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## Field Report

## Predation on a brown brocket by pampas foxes

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#### **Abstract**

We describe a predation event by two pampas foxes *Pseudalopex gymnocercus* upon an adult brown brocket *Mazama gouazoubira* on the side of a dirt road in the Mburucuyá National Park, Corrientes Province, Argentina.

#### Introduction

The pampas fox Pseudalopex gymnocercus is a relatively common species in the southern cone of South America, distributed from eastern Bolivia, western and central Paraguay, and southern Brazil, to Uruguay and northern and central Argentina (Redford and Eisenberg 1992, Lucherini and Luengos Vidal 2008). It inhabits grasslands, open forests (both mesophilic and xeric), wetlands, coastal dunes and agriculture areas (Medel and Jaksic 1988, Redford and Eisenberg 1992, Lucherini and Luengos Vidal 2008). The diet of pampas foxes is very broad, and includes mammals such as European hares Lepus europaeus, plains vizcachas Lagostomus maximus, Brazilian guinea pigs Cavia aperea, small rodents (genera Akodon, Calomys, Ctenomys, Eligmodontia, Graomys, Microcavia, Oligoryzomys, Phyllotis, and Reithrodon), whiteeared opossums Didelphis albiventris and armadillos (Chaetophractus spp., Dasypus hybridus and Zaedyus pichiy), and birds of the family Tinamidae and the orders Columbiformes and Passeriformes. They also eat lizards, fish, crayfish, the larvae and adults of insects, carcasses of ungulates (both wild and domestic), and fruits of both native and exotic plants (Crespo 1971, Redford and Eisenberg 1992, Juliá and Richard 2001, Lucherini et al. 2004, García and Kittlen 2005, Farias and Kittlen 2008, Varela et al. 2008). Although pampas foxes are often blamed for killing sheep, they largely only scavenge carcasses, although there is evidence of predation on newborn lambs (Lucherini et al. 2004). In this note, we describe a predation event by two pampas foxes upon an adult brown brocket Mazama gouazoubira in the Mburucuyá National Park (Corrientes, Argentina).

#### Results

On 9th November 2011 at 19:41h, when driving on Provincial Road 86, an unpaved road that traverses the Mburucuyá National Park, two pampas foxes were seen in the headlights attacking an adult female brown brocket (also known as grey brocket or corzuela parda) that was lying on the sandy side of the road. The foxes had bitten the deer in different areas of the body, but mainly on the flanks where injuries were evident. Both the foxes and the deer looked exhausted and were gasping for breath. The deer had trouble standing, each time it tried to  $% \left\{ 1\right\} =\left\{ 1\right\} =\left$ rise it fell again, managing to make only a few short jumps before falling (Figure 1). One fox grabbed the deer by the rump and started dragging it with effort toward the side of the road, which took several minutes. The other fox occasionally helped, but it was mainly engaged in biting on the ears, neck, throat, and flanks. The fox grabbed the deer several times by the neck and throat, in short bouts, for up to six seconds. Meanwhile, the first fox was laboriously dragging the deer off the road, which was raised by about 30cm (Figure 2). It occasionally stopped dragging the deer to bite it on the flanks and belly, tearing small pieces of skin or muscles, and its snout was bloody. Some 30 minutes after the initial observation, the deer could barely raise its head from the ground and had now been dragged off the road, possibly with the intention of carrying it into a wooded patch a few meters away. The observation was interrupted; when the observer passed the spot about an hour later, neither the deer nor foxes were visible.

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Figure 1. Brown brocket trying to escape harassment of two Pampas foxes in Mburucuyá National Park, Corrientes, Argentina. [view video]



Figure 2. Pampas fox dragging a brown brocket to a nearby forest in Mburucuyá National Park, Corrientes, Argentina. [view video]

### Discussion

There are no previous records of Pampas foxes attacking an adult brown brocket, although Juliá and Richard (2001) cited the capture and consumption of a three-month old fawn, and of an adult that was consumed after dying from other causes.

We do not know how the foxes caught the deer, or whether it was sick or hit by a car. The deer seemed to be in good condition; it did not look weak or show other evidence of sickness. There were no outward signs that the deer had been hit by a vehicle, and its legs showed no signs of fractures; it could move them in coordination. While we cannot rule out alternative explanations, it seems remarkable that the foxes were able to catch an adult deer in good physical condition since they are fast runners and jumpers. Although relatively small (4-6kg, Lucherini et al. 2004), pampas foxes are able to dominate and drag a prey of 20-25kg (Redford and Eisenberg 1992, Emmons and Feer 1997). Pampas foxes form pairs from mating until the independence of their young, but they tend to be solitary hunters (Brooks 1992, Branch 1994). medium-sized canids such as side-striped jackals Canis adustus and black-backed jackals *C. mesomelas* hunt cooperatively in pairs during the breeding season, capturing prey hard to catch alone (Macdonald et al. 2010). We cannot ascertain how often pampas foxes are habitual predators of brown brocket or if this constitutes a rare and unusual event.

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### Biographical sketches

Mario L. Chatellenaz is a zoologist from the Universidad Nacional del Nordeste working on birds and mammals of northeastern Argentina. He is currently involved in projects on the diet and parasites of carnivores in Mburucuyá National Park, and on the distribution and ecology of mammals in the Esteros del Iberá marshes.

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