Diet of the Yellow Armadillo, *Euphractus sexcinctus*, in South-Central Brazil

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**Introduction**

The 21 species of armadillos (Dasypodidae, Xenarthra) show a remarkable variation in size, geographic distribution and feeding patterns, and can be divided into four groups according to their dietary specializations: carnivore/omnivore (*Chaetophractus*, *Euphractus* and *Zaedyus*), generalist insectivore (fossorial) (*Chlamyphorus*), generalist insectivore (terrestrial) (*Dasypus*), and specialist insectivore (ants and termites) (*Priodontes, Cabassous* and *Tolypeutes*) (Redford, 1985).

The three genera of hairy armadillos, the carnivore/omnivores, show temporal and geographic variation in their diet which is more pronounced than in the other three feeding groups (Redford, 1985). Detailed and systematic studies on the diet of the carnivore/omnivores in natural conditions are needed for finer analyses of their patterns of trophic specialization. While research is wanting on the feeding ecology of nearly every edentate species (Redford, 1994), a notable exception among the hairy armadillos is Greegor's (1980) study on *Chaetophractus vellerosus* in northwest-ern Argentina. *C. vellerosus* combines an insectivorous diet with substantial intake of plant matter, especially *Prosopis* pods, in the winter.

The yellow armadillo, *Euphractus sexcinctus*, is the largest member of the carnivore/omnivore group and consumes many types of animal prey, including carrion, small vertebrates, ants (adults, larvae and cocoons), and plant matter such as fruits and tubers (Redford, 1985; Redford and Eisenberg, 1992; Bezerra et al., 2001). Plant matter (especially fruit) makes up a major portion of the diet in the Pantanal region of Brazil (Schaller, 1983).

*Euphractus sexcinctus* is a common species ranging from central and eastern Brazil through Paraguay, eastern Bolivia and northern Argentina (Redford and Wetzel, 1985). It occurs in a wide variety of biomes, including the Amazon, Caatinga, Cerrado, Pantanal, Chaco and the Atlantic Forest (Silva-Júnior and Nunes, 2001). Within these biomes it most often inhabits savannas, forest edges and *campos cerrados*, a type of *cerrado* in which trees are absent and shrubs form an open layer (Eiten, 1979). The biomass of this species was estimated to be approximately 19 kg/km² for dry forest, flooded grassland, and open savanna in the Brazilian Pantanal (Schaller, 1983). In northeastern São Paulo it comprises 37% of total mammal road kills, or 2.56 kg/km, according to a survey of paved highways in the region (J. A. Tavares-Filho, unpubl. data; see below). In this study we examine the diet of the yellow armadillo and compare the results with available data on this species and other armadillos in the carnivore/omnivore group.

**Methods**

The interior of the state of São Paulo is presently covered with a mosaic of cattle pasture, cultivated fields (mainly sugar cane, cereals and fruit) and exotic plantations of *Pinus* and *Eucalyptus*. Scattered patches of *cerrado* and mesophytic semideciduous forest (*sensu* Rizzini, 1963) are still found in the interior of the state. The northeast of São Paulo is one of the most intensively cultivated areas of the state. Troppmair (1975) classifies the climate as Cwa according to Köppen (1936), characterized by a rainy season in the summer and a dry season in the winter; the rainfall varies between 1100 and 1300 mm, with a period of drought from May to September, and July being the driest month (Caldarelli and Neves, 1981).

From January 1981 to April 1984, 74 specimens of *Euphractus sexcinctus* were found as road kills along paved highways in northeastern São Paulo (within an area of ca. 30 km of radius around the point 21°06'S, 48°27'W) in the municipali-