Volume 19 Issue 2 Pages 62 - 110 (October 2002)

Citation: van Damme, P., Wallace, R., Swaenepoel, K., Painter, L., Ten, S., Taber, A., Gonzalez Jimenes, R. Saravia, I., Fraser, A. and Vargas, J. (2002) Distribution and Population Status of the Giant Otter *Pteronura brasiliensis* in Bolivia. IUCN Otter Spec. Group Bull. **19**(2): 87- 96

Previous | Contents | Next

Distribution and Population Status of the Giant Otter *Pteronura brasiliensis* in Bolivia

Paul van Damme[1], Rob Wallace[2], Karen Swaenepoel[3], Lillian Painter[2], Silvia Ten[4], Andrew Taber[5], Rocio Gonzalez Jimenes[6], Isabel Saravia[1], Anna Fraser[7] and Julieta Vargas[8]

[1] *Programa de Conservaciï¿½n y Manejo de Recursos Hidrobiolï¿½gicos (COMARH), Centro de Limnologia y Recursos Acuï¿½ticos, Universidad Mayor de San Simï¿½n, Cochabamba, Bolivia. e-mail: Paul.vandamme@bo.net*
[2] *Living Landscapes Program, Wildlife Conservation Society, WCS Bolivia, La Paz, Bolivia.*
[3] *Laboratory for Aquatic Ecology, University of Leuven, Belgium.*
[4] *Asociaciï¿½n Hombre y Naturaleza: Bolivia. Trinidad, Bolivia.*
[5] *J Wildlife Conservation Society, USA.*
[6] *Confauna, Wildlife Conservation Society y Museo de Historia Natural Noel Kempff Mercado, Santa Cruz, Bolivia .*
[7] *University of Nottingham, Great Britain.*
[8] *Colecciï¿½n Boliviano de Fauna, La Paz, Bolivia.*

(received 15th December 2002, accepted 12th January 2003)

Abstract: The giant otter (*Pteronura brasiliensis*) is one of the most endangered mammal species in the Neotropical region. In Bolivia, it has been reduced to very low population numbers as a result of poaching in the 40s and 70s. Recently, 14 researchers on the giant otter, who together estimated that around 350 individuals exist in Bolivia, published a preliminary distribution map. In this report, we briefly present the most recent information on the distribution and population status of this species in the Bolivian Del Plata and Amazon river basins. Moreover, we comment on the superposition of giant otter family groups, hydro-ecoregions, and National Parks. Finally, we present a short discussion on the possibilities of interchange between Bolivian giant otter subpopulations.

Franï¿½aise | Espaï¿½ol

INTRODUCTION

The giant otter (*Pteronura brasiliensis*) used to be a common sight in the Bolivian river floodplains. As in all neighbouring countries, the species was decimated to the border of extinction by poaching between the 1940s and 70s. Between 1975 and 1995, the species was only known from very isolated locations in the Mamorï¿½, Itï¿½nez and Madre de Dï¿½os basins (DUNSTONE and STRACHAN, 1988; CAMERON et al., 1989; BARRA et al. 1992). On a continental scale, Bolivia represented one of the black spots on the distribution map of the giant otter (EISENBERG and REDFORD, 1999). This pessimistic view changed with the discovery of relatively healthy populations in the Itï¿½nez-Guaporï¿½ river basin by PAINTER et al. (1994), GONZï¿½LES JIMï¿½NEZ (1997), FRASER et al. (1993), van DAMME et al. (2002) and PALMER (pers. comm.). These authors reported a minimum total population of 350 individuals, organized into more than 40 family groups. The present report summarizes the distribution and population status of this species. We also discuss the protection status of the respective giant otter populations and the possibilities of interchange between neighbouring populations. This report is a brief summary of a recently published review (van DAMME et al., 2002).

