Bonner zoologische Beiträge	Bonner	Z00	logische	Beiträge
-----------------------------	--------	-----	----------	----------

Second Find of the Recently Discovered Amazonian Giant Peccary, *Pecari maximus* (Mammalia: Tayassuidae) van Roosmalen et al., 2007: First Record from Bolivia

Jiří MORAVEC¹⁾ & Wolfgang BÖHME²⁾

¹)National Museum (Natural History Museum), Prague, Czech Republic ²)Zoologisches Forschungsmuseum A. Koenig, Bonn, Germany

Abstract. We report on the discovery of a large peccary in the Amazon rainforest of northwestern Bolivia in the area of "Bolpebra" close to both the Peruvian and the Brazilian border, which is documented by several photographs. Its size, the relatively small head, long legs, and relatively thin and short fur without white-coloured markings leave no doubt that this is the second find of the Amazonian giant peccary, *Pecari maximus*, which was first discovered and described from Rio Aripuana, Amazonian Brazil, by VAN ROOSMALEN et al. (2007). Our second record for the species is at the same time the first for Bolivia, and the close geographic proximity to SE Peru makes its occurrence in this country also very likely. We suggest that this unique giant peccary should serve as a flag-ship species for protecting the entire region of its potential distribution range in a frontier-crossing World Heritage Site.

Keywords. Pecari maximus, Bolivia, Amazon rainforest.

1. INTRODUCTION

Only few years ago, a giant peccary species was discovered in Amazonian Brazil, the fourth species in the Neotropical artiodactyle family Tayassuidae (VAN ROOS-MALEN et al. 2007). Being the largest of the four extant peccary species, it was named Pecari maximus. First molecular data showed that it is the sister species of the collared peccary (*Pecari tayacu*), while the white-lipped peccary (Tayassu pecari) and the Chacoan peccary (Catagonus wagneri) form the sister clade of the two former. The description of P. maximus was one of the spectacular discoveries of a new large mammal species and took place only three decades after the discovery of another Neotropical pig, viz. Catagonus wagneri. The latter species had originally been described as a fossil taxon, and later it was discovered to survive in the Chaco of Paraguay (WETZEL et al. 1975; WETZEL 1977 a, b, 1981). This (re)discovery was long preceded by information provided by Carl BERKHAN, a German farmer resident in the Bolivian Chaco, who reported to M. EISENTRAUT in 1930 on the existence of a third and even fourth peccary species in the Chaco (see EISENTRAUT 1986; BÖHME & HUTTER-ER 1999; BÖHME & STIELS 2007). Only six decades later the presence of C. wagneri was proven also in Bolivia, one decade after its initial discovery as a living taxon in Paraguay (EISENTRAUT 1986).

In the case of *P. maximus* from Amazonian Brazil, it took only two years since its discovery before it was also found in a neighbouring country. This sighting was made in 2005 and is reported and discussed below.

2. COMPARATIVE DESCRIPTION OF A BOLI-VIAN SPECIMEN OF *PECARI MAXIMUS* WITH SOME ECOLOGICAL NOTES

In January 2005, the senior author spent 16 days in a remote area of the Bolivian side of the triangle where Bolivia, Peru and Brazil meet ("Bolpebra"). Close to a settlement named Bioceanica (11°08'S, 69°22'W), local hunters had killed an obviously young female peccary which was subsequently skinned, and some photographs were taken for documentation (Figs 1-3). The head-body length of this specimen was approximately 105 cm (the hunter's knife in Fig. 3 measured 38 cm for comparison,). The legs were much longer than in the two sympatric species P. tayacu and T. pecari, while the head was relatively smaller than in females of these species. The fur was thin, leaving much of the skin visible and showing some dark mottling, but in the neck and middorsal region, the hairs were longer and darker. There was no trace of a white collar typical for *P. tayacu*, nor of whitish lips as in *T*. pecari (rather lighter bristles occurred in the lower part



50 Jiří MORAVEC & Wolfgang BÖHME: Second Find of the Recently Discovered Amazonian Giant Peccary, Pecari maximus

Fig. 1. Young female Pecari maximus, shot at Bioceanica, Bolivia. Photograph J. MORAVEC.



Fig. 2. Lateral view of the head of the same specimen. Photograph J. MORAVEC.

