



CR·SiB

CERTIFICADO
DE REPORTE

1. INFORMACIÓN DEL CERTIFICADO

Número de certificado: **170A1AA7F47**

Fecha de la última actualización del conjunto de datos: **2020-03-03**

URL del conjunto de datos: https://ipt.biodiversidad.co/cr-sib/resource.do?r=1753_pteronurabrasiliensis_20200303

Número de registros biológicos reportados: **54**

2. INFORMACIÓN DEL PERMISO

Autoridad

Ministerio de Ambiente y Desarrollo Sostenible

Número del permiso

Artículo 252 de la Ley 1753 de 2015

Titular

Universidad de los Andes

Nit o cédula

860.007.386-1

Fecha de emisión del permiso

2015-06-09

3. INFORMACIÓN DEL RECURSO

Título del proyecto

Population Structure and Genetic Diversity of the Endangered South American Giant Otter (*Pteronura brasiliensis*) from the Orinoco Basin in Colombia: Management Implications and Application to Current Conservation Programs

Resumen

Endangered giant otters, *Pteronura brasiliensis*, are found along the Amazon and Orinoco rivers and most of their tributaries. Hunting in the mid-1970s pushed giant otter populations to the brink of extinction. We studied population structure and genetic diversity of giant otters from Colombia's Orinoco basin using analyses of partial mitochondrial DNA control region sequences obtained from scat material. We collected and analyzed 54 scat samples from 22 latrines, 2 tissue samples primarily from captive giant otters and 2 from hunted animals near Puerto Carreño and Puerto Inírida (Colombian Orinoco), as well as one tissue sample from Puerto Leguizamo (Colombian Amazon). Thirty-nine partial control region sequences were obtained (258bp), corresponding to

15 unique haplotypes. Most of these haplotypes, found in samples collected around Puerto Carreño, defined one phylogeographic group (phylogroup) not previously described. Higher genetic diversity in the Colombian Orinoco populations than in other South American populations suggests that this newly described phylogroup, as well as a second phylogroup defined from a few Colombian Orinoco and Amazon samples, should be considered distinct genetic management units. National conservation programs, particularly those aiming to establish protected areas, should manage these independently. Current Colombian confiscated animal reintroduction and captive reproduction programs should also consider such differentiation when determining reintroduction locations or improving husbandry practices.

Palabras clave

conservation genetics Colombia mtDNA Orinoco reintroduction, Specimen

3.1 Contacto del recurso

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3.4 Cobertura geográfica

Colombia CO Vichada Puerto Carreño Río Orinoco, San Borges Colombia CO Vichada Puerto Carreño Laguna el pañuelo Colombia CO Vichada Puerto Carreño Laguna la india Colombia CO Vichada Puerto Carreño Laguna Angela Colombia CO Vichada Puerto Carreño Río Orinoco, San José Colombia CO Vichada Puerto Carreño Río Bitá, Tres bocas Colombia CO Vichada Puerto Carreño Río Bitá, Paso de ganado Colombia CO Vichada Puerto Carreño Río Bitá, Tres iglesias Colombia CO Vichada Puerto Carreño Río Bitá, La yuca / reserva de Nimajay Colombia CO Guainía Inirída Laguna Clara Colombia CO Guainía Inirída Caño Vitina Colombia CO Guainía Inirída Caño pajarito Coordenadas: 3°33'57"N y 6°10'57.18"N Latitud; 67°56'24.24"W y 67°25'32.58"W Longitud

3.5 Cobertura taxonómica

Pteronura brasiliensis

Categorías taxonómicas

Especie: *Pteronura brasiliensis*

3.6 Cobertura temporal

31 de enero de 2010 - 31 de marzo de 2011

3.7 Métodos de muestreo

Due to the difficulty of obtaining and handling wild giant otters for blood or tissue sampling, we collected scat samples; these have proven to be a useful source of DNA in a number of mustelid species, including giant otters (García et al. 2007), the southern river otter (*Lontra provocax*) (Centrón et al. 2008), and the neotropical river otter (*Lontra longicaudis*) (Trinca et al. 2007). Samples were collected in the Colombian Orinoco, in the vicinity of the townships of Puerto Carreño and Puerto Inírida. Following the guidelines of Groenendijk et al. (2005), fieldwork was

conducted during the low water season when latrines were accessible: in February and March 2010, and in April 2011. Giant otters use communal latrines and feces are mixed due to territorial marking. In order to minimize resampling scat material from the same individual, samples were collected in the periphery of latrines, and sampled stools were at least 1 m apart. Fifty-four fresh fecal samples were collected by random selection of stools in each of 22 latrines that were separated from each other by at least 5 km (see Supplementary Table 1 online). Samples were stored in 70% ethanol at 4 °C (Sambrook and Russell 2001). In addition to scat samples, we analyzed 3 dry skin samples obtained from indigenous hunters; 1 from Puerto Carreño, 1 from Puerto Inírida, and 1 from the Caucayá River in Puerto Leguizamo (Colombian Amazon) (Figure 1). Finally, tissue samples were taken from 2 giant otter pups in rehabilitation (Keiko and Rey). The pups had been confiscated by the local authorities around Puerto Carreño and were being rehabilitated by Fundación OMACHA in Bojonawi Private Nature Reserve, Vichada province, at the time of sample collection.

La veracidad de este certificado se puede corroborar en la siguiente dirección web:

https://ipt.biodiversidad.co/cr-sib/pdf.do?r=1753_ptonurabrasiliensis_20200303&n=170A1AA7F47

Descargo de responsabilidad

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