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Opportunistic consumption of meat of Jaguar (Mammalia: Carnivora) in the Brazilian Amazon: a case report in the state of Pará

Consumo oportunístico de carne de onça-pintada (Mammalia: Carnivora) na Amazônia brasileira: um relato de caso no estado do Pará

Ana Carolina Srbek-Araujo¹

- 1. Programa de Pós-graduação em Ecologia de Ecossistemas, Universidade Vila Velha Rua Comissário José Dantas de Melo, nº 21, Bairro Boa Vista, Vila Velha, Espírito Santo CEP 29102-920, Brazil.
- * Corresponding author:srbekaraujo@hotmail.com

Abstract The present communication reports the opportunistic consumption of the meat of jaguar (*Panthera onca*) in the state of Pará, in Brazilian Amazon. The animal was killed in retaliation for cattle predation and the meat was salted and dried for later consumption. Although there are few reports of the use of the meat of big cats for food in Brazil, the consumption of these species should be further investigated in the country. If the consumption of meat of big cats be characterized as a common practice in some Brazilian regions, as observed in other regions in South America, this activity can become an additional threat for the species in Brazil and should also be considered in the conservation plans of the affected species.

Keywords: big cats, conflict retaliation, Felidae, *Panthera onca*, threatened species.

Resumo A presente comunicação relata o consumo oportunístico da carne de onça-pintada (*Panthera onca*) no estado do Pará, na Amazônia brasileira. O animal foi morto em retaliação à predação de gado e sua carne foi salgada e seca para consumo posterior. Apesar de haver poucos relatos da utilização da carne de grandes felinos na alimentação humana no Brasil, o consumo dessas espécies deve ser mais bem investigado no país. Se o consumo de carne de grandes felinos se caracterizar como uma prática comum em algumas regiões brasileiras, como observado em outras regiões da América do Sul, esta atividade pode se tornar uma ameaça adicional para as espécies de felinos no Brasil e também deve ser considerada nos planos de conservação das espécies afetadas.

Palavras-chaves: caça por retaliação, espécie ameaçada, Felidae, grandes felinos, *Panthera onca*.

The human consumption of feline meat does not seem to be a common practice in Latin America. There is little information available in the scientific literature and this includes records to Argentina (Altrichter 2006, Gonzalez-Maya et al. 2013), Brazil (Silva 2007, Amaral 2012, Ramalho 2012), Colombia (Balaguera-Reina and Gonzalez-Maya 2008, Gonzalez-Maya et al. 2010, Gonzalez-Maya et al. 2013, Pacheco and González-Maya 2013) and Venezuela (Gonzalez-Maya et al. 2013). Existing reports mentioning the hunting of jaguars (Panthera onca Linnaeus, 1758; Balaguera-Reina and Gonzalez-Maya 2008), pumas (*Puma concolor* Linnaeus, 1771; Altrichter 2006, Gonzalez-Maya et al. 2010, Gonzalez-Maya et al. 2013) and Jaguarundi (Puma yagouaroundi Geoffroy & Saint-Hilaire, 1803; Pacheco and González-Maya 2013) with the purpose of consumption (subsistence hunting); and the opportunistic use of meat of jaguars (Silva 2007, Amaral 2012, Ramalho 2012), pumas (Amaral 2012, Gonzalez-Maya et al. 2013, Ramalho 2012) and small spotted cats (genus Leopardus Gray, 1842; Silva 2007) usually killed because of conflict retaliation or during chance encounters. The use of jaguars, pumas and small spotted cats (Leopardus spp.) by indigenous communities and farmers as a source of medicinal and/or ornamental goods was also reported (eg Altrichter 2006, Gonzalez-Maya et al. 2010, Ramalho 2012), although the hunting for fur trade is historically the most well known use (eg Nowak 1975, Smith 1976, Iriarte and Jaksić 1986).

