REPTILES & AMPHIBIANS

New Records of Anuran Predation by *Ancylometes* sp. (Arachnida: Ctenidae) from the Bolivian Amazon

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Amphibians play essential roles in food chains and the biological balance of natural ecosystems, and are known to control populations, particularly of small invertebrates, but also are common prey for larger organisms (Muñoz-Saravia et al. 2020; Rivas et al. 2022; Reichle et al. 2024). Spiders in the genus *Ancylometes* (Ctenidae), which range from Central through much of South America, are abundant in the Amazonian region (Nyffeler and Pusey 2014; Nyffeler and Altig 2020). These medium-to-large spiders are nocturnal, terrestrial, and semi-aquatic carnivores (Höfer and Brescovit 2001; Nyffeler and Pusey 2014; Nyffeler and Altig 2020). Reports of *Ancylometes* predation include arthropods, fish, amphibians, and reptiles among their prey (e.g., Nyffeler and Pusey 2014; Bhukal et al. 2015; von May et al. 2019; Reyes-Olivares et al. 2020), but especially amphibians (e.g., Menin et al. 2005; Jansen and Shulze 2008; Fadel et al. 2019; von May et al. 2019; Figueiredo et al. 2020). The food quality of a prey item can be defined by its potential contribution to a spider's fitness (Toft 2013), and amphibians represent a high-quality prey source (Valdez 2020). We herein present six new cases of anuran predation by *Ancylometes* sp. from the Bolivian Amazon, four of which (on *Rhinella major*, *Pristimantis reichlei*, *Dendropsophus reticulatus*, and *Chiasmocleis ventrimaculata*) are the first records of those prey species. In three of the six cases (*D. minutus*, *D. reticulatus*, and *C. ventrimaculata*), the prey was eaten by the spiders, whereas in the other three (*R. major*, *P. reichlei*, and *Leptodactylus fuscus*), the spiders killed their prey, but ingestion was not verified.

At 2328 h on 12 February 2008, we observed an adult *Ancylometes* sp. preying on an adult *Pristimantis reichlei* (Fig. 1A) near the Estación Biológica Tahuamanu, Bolpebra Municipality, Nicolás Suárez Province, Pando Department, Bolivia (-11.40738, -69.01799). Following multiple failed attempts, the spider ultimately subdued the frog by embedding its fangs into the posterior dorsal region and enveloping the prey with its legs.

At 0251 h on 22 February 2008, we encountered an adult *Ancylometes* sp. ingesting an adult *Dendropsophus reticulatus* (Fig. 1B) adjacent to a large pond (Curiche) where multiple *D. reticulatus* were calling near Nueva Esperanza, Cobija Municipality, Nicolás Suárez Province, Pando Department, Bolivia (-11.11403, -68.87619). The spider had captured the frog by piercing its lateral shoulder and neck with its fangs while bracing itself with its pedipalps.

At 2217 h on 12 June 2021, we observed an adult *Ancylometes* sp. preying on an adult *Leptodactylus fuscus* (Fig. 1C) near the 12 of July Community, Puerto Villarroel Municipality, Carrasco Province, Cochabamba Department, Bolivia (-17.28222, -64.87972). The frog produced intermittent distress calls, which diminished in frequency as it expired.

At 2304 h on 25 February 2023, we encountered an adult *Ancylometes* sp. preying on an adult *Rhinella major* (Fig. 1D) ~1 m above the ground in secondary herbaceous vegetation adjacent to a ditch near San Vicente, Riberalta Municipality, Vaca Diez Province, Beni Department, Bolivia (-11.02750, -66.08750). The toad was alive during the brief observation period.

At 2216 h on 13 February 2024, we observed an adult *Ancylometes* sp. ingesting an adult *Chiasmocleis ventrimaculata* (Fig. 1E) ~40 cm above the ground at the edge of a small pond surrounded by a high density of calling anurans, including *Hamptophryne boliviana* and many *Chiasmocleis ventrimaculata*, a number of which were in amplexus on the ground, near Ucia, Filadelfia Municipality, Manuripi Province, Pando Department, Bolivia (-11.74286, -68.98795).

At 2226 h on 13 February 2024, we encountered an adult *Ancylometes* sp. ingesting an adult *Dendropsophus minutus* (Fig. 1F) ~90 cm above the ground adjacent to a small pond where numerous *Dendropsophus rhodopeplus*, *Scinax* sp.,

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D. minutus, and other species were calling and in amplexus on surrounding herbaceous vegetation and shrubs, near Ucia, Filadelfia Municipality, Manuripi Province, Pando Department, Bolivia (-11.74285, -68.98796).

Most of the predation events reported here occurred during the peak of the rainy season in February, when anurans are engaged in reproduction and which certainly attracted the attention of predators.

Figure 1. Predation of anurans by spiders in the genus *Ancylometes* in the Bolivian Amazon: *Pristimantis reichlei* (A), *Dendropsophus reticulatus* (B), *Leptodactylus fuscus* (C), *Rhinella major* (D), *Dendropsophus minutus* (E), *Chiasmocleis ventrimaculata* (F). Photographs by Arturo Muñoz (A–B), Patricia Mendoza (C), Steffen Reichle (D), and Luis Rivas (E–F).

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