METHODS

The present report is based on field observations from the period 1993-2002. Some of the observations have been published in scientific articles (TEN et al., 2001), but most were only available in relatively inaccessible reports (FRASER et al., 1993), Management Plans of National Parks (FAN-WCS, 1994; PAINTER et al., 1994), RAP expedition reports (EMMONS, 1998) and student theses (GONZï¿½LES JIMï¿½NEZ, 1997; SARAVIA, unpubl.). None of the previously mentioned authors used a standardized methodology, though there are some constant patterns in their approach. For example, most observed otters from a boat, which in most cases was equipped with an outboard motor. Some observations were made in the framework of other studies on neotropical mammals.

FRASER et al. (1993) conducted a study on giant otters in the River Itï¿½nez. GONZï¿½LES JIMENEZ (1997) and van DAMME et al. (2002) focused their attention on the River Paraguï¿½, on the western border of the Noel Kempff Mercado National Park. PAINTER et al. (1994) conducted field surveys in the Blanco, Negro, Negro de Caimanes and San Martin rivers, whereas TEN et al. (2001) focused on more downstream segments of the latter river and other rivers in the Itï¿½nez National Park. In addition, isolated observations were made by REBOLLEDO and QUIROGA (unpublished data) in the Bolivian Pantanal, VARGAS (unpublished data) in the Etanahua river (Madidi River basin), TORRES (unpublished data) in the Ipurupuru River (Itï¿½nez-Guaporï¿½ basin), and WALLACE, PAINTER, TABER and RUMIZ (unpublished data) in the Itï¿½nez-Guaporï¿½, Negro and San Martin rivers (for a summary see van DAMME et al. 2002).

RESULTS

Distribution and population status

Distribution data are presented in Fig. 1. More detailed results can be obtained in van DAMME et al. (2002).

In Bolivia the largest populations of giant otter occur in the **Itï¿½nez-Guaporï¿½** river basin. In this basin, four important populations were reported:

- a rather large population in the Parque Nacional Noel Kempff Mercado and its surroundings, in the upper Itï¿½nez-basin (EMMONS, 1998; FRASER et al., 1993; GONZï¿½LES JIMï¿½NEZ, 1997, WALLACE and PAINTER, unpublished data; van DAMME et al., 2002; PALMER, pers. comm.). Most of the giant otters were found in the rivers (Itï¿½nez, Paraguï¿½, Tarvo) and dead river arms that border the National Park.
  This population probably consists of more than 100 individuals.
- a subpopulation in the middle Itï¿½nez basin and in the lower parts of some tributaries, e.g. San Martin, in the Itï¿½nez Reserva and its surroundings (TEN et al., 2001; TEN, unpublished data). This population consists of more than 120 individuals.
- a smaller population in the upper parts of the same tributaries, i.e. the Rï¿½os Blanco y Negro Wildlife Reserve and surroundings (PAINTER et al., 1994;GONZï¿½LES JIMï¿½NEZ, 1997; RUMIZ, unpublished data). This population consists of around 44 individuals.
- a very small isolated population was recorded in the Upurupuru and Negro Caimanes rivers, in the lower Itï¿½nez river basin. In contrast with the above-mentioned rivers, these do not drain the Precambrian Shield, but the Beni alluvial lowlands.

