
PEER EDITED

NOTES

NEW PREY ITEM OF THE BANDED ROCK RATTLESNAKE
(*CROTALUS LEPIDUS KLAUBERI*) FROM SOUTHWESTERN
COAHUILA DE ZARAGOZA, MEXICO

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Abstract.—We report for the first time the consumption of the Texas Banded Gecko (*Coleonyx brevis*) by the Banded Rock Rattlesnake (*Crotalus lepidus klauberi*) in southwestern Coahuila de Zaragoza, Mexico. We consider that this event might be more widespread given the broad sympatry of both species, albeit rarely documented.

Key Words.—feeding; natural history; northwestern Mexico; Texas Banded Gecko

Resumen.—Reportamos por primera vez el consumo del Gecko Bandeado de Texas (*Coleonyx brevis*) por la Cascabel Bandeada de Roca (*Crotalus lepidus klauberi*) en el suroeste de Coahuila de Zaragoza, México. Consideramos que este evento puede ser más común dada la amplia simpatria de ambas especies, pero rara vez documentado.

Palabras Clave.—alimentación; Gecko Bandeado de Texas; historia natural; noroeste de México

Diet is one of the most important aspects of organisms, as it may vary within species, populations, and even ontogenetically, and determines survival and life-history traits (Greene 1983, 1989; Beaupre 1995; Wiseman et al. 2019). In snakes it has been identified as one of the factors that promotes evolution of the group (e.g., Greene 1983; Sherratt et al. 2018), but due to the difficulty of observing snakes feeding in the wild, many records on their dietary habits come from anecdotal and opportunistic events, and/or the review of museum specimens (e.g., Holycross et al. 2002; Wiseman et al. 2019). The Banded Rock Rattlesnake (*Crotalus lepidus klauberi*) is a medium-sized snake distributed from the southeastern U.S. southward to Jalisco and Zacatecas, México, encompassing the states of Arizona, New Mexico, Sonora, Chihuahua, Durango, Coahuila, Zacatecas, Nayarit, Jalisco, and San Luis Potosí (Campbell and Lamar 2004; Heimes 2016). Its diet has been studied in many populations and throughout its range, either as detailed follow-up observations in particular populations (Beaupre 1995) or as anecdotal and opportunistic field observations reporting novel prey items. Holycross et al. (2002) made an exhaustive compilation of the diet items of *C. l. klauberi* from throughout its range based on data collected in the field, museum specimens, and literature records, and found that the most consumed type of prey were lizards, centipedes, and mammals. Here we report on a novel prey item of *C. l. klauberi*.

On 17 September 2020, at 2136, we found an adult male *C. l. klauberi* (Fig. 1) near the road between Ejido Vicente Guerrero and Tacubaya (25.61451°N, -103.07316°W; 1,110 m elevation), Coahuila de Zaragoza, México. The snake measured 412 mm snout-vent length and 39 mm in tail length. It was active when we found it and the left hemipenis was protruding from the cloaca. We captured the snake for gathering morphometric data and to allow it time to retract the hemipenis to prevent its dehydration, but the specimen died the next morning after regurgitating its prey. Upon close examination, the regurgitated prey consisted of an adult Texas Banded Gecko (*Coleonyx brevis*), some mammal hair, and scales that can be assigned to the tail of a whiptail lizard of the genus *Aspidoscelis* (Fig. 1).

This is the first reported record of consumption of a lizard in the genus *Coleonyx* by *C. l. klauberi* or for any subspecies of *C. lepidus* (Holycross et al. 2002). Most of the works detailing the prey items of *C. lepidus* recognize lizards as the most frequently consumed type of prey of this rattlesnake (Beaupre 1995; Holycross et al. 2002) and even consider this snake as a specialist predator on lizards (Carbajal-Márquez and Quintero-Díaz 2015). All the previously reported lizards consumed by *C. lepidus* were of diurnal genera such as whiptails (*Aspidoscelis*), Mexican alligator lizards (*Barisia*), greater earless lizards (*Cophosaurus*), horned lizards (*Phrynosoma*), toothy skinks (*Plestiodon*), spiny



FIGURE 1. (Bottom) A Banded Rock Rattlesnake (*Crotalus lepidus klauberi*). Prey items we found in an individual near the road between Ejido Vicente Guerrero and Tacubaya, Coahuila de Zaragoza, México, were (A) a partially digested Texas Banded Gecko (*Coleonyx brevis*) and (B) the tail scales of a whiptail lizard (*Aspidoscelis* sp.). (Photographed by Ricardo Palacios-Aguilar).

lizards (*Sceloporus*), and brush lizards (*Urosaurus*; Beaupre 1995; Holycross et al. 2002; Lazcano et al. 2004; Carbajal-Márquez et al. 2012; Banda-Leal et al. 2015; Carbajal-Márquez and Quintero-Díaz 2015). Armstrong and Murphy (1979) suggested that *Sceloporus* lizards likely represent the most important component of the diet of these rattlesnakes, and Beaupre (1995) noted that while the lizards consumed were mainly diurnal species, mammalian species in their diet were mostly nocturnal or crepuscular species. The consumption of other squamate prey such as snakes, however, includes conspecifics and genera with crepuscular or nocturnal habits such as hook-nosed snakes (*Gyalopion*; Milstead et al. 1950) and kingsnakes (*Lampropeltis*; Carbajal-Márquez et al. 2012). An adult male *C. lepidus* was reported to have consumed a San Luis Potosí Nightsnake (*Hypsiglena jani*) at night (Mata-Silva et al. 2010). Thus, the opportunistic consumption of a nocturnal lizard like *Coleonyx brevis* may not be rare. The distribution range of *C. brevis* widely overlaps with the northern portion of that of *C. lepidus* spp. (Dixon 1970), suggesting that its consumption might be widespread, although infrequently observed.

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