

TABLE 1. Bird species reported to prey upon coral snakes.

Coral snake species	Avian predator species (Family)	Reference
<i>Micrurus nigrocinctus</i>	<i>Momotus lessonii</i> (Momotidae)	This study
	<i>Malacoptila panamensis</i> (Bucconidae)	Smith 1969, <i>op. cit.</i>
	<i>Hepetotheres cachinnans</i> (Falconidae)	Parker, 1990 ¹ ; DuVal et al. 2006, <i>op. cit.</i>
<i>Micrurus diastema sapperi</i>	<i>Hepetotheres cachinnans</i> (Falconidae)	Enamorado Guzmán and Arévalo Orrego 1992 ²
<i>Micrurus dissolucus</i>	<i>Malacoptila panamensis</i> (Bucconidae)	Smith 1970, <i>op. cit.</i>
<i>Micrurus frontalis pyrrhocryptus</i>	<i>Cariama cristata</i> (Cariamidae)	Pueta 2002, <i>op. cit.</i>
<i>Micrurus fulvius</i>	<i>Buteo jamaicensis</i> (Accipitridae)	Brugger 1989 ³
	<i>B. lineatus</i> (Accipitridae)	Jackson and Franz 1981 ⁴
	<i>Falco sparverius</i> (Falconidae)	Jackson and Franz 1981 ⁴
	<i>Hepetotheres cachinnans</i> (Falconidae)	Ferguson-Lees and Christie 2001 ⁵
	<i>Lanius ludovicianus</i> (Laniidae)	Stoddard 1978
<i>Micrurus lemniscatus carvalhoi</i>	<i>Hepetotheres cachinnans</i> (Falconidae)	Sazima and Abe 1991 ⁶
<i>Micrurus pyrrhocryptus</i>	<i>Hepetotheres cachinnans</i> (Falconidae)	Di Giacomo 2005 ⁷
<i>Micrurus</i> sp.	<i>Hepetotheres cachinnans</i> (Falconidae)	Brattstrom 1955 ⁸ ; Howell 1957, <i>op. cit.</i>

¹Parker 1991. In Burnham et al. (eds.), The Breeding Biology and Diet of Laughing Falcons (*Hepetotheres cachinnans*) in Pristine and Modified Tropical Forest Habitats, pp.115–120. The Peregrine Fund, Boise, Idaho; ²Enamorado Guzmán and Arévalo Orrego 1992. In Whitacre and Thorstrom (eds.), The Breeding Biology and Diet of Laughing Falcons (*Hepetotheres cachinnans*) in Pristine and Modified Tropical Forest Habitats, pp.193–200. The Peregrine Fund, Boise, Idaho; ³Brugger 1989. Copeia 1989:508–510; ⁴Jackson and Franz 1981. Herpetologica 37:213–228; ⁵Ferguson-Lees and Christie 2001. Raptors of the World. Houghton Mifflin, New York. 992 pp.; ⁶Sazima and Abe 1991. Studies on Neotropical Fauna and Environment 26:159–164; ⁷Di Giacomo 2005. In Di Giacomo and Krapovickas (eds.), Birds of the El Bagual Reserve, pp. 201–465. Asociación Ornitológica del Plata, Buenos Aires, Argentina; ⁸Brattstrom 1955. Evolution 9:217–219.