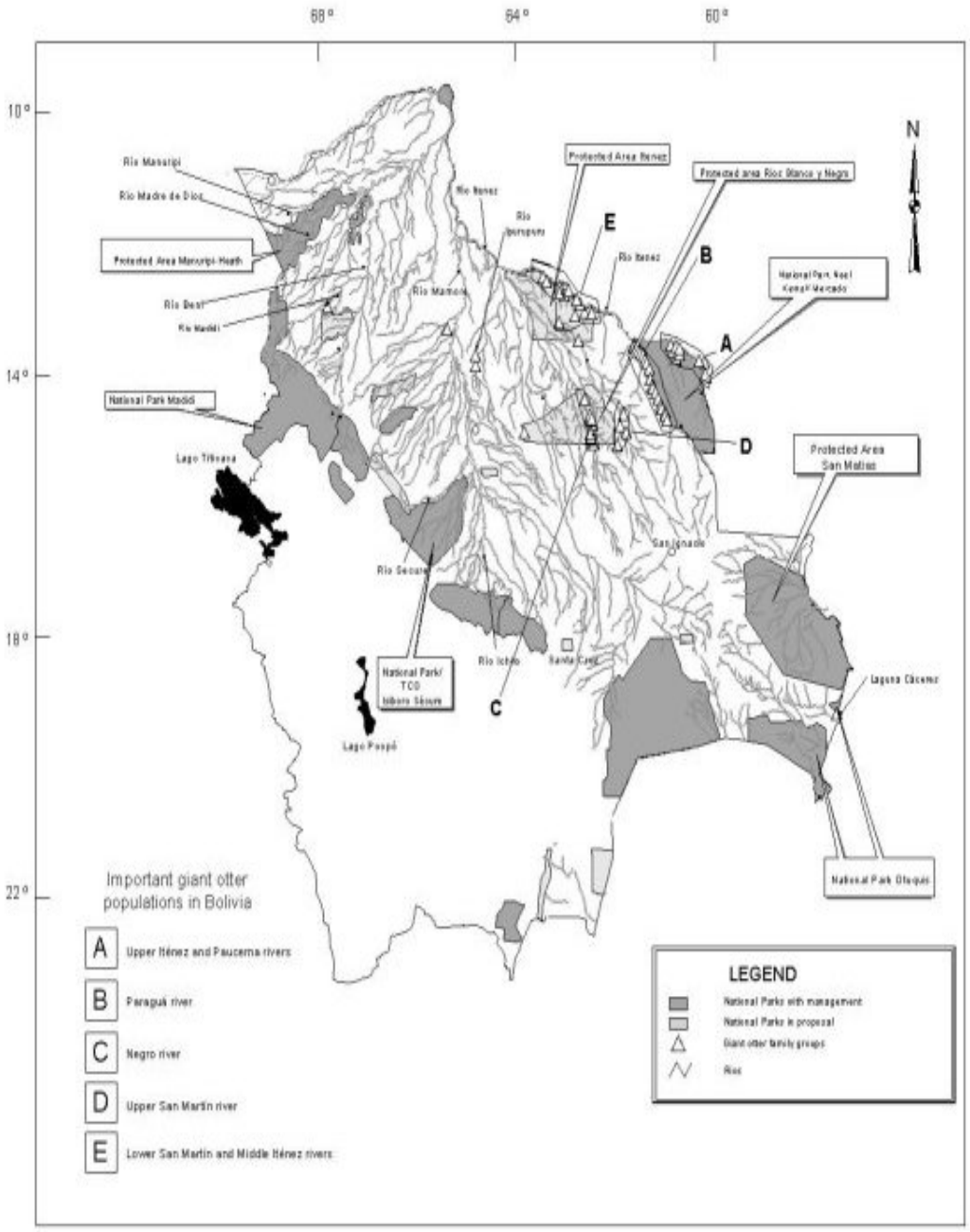

Figure 1: National Parks and Giant otter populations in Bolivia
(Click to see larger version)

Table 1. Surveys for *Pteronura brasiliensis* in Bolivia (1992-2002)

AUTHOR	SURVEY YEAR	STUDY AREA	RIVERS	HABITAT	POPULATION ESTIMATES
PALMER (unpubl. data)	2001	National Park Noel Kempff Mercado	Itï¿½nez, Paraguï¿½, Paucerna, Verde	River channels and old river arms that are permanently connected with rivers	Not Published
van DAMME et al (2002)	2001	National Park Noel Kempff Mercado / Indigenous Territory Bajo Paraguï¿½	Rï¿½o Paraguï¿½	Paraguï¿½ river channel, river arms permanently connected with river, lakes of fluvial origina	Paraguï¿½: 21 groups / 76 ind.
TEN et al (2001) TEN	2001	National Park Itï¿½nez	Itï¿½nez, Negro de Itï¿½nez, San Martin, San Simï¿½n, San Antonio	Rivers and lakes	San Martin: 89 ind. Itï¿½nez: 6 groups / 40 ind.

