

Atractus nigricaudus Schmidt & Walker, 1943 (Squamata: Dipsadidae) first record from Bolivia

Oliver Quinteros-Muñoz^{1,2}, Pedro Gómez-Murillo¹

¹ Museo de Historia Natural Alcide d'Orbigny, Casilla 843, Cochabamba, Bolivia.

² Centro de Investigación y Conservación de Anfibios Amenazados de Bolivia – K'ayra, Cochabamba, Bolivia.

Locality. – Bolivia, Cochabamba, Carrasco National Park, Sehuencas, (-17.446544° ; -65.270047° , 2100 m a.s.l., Fig. 1). An adult female of *Atractus nigricaudus* (Fig. 2), was registered and collected (MHNC-R 3251). The specimen was found dead among the leaf litter near on an unpaved road adjacent to a

mature secondary mountain forest in the Yungas ecoregion by Jorge Espinoza on December 2024. The specimen was collected under permit MMA-YANMABCCGDF/DGBAP/MEG N° 0053/2019 issued by Ministerio de Medio Ambiente y Aguas and deposited in the herpetological collection of

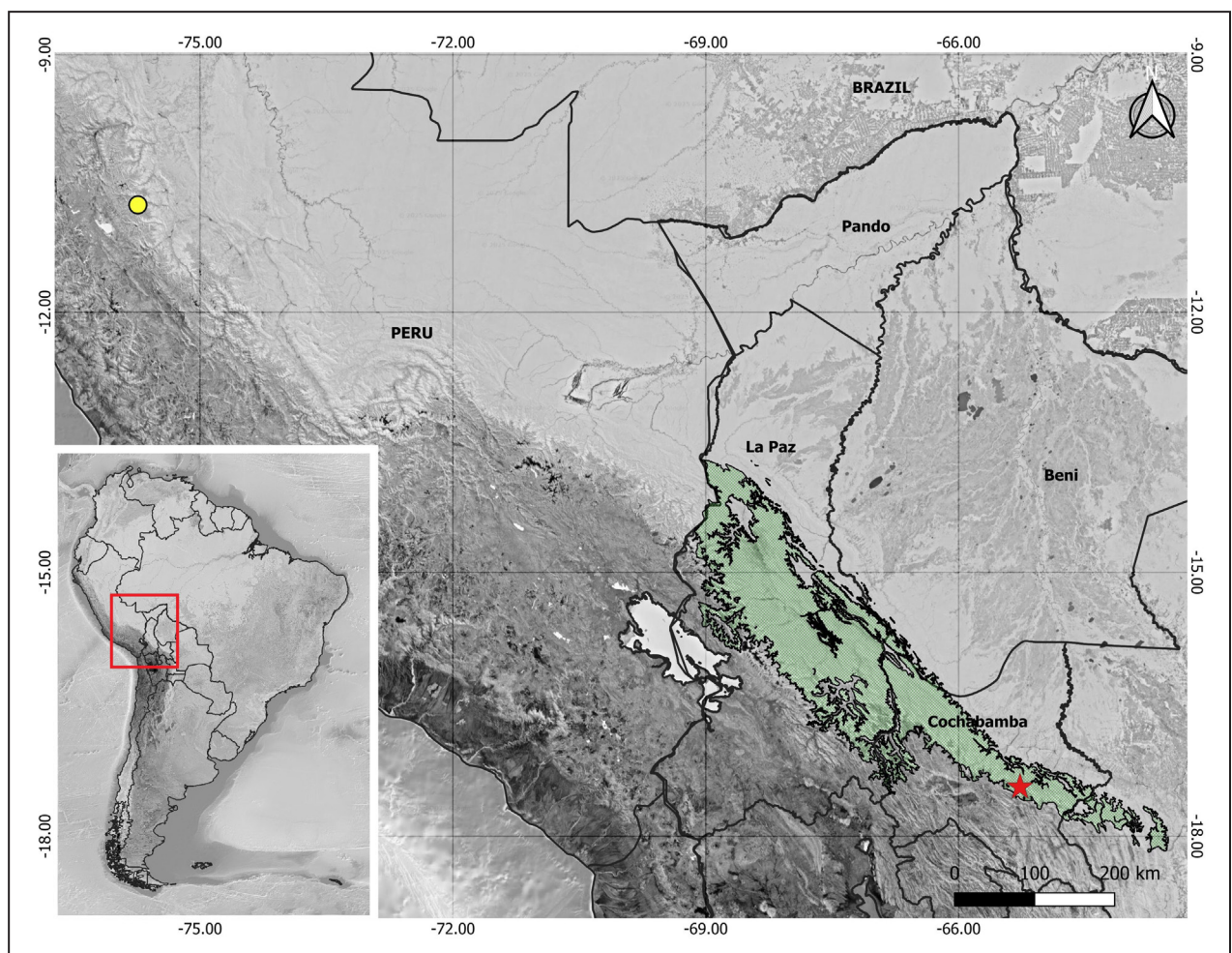


Figure 1. Geographic distribution of *Atractus nigricaudus*. Yellow circle represents the previously known distribution in Peru according Schmidt & Walker (1943) and Aguilar (2017). Red star corresponds the new record (MHNC-R 3251) in Cochabamba, Bolivia for the Yungas ecoregion (green cross line).

the Museo de Historia Natural Alcide d'Orbigny (MHNC-R), Cochabamba, Bolivia.

Comments. - The complex and diverse genus of neotropical snakes *Atractus* Wagler 1828, is composed of more than 150 species, distributed from Panama to Argentina (Myers, 2003; Passos *et al.*, 2013; Melo-Sampaio *et al.*, 2021; Uetz *et al.*, 2025; Esqueda *et al.*, 2025). However, many species remain known only from their type series or from geographically restricted regions (Passos *et al.*, 2019). This is do as the cryptic habits of these types of snakes limit their knowledge in the literature and scientific collections

(Silva, 2004). In Bolivia, 8 species are recognized (Gómez-Murillo *et al.*, 2025): *A. albuquerquei* Cunha & Nascimento, 1983; *A. bocki* Werner, 1909; *A. elaps* (Günther, 1858); *A. emmeli* (Boettger, 1888); *A. latifrons* (Günther, 1868); *A. major* Boulenger, 1894; *A. snethlageae* Cunha & Nascimento, 1983; and *A. torquatus* (Duméril *et al.*, 1854).

Atractus nigricaudus Schmidt & Walker, 1943 is a species categorized as Least Concern by the IUCN (Aguilar, 2017). This species is known only from the type locality: Huachon, in the upper part of the Paucartambo valley, Cerro de Pasco, Junín, Peru



Figure 2. Female specimen (MHNC-R 3251) of *Atractus nigricaudus* in preservative, from Sehuencas Carrasco National Park, Cochabamba, Bolivia. Left: lateral (top), dorsal (middle) and ventral (bottom) views of head. Right dorsal (top) and ventral (bottom) views of body. Scale bar (head only) = 10 mm.

