

FIRST RECORD OF PANTANAL CAT, *Leopardus colocolo braccatus*, IN BOLIVIA

José A. Díaz Luque^{1,2}, Valerie Beraud², Pablo J. Torres³,
Federico P. Kacoliris^{2,4,5}, Gonzalo Daniele², Robert B. Wallace⁶,
and Igor Berkunsky^{2,5,7}

¹ Urbanización el Coto, Calle Ruiñor Nº6, 29651 Mijas Costa, Málaga, España [Correspondence: <diazdl_7@hotmail.com>]. ² Proyecto de conservación de la Paraba Barba Azul, World Parrot Trust, Casilla 101, Trinidad, Beni, Bolivia. ³ Universidad Nacional de la Patagonia San Juan Bosco, Boulevard Brown 3700, Puerto Madryn, Chubut, Argentina. ⁴ División Vertebrados, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, Paseo del Bosque s/n, B1900FWA La Plata, Argentina. ⁵ CONICET (Consejo Nacional de Investigaciones Científicas y Técnicas), Argentina. ⁶ Wildlife Conservation Society, 185th Street and Southern Boulevard, Bronx, New York, 10460, U.S.A. ⁷ Instituto Multidisciplinario sobre Ecosistemas y Desarrollo Sustentable, Universidad Nacional del Centro de la Provincia de Buenos Aires, Campus Universitario, Paraje Arroyo Seco, B7000GHG Tandil, Argentina.

ABSTRACT: The Pantanal cat, *Leopardus colocolo braccatus*, has been reported for grasslands and subtropical humid forests in Brazil, Uruguay, Paraguay and Argentina. Here we report a dead Pantanal cat in the Moxos savannahs of the Beni Department of Bolivia, representing the first record of this taxon for Bolivia. This record, in combination with a reassessment of two previous records of *L. colocolo* in the lowlands of Bolivia, extends the distribution range of this subspecies ca.1000 km WNW from the nearest known locality in Brazil.

RESUMEN: Primer registro del gato de pantanal *Leopardus colocolo braccatus* en Bolivia. El gato de Pantanal (*Leopardus colocolo braccatus*) ha sido reportado para sabanas y bosques húmedos subtropicales en Brasil, Uruguay, Paraguay y Argentina. El objetivo de esta nota es reportar un espécimen de gato de Pantanal que fue encontrado muerto en los Llanos de Mojos en el Departamento del Beni, Bolivia. Este hallazgo es el primer registro de *Leopardus colocolo braccatus* en Bolivia. Este registro, en combinación con una reinterpretación de dos registros previos de *L. colocolo* en las tierras bajas de Bolivia, extiende en aproximadamente 1000 km al ONO el rango de distribución para la especie, desde la localidad conocida más cercana en Brasil.

Key words. Beni. Bolivia. Lowland. Moxos savannas. Pampas cat.

Palabras clave. Beni. Bolivia. Gato de las pampas. Llanos de Mojos. Tierras bajas.

The Pampas cat, *Leopardus colocolo* (Molina, 1782), is one of most variable species of Felidae (Do Nascimento, 2010). Some authors suggest that the species could be split into three species: *L. pajeros* in the Andean, Chaco, Pampas and Patagonia regions; *L. braccatus* in lowland humid forests and grasslands of

Brazil, Paraguay, Uruguay and Argentina; and *L. colocolo* endemic to highlands of northern Chile and forests of central Chile (western slope of the Andes; García-Perea, 1994).

In Bolivia, the reported specimens for the Altiplano and Andean mountains have been assigned to the subspecies *L. p. garleppii* and

L. pajeros steinbachi (Anderson, 1997). There are only two confirmed historical records for *L. colocolo* in Bolivian lowlands (Noss et al., 2010); although the subspecies was not assigned to the confirmed observation, description and sketch at Los Fierros in Parque Nacional Noel Kempff Mercado (Emmons et al., 2006), and the identity of the collection from Los Totumus, Beni Department was considered as *L. p. garleppi* (Anderson, 1997). There are no previous references about Pantanal cat *Leopardus colocolo braccatus* in Bolivia (García-Perea, 1994; Anderson, 1997; Clavijo and Ramires, 2009; Noss et al., 2010), although Emmons et al. (2006) mentioned this possibility for the Los Fierros sighting, and Wallace and Porcel (2010) included this taxon in a discussion of possible future additions to the Bolivian fauna.