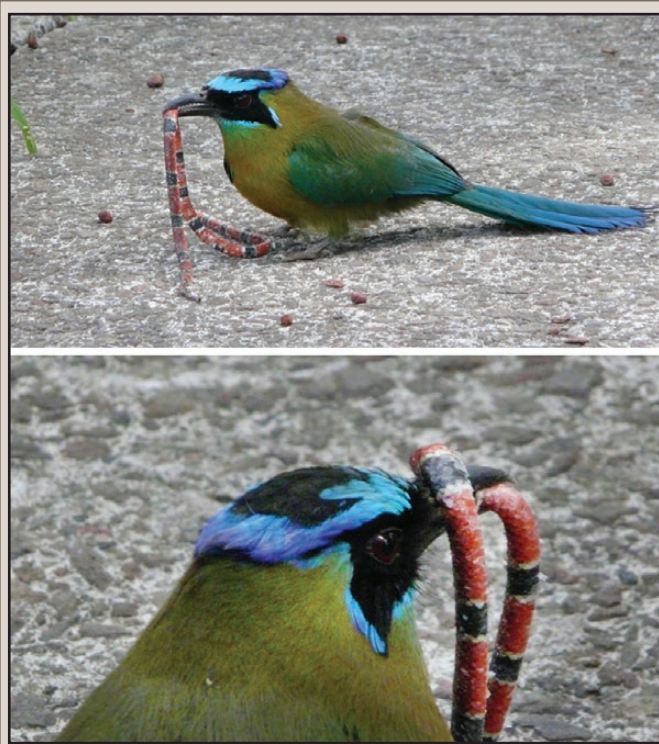


FIG. 1. Lesson's Motmot (*Momotus lessonii*) holding a *Micrurus nigrocinctus* at Hotel Rosa Blanca, Santa Barbara, Heredia province, Costa Rica.

Stiles and Skutch 1989. A Guide to the Birds of Costa Rica. Cornell University Press, Ithaca, New York. 632 pp.). Lesson's Motmots feed on a wide range of vertebrate prey, including lizards, frogs, hummingbirds, seedeaters, bats, mice, and shrews (Chacón-Madrigal and Barrantes 2004. Wilson Bull. 116:108–110; García-C and Zahawi, 2006. Wilson J. Ornithol. 118:261–263; Sandoval et al. 2008, *op. cit.*; Reid and Gutiérrez 2010. Zeledonia 14:68–72).

In contrast to experiments where the closely-related Turquoise-browed Motmot was shown to avoid coral snake models (Smith 1975, *op. cit.*), our observation showed that Lesson's Motmots are willing to prey upon coral snakes.

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MYERSOPHIS ALPESTRIS (Myers' Mountain Snake). **REPRODUCTION.** *Myersophis alpestris* (Lamprophiidae: Cyclocorinae) is a rarely observed species endemic to Luzon Island, Philippines (Leviton et al. 2018. Proc. California Acad. Sci., Ser. 4 64:399–568). Only three specimens of this species have ever been collected: University of Kansas Biodiversity Institute, Lawrence, Kansas (KU) 203012 and 203013, the holotype and paratype, respectively, collected in 1961; and KU 308684, collected in 2007. Information about the species' reproductive biology has never been reported.

We used high-resolution x-ray computed-tomography (CT) to examine the skeletal anatomy of the holotype of *M. alpestris* (KU 203012), an adult female (SVL = 60.7 cm) collected by Edward Taylor on 23 May 1961, near Banaue, Ifugao Province, Luzon, Philippines (1980 m elev.). The scan revealed that the individual was gravid with nine eggs (Fig. 1; avg. length = 23.97 mm, avg. diameter = 11.15 mm). Earlier descriptions of the *M. alpestris* holotype did not mention its reproductive status (Taylor 1963. Copeia 1963:429–433; Leviton 1983. Philipp. J. Sci. 112:195–223). We also visually examined the other *M. alpestris* specimens (KU 203013 and 308684), but we did not attempt to obtain any

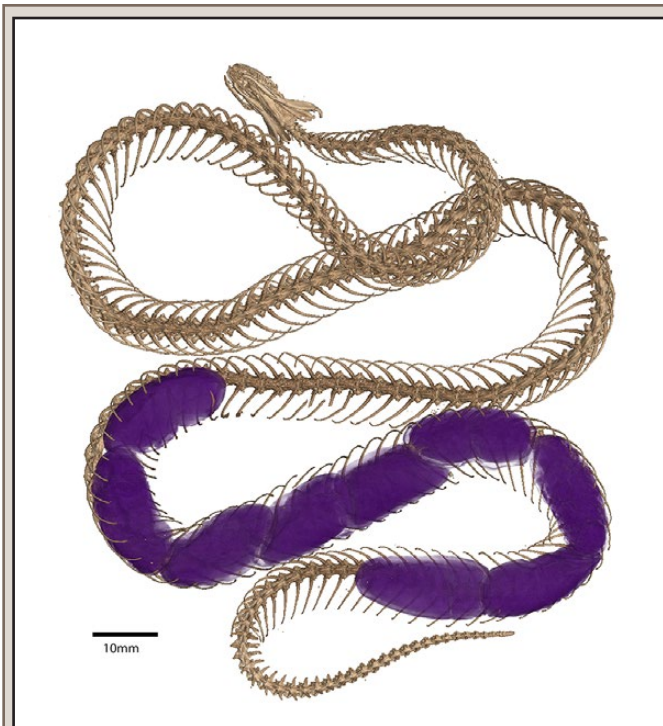


FIG. 1. Computed tomography reconstruction of *Myersophis alpestris* (KU 203012) in ventral view showing skeleton (brown) and nine eggs (purple).