(unpubl. data)					
GONZALES JIMï¿½NEZ (1997)	1995	National Park Noel Kempff Mercado / Indigenous Territory Bajo Paraguï¿½	Rï¿½o Paraguï¿½, San MArtin	River channels and old river arms that are permanently connected with rivers	Paraguï¿½: 12 groups / 27 ind.
PAINTER et al (1994) WALLACE (unpubl. data)	1992	Wildlife Reserve Rï¿½os Blanco y Negro	Blanco, Negro, Negro de Caimanes	Rivers and streams	Negro: 12 groups / 44 ind.
FRASER et al (1993)	1992	National Park Noel Kempff Mercado	Itï¿½nez, Paucerna, Verde	River channels and old river arms that are permanently connected with rivers	Verde: 1 group / 2 ind. Paucerna: 2 groups / 9 ind. Itï¿½nez: 6 groups / 26 ind.

In the **Mamorï¿½** river basin, very few giant otters have been recently observed. In the upper Mamorï¿½ basin, some historical records exist. The last known group in the Ichilo river basin (in an oxbow lake of the Sajta river) was extinguished a few years ago. The last giant otters in this river basin may occur in the Isiboro-Sï¿½cure National Park, where indigenous people have observed them.

Finally, in the most western parts of the Amazon basin, in the **Madre de Dï¿½os** and **Beni** river basins, individual otters or isolated family groups were recently recorded in the Heath, Madidi, Etanahua, Tuichi, Hondo, Quiquibey, Emero and Tequeje rivers (WALLACE et al., unpublished data; MONTAMBAULT, 2002; VARGAS, unpublished data). CARBAJAL (pers.comm.) recently observed a group of 8 giant otters in the Manuripi-Heath National Park (not indicated in Fig. 1). A systematic survey of these rivers has not been carried out so far.

In the basin of the **Paraguay river**, the giant otter has not been studied very well, though it may be expected to occur given its proximity to the Brazilian pantanal, where a relatively large population of giant otters occurs (SCHWEIZER, 1992). Recently, a family group was observed in the Cï¿½ceres lake, within the Otuquis National Park (REBOLLEDO Y QUIROGA, pers. comm.).

Habitat selection

Recently, NAVARRO and MALDONADO (2002) proposed a classification of Bolivia in hydro-ecoregions. Within the distribution range of the giant otter in the Amazon and De Plata basins, they distinguished three hydro-regions: the alluvial lowlands, the Precambrian Shield and the Oriental Mountain Ridge (Table 2).

Table 2: Number and percentage of individual *Pteronura brasiliensis* reported in different hydro-ecoregions (division in hydro-ecoregions based on NAVARRO and MALDONADO, 2002)

No	HYDRO-ECOREGIONS AND SECTORS	PAST OR PRESENT OBSERVATIONS [1]	TOTAL NUMBER OF INDIVIDUALS REPORTED[2]	% OF INDIVIDUALS[2]
HYDRO-ECOREGION: ALLUVIAL LOWLANDS				
1	Holocene deposites	+	0	0
2	Fluvial seasonal alluvial lowlands	+	19	5.1
3	Fluvial alluvial lowlands	+	0	0
4	Dry alluvial lowlands	-	0	0
5	Chaco Piedemonte	-	0	0
6	Hills, Ridges and Mesetas	-	0	0
HYDRO-ECOREGION: PRECAMBRIAN SHIELD				
7	Alluvial lowlands of the Precambrian Shield		340	90.4
8	Penillanura laterï¿½tica	+	17	4.5
9	Chiquitano mountain ridge and mesetas	-	0	0
10	Mesetas from the Precambrian Shield	-	0	0
HYDRO-ECOREGION: ORIENTAL MOUNTAIN RIDGE				
11	Fluvial seasonal mountain ridge and hills	+?	0	0
12	Fluvial mountain ridge and hills	+?	0	0
13	Fluvial seasonal sub-Andean valleys	+?	0	0
14	Fluvial seasonal Piedemonte	+	0	0

