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Zaedyus pichiy (Desmarest, 1804) is part of the collections of the Šariš Museum in Bardejov (Slovakia)

Alexander Csanády

Abstract: In this study are presented data of individuals belonging to armadillos (Cingulata, Chlamyphoridae, *Zaedyus*) from unknow locality of South America (probably from the Chubut region of Argentina). Totally, three voucher specimens and two skulls are in the SMB collection. Specimens presented in this study highlighted the importance of SMB's collection.

Key words: pichi, SMB collections, Slovakia, museum

Introduction

The pichi, is one of the smallest species of armadillo, with a body length of 26–34 centimetres, a tail length of 10–12 centimetres and a weight ranging between 1–2 kilogrammes (Superina & Abba 2014a, b). Authors also showed that it is the only species of armadillo that can dig its sharp claws in and burrow, setting only hard carapace for protection. The small armadillo also digs long tunnels for itself. Another exceptional characteristic that distinguishes it among armadillos is that it is the only one that can hibernate during the cold season (Superina & Boily 2007). Moreover, it can also enter torpor during environmental stress (Superina & Jahn 2013).

Superina (2008) reports that it is a solitary and diurnal species found in desert, xeric grassland, and scrub habitats and in Patagonian steppe habitats, always on sandy soils (including volcanic soils). Its occurrence has also been confirmed in some degraded habitats such as meadows and plantations. *Z. pichiy* was initially endemic to Argentina and spread into Chile in the 19th century. The home range of individuals is quite large. Currently, it extends from Argentina (San Juan and La Rioja) and eastern Chile south to the Strait of Magellan, from sea level to 2 500 m a.s.l. (Superina & Abba 2014a, b). Occurrences were confirmed in Argentina (Santa Cruz, San Luis, San Juan, Rio Negro, Neuquén, Mendoza, La Rioja, La Pampa, Córdoba, Chubut, Buenos Aires); Chile (Valparaíso, Santiago, O'Higgins, Maule, Magellanes, Los Lagos, La Araucania, Coquimbo, Biobío, Aisén).

The collections of mammals in the Šariš Museum in Bardejov, Slovakia (hereafter SMB) and their importance are known (Hromada *et al.* 2015, Csanády 2020, 2022). The data about three armadillo's specimens deposited in SMB collection, are presented for the first time.

Material and methods

In this study are presented data of three individuals of the pichi, *Zaedyus pichiy* (Desmarest, 1804), belonging to armadillos (Cingulata, Chlamyphoridae, *Zaedyus*) from unknow locality of South America. No further records of origin, date, sex, and locality could be found for these specimens. However, as has been shown elsewhere (cf. Mikula et al. 2018), Tibor Weisz, former curator of the SMB, was known not only for personally collecting birds and other vertebrates (1957 – 1981), but also for acquiring material for the museum in exchange from other collectors (1970 – 1972). Several vertebrate species without locality and date were also acquired in this way, which were tied to Neotropical areas through an exchange with the Argentinian collector Andor Kovács. Totally, three voucher specimens and two skulls of *Z. pichiy* are deposited in the SMB collection.

Results and Discussion

In total, there were three specimens of the pichi, found in the collection of Šaris Museum Bardejov (Fig. 1). Although details of locality, sex, age, and collection history of specimens were missing (specimens without protocol cards), the pichi specimens were probably collected from the Chubut area of Argentina. Based on the knowledge that several birds for SMB collections were collected from this area (cf. Mikula et al. 2018), as well as the confirmed occurrence of the species in this region (cf. Superina & Abba 2014a, b), there is a high probability of the origin of these specimens. Nevertheless, the importance of individuals in the collections contribute to the overall knowledge of the mammal SMB collection.

It should be noted that the conservation status of the pichi is listed as "Near Threatened" (NT) by the International Union for Conservation of Nature and Natural Resources Red List of Threatened Species (International Union for Conservation of Nature and Natural Resources 2011). It also is listed as "NT" in the Libro Rojo de los Mamiferos de Argentina (Superina *et al.* 2012). The declining population trend of *Z. pichiy* is mainly due to intensive (illegal) hunting for food and sport. Other significant losses of individuals are also caused by killing by dogs, hit by cars, and influenced by habitat modification and overgrazing. Disease has been an important factor causing local extinctions. It is estimated that the population has declined by 20% in the last 10 years (Abba and Superina 2010). Moreover, in the province of Mendoza, Argentina, *Z. pichiy* is also a major prey of poachers (Superina 2008).

The importance of collection specimens deposited in museums and other institutions may be emphasized in the future by the fact that the species has a declining population trend. Specimens so preserved may serve as an exceptional scientific time capsule. All the specimens housed in this and other similar collections, including specimens from local museums, will be widely needed, and used as data sets by ecologists and conservationists in the future.



Fig 1: Skins and skulls of the pichi (*Zaedyus pichiy*) deposited in SMB's collection.

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Author´s address:

Alexander Csanády, University of Prešov, Faculty of Humanities and Natural Sciences, Department of Biology, 17. novembra 1, SK-080 01 Prešov;
e-mail: alexander.csanady@unipo.sk, alexander.canady@gmail.com