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GIANT OTTER PROJECT IN PERU
FIELD TRIP AND ACTIVITY REPORT – 2003

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The project "Status, habitat, behaviour, and conservation of Giant Otters in Peru" of the Frankfurt Zoological Society - Help for Threatened Wildlife (FZS) is now in its 15th year and progress has been reported continually in the IUCN Otter Specialist Group Bulletin (SCHENCK and STAIB, 1992, 1995a, 1995b; SCHENCK et al. 1997, 1999; STAIB and SCHENCK, 1994; GROENENDIJK et al., 2000, 2001; GROENENDIJK and HAJEK, 2002, 2003). The giant otter (*Pteronura brasiliensis*) was uplisted from 'vulnerable' to 'endangered' by IUCN in 2000 with habitat destruction in South America currently posing the greatest threat to the species. Activities in Peru have been geared toward developing a national integrated conservation strategy, incorporating research and monitoring, environmental education, management of human activities in giant otter habitats, capacitation and awareness-raising, networking, and the creation of a distribution database and mapping facility.

Manu Biosphere Reserve population census

As in 2002, only one population census was carried out in Manu National Park in 2003, between 23.09.03 and 30.10.03. We investigated 19 oxbow lakes and also entered the Pinquen River. Due to reliable, recent reports of the presence of potentially hostile voluntarily isolated groups of people on the upper Manu River, we decided not to continue upriver of the community of Tayakome. Thus the census could not include the territory of 1 of the giant otter groups (Pirana/Upper Manu Group) censused since 1990.

The total number of different giant otter individuals encountered was at least 69 (56, or 81%, were successfully filmed and identified); the highest encountered in the history of the Project. This included 4 solitaries with the remainder being members of 11 groups. The largest group numbered 10 animals, and average group size was 5.9. The total number of litters was 9 and the total number of cubs was at least 16; average litter size was therefore 1.8 cubs. The total time of direct observation was approximately 58 hours, almost half of which was spent on Cocha Salvador. Of the 130 different neck markings filmed since the beginning of 1999, the sex is definitely known of 40 individuals, that is, 31%.

A top priority for 2004 is the detailed analysis of demographic data gathered over the last 5 years, incorporating also data collected by the previous project leaders during the 1990-1996 period.

Small river research: Palma Real and Patuyacu

The Palma Real research was concluded during 2003 with a final two visits to the field, the first between 10.03.03 and 30.03.03 (when water levels were the highest

yet seen), and the second between 16.11.03 and 25.11.03 (the rainy season had not yet started and water levels were very low). For a map of the area, please refer to OSGB Vol. 19(1) April 2002.

Results of Survey 1

Patuyacu

A solitary was sighted on two different days, but on neither occasion was the animal identified. A third sighting was of two individuals. On the 29th of March, a group of 3 individuals was observed two of which were those seen the previous day, Suerte (born in 2000) and Leche (a solitary in 2002). The third animal was Timida, who we suspect is the breeding female of the group, and who was first seen in April 2001. It seems that Leche has replaced the male Patu. A total of 14 campsites were found on the Patuyacu, of which only three were fresh. Two fresh dens and two old dens were also encountered; at one of the old dens what appeared to be a Neotropical otter (*Lontra longicaudis*) track was found in the entrance, as well as Neotropical otter spraint, containing fur and animal (non-fish) bones. A few days later, a Neotropical otter was seen nearby and the log directly underneath the den was wet, indicating that he had again visited it. Neither species seemed to be using the den itself (which had a campsite and was therefore occupied at one time by giant otters). Single Neotropical otters were seen a total of 5 times.

Palma Real

Giant otters were not observed, despite the fact that 3 of the 8 campsites encountered were fresh. Only one old den was found, while single Neotropical otters were sighted twice.

Palma Real Grande

Giant otters were also not seen on the Palma Real Grande, although 2 of the 5 campsites, and the one den found, were fresh.

Results of Survey 2

Patuyacu

An unknown solitary giant otter was observed and filmed. A total of 6 dens, of which 5 were fresh (one of which was old two days earlier), and 13 campsites (3 fresh) were recorded. A Neotropical otter was sighted once.

Palma Real

On the 20th of November, there were 7 sightings of a group of 3 individuals as they moved downriver. They were identified as Onyx (first seen in August 2000) and Honguito (female and first seen in April 2002), plus a juvenile. The previous day, a different group also of three animals, was observed, including Real (first seen in Sept. 1998) and Aguja (first seen in September 2001 together with Real). A total of 19 campsites (13 fresh), and 9 dens (5 fresh) were encountered.