additional reproductive information from these two individuals, because they were not mature. Oviparity has been reported for other cyclocorine species, including *Cyclocorus lineatus* (3–6 eggs) and *Oxyrhabdium modestum* (8 eggs) (Taylor 1922. The Snakes of the Philippine Islands. Department of Agriculture and Natural Resources, Bureau of Science, Manila. 312 pp. + 37 pl.; Leviton 1965. Philipp. J. Sci. 94:519–533; Smith 1993. Asiat. Herpetol. Res. 5:96–102; see also Phenix et al. 2011. Herpetol. Rev. 42:614), but our study of the *M. alpestris* holotype provides the first information on reproductive mode and clutch size for *Myersophis*.

CT tomograms and models are available via MorphoSource (doi:10.17602/M2/M53482). This work was supported by the oVert Thematic Collections Network, NSF DBI-1701714 and DBI-1701932.

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OLIGODON CINEREUS (Günther's Kukri Snake). **DIET.** Apart from a few well-known guilds of snakes that specialize on centipedes as prey, there are relatively few documented records of generalist snake species preying on these formidable invertebrates. In one instance under laboratory conditions, *Sistrurus miliarius* was seen to prey upon *Scolopendra viridis* (Farrell et al. 2018 J. Herpetol. 52:156–161). At ca.1815 h on 9 August 2018, we found a dead male *Oligodon cinereus* killed by locals in the Basista area of Guwahati city, Assam, India



FIG. 1. *Oligodon cinereus* with centipede prey, from Guwahati city, Assam, India.

(26.08721°N, 91.78062°E, WGS 84; 200 m elev.). The snake was in a good condition. Upon dissection, the snake was found to contain a minimally digested *Scolopendra subspinipes* in its gut (Fig. 1). To our knowledge this is the first record of a snake in the genus *Oligodon* preying upon a centipede.

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OPHEODRYS AESTIVUS AESTIVUS (Northern Rough Greensnake). **AQUATIC FORAGING.** The following reports an observation of an adult female *Opheodrys aestivus* foraging in an aquatic setting. Duellman (1949. Herpetologica. 5:144) and Richmond (1952. Herpetologica 8:38) observed *O. aestivus* in aquatic habitats. Plummer (1981. J. Herpetol. 15:425–432; 1993. J. Herpetol. 27:254–260; 1997. Herpetol. Monogr. 11:102–123) and Goldsmith (1984. Southwest. Nat. 29:445–452) extensively described use of vegetation in edge habitats near bodies of water by *O. aestivus* but did not observe foraging in aquatic habitats. Plummer (1981, *op. cit.*) also studied the diet of *O. aestivus* at a site in Arkansas and found that odonates constituted a small percentage of evaluated stomach contents, though he did not report the life-stage of the prey items.

On 7 July 2018 at 1118 h, a female *O. aestivus* was observed through binoculars swimming between clumps of aquatic vegetation and branches of dead tree tops above the waterline in a Coastal Plain pond in Middle Township, Cape May County, New Jersey, USA (39.12039°N, 74.80902°W, WGS 84; 6 m elev.). The snake inspected eight different clusters of exposed branches and vegetation clumps ca. 30 m from the nearest shoreline and was observed on three occasions eating prey items. The snake swam rapidly through the open water sections of the pond. When the swimming snake made physical contact with either vegetation or branches, it would then slowly search for potential prey after a period of stillness. Two of the three prey items were not identified due to distance and obscured location, but the first item taken was an odonate naiad perching exposed on a branch, presumably about to undergo the final molt into the adult stage. After approximately 65 min, the snake swam to shore from a cluster of exposed branches near the center of the pond, where it appeared to rest for 15 min in an *Eleocharis palustris* (Common Spike-Rush) patch before climbing into a