The recent hunting of jaguars and/or pumas was widespread confirmed in Brazilian protected areas with different degrees of restriction to human use (Carvalho Jr. and Morato 2013). The most frequently reasons for big cats kill were retaliation for depredation of livestock, perceived risk to human life and sport hunting, for both species (Carvalho Jr. and Morato 2013). However, the hunting of big cats is a problem also outside protected areas (eg Canale et al. 2012, Michalski et al. 2006), and it occurs in almost all Brazilian biomes (Paula et al. 2013). The opportunistic use of the

meat of jaguar and puma is known to the country (RG Morato and EAR Carvalho Jr., personal communication) and there are scientific reports of meat consumption for food in two studies conducted in Mamirauá and Amanã Sustainable Development Reserves (Amaral 2012, Ramalho 2012) and in the village of Carvoeiro (Silva 2007), all of them in the state of Amazonas. According Amaral (2012), the felids are often killed and are not generally consumed by the monitored communities, but the consumption of the meat is not a rare event in the studied reserves.

The present communication reports the opportunistic consumption of the meat of jaguar by residents of the municipality of Curionópolis ($6^{\circ}24^{\circ}57.9^{\circ}$ S / $49^{\circ}39^{\circ}0.9^{\circ}$ W), southeastern of the



Figure 1 Map of the state of Pará showing the municipality of Curionópolis, north region of Brazil (inset).

state of Pará, in Brazilian Amazon (Figure 1).

The animal was killed in retaliation for cattle predation in August 2005 (Figure 2). The meat was salted and dried (like a jerked beef) for later consumption without the need of maintenance under refrigeration. The hunter was using the meat for your family consumption and part of the meat was distributed to your nearest neighbors.

According Balaguera-Reina and Gonzalez-Maya (2008), occasionally the wild cat species may be included as consumed prey in isolated and socially depressed communities. And depending of social and economic conditions of local communities, the use of meat of felids can become a threat for large carnivores (Balaguera-Reina and Gonzalez-Maya 2008). Despite the hunting of felids for human consumption is not a typical activity in Colombia, with occasional and isolated cases, it seems to fit with an apparent widespread trend (Gonzalez-Maya *et al.* 2013).

Felids are considered a taboo food and their meat is commonly rejected for consumption in some regions of Brazil (Silva 2007). Jaguar is a mythical element for riverine communities in some parts

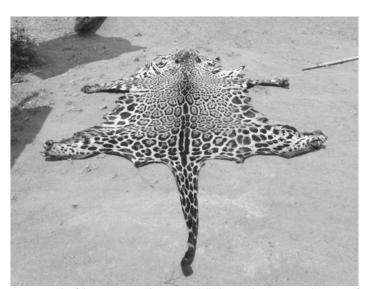


Figure 2 Pelt of the jaguar (*Pantbera onca*) killed in retaliation in southeastern of the state of Pará, Brazil. Photo by Ana C. Srbek-Araujo.

of the Brazilian Amazon (Silva 2007). And, as far as we know, the species is not hunted for food purposes in the country (eg Amaral 2012, Canale et al. 2012, Ramalho 2012), do not representing an important food resource for humans in Brazil (Ramalho 2012). However, despite the consumption of the meat of big cat species should not be a critical problem in Brazil right now, as it seems to be in other regions in South America (eg Balaguera-Reina and Gonzalez-Maya 2008, Gonzalez-Maya et al. 2010, Gonzalez-Maya et al. 2013), this issue need to be further investigated in the country, inside and outside protected areas. This is necessary because the separation between the opportunistic use and the hunting for consumption can be a narrow boundary. It is just need the appreciation of the meat of big cats by hunters to this become a problem also in Brazil. And the consumption of meat of jaguar and puma can become a real problem especially in the border areas of the Brazilian Amazon, with the arrival of people from different regions. The cultural aspects are mixed in these areas and it favors the emergence of a "new culture of occupation" (personal observation).

If the consumption of meat of big cats in Brazil, particularly in the Brazilian Amazon, follows the trend observed in Colombia, it can also become an additional threat to conservation of threatened feline species, such as jaguar and puma. And, as proposed by Gonzales-Maya *et al.* (2010, 2013) to Colombia, this practice should also be considered in the conservation plans of the affected species.

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