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Otter Conservation – An Example for a Sustainable Use of Wetlands

March 14-19, 1998
Trebon
Czech Republic

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DISTRIBUTION AND CONSERVATION STATUS OF THE NEOTROPICAL OTTER *(Lutra longicaudis)* AND THE GIANT OTTER *(Pteronura brasiliensis)* IN ECUADOR

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Abstract: We studied the distribution and conservation status of the Neotropical Otter and the Giant Otter in Ecuador. This study included bibliographical research, personal sightings and those from other reliable observers. The status assessment is based on the criteria of the Mammal Specialist's Group of Ecuador. We collected 76 sighting records of the Neotropical Otter and 49 of the Giant Otter. The Neotropical Otter is present on both sides of the Andean Mountain Range especially in the Cayapas and Esmeraldas river basins on the western slope and in most rivers on the eastern slope. The Giant Otter has become extinct in the northern part of ecuadorian Amazonia and is only present in the most remote areas of the eastern lowlands: in the Yasuni National Park and the Pastaza, Morona and Zamora river basins. Both species are threatened by habitat destruction, river pollution and poaching. Specific national legislation for the protection of both species is needed, as well as the enforcement of the existing law, protection of the areas where the otters are still present, and better public awareness concerning the importance of the species and their habitats.

INTRODUCTION

Little research has been done in Ecuador on the two otter species that occur: the Neotropical otter (*Lutra longicaudis*) and the Giant otter (*Pteronura brasiliensis*). A single, unpublished study on the Neotropical otter in the Guayas river upper basin was conducted by QUEVEDO in 1992. Most of the information available on the two otter species is restricted to records of their presence in localized areas. Recently, we started the first field investigations on these species (see UTRERAS et al., 1997).

Of the four otter species present in South America, the Neotropical otter has the widest distribution, ranging from Mexico to the northeast of Argentina. According to the Zoogeographical Map of Ecuador (ALBUJA, 1991), the Neotropical otter occurs in the Tropical and Subtropical zones, on both sides of the Andean mountain range, from 0 to 2000 m altitude. FOSTER-TURLEY et al. (1990) stated that the Neotropical otter occured in all of continental Ecuador, including the Andean highlands (i.e.: Nangaritza, Yacuambi and Zamora Rivers); they also mentioned that this otter was common in the eastern tropical forests and the northwest region.

The Giant otter is widely distributed in South America occurring in Brazil, Guyana, Surinam, Venezuela, Colombia, Ecuador, Peru, Bolivia and Paraguay. Currently, it is assumed to be extinct in Argentina and Uruguay (FOSTER-TURLEY et al., 1990). In Ecuador, this otter is present in the lower Eastern Tropical Zone (ALBUJA, 1991). MELQUIST (1984) states that the Giant otter occurs in isolated localities of the lower eastern tropical forests of Ecuador, including the Ishpingo and Bobonaza Rivers close to the eastern borderline;

and in the Cuyabeno, Guepi, Lagartococha and Tarapuy rivers in the northeast. FOSTER-TURLEY et al., (1990) mention its presence in the Cuyabeno Faunistic Production Reserve and in the Yasuni National Park.

The objective of the present study is to determine the current distribution and conservation status of the Neotropical and Giant otters in Ecuador.

METHODS

Since 1994, we have conducted a systematic compilation of otter sighting records throughout Ecuador. The records come from the literature, personal observations and from other researchers, naturalists, indigenous and local people, whose data are reliable. The conservation status assessment is based on the criteria of the Mammal Specialist's Group of Ecuador, in which we participated, and on interviews with local hunters and traders.

RESULTS

Neotropical otter (local names: lobo de agua, nutria)

Distribution: We collected 76 records of Neotropical otter occurrence from different localities. This species is present on both sides of the Andean Mountain Range: in the Cayapas, Esmeraldas, Cojimíes and Guayas river basins on the western slope; and in the Aguarico, Napo, Curaray, Pastaza and Zamora river basins on the eastern slope (Figure 1). Of these records, 77% occur in the Tropical Zone (0-1000 m.a.s.l.); 20% in the Subtropical Zone (1000-2000 m.a.s.l.) and 3% in the Temperate Zone (2000-3000 m.a.s.l.). The Temperate Zone records fall between 2600 to 2620 m. The broad altitudinal range recorded confirms the wide variety of habitats used by the species. This information agrees with that of FOSTER-TURLEY et al. (1990). Most of the records in the northwestern region are from the Esmeraldas province, the only Ecuadorian province that still contains large remnants of Pacific Tropical Rain Forests (SIERRA, 1996).

Conservation status:

The Neotropical otter is protected in Ecuador under CITES, to which Ecuador is a signatory. At present there is no specific legislation for the protection of the Lutrinae; however, regulations for threatened mammal species protection will soon be approved (Sergio Lasso, pers. comm). In practice, protection till now has been insufficient due to the lack of resources and trained field personnel. The Mammal Specialist's Group in Ecuador consider the Neotropical otter as vulnerable (VU) in the national territory (UICN-SUR/GTNBD / ECOCIENCIA, 1997), based on the criteria of the IUCN's Red Book (BAILLIE & GROOMBRIDGE, 1996).