Leopardus colocolo braccatus has been reported for grasslands and subtropical humid forests in Brazil, Uruguay, Paraguay and Argentina (García-Perea, 1994; Nowell and Jackson, 1996; Chebez et al., 2008). Known localities for this subspecies are more common in Brazil and Paraguay (Silveira, 1995; Courtenay, 2002; Bagno et al., 2004; Do Nascimento, 2010; Godoi et al., 2010). Its type locality is Chapada dos Guimaraes, Mato Grosso, Brazil which is the closest *L. c. braccatus* locality to Bolivia (Do Nascimento, 2010). The objective of this note is to report the observation and photographic record of a dead Pantanal cat in the Moxos' savannahs in the Beni Department of Bolivia.

On August 16th 2008, we found a wild cat that had just been killed by domestic dogs on a cattle ranch of Cercado Province ($13^{\circ} 37' S$, $65^{\circ} 07' W$, 139 m asl, **Fig. 1**), northern central Beni Department. We were riding horses during our fieldwork

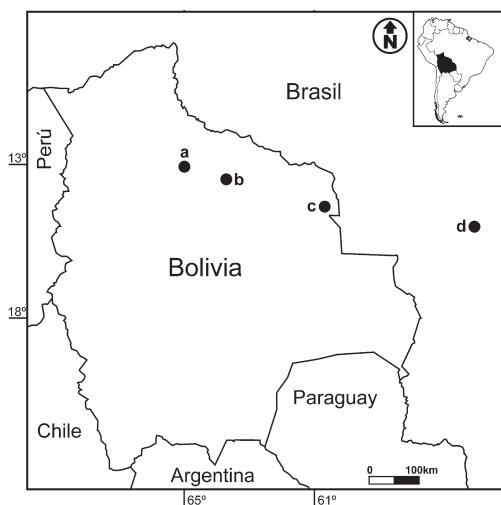


Fig. 1. Map showing the location of records for: a) *Leopardus colocolo braccatus*, this work; b) and c) previous records of *L. colocolo* in lowlands of Bolivia (Wallace et al., 2010); and d) closest record of *L. c. braccatus*, Chapada dos Guimaraes, Mato Grosso, Brazil (Do Nascimento, 2010).

and the dogs were accompanied a local guide that came with us. We heard the dogs fight and after a few seconds we saw the recently dead Pampas cat. We took photographs at the same place and position that the animal was found (**Fig. 2**); the specimen was neither collected nor measured.



Fig. 2. Pantanal cat *Leopardus colocolo braccatus* minutes after the encounter in northern central Beni Department, Bolivia. Note the characteristic features of this species: "black boots" and non-ringed tail.

We compared the obtained photographs with the pictures and skins of other cats of the *Leopardus* genus. This photographed individual matches with the description of *L. c. braccatus*. The analysis of spotting variability matches with the type 3A specimen of García-Perea (1994). This type is characterized by a uniform brown “agouti” color dorsally, with some traces of dark brown rosettes on the flanks. The tail is not ringed, black at the tip. Legs are striped and ventral markings are black. Feet are dorsally and ventrally black, including wrist and ankles.

This encounter is the first record documenting the presence of *L. c. braccatus* in Bolivia. Some works rank *L. c. braccatus* as full species (García-Perea, 1994; Wozenkraft, 2005; Do Nascimento, 2010). Nevertheless, a recent genetic analysis of a global cat species only recognizes one Pampas cat species, *L. colocolo* (Johnson et al., 2006). While our data does not provide a taxonomic solution to this debate, it does confirm the *L. c. braccatus* phenotype for Bolivia extending its distribution about 1000 km WNW from the nearest known locality ($15^{\circ} 26' S$, $55^{\circ} 45' W$; Chapada dos Guimaraes, Mato Grosso, Brazil; Do Nascimento, 2010). This finding advises that the material of the two previous records of *L. colocolo* in the Bolivian lowlands must be revised in order to confirm the subspecific assignation (Emmons et al., 2006; Wallace and Porcel, 2010).