(Schmidt & Walker, 1943; Aguilar, 2017). It is a very poorly known species, so new information about it is of great importance, through which conservation actions can be established.

During the review of the snake's collection from the Yungas ecoregion housed in the herpetological collection of the Museo de Historia Natural Alcide d'Orbigny, Cochabamba, Bolivia, we found an adult specimen of *Atractus nigricaudus* collected in December 2024. Here we describe the presence of *A. nigricaudus* for the first time in Bolivia. This record extends its geographic distribution more than 1350 km southeast of its nearest recorded locality in Peru and we provide an updated distribution map for this species.

The voucher specimen (MHNC-R 3251, Fig. 2) was deposited in the herpetological collection at the Museo de Historia Natural Alcide d'Orbigny in Cochabamba, Bolivia. The specimen was identified using the descriptions of Schmidt & Walker (1943), Rivera-González (2009) and the photographs of the holotype (MCZ 45909, Fig. 3) available in the database of the Museum of Comparative Zoology at Harvard University (MCZ). Morphological terminology and abbreviations of the morphometric traits follow Melo-Sampaio *et al.* (2021). To provide an updated distribution of this species, we checked data on the presence of *Atractus nigricaudus* from the literature (Schmidt & Walker, 1943; Aguilar, 2017). The final map of the currently known distribution of the species was built on cartographic information from the IUCN (Aguilar, 2017).

We identified this specimen as *A. nigricaudus* using the following characteristics according to Schmidt & Walker (1943): (1) small ground snake with a moderately stout body (SVL=480 mm, TL=561 mm), a small head barely distinguishable from the neck, and a short tail; (2) maxillary teeth 8; (3) postoculars 2; (4) temporals 1+2; (5) supralabials 6, the third and fourth entering the eye; (6) infralabials 7, the first four in contact with the single pair of chin shields; (7) dorsal scales 17-17-17; (8) ventrals 156; (9) cloacal plate single; (10) subcaudals 26; (11) dorsal background brown with black-marked scales; vertebral line black and two faint lateral lines on each side converging into one on the tail; (12) head brown, mottled black, with a longitudinal black stripe through the eye and a transverse one on the nape; (13) venter coloration yellowish, mottled black, and on each side a faint row of discontinuous stripes along its entire length; (14) tail mottled black with dark edges to the scales. Meristic

characters of the specimens of *Atractus nigricaudus* from Peru and Bolivia are in Table 1.

