

The Cerberus Groundsnake is a Critically Endangered new species from Ecuador

March 22 2017



One of the newly discovered colubrid snake species, *Atractus cerberus*. Credit: Alejandro Arteaga

With as many as 140 species, *Atractus* is the most diverse snake genus in the world, even though it can be found exclusively in Central and South America. However, these colubrid ground snakes seem largely under-researched, since there have been thirty-three species discovered in the last ten years only.

As concluded by a team of scientists, led by Alejandro Arteaga, Tropical Herping, Ecuador, this is the result of a lack of DNA information in the

original descriptions of many of these species. Consequently, there have been a lot of specimens sitting in museum collection that remain either misidentified, or anonymous.

To address the issue around the problematic identification of these snakes and their correct placement in the tree of life, the scientists have studied the hereditary molecular differences in the genus using both newly collected specimens, as well as previous publications on the species occurring in the Pacific lowlands and the adjacent Andean slopes.

Their research results in a new paper, published in the open access journal *ZooKeys*, which describes a total of three [new species](#) from Ecuador. The authors also propose a new species group and a redefinition of a previously established one.

Interestingly, one of the new species is to be referred to as Cerberus Groundsnake, while in the books it will appear under *Atractus cerberus*. It is predominantly brown in colour with faint black longitudinal bands, and measures about 21 - 31 cm in length. The biologists justify the curious name of this species with the peculiar location where they spotted the first known specimen. Found at the gates of the newly formed "Refinería del Pacífico", a massive industrial oil-processing plant, the authors were quick to recall the multi-headed monstrous dog Cerberus, known to be guarding the gates of the underworld, according to Greek mythology.



One of the newly discovered colubrid snake species, *Atractus pyroni*. Credit: Alejandro Arteaga

In terms of their conservation status, the scientists have proposed the Cerberus Groundsnake to be listed as Critically Endangered, according to the IUCN criteria, since its single known habitat is highly likely to be the only one, being isolated from any other similar habitats. Moreover, it comprises a relatively small patch of land, which in turn is declining in both size and quality due to deforestation. According to the IUCN criteria, a Critically Endangered status is given to a (group of) species whenever the best available evidence indicates that it faces an extremely high risk of extinction in the wild.

The other two new species, the Indistinct (*Atractus esepe*) and the Pyron's (*Atractus pyroni*) ground snakes are to be listed as Data Deficient as the information about them is currently insufficient for their risk of

extinction to be assessed.

Having increased the number of *Atractus* species in Ecuador to twenty-seven, the authors expect that the count is yet to rise. "We hope that the novel genetic and morphological data provided herein will promote future researchers to examine [species](#) boundaries in *Atractus*, as additional work clearly is waiting," they add.



One of the newly discovered colubrid snake species, *Atractus esepe*. Credit: Alejandro Arteaga

More information: Alejandro Arteaga et al, Molecular phylogeny of *Atractus* (Serpentes, Dipsadidae), with emphasis on Ecuadorian species and the description of three new taxa, *ZooKeys* (2017). [DOI: 10.3897/zookeys.661.11224](https://doi.org/10.3897/zookeys.661.11224)

Provided by Pensoft Publishers

Citation: The Cerberus Groundsnake is a Critically Endangered new species from Ecuador (2017, March 22) retrieved 3 May 2024 from <https://phys.org/news/2017-03-cerberus-groundsnake-critically-endangered-species.html>

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