Illinois University, Carbondale, Illinois 62901, USA (e-mail: tonyf@siu.edu); CHAD E. MONTGOMERY, University of Wisconsin La Crosse, La Crosse, Wisconsin 54601, USA (e-mail: chad_mont@yahoo.com); SCOTT M. BOBACK, Department of Biological Sciences, University of Alabama, Tuscaloosa, Alabama 35487, USA (e-mail: sboback@ua.edu); and ROBERT N. REED, Invasive Species Science, USGS Fort Collins Science Center, 2150 Centre Ave, Bldg C, Fort Collins, Colorado 80526, USA (e-mail: reed@usgs.gov).

CONOPSIS NASUS (Large-nosed Earth Snake). PREDATION. On 3 October 2005, while conducting a road transect along Road No. 68 in the state of Aguascalientes in central Mexico, we found a DOR male Coachwhip (Masticophis flagellum) (SVL 920 mm, TL 200 mm). Close examination of the carcass (possibly killed the day before) revealed two partially digested Conopsis nasus (SVL 110 mm each, sexes undetermined) protruding from the gut. To our knowledge this is the first record of predation of M. flagellum on C. nasus.

Submitted by HECTOR AVILA-VILLEGAS (e-mail: avila_hec@yahoo.com.mx), LUIS F. LOZANO-ROMÁN (e-mail: flozanor@yahoo.com), Instituto del Medio Ambiente de Aguascalientes, Programa de Monitoreo Biológico, Gobierno del Estado de Aguascalientes, México; and RARAMURI REYES-ARDIT, Universidad Autónoma de Aguascalientes, México.

CROTALUS HORRIDUS (Timber Rattlesnake). BEHAVIOR. On 7 March 1998 we observed an adult Crotalus horridus at a communal hibernaculum in Scioto County, Ohio, USA. The snake alerted us to its presence by rattling, and dried mud was present on its tail. Skies were partly cloudy with occasional periods of sunlight and a light breeze. Ambient temperature was 14°C and substrate temperature was 18°C. Earliest emergence date is a key component of the seasonal cycle of this species (Brown 1993. Biology, Status, and Management of the Timber Rattlesnake [Crotalus horridus]: A Guide for Conservation. SSAR Herpetol. Circ. No. 22, 78 pp.). Published accounts of the seasonal cycle of C. horridus in Ohio note observations from May to September (Conant 1938. Amer. Midl. Nat. 20:1–200). To our knowledge, this is the earliest emergence date for C. horridus at this latitude (Martin 1992. In J. A. Campbell and E. D. Brodie Jr. [eds.], Biology of the Pitvipers, pp. 259–278. Selva Press, Tyler, Texas).

Submitted by JIMFOX, 71 Glendale Milford Rd. Milford, Ohio 45150, USA; and BRYAN HAMILTON, Great Basin National Park, Baker, Nevada 89311, USA (e-mail: bryan_hamilton@nps.gov).

CROTALUS LEPIDUS LEPIDUS (Mottled Rock Rattlesnake). DIET. The diet of Crotalus lepidus recently was reviewed by Holycross et al. (2002. J. Herpetol. 36:589–597), and relatively little information exists on mammals consumed by rock rattlesnakes under natural conditions. Mammals consumed by this species in the wild include shrew, mouse, Dipodomys spp., Chaetodipus spp., Perognathus spp., Peromyscus spp., and Sigmodon spp. (Holycross et al., op. cit.).

