



Taxonomic revision of the Neotropical water snake *Hydrops triangularis* (Serpentes, Colubridae)

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Abstract

Six subspecies of *Hydrops triangularis* (Wagler 1824) are currently recognized on the basis of differences in the number of ventral and subcaudal scales and dorsal coloration (viz., the number of bands on the body, the extent of bands on the body, and the occurrence of projections of the bands on the body). Analysis of a larger sample from throughout the distribution of the species revealed overlapping variation in all of these characters across regional boundaries. The available evidence is therefore unable to objectively delimit multiple geographic races, and we therefore consider the subspecies of *H. triangularis* to be subjective synonyms.

Key words: *Hydrops*, taxonomy, Hydropsini, Xenodontinae, South America

Introduction

The water snake genus *Hydrops* Wagler, 1830 is a group of moderate-sized snakes distributed across the northern two-thirds of South America in Guyana, Surinam, Trinidad, Venezuela, Colombia, Ecuador, Brazil, Peru, Bolivia, Paraguay and Argentina (Roze 1957; Albuquerque 2000). Currently, the genus comprises three species: *H. martii* (Wagler 1824), *H. triangularis* (Wagler 1824) and *H. caesurus* Scrocchi, Ferreira, Giraud, Ávila and Motte, 2005.

Roze (1957) presented a resume of his taxonomic revision of genus *Hydrops*. Within *H. triangularis*, Roze described as new: *H. t. venezuelensis* (based on the analysis of six specimens from Venezuela and Colombia); *H. t. neglectus* (eight specimens from Trinidad and western Guyana); *H. t. bolivianus* (two specimens from Bolivia) and *H. t. bassleri* (17 specimens from Peru). In addition, he also recognized the nominal subspecies (eight specimens from Pará state, Brazil) and *H. t. fasciatus* (25 specimens from French Guyana and Suriname plus an intermediate between *H. t. triangularis* and *H. t. fasciatus* from Suriname). Roze (1957) distinguished these subspecies on the basis of the number of ventral and subcaudal scales, as well as the number of bands on the body and tail. He also used the width of those bands, their extent on the dorsum (whether they reach the vertebral line or not) and the presence or absence of some projections. Roze (1957) also hypothesized a possible relationship among the Neotropical snake genera *Helicops* Wagler, *Pseudoeryx* Fitzinger and *Hydrops*, based on dentition, reduction in number of dorsal scales, coloration pattern, number of dorsal scales, and presence/absence of keels.

Despite the comprehensive revision of Roze (1957), subspecific identification of *H. triangularis* without locality data is often difficult, due to the overlapping of diagnostic characters (e.g. Peters & Orejas-Miranda 1970; Williams & Couturier 1984; Chippaux 1986; Vanzolini 1986; Alvarez & Aguirre 1995; Giraud 2001), which suggested the need to reassess the validity of them all (Cunha & Nascimento 1993; Albuquerque 2000).