1 + Present
- Absent
+? Probably present (based on anecdotal / historical reports)

2 Anecdotal and historical reports were not included

Among the sectors that can be distinguished in these hydro-regions, the giant otter was most often reported in the alluvial lowlands of the Precambrian Shield (88.5% of all individuals), overlapping with the floodplain of the Itï¿½nez-river and some of its tributaries (Paraguï¿½ and San Martin rivers). Fewer individuals were recorded in the Fluvial alluvial lowlands of the white-water floodplains of the Mamorï¿½ and Madre de Dï¿½os rivers, whereas in other sectors only anecdotal and historical reports were available. Overall, more than 85% of the observations so far were made in small rivers, most of them draining the Precambrian Shield. So far, very few giant otters have been reported in white-water oxbow lakes, though they are expected to occur.

Protection status of the giant otter

Current data (Table 3) suggest that only 7% of giant otters can be found in protected areas with a management plan. Twenty four percent were observed in rivers that are borders between National Parks and indigenous territories. Eight percent were found in international rivers that represent the border of Bolivian National Parks and 61% were found in areas without adequate official protection status.

Table 3: Number and Percentage of *Pteronura brasiliensis* reported from National Parks, Indigenous Territories, areas in the process of titulation, areas without protection, in rivers that represent limits between different types of areas and in international rivers

CATEGORY	NUMBER OF INDIVIDUALS REPORTED	% OF INDIVIDUALS REPORTED
Within protected areas	27	7.0
Immovilized parks (with management plan) partly superposed with indigenous territories	134	34.7
Within National Parks with uncertain conservation status	45	11.7
Within Indigenous Territories (TCO) [1]	0	0
In rivers that are borders of National Parks and Indigenous Territories	86	22.3
In international rivers (Brazil, Peru) that are at the same time borders of National Parks	68	17.6
Areas without official protection status	26	6.7

[1] The giant otters observed in the TCO Tacana were not included

DISCUSSION

The giant otter is a rare species in Bolivia and is found only in National Parks and in remote areas. According to preliminary estimates, the minimum population size is 350 individuals. However, the effective population size is much smaller, considering that each family group consists of only two adults. The population status is particularly alarming in the white-water floodplains of the Amazon (Mamorï¿½, Beni and Madre de Dï¿½os river basins), though low estimates may partly reflect low research effort in this area. In the Itï¿½nez-Guaporï¿½ river basin, however, relatively healthy populations can be found in the black-water floodplains of the rivers San Martin, Paraguï¿½, Paucerna, Itï¿½nez and Negro.

One of the central issues in conservation science is the degree of isolation of animal populations. EISENBERG (1989) and EISENBERG and REDFORD (1999) indicated that the actual giant otter populations have a patchy distribution in the Amazon, with little possibilities of gene interchange. Connection of Peruvian and Bolivian populations in Peru is highly probable considering the conservation status of the border area (Bahuaja-Sonene and Madidi National Parks in Peru and Bolivia, respectively). The nearby populations in Brazil (> 500 ind.) can be found in the Bolivian Pantanal (SCHWEIZER, 1992; CARTER and ROSAS, 1997), but connection between the Amazon and Pantanal populations is less probable given the fact that the Pantanal belongs to the La Plata river basin and that interchange can only be realized over land, which is heavily affected by deforestation. In the Brazilian states of Rondonia and Mato Grosso, some conservation units neighbouring the Noel Kempff Mercado and Itï¿½nez National Parks might also harbour giant otters, though so far there are no otter reports from these areas.

