



Predation on a Roughskin Anole (*Anolis trachyderma*) by a Smooth-billed Ani (Aves: Cuculidae)

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The Roughskin Anole or Common Forest Anole (*Anolis trachyderma* Cope 1875) is of moderate size (SVL 58–61 mm) (Ávila-Pires 1995; Williams et al. 1995; Vitt et al. 2002). This species has a disjunct distribution east of the Andes in the western Amazon of Ecuador, Colombia, Peru, and Brazil. In the Ecuadorian Amazon, it is present between 150 and 1,400 m asl in well preserved evergreen forests, most frequently in primary forest and less commonly along the borders of rivers and forest clearings (Ayala-Varela 2004). During daily activity, it forages in leaf litter, around logs, and in small shrubs (Ayala-Varela 2004).

Smooth-billed Anis (*Crotophaga ani*) have an extensive distribution from Florida (USA) to northern Argentina, where they occupy a wide variety of habitats (BirdLife International 2023). They are generally diurnal and considered generalist predators that feed on arthropods and small vertebrates, including lizards. They typically forage near cattle in grasslands, disturbed open habitats, and forest borders, and



Figure 2. Location where a Smooth-billed ani (*Crotophaga ani*) was observed eating a Roughskin Anole (*Anolis trachyderma*) along the edge of Cayambe-Coca National Park, Napo, Ecuador. In the satellite image, the land use change is evident, with primary forests close to the border and pastures along the main highway toward the Coca River outside the park.



Figure 1. A Smooth-billed ani (*Crotophaga ani*) eating a Roughskin Anole (*Anolis trachyderma*) on 9 July 2021 along the edge of Cayambe-Coca National Park, Napo, Ecuador. Photograph by Felipe Espinoza De Janon.

they frequently perch in low vegetation, such as shrubs and small trees, between feeding events (Bent 1940; Ridgely and Greenfield 2001; Cooke et al. 2019).

At 1455 h on 9 July 2021, while traveling to the Cuyabeno Wildlife Reserve in the Ecuadorian Amazon, we stopped near Manuel Galindo between the Coca River and Cayambe-Coca National Park in Napo, Ecuador (-0.138053, -77.619137), where we observed Smooth-billed Anis feeding on insects and witnessed one individual on the upper branch of a small tree next to the highway with a captured adult *A. trachyderma* in its beak (Fig. 1).

Although records of predation on other lizard species by *C. ani* exist, to our knowledge this is the first report of predation on *A. trachyderma*. This is likely an unusual event given the habitat preferences of the two species. *Anolis trachyderma* is a tropical forest specialist (Castañeda et al. 2020), whereas

C. ani is more commonly associated with artificial or highly modified habitats (BirdLife International 2023).

Based on the location of the predation event, we speculate that changes in land use (i.e., forests converted to pastures) resulted in a relict population of *C. ani* that feeds around the highway easement and pastures next to the abrupt forest border with the Cayambe-Coca National Park (Fig. 2). This observation also brings attention to habitat alterations in the Ecuadorian Amazon that are likely to facilitate encounters between generalist species and forest specialists (Bonilla et al. 2008; Moulatlet et al. 2021).

Acknowledgements

The Instituto Nacional de Biodiversidad (INABIO) and Mauricio Herrera facilitated the logistics where this observation was made.

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