

## COMMERCIALIZATION OF *URANOSCODON SUPERCILIOSUS* LINNAEUS, 1758 (TROPIDURIDAE) FOR MAGICAL-RELIGIOUS PURPOSES IN NORTH AND NORTHEASTERN OF BRAZIL

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### INTRODUCTION

Reptiles are one of the fundamental ethnozoological entities, and we interpret our relationship with reptiles differently depending upon culture, environment, and personal experience. Besides the use of them as food, reptiles have been used for various purposes, for example, traded as pets, used in traditional medicine and as magical-religious objects. Reptiles are among the animal species most frequently used in traditional folk practices in different socio-cultural contexts throughout the world (ALVES *et al.*, 2008). Despite the intensive use of reptiles for purposes other than alimentary, there is a general lack of detailed information concerning the magnitude of this harvesting and its impact on the species.

Although Brazilian legislation forbids commercial use of wild fauna (Article 1 Law 5.197 January 3<sup>rd</sup>, 1967 and Article 29 of Law 9.605 February 12<sup>th</sup>, 1998), products and derivatives made from animals are commonly illegally traded in traditional markets, representing important sale points of the native exotic fauna of the Amazonian region (ALVES & SANTANA 2008). The diving lizard (*Uranoscodon superciliosus* Linnaeus, 1758) is among the species most frequently used and traded for magical-religious purposes. Nevertheless, there are no records of commercial use of this species.

This lizard occurs in northern South America east of the Andes (AVILA-PIRES, 1995). It is an arboreal lizard, living in vegetation along streams, rivers, and marshes and feeding largely on insects and other invertebrates washed up on shores or deposited in rift piles just above the water line (HOWLAND *et al.*, 1990). It is the sister taxon to all other tropidurids (FROST, 1992).

### MATERIAL AND METHODS

As part of broader study of magical-religious fauna in Brazil, this paper reports aspects of the use and commercialization of *U. superciliosus* for magical-religious purposes in cities of São Luís (Maranhão) and Belém (Pará) Northeastern and Northern Brazil respectively. The study was carried out from January 2004 to November 2005. Visits were done in outdoor markets and religious articles stores, where products derived of the animals are commonly traded. Information on the use and trade of *U. superciliosus* for magical-religious purposes was obtained through semi-structured questionnaires applied to 30 traders (15 in Belém and 15 in São Luís).

Belém is the capital and also the biggest city of the state of Pará (01°27'21" S -48°30'16" W). With a population

of over 1.3 million, it is the 10th biggest city of Brazil. Its metropolitan area has approximately 2.01 million inhabitants. It is the entrance gate and, together with Manaus, the most important city in the Brazilian Amazonian region. The city of São Luís (02°31'47" S - 44°18'10" W) is the capital of Maranhão State and is located in São Luís Island at the banks of São Marcos and São José bays, Northeastern of Brazil. The metropolitan area totals 1.227,659 (ranked 16 in Brazil) (ALVES & PEREIRA-FILHO, 2007).

### RESULTS AND DISCUSSION

*U. superciliosus* is known as “tamaquaré” by locals. All interviewees mentioned traded products derived from *tamaquaré*. Dead animals are usually sold whole or in parts. Nevertheless, live animals stored in plastic bottles could be observed during the fieldwork. In addition to whole animals or their parts, other products derived from *tamaquaré* are offered for sale, principally “águas” (waters) or perfumes and “pó” (dust). The *águas* (Fig. 1) or perfumes are products that contain *U. superciliosus* suspended in ingredients such as alcohol, rose water, or solutions



Fig. 1. “Água (water) de tamaquaré” (*U. superciliosus*) commercialized in religious articles stores in São Luís, Maranhão State, Brazil.

According to the shop owners, the products produced from *U. superciliosus* (dust and water) are used



Fig. 2. Dried diving lizard (*U. superciliosus*) for sale in Ver-o-Peso Market, Belem, Pará State, Brazil.

to “amansar” (to calm down an aggressive person or ease the anger of someone betrayed by their wife or husband). There is an association between the biological characteristics of lizard and the effects its use is expected to generate. Animals that move slowly (“lerdos”) are used to calm people down (“lerdar”). This observation is similar to that of RADBILL (1976) who pointed out that in homeopathic or imitative magic, it is assumed that certain qualities attributed to animals can be transferred to humans, and that this transfer can occur by inhalation, ingestion or application of the body parts of those animals.

The *águas* are also used in washing clothes (the product is diluted into the water used to wash the clothes of the person to be affected) or as a perfume that can be given to the person in question as a present. The *pó* (dust) serves the same purpose as the *águas* made with *tamaquaré*, but it is employed by placing the dust in food served to the person who is to be cast under its spell.

Despite the existence of intensive use and trade of *U. superciliosus* in the Amazon region, there is a great lack of information about it, what makes difficult for an evaluation of the real size of this activity and its impact on nature. Beyond of the *tamaquaré*, others reptiles have been traded for magical-religious purposes in Brazil (ALVES & PEREIRA FILHO, 2007). Understanding the socio-economic and cultural aspects of use and trade of animals is also important for the development of any successful management plan. Given that this is the first report on this subject, further investigations of this topic may bring important additional information for the conservation of reptiles. As noted by ALVES *et al.* (2008), the manner in which natural resources are used by human populations and cultural norms associated with that use are extremely relevant to the definition of possible conservation strategies.

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