Within Bolivia, connection between the upper Itï¿½nez and middle Itï¿½nez populations is highly probable (subpopulations A and E in Fig. 1). The major human impact on this river is commercial navigation and commercial fisheries, but it is thought that these activities do not disrupt the function of the River Itï¿½nez as a corridor for giant otters. The population in the upper San Martin and Negro rivers (subpopulations C and D in Fig. 1) may be relatively more isolated as they are separated from the lower river populations by a colonized area, characterized by increased deforestation and habitat destruction. Interconnections of the populations of the Blanco y Negro protected area (subpopulations C and D in Fig. 1) and the Noel Kempff Mercado National Park (subpopulation B) might be realized by individuals that cross terra firma forest. According to some authors (WALLACE, pers. obs.) giant otters may cross high forest stretches, but the relative importance of this terrestrial route is not known.

In Surinam and Guyana, the giant otter seems to prefer slow-moving rivers with transparent water (DUPLAIX, 1980; LAIDLER, 1984). This also seems to be the case in Bolivia, where giant otters are predominantly found in the so-called black- or clear-water rivers that drain the Precambrian Shield. These rivers are characterized by a high water transparency, abundance of submerged and emergent macrophytes (KILLEEN and SCHULENBERG, 1998) and the occurrence of steep riverbanks. The giant otters prefer the downstream segments of these rivers, upstream parts probably not providing enough food to sustain viable populations.

In the past, giant otters probably inhabited white-water oxbow lakes, an otter habitat similar to the one described for this species in the Manï¿½ and Bahuaja-Sonene National Parks in Peru (SCHENK and STAIB, 1998; GROENENDIJK et al., 2001), and in lakes of tectonic origin. This is indicated by their relict presence in these habitats in the white water floodplains of the rivers Mamorï¿½, Beni and Madre de Dï¿½os. There are also indications that they occurred historically in the clear water tributaries of these white water rivers. The white water river channels themselves were possibly used as corridors for colonization of new river stretches or lakes.

There are strong indications that general habitat characteristics determined the original distribution patterns of giant otters in Bolivia. Other factors, such as food availability, and carrying capacity may become important in smaller river basins where the carrying capacity for giant otters is reached, such as on the rivers Paraguï¿½, San Pedro and San Martin in the Itï¿½nez river basin. In some of these rivers, competition for fish with fishermen may already occur (van DAMME et al., in prep.). The spatial distribution and the abundance of the fish resource may also determine giant otter group size. For example, in the lower San Martin river, large groups of up to 20 individuals (possibly 2 or 3 family groups that temporally feed together) are sometimes formed around fish-rich river stretches that dry up in summer (TEN, pers. obs.).

Nevertheless, current distribution pattern of giant otters in Bolivia may reflect the ease of human access to areas where giant otters originally occurred. The giant otter is extremely susceptible to hunting pressure. Its large size, diurnal activity and social behaviour make it an easy prey for fishermen who assert that giant otters compete with them for fish, and to occasional hunters in search of a trophy (OJASTI, 1996; GROENENDIJK et al., 2001). The negative correlation between human population density and otter occurrence suggests that human presence represents a major threat to the species and is probably related to the booming skin trade of the last century, In Bolivia, occasional kills, habitat loss and disturbance caused by river traffic seem to be important causes of current population stagnation or decrease (van DAMME et al., 2002). Mercury contamination (MAURICE-BOURGOIN et al., 1999) and demographic isolation of populations may represent additional threats that will need to be seriously considered in the future. This situation makes the development of national research and conservation strategies for the species a pressing priority, particularly given the flagship nature of the species, the globally threatened situation for giant otters, the probable ecological importance of the species, and the potential economic importance in terms of ecotourism opportunities.