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LITERATURE CITED

- ANDERSON S. 1997. Mammals of Bolivia, taxonomy and distribution. Bulletin of the American Museum of Natural History 231:1-652.
- BAGNO MA, FGH RODRIGUES, MP VILLALOBOS, JC DALPONTE, RC PAULA, RA BRANDÃO, B BRITTO, and AMR BEZERRA. 2004. Notes on the Natural History and Conservation Status of Pampas Cat, *Oncifelis colocolo*, in the Brazilian Cerrado. Mammalia 68:75-79.
- CHEBEZ JC, NA NIGRO, GA SOLIS, and AT STRUMIA. 2008. Confirmación de la presencia del gato del Pantanal *Lynchailurus braccatus* (Cope, 1889) en La Argentina. Nótulas Faunísticas 19:1-11.
- CLAVIJO A and GF RAMIRES. 2009. Taxonomía, distribución y estado de conservación de los felinos suramericanos: revisión monográfica. Boletín Científico Museo de Historia Natural 13:43-60.
- COURTENAY O. 2002. A new record of Pampas cat, *Lynchailurus braccatus*, in Brazil. Mammalia 66:295-297.
- DO NASCIMENTO FO. 2010. Revisão taxonómica do género *Leopardus* Grayi, 1842 (Carnivora, Felidae). Pp 208-216, in: Tesis de doutorado, Universidade de São Paulo, São Paulo, Brasil.
- GARCÍA-PEREIRA R. 1994. The Pampas cat group (genus *Lynchailurus* Severtzob, 1858) (Carnivora: Felidae), a systematic and biogeographic review. American Museum Novitates 3096:1-36.
- GODOI, MN, R TERIBELE, R BIANCHI, N OLIFIERS, HVB CONCONE, and NLX FILHO. 2010. New records of Pampas cat for Mato Grosso do Sul State, Brazil. Cat News 52:28-29.
- EMMONS LH, V CHAVEZ, N ROCHA, B PHILLIPS, I PHILLIPS, LF DEL AGUILA, and M SWARNER. 2006. The non-flying mammals of Noel Kempff Mercado National Park (Bolivia). Revista Boliviana de Ecología y Conservación Ambiental 15:23-46.
- JOHNSON WE, E EIZIRIK, J PECON-SLATTERY, WJ MURPHY, A ANTUNES, E TEELING, and SJ O'BRIEN. 2006. The late Miocene radiation of modern Felidae: a genetic assessment. Science 311:73-77.
- NOSS AJ, ML VILLALBA, and R ARISPE. 2010. Felidae. Pp. 403-444, in: Distribución, ecología y conservación de los mamíferos medianos y grandes de Bolivia (RB Wallace, H Gómez, ZR Porcel, and DI Rumiz, eds.). Centro de Ecología Difusión Simón I. Patiño. Santa Cruz de la Sierra, Bolivia.
- NOWELL K, and P JACKSON. 1996. Wild cats. Status survey and conservation action plan. The World Conservation Union IUCN. Cambridge, UK.
- SILVEIRA L. 1995. Notes on the distribution and natural history of the Pampas Cat, *Felis colocolo*, in Brazil. Mammalia 59:284-288.
- WALLACE RB and ZR PORCEL. 2010. Interrogantes taxonómicas y posibles adiciones para los mamíferos medianos y grandes de Bolivia. Pp. 831-850, in: Distribución, ecología y conservación de los mamíferos medianos y grandes de Bolivia (RB Wallace, H Gómez, ZR Porcel, and DI Rumiz, eds.). Centro de Ecología Difusión Simón I. Patiño. Santa Cruz de la Sierra, Bolivia.
- WALLACE RB, H GÓMEZ, ZR PORCEL, and DI RUMIZ. 2010. Distribución, ecología y conservación de los mamíferos medianos y grandes de Bolivia. Centro de Ecología Difusión Simón I. Patiño. Santa Cruz de la Sierra, Bolivia.
- WOZENKRAFT WC. 2005. Order Carnivora. Pp. 537-540, in: Mammals species of the world: A taxonomic and geographic reference (DE Wilson and DM Reeder, eds.) 3rd Edition. The John Hopkins University Press, Baltimore.