

# NOTEWORTHY RECORD OF SUBSISTENCE HUNTING AND MEAT CONSUMPTION OF JAGUARUNDI (*Puma yagouarondi*) IN COLOMBIA

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## ***ABSTRACT***

Wild felids in the Americas are generally considered as cultural icons and are respected and revered by most of the cultures. However, they are considered threatened across their ranges, mostly by habitat loss and fragmentation, and both direct and prey hunting. Small felids are usually seriously affected by retaliation hunting caused by conflicts derived from wild cats' predation on domestic animals; however, few records exist for subsistence hunting and consumption of these species by local communities. Here we report the hunting and consumption of an adult male jaguarundi in the Córdoba department of Colombia. The animal was hunted using dogs; the carcass was prepared and was saved for later consumption during religious holidays by the entire community. This represents the first direct record of jaguarundi consumption across its range, representing an important aspect for wild felids' conservation among rural marginalized communities across Latin America.

**Key Words:** Carnivora, Colombia, Córdoba, felidae, poaching, *Puma yagouarondi*, South America,

**Palabras clave:** Cacería, Carnívora, Colombia, Córdoba, Felidae, *Puma yagouarondi*, Suramérica

Despite their importance, few information regarding multiple ecological and conservation aspects of Neotropical cats exists, especially for the small species, which makes conservation decision-making especially difficult (Nowell and Jackson, 1996; Escobar and Vásquez, 2007). Across Latin America, felid species have suffered population reductions and threats caused by several factors, and most species are considered threatened either at national and/or global levels (Nowell and Jackson, 1996; Sunquist and Sunquist, 2009). The usual threats include habitat loss and fragmentation (Crooks, 2002), but probably illegal hunting, both of the felid species and their prey by local communities, plays a bigger role than normally considered (González-Maya *et al.*, 2013a).

For small felids, hunting as reprisal for conflicts caused by predation events on domestic animals could be considered among the top threats and population loss drivers (Laundré and Hernandez, 2010; Gonzalez-Maya *et al.*, 2013a). Additionally, hunting of these species for human consumption or other uses so far is poorly described or reported on literature mainly due to the lack of reliable data (Balaguera-Reina and González-Maya, 2008; Gonzalez-Maya *et al.*, 2010; González-Maya *et al.*, 2013b). For rural and indigenous communities, wildlife exploitation has been characterized primarily by the selective use of species for subsistence consumption, economic, traditional and/or religious values (Racero-Casarrubia *et al.*, 2008); for wild felids, these uses are and had been mainly associated with hunting for fur (Di Bitteti *et al.*, 2008) and as mentioned before, by conflict retaliation (Gonzalez-Maya *et al.*, 2013a; 2013b).

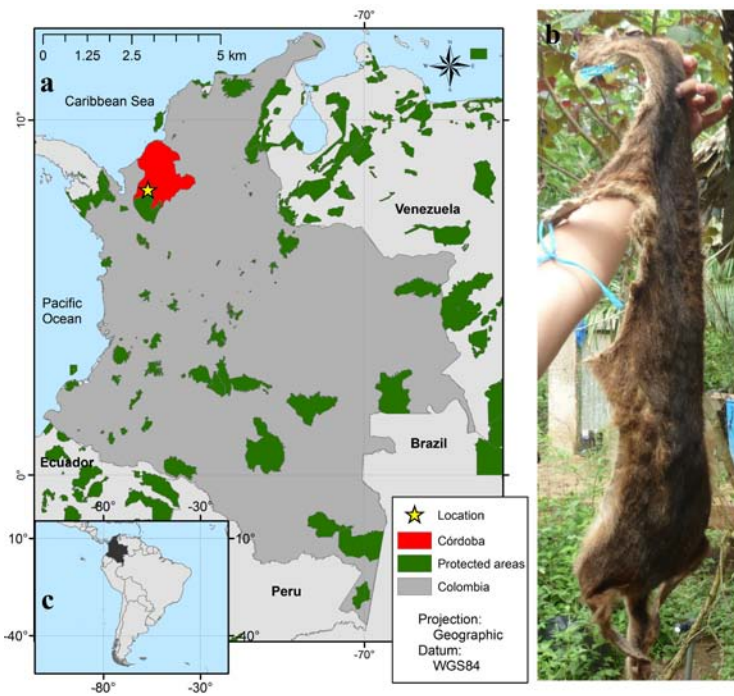
The jaguarundi (*Puma yagouaroundi*) is a Neotropical small felid species distributed from United States to Paraguay and Argentina (Sunquist and Sunquist, 2002; Caso *et al.*, 2008). Listed as Least Concern by the IUCN Red List of Threatened Species (Caso *et al.*, 2008), it is however considered uncommon throughout its range. Main threats over this species are also fragmentation and hunting. Despite jaguarundi pelt is usually considered to have no significant

commercial value like other small spotted cats (Nowell and Jackson, 1996; De Oliveira, 1998), it is still subject to low intensity hunting for been a conspicuous predator of domestic poultry (Caso *et al.*, 2008) and by its use for medicinal or ornamental purposes (Monroy-Vilchis *et al.*, 2008).