REFERENCES

Barra, C., Maldonado, M., Goitia, E., Acosta, F., Cadima, M. Arrï¿½zola, S. 1992. Prospecciï¿½n de los recursos hidrobiolï¿½gicos en el sistema del rï¿½o Isarsama, Cochabamba. Unpublished report. 47 p.
Cameron, R., Wiltshire, C., Foley, C., Dougherty, N., Aramayo, X., Rea, L. 1989. Informe final de la expediciï¿½n OXFORD '87. An Oxford University Conservation Project (not published). 26 p.
Carter, S.K., Rosas, F.C.W. 1997. Biology and conservation of the Giant otter *Pteronura brasiliensis*. *Mamm. Rev*. **27**,1-26
Dunstone, N., Strachan, R. 1988. Status and distribution of otters in the Amboro National Park. Bolivia. *IUCN OSG Bull*. **3**, 24-33.
Duplaix, N. 1980. Observations on the ecology and behaviour of the giant river otter *Pteronura brasiliensis* in Suriname. *Terre Vie* **34**, 496-620
Eisenberg, J.F. 1989. Mammals of the Neotropics: Vol. 1. The northern Neotropics: Panama, Colombia, Venezuela, Guayana, Suriname, French Guiana. The University of Chicago Press, Chicago.
Eisenberg, J.F., Redford, K.H. 1999. Mammals of the Neotropics. Vol. 3. The central Neotropics: Ecuador, Peru, Bolivia, Brazil. The University of Chicago Press, Chicago and London. 609 p.
Emmons, L.H. 1998. Fauna de mamiferos del Parque Nacional Noel Kempff Mercado. pp. 137-144. In: Killeen, T.J., Schulenberg, T.S. (eds.) A biological assessment of Parque Nacional Noel Kempff Mercado, Bolivia. RAP Working Papers.
FAN-WCS. 1994. Plan de Manejo. Reserva de Vida Silvestre de Rï¿½os Blanco y Negro. 457 p.
Fraser, A., Barrett, J., Marsh, A., Smith, K., Stipale, J. 1993. Giant otters in the Noel Kempff Mercado National Park. Report. Nottingham University. 59 p.
Gonzï¿½les Jimï¿½nes, E.R. 1997. Ecoetologia de la londra (*Pteronura brasiliensis*) en la Reserva de Produccïï¿½n del Bajo Paraguï¿½. Tesis de Licenciatura. Universidad Autï¿½noma Gabriel Renï¿½ Moreno. 69

pp.
Groenendijk, J., Hajek, F., Schenck, C., Staib, E. 2001. Monitoreo del lobo de rï¿½o (*Pteronura brasiliensis*) en la Reserva de Biosfera del Manu: metodologï¿½as y resultados. In: Rodriguez, L.O. (ed.). El Manï¿½ y otras experiencias de investigaciï¿½n y manejo de bosques neotropicales; pp. 150-153
Montambault, J.R. (ed.) 2002. Informes de las evaluaciones biolï¿½gicas de Pampas de Heath, Peru, Alto Madidi, Bolivia y Pando, Bolivia. Conservation International, Washington D.C.
Killeen, T., Schulenberg, T.S. (eds.) 1998. A biological assessment of Parque Nacional Noel Kempff Mercado, Bolivia. RAP Working Papers 10. Conservation International, Washington D.C. 372 p.
Laidler, P.E. 1984. The behavioural ecology of the giant river otter in Guyana. Ph.D., University of Cambridge. 296 p.
Maurice-Bourgoin, L., Quiroga, I., Malm, O., Chincheros, J. 1999. Contaminaciï¿½n por mercurio en agua, peces y cabellos humanos debido a la minerï¿½a aurï¿½fera en la Cuenca Amazï¿½nica Boliviana. *Revista Boliviana de Ecologï¿½a y Conservaciï¿½n Ambiental* **6**, 239-246
Navarro, G., Maldonado, M. 2002. Geografia ecolï¿½gica de Boliva. Fundaciï¿½n Simon Patiï¿½o. 415 p.
Ojasti, J., 1996. Wildlife utilization in Latin America: Current situation and prospects for sustainable management. FAO, Rome. 237 pp.
Painter, R.L.E. (ed.), Arias Cossio, S., Cox, G., Rebolledo, P., Rumiz, D., Tapia Arauz, C., Wallace, R. 1994. Anexo 3. La fauna de la Reserva de Vida Silvestre de los rï¿½os Blanco y Negro: Distribuciï¿½n, diversidad, densidad y pautas para su conservaciï¿½n. En : FAN-WCS. Plan de Manejo Reserva de Vida Silvestre de rï¿½os Blanco y Negro.
Schenck, C., Staib, E. 1998. Status, habitat use and conservation of giant otter in Peru. pp. 359-370. In: Dunstone, N., Gorman, M. (eds.). Behaviour and ecology of riparian mammals. Cambridge University Press
Schweizer, J. 1992. Airanhas no Pantanal: Ecologï¿½a e Comportamiento da *Pteronura brasiliensis*. Edibran-Editora Brazil Natureza Ltda., Curitiba.
Ten, S., Liceaga, I., Gonzï¿½lez, M., Jimï¿½nez, J., Torres, L., Vï¿½zquez, R., Heredia, J., Padial, J.M. 2001. Reserva Inmovilizada Itï¿½nez: Primer Listado de Vertebrados. *Revista Boliviana de Ecologï¿½a y Conservation Ambiental* **10**, 81-110
van Damme, P.A., Ten, S., Wallace, R., Painter, L., Taber, A., Gonzï¿½les Jimï¿½nes, R., Fraser, A., Rumiz, D., Tapia, C., Michels. H., Delaunoy, Y., Saravia, J.I., Vargas, J.. Torres, L., in press. Distribuciï¿½n y estado de las poblaciones de londra *Pteronura brasiliensis* en Bolivia. *Revista Boliviana de Ecologï¿½a y Conservation Ambiental.*

