



Submitted: 2023-10-01

Accepted: 2023-11-14

Published: 2023-12-01

DOI: <https://doi.org/10.59763/mam.aeq.v5i.66>

SCIENTIFIC NOTE

Report of attack by *Neogale frenata* (Carnivora, Mustelidae) on a chicken coop in Cuyuja, Napo, Ecuador

Reporte del ataque de *Neogale frenata* (Carnivora, Mustelidae) a un gallinero en Cuyuja, Napo, Ecuador

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ABSTRACT

In this scientific note, I document an attack by *Neogale frenata* (long-tailed weasel) on a chicken coop near Cuyuja, in the province of Napo, Ecuador. Early in the morning, in less than five minutes, the carnivore killed all 20 chickens in the coop with quick and effective bites to the neck, retreating into the forest carrying only one chicken. Although the carnivorous habits of weasels are frequently discussed in the literature, there are no specific reports detailing the behavior recorded in this scientific note.

Keywords: *Gallus gallus domesticus*, Human-wildlife conflict, Parque Nacional Cayambe-Coca, poultry, predation.

RESUMEN

En esta nota científica documento el ataque de *Neogale frenata* (comadreja de cola larga) a un gallinero, cerca de Cuyuja, en la provincia de Napo, Ecuador. A primera hora de la mañana, y en

Citation:

Tirira, D. G. (2023). Report of attack by *Neogale frenata* (Carnivora, Mustelidae) on a chicken coop in Cuyuja, Napo, Ecuador. *Mammalia aequatorialis*, 5, 93–95.

menos de cinco minutos, el carnívoro mató a las 20 gallinas existentes con mordidas rápidas y efectivas a la altura del cuello, para luego marcharse al interior del bosque con solo una. Si bien en la literatura se comenta con frecuencia los hábitos carnívoros de esta comadreja, no existen reportes específicos que detallen esta conducta, según se narra en esta nota científica.

Palabras clave: ave de corral, conflicto gente-fauna silvestre, depredación, *Gallus gallus domesticus*, Parque Nacional Cayambe-Coca.

Neogale frenata (long-tailed weasel) is a small carnivore within the family Mustelidae (total length 279–412 mm; Larivière & Jennings, 2009). However, among the small Neotropical carnivores, it is considered the largest and least-specialized, as it is a generalist predator that feeds mainly on small and medium-sized mammals (Rosenzweig, 1966; Sheffield & Thomas, 1997). In North America (Canada and the United States), there are several studies that report *N. frenata* preying upon a wide variety of small vertebrates, such as rodents (mice and squirrels) and rabbits of small to medium size (Sheffield & Thomas, 1997); it also eats moles and bats, but less frequently (Hall, 1951; Mumford, 1969). Its diet also features some avian prey, such as quail, blackbirds, flickers, sparrows, and juncos, among others (Fagerstone, 1987; Hall, 1951). Rarely, it preys on snakes, lizards, ground beetles, grasshoppers, and other insects (Sheffield & Thomas, 1997). However, there are hardly any reports on prey consumed within the Neotropical region, despite its wide distribution (Larivière & Jennings, 2009); in the Neotropics, its diet is thought to consist mainly of small mammals, rabbits, and birds and their eggs (Larivière & Jennings, 2009). This species has often been considered an agricultural pest due its predation on poultry (*Gallus gallus domesticus*; Quick, 1944; Sheffield & Thomas, 1997), mainly due to surplus killing, a documented and known behavior in other Mustelidae species (Oksanen et al., 1985).

Although several reports comment on prey captured by *N. frenata*, and some of them mention predation of poultry, no study that I am aware of presents specific data on this activity anywhere throughout its extensive geographic range. Its range is the largest for any mustelid species within the Americas, with records from Canada to northern South America, extending southward

along the Andes Mountains to southern Peru and northern Bolivia (Larivière & Jennings, 2009).

The event I document in this scientific note occurred 5 km NW of the town of Cuyuja, on the road to Papallacta (00°22'57" S, 78°03'52" W, 2750 m altitude), on a small farm near Parque Nacional Cayambe-Coca. The locality is located in the Piso Templado Oriental (Western Temperate Zone; Tirira, 2017) and corresponds to the Bosque siempreverde montano del norte de la Cordillera Oriental de los Andes (northern montane evergreen forest of the eastern Andes mountains; MAE, 2013).

During my one-week stay in the locality, I observed how the owner of the farm built a chicken coop with the objective of avoiding possible long-tailed weasel attacks; thus, the coop was covered with mesh on all sides and roofed. On the evening before the attack, the owner of the farm brought 20 white chickens for their first night in the new coop.

At 06:30 hours the next day (November 5, 1991), while camping a few meters from the coop, I was awakened by a commotion. Upon investigation, I observed that a long-tailed weasel had entered the coop and proceeded to chase and kill each hen in a matter of seconds using only quick and effective bites to the neck. In less than five minutes, it had killed all 20 hens; it proceeded to grab one of them and drag it through a small opening it had found at the bottom of the coop door, carrying the corpse into the adjacent forest. In the literature, it has been recorded that *N. frenata* kills prey by subduing it through a ventral attack and then asphyxiating it by biting its neck (Larivière & Jennings, 2009). However, this method would take longer than what was observed in the attack described here, as the death of the hens was instantaneous.

In popular Ecuadorian culture, farmers attribute a hematophagous diet to the long-tailed

weasel (locally called *chucuri* or *chucurillo*) due to the habit of this carnivore of killing its prey via bites to the neck, without eating the corpses.

This scientific note provides specific information regarding the carnivorous habits of this small mustelid in the form of an unpublished report of a behavior widely mentioned but lacking specific documentation. Notes such as these contribute to the knowledge of the natural history of little-known mammal species.

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