Rivera-González (2009) presents a comparative information on *Atractus nigricaudus* and *Atractus pausiscutatus*, very similar species whose distribution is very close (approximately 50 km apart) and both described by Schmidt & Walker (1943). *Atractus pausiscutatus*, the holotype was found in Carpapata, Junin, and *Atractus nigricaudus* with type locality in Huachón, Pasco. Although the author finds the same differences as Schmidt & Walker (1943), between the number of ventral scales, ventral coloration, and the relationship between the size of the frontal scale and the distance of that scale from the tip of the snout, these identified characters do not offer significant differences to separate these two species. Thus, only the presence of *Atractus nigricaudus* is recognized for Peru, and this species is also valid for the present comparison.

The record presented here of *Atractus nigricaudus* is of special interest for taxonomic and conservation issues. The specimen identified as *A. nigricaudus* from Sehuenas in Bolivia confirms the presence of this species in the country and extends the geographical distribution of this snake approximately 1350 km southeast of the nearest locality in Huachón, Peru (Schmidt & Walker, 1943; Aguilar, 2017). The Bolivian record of *A. nigricaudus* shows that the species has an even wider distribution. It is also possible that it is uncommon or rare in Bolivia. This record also confirms that the species inhabits the Yungas of Bolivia. According to Quinteros-Muñoz *et al.* (2022), these types of forests (Yungas) play a very important role, as they act as a “green corridor” between Peruvian Yungas and the Yungas of Bolivia, thus allowing the dispersal of this species to the more southern habitats of South America.

Atractus nigricaudus is a species with restricted distribution and is only known from its type locality in Peru (Schmidt & Walker, 1943; Aguilar, 2017) (Fig. 1). We name the Bolivian population presented here *Atractus nigricaudus*; however, to better understand and clarify the status of the species and its possible “geographic variation” from a geographically distant population, a detailed integrative and molecular approach is necessary.

Finally, this record, housed in a museum, highlights the importance of repositories such as scientific collections. They are of great importance as they contribute to the exchange and increase of scientific knowledge and, much more importantly,



Figure 3. In preservative, holotype MCZ 45909 of *Atractus nigricaudus* Schmidt & Walker, 1943 collected in Peru. Left: dorsal (top and bottom) views of body. Right lateral (top), dorsal (middle) and ventral (bottom) views of head. © President and Fellows of Harvard College (licensed under <http://creativecommons.org/licenses/by-nc-sa/3.0/>).

serve as custodians of timeless treasures that are part of our natural heritage (Koch *et al.*, 2019).

Acknowledgments

We thank to the Carrasco National Park and its

park rangers for their invaluable work to benefit the conservation of our biological wealth. D. Barrozo, R. Carpio and E. Pérez for their constant support during fieldwork. We also thank L. F. Esqueda for his help with species identification and the and the

Table 3. Meristic characters of the specimens of *Atractus nigricaudus*: Holotype (MCZ45909) from Peru and the new record (MHNC-R 3251) from Bolivia.

	Holotype: MCZ 45909	MHNC-R 3251
Sex	Female	Female
DSR	17-17-17	17-17-17
SVL	335	480
TL	367	561
TTL	32	81
Postoculars	2	2
Temporals	1-2	1-2
Ventrals	157	156
Subcaudals	19	26
Supralabials (SL)	7	6
SL contact the orbit	third and fourth	third and fourth
Infralabials (IL)	7	7
IL contact first pairs of chin-shields	first four	first four
Maxillary teeth	-	8
Anal plate	single	single

anonymous revisors for critically reading and commenting on this manuscript.