The main threats to the Neotropical otter in Ecuador are a) habitat destruction, b) water pollution, c) hunting and fur trade.

a) Neotropical otter populations are severely affected by large-scale deforestation, especially in the western region of Ecuador, where less than 10% of the original forest coverage remain by end of the 1980's (SIERRA, 1996). There is also heavy pressure on the subtropical and temperate ecosystems on both sides of the Andean range, due to colonization, agriculture and cattle ranching expansion. As a consequence, the former habitat has been

fragmented into a large number of forest patches of variable size and structure, in which the existence of viable otter populations is uncertain.
b) The pollution of watersheds also constitutes a severe threat. On both sides of the Andean range, aquatic ecosystems are deteriorating due to the intensification of oil exploration and exploitation activities, mining, and the use of chemicals in agriculture.
c) The Neotropical otter has been intensively hunted throughout its range for several decades. The pelt is used as a house ornament. Occasionally these otters are captured alive to be kept or sold as pets. It is not rare to find Neotropical otter pelts at handcraft stores or sold directly by fur-traders on the streets of settlements near forested zones or protected areas, in both eastern and western regions. In 1989, six otter pelts were offered in the Vía Ahuano (Amazon region) for the equivalent of US$ 5 each (DANIEL RUBIO, pers. comm.). The current value of a pelt is US$ 8.

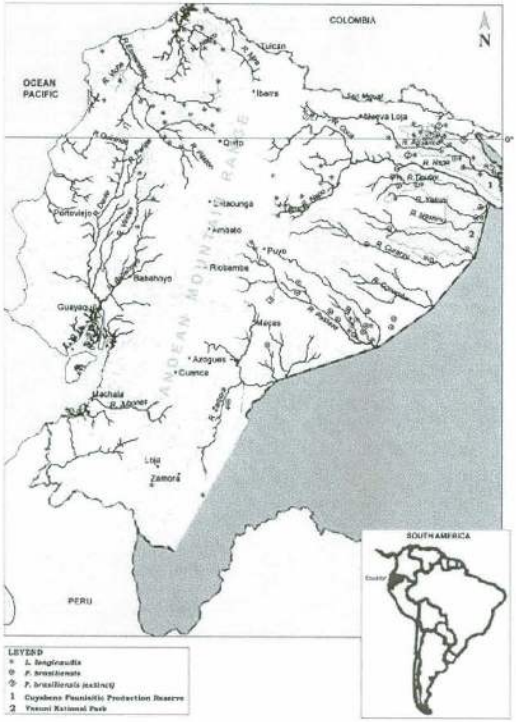

Figure 1. Study area

names: nutria gigante, lobo de río)

49 records of the Giant otter, all from within the Eastern 00-1000 m altitude), in the Tiputini, Tivacuno, Yasuní, Morona and Zamora river basins (Figure 1). Some of the Pastaza River come from localities very close to each other; ne instances, correspond to the same individuals or groups. as been extirpated from most of the northern Ecuadorian cluding the Cuyabeno Reserve (Figure 1).

atus:

er is protected in Ecuador under CITES. Protection is virtually to the lack of resources, qualified personnel and the poor he authorities towards conservation. SUAREZ & GARCIA Giant otter as one of the 60 most threatened animal species ammal Specialist's Group of Ecuador consider the Giant otter cal Danger (CR) in the national territory (UICN-IENCIA 1997), based on the criteria of the IUCN's Red Book OMBRIDGE, 1996).

eats faced by the Giant otter in Ecuador are a) water pollution d fur trade. Habitat destruction is not considered as critical Amazonia still preserves 70% of its forested area (SIERRA

amazonian aquatic systems represents a serious threat for uador, and is directly related to the oil exploitation activities arried out since the early 1970's. This industry is likely to ture, mainly in the central and southern Amazon region National Park), an important part of the species' range. In the s and riparian systems have been affected by large-scale oil n the northern region, even within protected areas such as erve.

1950's to the middle 1980's, the Giant otter was intensively r. Unfortunately there is no information on the number of ved. However, it is evident that it has been extirpated from inly in the northern region (Figure 1). Towards 1960, the ppeared from the Cuyabeno Reserve. Several colonists d there to sell the pelts (RANDALL BORMAN pers.comm). years ago, the Lagartococha region (Cuyabeno Reserve's sumably held a large population of Giant otters. The Quichua used to hunt Giant otters and sell their pelts to Peruvian and (ROGELIO TANGOY pers. comm). "In 1984, during my visit cha (military post at the confluence of the Lagarto and saw several groups of Giant otters. They were killed and the ge packages to be transported to El Coca city to be exported to Italy" (COL. LUIS MUÑOZ pers. comm.). In July 1997, we of two Giant otter pelts at a handcraft store in the city of equivalent of US$ 11. The pelts presumably came from the region.

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DISCUSSION

The distribution map (Figure 1) indicates the presence of the Neotropical and Giant otter in several localities. However, nothing is known about the population status of either of the two species. If the present rates of habitat destruction, water pollution and poaching remain constant, both species could become extinct in Ecuador within the next few decades, especially the Giant otter. Several *in situ* and *ex situ* measures ought to be taken to prevent this. SCHENCK and STAIB (1994) argued that the prevention of further habitat destruction, effective protected areas management, creation of additional protected areas, research and monitoring programmes and the elimination of poaching are necessary items in an effective conservation strategy for the Giant otter in Peru. We think this applies in Ecuador as well. However, the specific national legislation concerning the protection of both species, as well as the enforcement of the existing laws and conventions related to wildlife conservation, water pollution and habitat destruction also need to be attended.

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