Bonner zoologische Beiträge 56 (2007)



Fig. 3. Local hunter beginning to skin same specimen. Photograph J. MORAVEC.

of the cheek area only). The brown dark mottled fur colouration differed from the strongly speckled dark blackish-grey fur colouration of *P. tayacu* as well as from the blackish brown longer fur of *T. pecari*. In the figures the differences in fur colour and bristle-haired texture are evident although the freshly killed female pig lay in a forest creek and was therefore wet.

All characteristics given above are diagnostic for *P. maximus* from Rio Aripuana in Brazil, compared with its only congener *P. tayacu* (Fig. 4). It is characterized "in being much larger but less robust, with much longer legs and a proportionally small head only slightly bigger than that of *P. tayacu*. Most of the body is thinly bristle-haired, overall colour brown mixed with dirty white, a black mid-dorsal mane running from the ears as far as the rudimentary tail. Nasal disc pinkish, relatively small and soft" (VAN ROOSMALEN et al. 2007). According to this diagnosis, the Bolivian female specimen described here belongs without any doubt to *Pecari maximus* and represents thus the second documented record for this new species. At the same time, it is the first record from outside Brazil, viz. from Bolivia.

The distance between the type locality of *P. maximus* (left bank of the Rio Aparuana, at the mouth of its tributary Rio Arauazinho, 06°16'S, 60°20'W) is about 1000 km away

from our new locality (11°08'S, 69°22'W). However, VAN ROOSMALEN et al. (2007) cited already an old report by an American rubber cutter, J. C. Yungjohann, who had lived in the Rio Xapuri area from 1906-1919 which is only 80–100 km NE of the Bolivian site at Bioceanica. Similarly as the German farmer in the Bolivian Chaco mentioned above, YUNGJOHANN also reported already one century prior to the "official", zoological discovery on a third species of "bush pigs": "There is a great, big one porcao, they travel in pairs, and are very lively" (YUNGJOHANN 2003). Obviously, this truly cryptozoological information is now proven by the new record of *P. maximus* described here.

Also the characterization of *P. maximus* by Yungjohann as living in pairs fits the information given by VAN ROOS-MALEN et al. (2007) that this species – in strong contrast to the large herds of both *P. tayacu* and *T. pecari* (SOWLS 1984) – lives "in small family groups that consist of an adult pair with or without 1–2 offspring". Also the young female from Bioceanica was, according to the hunters, part of a small group of only four specimens.

The area of Bioceanica is characterized by undulating terrain, with the elevation ranging from ca. 250 to 300 m a.s.l. It is covered by tall, slightly selectively logged *terra firme* rain forest characterized by an abundance of Brazil nut 52 Jiří MORAVEC & Wolfgang BÖHME: Second Find of the Recently Discovered Amazonian Giant Peccary, Pecari maximus



Fig. 4. Live Pecari maximus from the type locality. Photograph L. FRENZ.

trees *Bertholletia excelsa*. The upper canopy closes at the height of 30–40 m. The densest understory is associated with moist depressions along forest brooks.

3. CONCLUSION

The assumption by the discoverers of Pecari maximus that it might be more widely distributed than known so far has been corroborated by the new, distant find of this species in NW Bolivia. As to its conservation status according to IUCN criteria, it must certainly be regarded as "data deficient". But possible severe threats have already been listed by VAN ROOSMALEN et al. (2007). However, it could well serve as an impressive flagship species for protecting the entire interfluve range between Rio Madeira and Rio Tapajos which yielded several impressive new mammal discoveries and is certainly also full of other, still undescribed vertebrate species. Therefore, we strongly support the appeal by VAN ROOSMALEN et al. (2007) to encourage UNESCO to urge the Brazilian and Bolivian governments to declare the entire region a - frontier-crossing -World Heritage Site, including also the rain forest part of neighbouring Peru.

Acknowledgements. We thank Lothar Frenz, Hamburg, for the permission to use a photograph of a live *Pecari maximus* specimen taken by him at the type locality in Brazil. The senior author is indebted to James Aparicio, Collección Boliviana de Fauna (CBF), La Paz, for continuing support during his field research trips to Bolivia. The work of JM was supported by the Ministry of Culture of the Czech Republic, project MK00002327201. The junior author thanks his two mammological colleagues at ZFMK, Bonn, Rainer Hutterer and Gustav Peters, for sharing their experience with him, and for constructive comments.