Here we report an event of jaguarundi hunting for consumption occurred in April 2012 by a local community inhabiting Tutifrutí locality (8°2'36"N, 76°6'1.1"W) located in Cerro Murrucucú, Tierralta municipality, Córdoba department (province), Colombia (Figure 1). The area is located in north-western Colombia, contiguous to Paramillo National Park (Figure 1), in the Caribbean region, and has a long history of intensive land-use change for cattle and agriculture, social conflicts, marginalization and violence (Romero, 2000; Carrascal *et al.* 2011).

The hunting event occurred in the surroundings of a rural settlement after a poultry predation event was detected by the locals. The animal was hunted using hunt-chasing dogs and was prepared as food by indigenous people of the Embera Katíos ethnic group. The individual was an adult male with brown and black coloration. The skin was prepared with a mixture of common salt and ashes and was sundried (Figure 1). After this, the skull was removed from the body-carcass and flesh was torn from bones. The remaining bones, tendons and other parts were feed to domestic dogs of the community. The meat was not consumed immediately, and was saved refrigerated for later consumption during Holy Thursday and Good Friday (holy week celebrated in Colombia) before Easter, considered the most important religious celebration in the country. The meat was roasted and mixed with eggs, and was shared among all members of the community during the celebrations. In Cordoba, traditionally during this celebration, the common food consumed consists of fish and wild meat, replacing meat from cattle and chicken.

This hunting and consumption event follows the same pattern reported for most wild cats in Colombia; hunting is attributed as a defence or retaliation to wild felid attacks on domestic



**Figure 1. Location of the hunting event of *Puma yagouarundi* for consumption by the Embera-Katíos community, Tierralta, Córdoba, Colombia. a) Location of Córdoba department within Colombia and the record location, b) pelt of the adult jaguarundi individual hunted, and c) location of Colombia in South America.**

animals, and afterwards meat is used for consumption and skin or fur is used as ornament (Balaguera-Reina and González-Maya, 2008; Gonzalez-Maya *et al.*, 2010; 2013b). However, this represents the first direct report on jaguarundi consumption throughout its range. Felids are considered as respected icons in most Latin American cultures, been mainly associated with power and balance (Castaño-Uribe, 2013); however, subsistence hunting and meat consumption of felids seems to be more widespread than previously considered and the assessment of the magnitude of these practices is warranted (Racero-Casarrubia *et al.*, 2008; Gonzalez-Maya *et al.*, 2010; 2013b).

To our knowledge, this is the first confirmed record of human consumption on jaguarundi, been recorded only its use for ornament and medicinal purposes (Monroy-Vilchis *et al.*, 2008; González-Maya *et al.*, 2010). It is important to highlight that, although cats are often hunted, adding a new motive should be considered when developing conservation plans (Gonzalez-Maya *et al.*, 2010; 2013b). This is particularly important considering that species-use by communities, and in general the relationship between wildlife and culture, is an important component of conservation, so these relation-

ships must be carefully and thoroughly stated, analysed and understood (Gonzalez-Maya *et al.*, 2010). Although most of Colombia had suffered long processes of violence, social conflict and isolation, the Caribbean region especially had suffered of a long history of unsustainable natural resource use, severe land-use change and resource overexploitation (Meisel-Roca and Pérez, 2006; Zárrate-Charry *et al.*, 2013). Specifically, the Cordoba department is historically and currently one of the most conflictive regions in the country, suffering from severe marginalization processes, poverty and violence (Romero, 2000; Carrascal *et al.*, 2011). Unprecedented events or atypical wildlife uses, especially subsistence hunting, have been previously related with scarce human living conditions or marginalization processes (Balaguera-Reina and González-Maya, 2008; González-Maya *et al.*, 2013b), therefore, we consider this a representative case of marginalization, pushing towards behaviors not usually considered among cultures' vision or costumes. Little is known about *P. yagouarundi* in general (Monroy-Vilchis *et al.*, 2011), and its conservation status along with its ecology, abundance and distribution is still poorly understood. This new confirmed record of consumption should be taken into account

when establishing the conservation status or for designing conservation strategies for the species, even more in light of been considered as uncommon and potentially threatened in the near future.

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