

EXTENSION OF THE DISTRIBUTION OF *EUNECTES MURINUS* (LINNAEUS, 1758) AND *HELICOPS ANGULATUS* (LINNAEUS, 1758) IN VENEZUELA, WITH NOTES ON OPHIOPHAGIA

EDWIN INFANTE-RIVERO¹, MARCO NATERA-MUMAW² AND ALBERTO MARCANO³

¹Maestría en Zoología, Universidad Central de Venezuela, Apartado 47058, Caracas 1041-A, Venezuela. e-mail: edwinfante@gmail.com

²Museo de Vertebrados, Centro de Estudios del Llano (CELLUNERG), Universidad Nacional Experimental Rómulo Gallegos, Apartado 205, San Juan de los Morros 2301, Guárico, Venezuela

³Museo de Biología de la Universidad Central de Venezuela, Facultad de Ciencias Sección de Ictiología, Apartado 47058, Caracas 1041-A, Venezuela

The anaconda (*Eunectes murinus* Linnaeus, 1758) and the brown-banded water snake (*Helicops angulatus* Linnaeus, 1758) are relatively common semi-aquatic snakes that share much of their geographical distribution across the Amazonas and Orinoco river basins (Peters and Orejas-Miranda 1970). In Venezuela, both species are sympatric, and even syntopic in some areas (Roze 1966, Staton and Dixon 1977, Lancini 1979, Hoogmoed 1979, and Gorzula and Señaris 1999).

On 1 September 2006, an Anaconda was collected by local villagers in the headwaters of the river Cabrutica, a tributary of the Orinoco River, at coordinates 8°30'31.2"N and 64°52'14.8"W; at 171 m.a.s.l. in San Tomé District, south of Anzoátegui state in Venezuela (Museo de Biología de la Universidad Central de Venezuela, MBUCV-III-7189). The snake was among riparian vegetation, characterized by a moderately influx of turbid water 3 m wide and 0.5 to 1.5 m in depth, with silt-bottomed clay and many trunks and branches. This is the first record for the state and increases the species distribution approximately 126 km east of the nearest known locality, Espino (Guárico state)(Roze 1966). The specimen is an immature female, with a total length of 970 mm and a 145 mm tail. Its scale counts falls between the ranges given by Roze (1966) and Lancini (1979). During its capture, the anaconda regurgitated a partially digested *Helicops angulatus* (MBUCV-III-7189) swallowed headfirst. To our knowledge, this is the first record of ophiophagia for anaconda in Venezuela. The anaconda prey on a variety of vertebrates like fishes, reptiles, birds, and large size mammals (Rivas, Molina and Avila 1998, Martins and Oliveira 1999, Gorzula and Señaris 1999, Valderrama and Thorbjarnarson 2001, Rivas 2004). Although anacondas are not typically ophiophagous, some females ingest males after mating in natural conditions (Rivas and Owens 2000). The wide range of prey items, as well as occasional attacks on humans (Rivas 1999), suggest that anaconda is a generalist species in its feeding habits.

Eunectes murinus has been mentioned in Venezuela for the States of Amazonas, Apure, Bolívar, Delta Amacuro, Sucre and Zulia (Roze 1966, McDiarmid and Paolillo 1988, Rivas and Oliveros 1998, Molina et al. 2004), while *Helicops angulatus* is distributed in the states of Amazonas, Apure, Bolívar, Monagas, Delta Amacuro, Sucre and Portuguesa (Roze 1966, Staton and Dixon 1977, Rivas and Oliveros 1997, Gorzula and Señaris 1999, Molina et al. 2004). In this work we report for the first time the presence of both species in Anzoátegui state, that, although Lancini and Kornacker (1989) included in a distribution map south of this State, lacked museum records for the species (Roze 1966). Another record of *Helicops angulatus* for Anzoátegui state is documented by a photograph of a specimen (Fig. 1) taken at Caño San Lorenzo, a small river near the town of San Pablo (09°46'N, 65°03'W) northwest Anzoátegui state. This record is located 239 km west and 145 km northeast of the closest previous localities for the species, Caripito and Espino (Monagas and Guárico states, respectively)(Roze 1966). Given the known geographic distribution for *E. murinus* and *H. angulatus* in Venezuela, we presume that both species may be present in the lowlands of central and southern Monagas state.

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REFERENCES

- Gorzula, S. and J.C. Señaris. 1999 ("1998"). Contribution to the herpetofauna of the Venezuelan Guayana I. A Data Base. *Scientia Guiana* 8:1-270.
 Hoogmoed, M.S. 1979. The herpetofauna of the Guianan region: Pp. 241-279 In W.E. Duellman (Ed.). The South America Herpetofauna: Its Origin, evolution, and dispersal. Museum of Natural History University of Kansas, Monograph 7.
 Lancini, A.R. 1979. Serpientes de Venezuela. Ernesto Armitano Ed., Caracas. 264 pp.



FIG. 1. Specimen of *Helicops angulatus* from Anzoátegui State, Venezuela. Photo by M. Natera-Mumaw.

Ejemplar de *Helicops angulatus* del estado Anzoátegui, Venezuela. Foto por M. Natera-Mumaw.

Lancini, A.R. and P.M. Kornacker. 1989. Die Schlangen von Venezuela. Verlag Armitano. Venezuela. 381 pp.

Martins, M. and M.E. Oliveira. 1999 . Natural history of snakes in forest of the Manaus region, Central Brazil. *Herpetological Natural History* 6(2):78-150.

McDiarmid, R.W. and A. Paolillo. 1988. Herpetological collections: Cerro de la Neblina. Pp. 667-670 In C. Brewer-Carías (ed.), Cerro de la Neblina. Resultados de la expedición 1983-1987. Caracas. FUDEC. 922 pp.

Molina, C., J.C. Señaris and G. Rivas. 2004 ("2003"). Los reptiles del Delta del Orinoco, Venezuela. Memoria de la Sociedad de Ciencias Naturales La Salle 159-160: 235-264.

Peters, J. A. and B. Orejas-Miranda, 1970. Catalogue of the Neotropical Squamata. Part I: Snakes. Smithsonian Institution Press, Washington. 347 pp.

Rivas, G. and O. Oliveros. 1998 ("1997"). Herpetofauna del Estado Sucre, Venezuela: lista preliminar de reptiles. Memoria de la Sociedad de Ciencias Naturales La Salle 147:67-80.

Rivas, J.A. 1999 ("1998"). Predatory attacks of green anacondas (*Eunectes murinus*) on adult human beings. *Herpetological Natural History* 6(2):157-159.

Rivas, J.A. 2004. Subduing behavior. *Eunectes murinus*. *Herpetological Review* 35(1):66-67.

Rivas, J.A. and R.Y. Owens. 2000. Cannibalism. *Eunectes murinus*. *Herpetological Review* 31(1):45-46.

Rivas, J.A., C.R. Molina and T.M. Ávila. 1998. Juvenile predation. *Iguana iguana*. *Herpetological Review* 29(4):238-239.

Roze, J.A. 1966. La Taxonomía y Zootogeografía de los Ofidios de Venezuela. Universidad Central de Venezuela, Ediciones del Rectorado, Caracas. 362 pp.

Staton, M.A. and J.R. Dixon. 1977. The herpetofauna of the central Llanos of Venezuela: noteworthy records, a tentative checklist and ecological notes. *Journal of Herpetology* 11(1):17-24.

Valderrama, W. and J.B. Thorbjarnarson. 2001. Diet. *Eunectes murinus*. *Herpetological Review* 32(1):46-47.

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