Literature cited

- Aguilar, C. 2017. *Atractus nigricaudus*. The IUCN Red List of Threatened Species 2017: e.T48617406A48617418. S.T48617406A48617418.en. Accessed on 23 July 2025.
- Esqueda, L.F.; Rojas-Runjaic, F.J.; Prudente, A.; Bazó, S.; Navarrete, L.F.; Carmargo-Sillet, E.; Ortiz, J.C.; Correa, C.; Guerrero, P. & Urrea, F. 2025. A first phylogenetic and taxonomic approach to sleepyhead snakes from Venezuela (Dipsadidae: Atractus), with the description of two new Andean species. *Organisms Diversity & Evolution* 25: 1-37.
- Gómez-Murillo, P.; Quinteros-Muñoz, O.; Domic, E.; Camacho, T.; Rojas-Estrada, R.; Arellano-Martín, I.; Aguayo, R.; Gonzales, L.; Esqueda, L.F.; Urdiales, C.; Lizarro, D.E.; Cortez, E.; Ocampo, M.; Reichle, S.; Jiménez-Robles, O.; Carpio, R.; Entiauspe-Neto, O.M.; Rivas, L.R.; Llobet, A.; Miranda-Calle, A.B.; Aguilar-Kirigin, A.J. & De la Riva, I. 2025. Catalogue of the reptiles (Reptilia) of Bolivia: Checklist, distribution and literature. *Cuadernos de Herpetología* 39 (Suppl. 1): 2-185.
- Harvard University, Museum of Comparative Zoology. 2018. MCZbase, Museum of Comparative Zoology, Harvard University. Occurrence Dataset. <http://digir.mcz.harvard.edu/ipt/resource?r=mczbase>.
- Koch, C.; Martins, A. & Schweiger, S. 2019. A century of waiting: description of a new *Epictia* Gray, 1845 (Serpentes: Leptotyphlopidae) based on specimens housed for more than 100 years in the collection of the Natural History Museum Vienna (NMW). *PeerJ* 7: e7411.
- Melo-Sampaio, P.R.; Passos, P.; Prudente, A.L.C.; Venegas, P.J. & Torres-Carvajal, O. 2021. Systematic review of the polychromatic ground snakes *Atractus snethlageae* complex reveals four new species from threatened environments. *Journal of Zoological Systematics and Evolutionary Research* 59: 718-747.
- Myers, C.W. 2003. Rare snakes—five new species from eastern Panama: reviews of northern *Atractus* and southern *Geophis* (Colubridae: Dipsadinae). *American Museum Novitates* 3391: 1-47.
- Passos, P.; Kok, P.J.R.; Albuquerque, N.R. & Rivas, G. 2013. Groundsnakes of the Lost World: a review of *Atractus* (Serpentes: Dipsadidae) from the Pantepui region, northern South America. *Herpetological Monographs* 27:52-86.
- Passos, P.; Scanferla, A.; Melo-Sampaio, P.R.; Brito, J. & Almendáriz, A. 2019. A giant on the ground: another large-bodied *Atractus* (Serpentes: Dipsadinae) from Ecuadorian Andes, with comments on the dietary specializations of the goo-eaters snakes. *Anais Da Academia Brasileira De Ciências* 91: e20170976.
- Quinteros-Muñoz, O.; Carpio, R.; Pérez, E. & Gómez-Murillo, P. 2022. First formal evidence and distribution extension of *Erythrolamprus macrosomus* (Amaral, 1936) (Serpentes: Dipsadidae) in Bolivia. *Holotipus revista di zoologia sistematica e tassonomia* III(2): 23-30.
- Rivera-González, D.E. 2009. Estudio comparativo entre especies del género *Atractus* (Colubridae: Dipsadinae) del Perú: análisis de sus relaciones fenéticas utilizando caracteres de la morfología externa, morfometría y merística. Escuela Académico Profesional de Ciencias Biológicas. Universidad Nacional Mayor de San Marcos.
- Schmidt, K.P. & Walker, W.F. 1943. Three new snakes from the Peruvian Andes. *Zoological Series of Field Museum of Natural History Chicago* 24: 297-327.

O. Quinteros-Muñoz & P. Gómez-Murillo. — *Atractus nigricaudus* in Bolivia

Silva, J.J. 2004. Las serpientes del género *Atractus* Wagler, 1828 (Colubridae, Xenodontinae) en la Amazonia Colombiana. *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales* 28: 409-446.

Uetz, P.; Freed, P.; Aguilar, R.; Reyes, F.; Kudera, J. & Hošek, J. (eds.). 2025. The Reptile Database, <http://www.reptile-database.org>. Accessed on 10 August 2025.

Recibida: 31 Agosto 2025

Revisada: 05 Noviembre 2025

Aceptada: 31 Julio 2026

Editor Asociado: S. Quinzio

doi: 10.31017/CdH.2026.(2025-030)

© 2026 por los autores, licencia otorgada a la Asociación Herpetológica Argentina. Este artículo es de acceso abierto y distribuido bajo los términos y condiciones de una licencia Atribución-No Comercial 4.0 Internacional de Creative Commons. Para ver una copia de esta licencia, visite <http://creativecommons.org/licenses/by-nc/4.0/>