

# Edentates in the caatinga of Serra da Capivara National Park

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## Introduction

Most of northeastern Brazil is covered by the semi-arid biome known as Caatinga, characterized by its unpredictable climate and long, harsh droughts (Markhan, 1972; Reis, 1976). The mammalian fauna of the Caatinga is considered to be relatively poor, being a subset from more mesic areas (Mares *et al.*, 1985), but endemism levels are high in groups like reptiles, and at least one edentate, the three-banded armadillo, is largely restricted to the Caatinga (Santos *et al.*, 1994).

Only 0.1% of the Caatinga is protected by parks and reserves. The largest of these is the Serra da Capivara National Park, with 1,300 km<sup>2</sup> located in southeastern Piauí (around 8°30'S, 42°20'W), one of the best studied areas in the biome (see Emperaire, 1989; Olmos, 1992, 1993a, b). The entire region is covered by deciduous Caatinga formations, except by a few forest enclaves in the narrower canyons, and water sources are very scarce (Olmos, 1992, 1993a).

Here I describe the edentate fauna of Serra da Capivara, its habitat and conservation status, based on information gathered along several field trips from 1986 to 1991.

## Species account

*Myrmecophaga tridactyla*: giant anteater, "tamanduá-bandeira"

Not previously recorded from the Caatingas (Willig & Mares, 1989), this species is well-known to local hunters, who are unanimous to point it as very scarce. The only positive record from Serra da Capivara was a fractured skull from an adult found in the debris of a poacher's camp on April 20, 1991. The general area was covered by dense arboreal caatinga 8-10 m high growing on sandy soil, with very few water sources available.

If still extant in the area, the most probable area for finding the species is the Serra da Capivara plateau, devoid both of people and roads, although the giant-anteaters in the regions may be stragglers from the Caatinga-Cerrado contact area 200-300 km further west (Canto do Buriti and Bom Jesus do Gurgueia municipalities).

*Tamandua tetradactyla*: southern tamandua, "mixila"

Tamanduas in southeastern Piauí are golden yellow with a black vest, as described for Cerrado tamanduas in Redford (1994). The species was fairly common in the Park, and could be found with some ease during night surveys along roads. Preferred sleeping sites are small caves in the sandstone walls of the canyons and cliffs the cut the Serra da Capivara massif, where huge amounts of dried tamandua dung can be found.

Besides man, known predators of the species in the Park are jaguars and pumas (Olmos, 1993b).

The conservation status of the species seems good, provided poaching in the Park is reduced.

*Euphractus sexcinctus*: yellow armadillo, "tatu-peba"

The second most often found armadillo in the Park, has been detected mainly in areas with a taller vegetation, being rarer in the bushier areas over sandy soil. Foraging burrows of yellow armadillos were associated mainly to tubers of *Ipomoea* climbers, which seem to be a staple (see Schaller, 1983). My observations agree with a diurnal activity for the species (Redford, 1994), as all records were made during the day.

*Priodontes maximus*: giant armadillo, "tatu-canastra"

The only positive record from southeastern Piauí is a shell in possession of Mr. José Lopes, schoolmaster in São Raimundo Nonato, said to be from an animal caught in the southern border of the park in the late 60's. The area is in the contact between the Serra da Capivara massif and the surrounding plain, being nowadays mostly degraded by agriculture and wood-cutting. Nevertheless, in July 1991 one adult female was said to have been road-killed west of the Park, at Canto do Buriti municipality, an area of tall arboreal Caatinga and semi-deciduous forest enclaves.

*Cabassous unicinctus*: southern naked-tailed armadillo, "tatu"

An armadillo fitting this species' description is said to occur on the northwest of the park, in areas of loose, sandy soil covered by low bushes. Nevertheless I was

unable to gather material evidence of a *Cabassous* in Serra da Capivara.

*Dasybus novemcinctus*: common long-nosed armadillo, "tatu-verdadeiro"

The commonest armadillo in the region, avidly sought by poachers. It has been found in all different kinds of Caatinga over clay soil. Judging from faeces from this species its main prey are large harvest termites abundant in the region.

*Dasybus septemcinctus*: Brazilian lesser long nosed armadillo, "tatu-china"

Not recorded before from the Caatinga (Willig & Mares, 1989), I have made fewer records from this species than from the endangered Brazilian three-banded armadillo. It has been found both in the west of the Park, in areas of rock outcrops surrounded by tall arboreal Caatinga, and in the degraded plain south of Serra da Capivara. In captivity it will eat yogurt and eggs quite readily, being an active animal and quite strong digger.

*Tolypeutes tricinctus*: Brazilian three-banded armadillo, "tatu-bola"

This endangered species has been recently extirpated from the southern part of the Park. I have found it in the west part, in tall arboreal Caatinga over clay, and in areas dominated by rock outcrops and shrubby vegetation growing on sandy soil. In the north-central part of the Park it occurs in arboreal-arbustive caatinga over sandy soils, and also in very dry valley bottoms of white sand covered by sparse legume shrubs. The species seems to be rare in the Park, but judging from tracks, higher densities occur in its west part. Most records were from lone animals, except one in late April, when the tracks of two armadillos traveling together were found and probably represents a couple. Along three months, in 1991, I bought 8 live armadillos from local hunters (5 males, 3 females). These were said to come from an area of sandy soil covered by low shrubs to the northwest of Canto do Buriti. Captives done well on an yogurt diet, being released in the Park.

## Discussion

The Caatingas of southeastern Piauí have a fairly diverse edentate fauna, more so than other places in northeastern Brazil probably due to the proximity of the Cerrado-Caatinga transitional area. More Cerrado-typical species like *M. tridactyla* and *D. septemcinctus* are rare in the region, but I can not discount that this

may be due to over-hunting. The present status of *P. maximus* and *C. unicinctus* waits investigation.

From the conservation standpoint, Serra da Capivara still holds a population of one of the most threatened edentates, *T. tricinctus*. It is necessary to assess the size of this population and its ecological needs in order to manage it. As the largest reserve in the Caatinga, Serra da Capivara, if adequately protected, will be vital for the conservation of this species in the long-term. Some of the areas where *Tolypeutes* has been found are immediately out of the Park's limits but could be annexed to it. Especially an 8,000 ha stretch between the Park and the PI140 road (see map in Olmos, 1993) should be added, as it seems to hold higher densities of armadillos, besides being used by threatened species like jaguars and scarlet macaws.

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