Rï¿½sumï¿½ : Rï¿½partition et Statut des Populations de Loutres Gï¿½antes *Pteronura brasiliensis* en Bolivie

La loutre gï¿½ante (*Pteronura brasiliensis*) est l'une des espï¿½ces de mammifere les plus menacï¿½es de la ceinture nï¿½otropicale. En Bolivie, les effectifs des populations se sont effondrï¿½s du fait du braconnage durant les annï¿½es 50 et 60. Rï¿½cemment, 14 lutrologues ont produit une premiï¿½re carte de rï¿½partition, estimant ï¿½ environ 350 l'effectif total de loutres gï¿½antes subsistant dans le pays. Le prï¿½sent article rapporte briï¿½vement les connaissances les plus rï¿½centes concernant la rï¿½partition et le statut des populations de l'espï¿½ce sur les bassins boliviens de 1'Amazone et du Rio del Plata. Est ensuite ï¿½tudiï¿½e la correspondance entre groupes familiaux de loutres, hydro-ecorï¿½gions et Parcs Nationaux. Les possibilitï¿½s de brassage entre differï¿½ntes sous-populations boliviennes de loutres sont enfin discutï¿½es.
Revenez au dessus

Resumen: Distribuciï¿½n y Estado Poblacional de la Nutria Gigante *Pteronura brasiliensis* en Bolivia

La nutria gigante (*Pteronura brasiliensis*) es uno de los mamiferos mï¿½s amenazados de la regiï¿½n Neotropical. En Bolivia ha sido reducida a muy poco nï¿½meros como resultado de la caza durante los 50s y 60s. Recientemente 14 especialistas en nutrias han publicado un mapa preliminar de distribuciï¿½n en el que se estima que aproximadamente unos 350 individuos existen en Bolivia. En esta nota presentamos brevemente informaciï¿½n mas reciente sobre la distribuciï¿½n y el estado poblacional de esta especie en la cuenca boliviana de los rï¿½os Amazona y del Plata. Ademï¿½s comentamos la superposiciï¿½n de grupos familiares de nutria gigante con hidroregiones y parques nacionales. Por ultimo, presentamos una breve discusiï¿½n sobre las posibilidades de intercambio entre las subpoblaciones bolivianas de la especie.
Vuelva a la tapa

Previous | Contents | Next