Palma Real Grande

Giant otters were observed a total of 3 times. The first sighting was of at least two individuals swimming upriver. About 150m further up, three animals were seen. On the 21st of November, three individuals were again observed (probably the same group as that seen a few days earlier), one of which was a cub. One animal was identified as Charlie, a male otter first seen as a solitary on the upper Patuyacu in April 2001. In April 2002 he was again observed as a solitary. A total of 5 campsites

(4 fresh), and 3 dens of which only one was fresh, were also recorded. Neotropical otters were observed on 3 occasions (all single individuals) between the Palma Real Grande and the Palma Real.

Discussion

We believe that the group comprising Leche, Timida and Suerte was the only one inhabiting the whole of the Patuyacu tributary in March 2003, with one or more solitaries also present. A second group was simultaneously occupying the middle reaches of the Palma Real Grande, but was not identified. There was also clear evidence of a third group on the upper Palma Real in the area that we consider being the territory of Real's group; however, the otters were not seen. Unusually, no sign of giant otter presence was encountered on the middle Palma Real, in the territory of Onyx and Honguito; we assume they were far up Quebrada Aguaje.

In November 2003, we were finally able to film two members of a group of three on the Palma Real Grande, one of which we know as Charlie, a male seen on the Patuyacu in 2001 and 2002. He was in the company of another adult and a cub, which leads us to believe that he has established a permanent territory on the whole of the Palma Real Grande, extending roughly up to the mouth with the Patuyacu.

Only old sign was recorded on the upper Patuyacu, but there was much fresh activity in the middle and lower reaches; however, only an unidentified solitary was observed.

Fresh signs of giant otter presence were encountered throughout the length of the Palma Real, with Real, Aguja and a sub-adult occupying the upper reaches, while Onyx, Honguito and a cub were occupying the middle Palma Real.

Sandoval Control and Interpretation Centre

Since the beginning of the year 2003, the Project focused on developing and implementing an Interpretation Centre located at the Sandoval Control Post where local people from Puerto Maldonado, children participating in the FZS Sandoval Environmental Education Programme, and national and international tourists, enter to visit the lake. This centre was developed not only as a powerful educational tool, but also as an additional attraction away from the lake, decreasing the amount of time spent there by visitors and consequently reducing the pressure put on the giant otter habitat. Approximately 30 bilingual installations (Spanish and English) were designed and organised according to five main themes. The design and construction process involved a large team of local artists and businesses, as well as the park wardens. The Centre was inaugurated on July 21st with about 70 persons, representing local institutions, authorities, NGOs, professionals and residents, participating in the event.

Heath population census

More than a decade after the area was first visited by the Project, biologist Raphael Notin and team carried out a giant otter population census in the Heath watershed in August 2003, exploring 37 lakes and 3 streams over a period of one month. The Heath River forms the natural boundary between Bahuaja Sonene National Park of Peru and Madidi National Park of Bolivia. WCS-Bolivia facilitated the obtaining of a permit from the Bolivian authorities to investigate the oxbow lakes on the Bolivian bank of the river, and a Madidi gamewarden participated throughout the census. Raphael encountered a total of 42 different giant otters (7 groups and one transient). Clearly, this is a very important population for both Peru and Bolivia and

demonstrates the significance of continued bi-national collaboration towards the conservation of the transfrontier Madidi and Bahuaja Sonene National Parks.

Distribution survey in the Department of Ucayali

Between August and December 2003, a study of the distribution of the giant otter in the department of Ucayali, central Peruvian Amazon was carried out, not only with the aim of elaborating upon existing, scarce information on distribution of the species in the area but also to test standardised field survey technique guidelines proposed in "Surveying and Monitoring Distribution and Population Trends of the Giant Otter – Guidelines for a standardisation of survey methods" (Groenendijk et al., in prep.) These included quadrant size (30'x30' or 15'x15' lat./long.), number of survey sites per quadrant, site survey distance, and criteria for site selection. The study was carried out by Ecuadorian biologist, Geovanna Lasso.

A total of 12 rivers were investigated, along which 9 squares of 30'x30' and 25 quadrants of 15'x15' were surveyed, one site per 15'x15' quadrant (a 15'x15' quadrant is roughly equivalent to 25x25km, whereas a 30'x30' quadrant is comparable to 50x50 km; a 30'x30' square is made up of four 15'x15' quadrants). In each site (whether rivers or lakes), it was attempted to cover a standard survey distance of 30 km. On rivers, both banks were surveyed while on lakes the entire perimeter was explored in the majority of cases.

