



# Predation of *Atelocynus microtis* (Carnivora: Canidae) by *Panthera onca* (Carnivora: Felidae) in Southeastern Peru

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## Resumen

Este estudio aborda la ecología de depredación poco estudiada de *Atelocynus microtis*, un cánido amazónico raro y casi amenazado. Detallamos eventos de depredación por la especie de felido, *Panthera onca* (Jaguar), observados en el sureste de Perú en 2004. Los descubrimientos se realizaron durante nuestra investigación en curso, que incluye seguimiento por radio telemetría y un proyecto de reintroducción. Dadas las superposiciones ecológicas observadas, también sugerimos que el *Puma concolor* (Puma, león de montaña) podría ser un depredador potencial de *A. microtis*. Nuestros hallazgos amplían el limitado conocimiento existente sobre los depredadores de *A. microtis*, sugiriendo una gama de depredadores más amplia que la identificada previamente.

**Palabras clave:** perro de orejas cortas, jaguar, Amazonas, dieta.

## Abstract

This study addresses the understudied predation ecology of *Atelocynus microtis*, a rare and Near Threatened Amazonian canid. We detail depredation events by the felid species, *Panthera onca* (Jaguar), observed in southeastern Peru in 2004. The observations were made during ongoing research, which includes radio-telemetry tracking and a reintroduction project. Given historical observed ecological overlaps, we also speculate that *Puma concolor* (Puma, Mountain Lion) could be a potential predator of *A. microtis*. Our findings expand the limited existing knowledge on the predators of *A. microtis*, suggesting a broader range of predators than previously identified.

**Key words:** short-eared dog, jaguar, Amazon, diet.

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Literature on the predation ecology of Amazonian canids like *Atelocynus microtis* (Short-eared Dog) is limited. These canids have a wide distribution across South and Central America but remain rare and under-studied among Neotropic carnivore mammals (Leite-Pitman & Beisegel 2013). For example, a 2018 review revealed that no new literature on *A. microtis* appeared between 2013 and 2017 (Tensen 2018). Despite their classification as Near Threatened by the International Union for Conservation of Nature (Leite-Pitman & Williams

2011), more recent research suggests that *A. microtis* may be at even higher risk than currently acknowledged (Rocha et al. 2020). Although one study did document a *Boa constrictor* consuming an *A. microtis* in southeastern Peru (Leite, Champagne, & Ferreira 2023), we are unaware of other observations that describe the predators of *A. microtis* or the role that predation plays in their ecology.

We describe two depredation events by the felid species *Panthera onca* (Jaguar) that took place in 2004 in southeastern Peru. We recorded these observations opportunistically during an ongoing study of the species, which has included observations generated during traditional tracking methods and radio-telemetry tracking.



**FIGURA 1.** A radio-collared, juvenile, male short-eared dog was killed and eaten by a jaguar (*Panthera onca*) on May 15, 2004, at the Estación Biológica Los Amigos.

The first event was on May 15, 2004, when we discovered a juvenile, male *A. microtis*, approximately 7 months old, with a radio-collar, that a *P. onca* had killed and eaten around 06:00 (Figure 1). We tracked the individual for 40 days near the Estación Biológica Los Amigos, Madre de Dios, Peru (EBLA) (-12.55, -70.10 ca 290m a.s.l). The night before the predation event, we located the *A. microtis* burrow and installed a camera. The camera captured the *A. microtis* leaving its den at 03:58 and around 120 minutes before we found it dead. We observed tracks around the carcass that looked like they belonged to a large cat species, although they were indistinct. We verified *P. onca* as the predator the next day when we discovered *P. onca* scat near the predation site containing *A. microtis* hairs, identified through comparison with samples taken directly from radio-collared *A. microtis*. The predator had consumed all parts except for the nose and feet, aligning with *P. onca* known dietary preferences at that field site (Leite-Pitman unpublished records-2000). In

June 2004, we found a second *A. microtis* carcass at EBLA (-12.56, -70.10, 295 ma.s.l.) and in a condition similar to the one previously described. We noticed tracks of a large cat species, however could not confirm the species and found only the nose, feet, and tail remaining of the *A. microtis*.

Alongside members of Boidea including *Boa constrictor* (Leite, Champagne & Ferreira 2023), the predators of *A. microtis* also include members of Felidae, specifically *P. onca*. *Atelocynus microtis* falls within the known prey size ranges of *P. onca* (Emmons 1987; Meyer & Gonzalez 2002; Novack, et al. 2005). Due to ecological overlaps in diet and geography with *P. onca*, we also suspect that *Puma concolor* (Puma, Mountain Lion) consume *A. microtis* (Núñez, Miller, & Lindzey 2000; Moreno, Kays, & Samudio 2006).

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