pharmaceutical services, and supplies. The field study is conducted under Arizona Game and Fish Department Scientific Collecting License #SP646676 (MDC) and is approved by San Diego State University’s Institutional Animal Care and Use Committee.

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CROTAIUS ORNATUS (Eastern Black-tailed Rattlesnake). FEEDING BEHAVIOR. Crotalus ornatus was recently re-validated as a species (Anderson and Greenbaum 2012. Herpetol. Monogr. 26:19–57); thus, the diet and feeding behavior of the species is poorly known. It is thought that the diet of C. ornatus closely resembles that of former conspecific C. molossus, which primarily feeds on small mammals, with lizards, snakes, anurans, birds, and insects being consumed occasionally (Ernst and Ernst 2003. Snakes of the United States and Canada. Smithsonian Institution Press, Washington D.C. 668 pp.). Additionally, there are no reports on the seasonality of feeding behavior for C. ornatus, but C. molossus in the Chiricahua Mountains of southeast Arizona, USA, is reported to feed from late March until late November or early December, after which a period of winter inactivity begins (Greene et al. 2002. In Schuett et al. [eds.], Biology of the Vipers, pp. 179–205. Eagle Mountain Publishing, Eagle Mountain, Utah).

In late February at a site in the northern Chihuahuan Desert, in the Trans-Pecos ecoregion of Texas, USA, which to our knowledge, represents the earliest known observation of feeding for either species of Black-tailed Rattlesnake in the USA.

On 23 February 2018, at 1406 h, an adult female C. ornatus (925 mm SVL, 410 g), fitted with a radio-transmitter (Holohil Ltd. SI-2), was being monitored at the Indio Mountains Research Station, Hudspeth County, Texas, USA, on 23 February 2018. The snake was situated under a large rock, in a loose resting coil, with the posterior portion of her body extended near the cavity opening, partially exposed to the sunlight; a large food bolus from a recent meal was readily visible (Fig. 1). At the time of the observation, the internal body temperature of the snake was ca. 34.4°C, air temperature was 27.2°C, ground temperature in the sun at the cavity entrance was 41.8°C, and ground temperature in the shade adjacent to the food bolus was 21.8°C. The snake was left undisturbed following the observation.

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Furthermore, as C. v. vudii is a largely terrestrial species and only occasionally moves off the ground into lower vegetation (Schwartz and Henderson 1991. Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History. University of Florida Press, Gainesville, Florida. 720 pp.), we would assume that C. v. vudii would only be able to prey upon birds that are caught on the ground or in low vegetation. As a result, we expect that bird predation by C. vudii is an uncommon occurrence. Indeed, there is only one published report that describes a predation event of C. ornatus and the feeding behavior observed here was consistent with previous reports.

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Fig. 1. Cubophis vudii vudii constricting and ingesting a fledgling Mimus polyglottos in The Bahamas.
C. vudii on a bird and this study was also unable to identify the prey species (Henderson and Sajdak 1996, op. cit.). Here, we report a predation event of C. v. vudii on a fledgling Mimus polyglottos (Northern Mockingbird) further supporting the hypothesis that C. vudii primarily preys on birds that are caught on the ground or in low vegetation.

On 5 July 2019, at 1646 h, one of the authors witnessed an adult-sized C. v. vudii catching and ingesting a fledgling M. polyglottos (Fig. 1). Prior to the attack, the bird had fallen out of a tree and landed on the ground, potentially as a result of the fledgling practicing to fly. Upon falling out of the tree, the bird was immediately approached by the snake. Following a strike to the upper body, C. v. vudii wrapped two coils around the bird to fixate it. It then ingested the bird headfirst while it still showed signs of vitality, breathing and calling. A video of the predation event can be seen at https://doi.org/10.5281/zenodo.3554496.

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On 1 November 2019, at 0017 h (air temperature = 19.8°C), in Hentona, Kunigami-son, Kunigami-gun, Okinawa Prefecture, Japan (26.7332°N, 128.1875°E; WGS 84; 203 m elev.), we found a male C. semicarinatus (911 mm SVL, 191 mm tail length) on a branch of a pine tree (Pinus luchuensis) 7 m above the ground. When found, the snake was lying motionless on the branch in a loose coil and was assumed to be sleeping. The snake was released after measurement and examination of the stomach contents (none found).

To our knowledge, this is the first report of arboreal habitat use by C. semicarinatus. Arboreal resting at night has been reported for its congener C. major (Chinese Green Snake; Xiang and Li 2009. Colored Illustrations of Amphibians and Reptiles of Taiwan. Huayu Nature Book Trade Co. Ltd., Beijing, China. 336 pp.) and arboreal habits have also been reported for C. doriae (Doria’s Green Snake; Das 2010. A Field Guide to the Reptiles of South-East Asia. New Holland Publishers Ltd., London, UK. 376 pp.). Recent publications have revealed that several species of Cyclophiops are phylogenetically nested within the genus Ptyas (Figueroa et al. 2016. PLoS ONE 11:e0161070; Meetee et al. 2018. Zootaxa 4457:537–548). In this genus, several species are also known for resting on trees at night (Charlton 2019. A Guide to Snakes of Peninsular Malaysia and Singapore. Natural History Publications, Kota Kinabalu, Sabah. 300 pp.; Chan-ard et al. 2015. A Field Guide to the Reptiles of Thailand. Oxford University Press, New York, New York. 352 pp.). We assume that C. semicarinatus uses arboreal habitats more often than previously recognized.

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DENDRELAPHIS NGANSONENSIS (Nganson Bronzeback). DIET. Dendrelaphis ngansonensis is known to occur from Yunnan and Hainan, China (Nicodemo and Bain 2007. Herpetol. Rev. 38:355) and central and north Vietnam to Laos, southwest Cambodia, and southeastern Thailand (Neang et al. 2015. Cambodian J. Nat. Hist. 2015:172–182). This oviparous, arboreal species has been reported from primary and secondary forest, where it is thought to be diurnal and to feed on small vertebrates (Neang et al. 2012. The IUCN Red List of Threatened Species 2012:e.T192029A2030499). Here, we report the predation of an adult Rhacophorus kio (Black-webbed Treefrog) by an adult D. ngansonensis.

At 1100 h on 6 April 2016 (air temperature = 24.1°C, humidity = 81%), near the Bach Van Pagoda (16.19617°N, 107.84740°E; WGS 84; 1150 m elev.) within Bach Ma National Park, Phu Loc District, Thua Thien-Hue Province, central Vietnam, we observed a R. kio being eaten by a D. ngansonensis (Fig. 1). The frog was struck and held by the D. ngansonensis when the frog was sitting