REFERENCES

- BÖHME, W. & HUTTERER, R. 1999. Leben und Werk von Martin Eisentraut (1902–1994). Bonner zoologische Beiträge 48: 367–382.
- BÖHME, W. & STIELS, D. 2007. Totgesagte leben länger: Wiederentdeckungen ausgestorben geglaubter Landwirbeltiere. Koenigiana 1: 21–39.
- EISENBERG, J. F. & REDFORD, K. H. (eds.). 1999. Mammals of the Neotropics. The Central Neotropics, vol. 3: Ecuador, Peru, Bolivia, Brazil. University of Chicago Press, Chicago and London, i–x+609 pp.
- EISENTRAUT, M. 1986. Über das Vorkommen des Chaco-Pekari, *Catagonus wagneri*, in Bolivien. Bonner zoologische Beiträge **37**: 43–47.
- Sowls, L. K. 1984. The peccaries. University of Arizona Press, Tucson, 251 pp.

Bonner zoologische Beiträge 56 (2007)



Fig. 5. Live Pecari tayacu, congener of P. maximus to show the different body proportions. Photograph W. BÖHME.

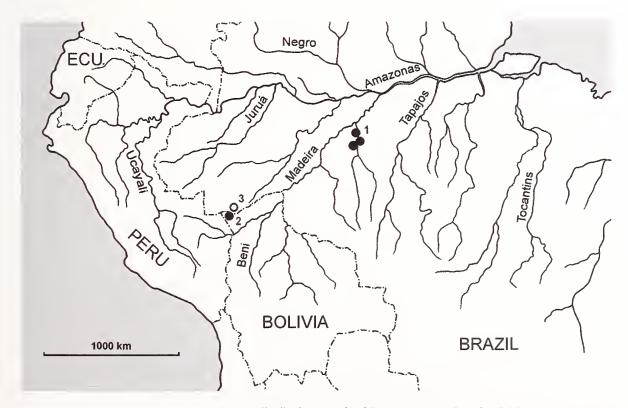


Fig. 6. Map of central South America showing the distribution records of *Pecari maximus*. Drawing J. MORAVEC.

54 Jiří MORAVEC & Wolfgang BÖHME: Second Find of the Recently Discovered Amazonian Giant Peccary, Pecari maximus

- VAN ROOSMALEN, M. G. M., FRENZ, L., VAN HOOFT, P., DE LONGH, H. H. & LEIRS, H. 2007. A new species of living peccary (Mammalia: Tayassuidae) from the Brazilian Amazon. Bonner zoologische Beiträge 55: 105–112.
- WETZEL, R. M. 1977 a. The Chacoan peccary, *Catagonus wag-neri* (Rusconi). Bulletin of the Carnegie Museum 3: 1–36.
- WETZEL, R. M. 1977 b. The extinction of peccaries and a new case of survival. Annals of the New York Academy of Science **288**: 538–544.
- WETZEL, R. M. 1981. The hidden Chacoan peccary. Carnegie Magazin 55: 25–32.
- WETZEL, R. M., DUBOS, R. E., MARTIN, L. R. & MYERS, P. 1975. *Catagonus*, an "extinct" peccary, alive in Paraguay. Science 189: 379–381.
- YUNGJOHANN, J. C. 2003. White Gold: The Diary of a rubber cutter in the Amazon 1906–1916. Synergetic Press, Santa Fé.

Authors' addresses: Prof. Dr. Wolfgang BöHME (corresponding author), Zoologisches Forschungsmuseum Alexander Koenig, Adenauerallee 160, D-53113 Bonn, Germany; E-mail: w.boehme.zfink@uni-bonn.de; Dr. Jiří Mo-RAVEC, National Museum (Natural History Museum), Zoological Department, Vaclavské nám. 68, C-115 79 Praha 1, Czech Republic; E-mail: jiri_moravec@nm.cz.

Received: 20.06.2008 Revised: 29.06.2008 Accepted: 10.10.2008 Corresponding editor: R. van den Elzen

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Bonn zoological Bulletin - früher Bonner Zoologische Beiträge.

Jahr/Year: 2009

Band/Volume: 56

Autor(en)/Author(s): Moravec Jirí, Böhme Wolfgang

Artikel/Article: Second Find of the Recently Discovered Amazonian Giant Peccary, Pecari maximus (Mammalia: Tayassuidae) van Roosmalen et al., 2007: First Record from Bolivia 49-54