Nine of the 15'x15' quadrants (4 of the 30'x30' squares) were identified as positive for the presence of giant otters, based on direct as well as indirect signs (a square is declared positive even if only one of its four quadrants is found to be positive in the field). Of the 25 sites surveyed (rivers and lakes), in every case it proved to be impossible to cover the full survey distance, due to low water level, obstacles in the water course, personal danger (posed by armed loggers, fishermen, miners, etc.), or because the total perimeter did not amount to the full distance (on lakes). In all positive survey sites (n = 9), the stop-at-first-sign survey distance was less than 12 km. Of the 51 signs recorded, only 4 were direct sightings of individuals while just fewer than 60% of indirect signs were campsites, the remainder being dens. Ten of the 25 surveyed sites were selected on the basis of interviews with local people, 80% of which proved to be positive. The remaining 15 sites were chosen using maps and only 1 was positive when surveyed.

After analysing the data collected, this study suggests the following distribution survey guidelines: 1 - One site per 15'x15' quadrant should be surveyed and a minimum of two of the four quadrants should be surveyed in a 30'x30' square; 2 - A stop-at-first-sign approach should be adopted during surveys, i.e. halting the survey of a site at the first sign (direct or indirect) that without question indicates the presence of giant otters; 3 - The standard site survey distance could be halved to 15 km without affecting the probability of encountering giant otter sign, but this would need to be tested in other habitats and at different otter densities; 4 - Survey sites should be selected as much as possible on the basis of reliable information provided by local people through rapid interviews or questionnaires.

Second giant otter field survey techniques standardisation course

Between the 17th and 26th of June, giant otter specialists from Venezuela, Suriname, Guyana, Brazil, and Ecuador participated in the second 12-day Giant Otter Survey Methodology and Habitat Management Standardisation field course/workshop (see photograph). The meeting was held in the Bahuaja Sonene National Park and Tambopata Reserved Zone, Madre de Dios, south-eastern Peru.

The course began with a field trip of 6 days to the Palma Real and Patuyacu Rivers, in search of signs and sightings of giant otters. Two giant otters were briefly encountered on the first day on the Palma Real Grande. Over the following days, we visited Lakes Cocococha and Tres Chimbadas, where monitoring of the resident groups of giant otters and the management of tourism was discussed, together with the guides of the two lodges. In Cocococha, eight individuals (including two cubs) were observed swimming and hunting on the opposite shore; later they approached to within a few metres from our fixed observation point, a hide, before heading off. On Tres Chimbadas, we accompanied Rainforest Expeditions guides and tourists on the established lake circuit. We had the opportunity to witness and discuss the importance of guide–tourist interaction in conveying a conservation/education message. We were also able to observe 5 otters of the Tres Chimbadas group.

Photo: Travelling up the Palma Real river to the study area during the Giant Otter Survey Methodology and Habitat Management Standardisation field course/workshop

In parallel with the field visit, discussions and workshops were held to determine the terminology, and parameters for correct identification of indirect signs, to be used as part of a standard survey methodology for the species. Preliminary points for the establishment of a continental distribution survey strategy were also discussed, but it was recognised and proposed that a meeting be organised in December to deal with this issue in depth (see below).

Friends of the Giant Otter Bulletin

Two issues of the Friends of the Giant Otter Bulletin were produced and distributed in April and August 2003. More than 350 people currently receive the Spanish version and an additional 75 receive the English copy (compared to 230 and 61 persons respectively in 2002, 181 and 56 persons respectively in 2001, and 80 and 25 respectively in 2000).

Pantanal workshop

Between the 10th and 13th of December 2003, a workshop was held at the Centro de Conservação do Pantanal, Fazenda Sete, in the Brazilian Pantanal, to further the development of a range-wide giant otter distribution survey strategy. The event was organised by Sociedade Civil Mamirauá and the IUCN/SSC Otter Specialist Group with support from the Wildlife Conservation Society and Fundação Brasileira para o Desenvolvimento Sustentável. Fourteen otter specialists participated.

A first set of guidelines was established for a strategy for carrying out giant otter distribution surveys in a standardised format, thereby generating reliable and comparable data. Moreover, data obtained through future standardised giant otter field surveys will contribute to a user-friendly GIS database being created by Aktion Fischotterschutz, Germany. It is hoped this database will facilitate the estimation and evaluation of future variations in the distribution and population status of the species, and thus help to lay the foundation for long-term giant otter conservation programmes across national boundaries.

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