On 23 March 2005 I observed and photographed an adult C. l. lepidus consuming an adult White-ankled Mouse (Peromyscus pectoralis) at 1350 m elev. in Carlsbad Caverns National Park, Guadalupe Mountains, Eddy Co., New Mexico, USA (Arizona State University, ASU HP-00054). This event was observed below the stone amphitheater on the paved switchback trail leading into the large natural entrance of Carlsbad Cavern. At about 2230 h (Mountain Standard Time), I found the C. l. lepidus swallowing the P. pectoralis head-first with back legs and white ankles of the mouse still visible, which facilitated the specific identification (see
Fig. 63 in Geluso and Geluso 2004. Mammals of Carlsbad Caverns National Park, New Mexico. Bull. Univ. Nebraska State Mus. 17:1–180). My sighting represents the first documentation of a known species of mammal being consumed by *C. lepidus* under natural conditions. Information on the natural history of this subspecies is important because it is listed as endangered by the New Mexico Department of Game and Fish (Degenhardt et al. 1996. Amphibians and Reptiles of New Mexico. University of New Mexico Press, Albuquerque).

Submitted by KEITH GELUSO, Department of Biology, University of Nebraska at Kearney, Kearney, Nebraska 68849, USA; e-mail: gelusok.1@unk.edu.

**CROTALUS VIRIDIS VIRIDIS** (Prairie Rattlesnake). BEHAVIOR. Observations of the directional movements of experimentally displaced *Crotalus atrox* (Landreth 1973. Copeia 1973:26–31) and the straight-line paths of migratory *C. viridis viridis* between seasonal habitats (Duvall et al. 1985. Nat. Geogr. Res. 1:80–111) have led to the suggestion that rattlesnakes use celestial cues (e.g., the sun) for orientation. However, the use of other cues for orientation and navigation by rattlesnakes can not be ruled out based on limited experimental evidence. This observation of the homing ability of a naturally displaced prairie rattlesnake suggests that the species possesses not only a compass sense but also a map sense (Type III orientation; Griffin 1952. Biol. Rev. 27:359–400), providing knowledge of their location in relation to a destination.

I employed radio telemetry to track the migrations of 18 non-gravid female Prairie Rattlesnakes, *Crotalus v. viridis*, from two dens near Medicine Hat, Alberta, Canada in 2005. One radio tagged rattlesnake was tracked across the South Saskatchewan River to its north side on 16 May (Fig. 1). The radio tagged rattlesnake remained on the north side of the river until 17 September and all recorded locations during this period were within approximately 560 m of the den of origin. On 18 September the rattlesnake crossed the river and was located on its south side ca. 2000 m east of its last known location. The river flows from west to east and it is assumed that the snake drifted downstream when crossing. Prior to this displacement the den was ca. 453 m from the snake’s location on a true bearing of 103°. After displacement the den was ca. 1621 m away on a bearing of 246°. On the day following the crossing the snake moved 55 m from her previous location on a bearing of 333°. On the third and fourth day, four positions were recorded as the rattlesnake moved 1610 m back to the den. The route taken by the snake approximated a straight line with a mean bearing of 243.3° + 4.2°.

In this instance type II orientation can be discounted because the rattlesnake did not continue to orient as if it had not been displaced (Lawson 1994. Copeia 1994:263–274). Lohmann et al. (2004. Nature 428:909–910) stated, “Migratory animals capable of navigating to a specific destination, and of compensating for an artificial displacement into unfamiliar territory, are thought to have a compass for maintaining their direction of travel and a map sense that enables them to know their location relative to their destination.” If we assume that Prairie Rattlesnakes are capable of using the sun as an effective compass it would allow the displaced rattlesnake to maintain a heading, but this would not account for the rattlesnake’s apparent knowledge of its location relative to the den. Map sense in other taxa (e.g., turtles and birds) is thought to be based on the use of visual (Avens and Lohmann 2003. J. Exp. Biol. 206:4317–4325) or solar cues (Askerson et al. 2005. Current Biol. 15:1591–1597) combined with magnetic cues. Among snakes, chemosensory cues could also be used in combination with other cues for navigation during migration (Brown and Parker 1976. Copeia 1976:225–242; Fitch 1960. Univ. Kansas. Mus. Nat. Hist. Misc. Publ. 13:85–288; Lawson 1989. Musk-Ox 37:110–115). This observation of a naturally displaced Prairie Rattlesnake suggests...