

NOTES ON GEOGRAPHIC DISTRIBUTION

Reptilia, Colubridae, *Helicops angulatus* and *Helicops leopardinus*: Distribution extension, new country record

Diego F. Cisneros-Heredia

College of Biological and Environmental Sciences, Universidad San Francisco de Quito, Casilla Postal 17-12-841 Quito, Ecuador. E-mail: diegofrancisco_cisneros@yahoo.com

Our knowledge on the taxonomy, biology, ecology, distribution and biogeography of reptiles from most Neotropical countries is very scarce. The long-term conservation of reptiles in those countries is severely jeopardized by anthropogenic activities. It is necessary to increase the information available on reptiles in order to improve the opportunity to establish strategies to preserve those important constituents of global biodiversity.

The snakes of the genus *Helicops* are semi-aquatic snakes that inhabit South America. Three species have been reported from Ecuador: *Helicops angulatus*, *H. petersi*, and *H. pastazae*. Herein, I present some distribution extension data for *H. angulatus* in the country and the first report of *H. leopardinus* for Ecuador.

Helicops angulatus occurs east of the Andes in Venezuela, Colombia, Brazil, Bolivia, Peru, Ecuador, French Guiana, and Trinidad (Uetz 1995-2005). It has been reported in Ecuador from the provinces of Napo, Orellana, Sucumbíos, and Pastaza (Duellman 1978, Perez-Santos and Moreno 1991, Cisneros-Heredia 2003) (Fig. 1). One specimen of *H. angulatus* (FHGO-USFQ 3623) was collected at Centro Makuma (02°09'S, 77°43'W, ca. 600 m), province of Morona-Santiago (Fig. 1), on 28 September 2002 by D. Holmes and T. Chu. This is the first record from the province of Morona-Santiago extending its distribution ca. 80 km SW airline from the nearest records at the province of Pastaza (Perez-Santos and Moreno 1991), and filling the gap between Ecuadorian and Peruvian localities (Figure 1).

Helicops leopardinus is known to occur in the Guianas, Brazil, Bolivia, Paraguay, Argentina, and Peru (Uetz 1995-2005). Its occurrence in

Ecuador was suggested by Vanzolini in Miyata (1982) but no records have ever been published. The species is listed as part of the Ecuador ophidiofauna by Uetz (1995-2005), citing Almendáriz (1991) as the source of the record. However, Almendáriz (1991) did not include *H. leopardinus* in her list of reptiles from Ecuador. Three specimens of *H. leopardinus* were collected in localities of Amazonian Ecuador, confirming the presence of the species in the country. One specimen (FHGO 1363) was collected at Puerto Napo (01°03'S, 77°47'W, 450 m), Province of Napo, on 15 July 1995 by A. de Roger; another one (FHGO 1132) was collected at Sacha Lodge, Laguna Agua Negra (00°27'S, 76°23'W, 290 m), province of Napo, on 01 March 1995 by J. Savage; and a third specimen (FHGO 1363) was collected at the Río Dicaro, Km 107 Pompeya Sur – Iro road (00°53'S, 76°17'W, 180 m), province of Orellana, on 05 August 1996 by J. Yépez (Fig. 1). These reports are the first records of this aquatic snake for Ecuador and represent an extension on the distribution range of the species on ca. 400 km airline from records at the Department of Loreto, Peru (Dixon and Soini 1986).



Figure 1. Map of Ecuador showing the new localities for *Helicops angulatus* (1 = Centro Makuma), and for *H. leopardinus* (2 = Puerto Napo, 3 = Río Dicaro, 4 = Sacha Lodge.). Provinces: S = Sucumbíos, O = Orellana, N = Napo, P = Pastaza, M = Morona-Santiago.

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Literature Cited

- Almendáriz, A. 1991. Anfibios y Reptiles. Pp. 89-162. In L.Albuja, R. Barriga and A. Almendáriz. *Lista de Vertebrados del Ecuador*. Quito. Revista Politécnica XVI (3).
- Cisneros-Heredia, D. F. 2003. Herpetofauna de la Estación de Biodiversidad Tiputini, Amazonía Ecuatoriana. Pp: 1-21. In S. De la Torre and G. Reck (eds), *Ecología y Ambiente en el Ecuador*. Mem. I Congreso de Ecología y Ambiente, Ecuador país megadiverso. CD. Universidad San Francisco de Quito.
- Dixon, J. R. and P. Soini. 1986. *The Reptiles of the Upper Amazon Basin, Iquitos Region, Peru. Part 2 Crocodilians, Turtles and Snakes*. Milwaukee. Milwaukee Public Museum. 154 p.
- Duellman, W. E. 1978. *The Biology of an Equatorial Herpetofauna in Amazonian Ecuador*. Lawrence. Misc. Publ. Univ. Kansas, Mus. Nat. Hist. 65. 352 pp.
- Miyata, K. 1982. A checklist of the amphibians and reptiles of Ecuador with a bibliography of Ecuadorian herpetology. *Smithsonian Herp. Inf. Serv.* 54: 1-70.
- Perez-Santos, C. and A. G. Moreno. 1991. *Serpientes de Ecuador*. Monog. XI. Torino. Mus. Reg. Scien. Nat. Torino. 540 pp.
- Uetz, P. 1995-2005. EMBL reptile database. Ver. 2.1. 17 March 2000. <<http://www.embl-heidelberg.de/~uetz/LivingReptiles.html>>. Captured on October 2005.

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