

## IUCN OTTER SPECIALIST GROUP BULLETIN VOLUME 7 PAGES 24 - 26

Citation: Schenck, C. & Staib, E. (1992) Giant Otters in Peru *IUCN Otter Spec. Group Bull.* 7: 24 - 26

### GIANT OTTERS IN PERU

Christof Schenck and Eike Staib

*Expediciones Manu. P O Box 606, Cusco, Peru*

**Abstract:** We are in the second year of fieldwork surveying for Giant Otters in the southeastern rainforest of Peru, in three areas with differing levels of legal protection. While there is some illegal hunting still happening outside the protected areas, the main threat to the otters is badly-conducted tourism. Well-organised tourism can be a promising argument for establishing protected areas like national parks.

The Giant otter (*Pteronura brasiliensis*) is one of the most endangered otter species, once widespread all over South America, but heavy hunting from 1950 to 1970 brought them near to extinction. Little is known about the effects of habitat destruction, overfishing, or tourism. Also, there are still a lot of question marks concerning the social behaviour, population dynamics, and habitat use. Since the first longterm studies on giant otters by Nicole Duplaix (1978) in Suriname, followed a short time later by Liz and Keith Laidler in Guyana, very little has been published.

In the middle of 1990 we, the two German biologists from the Wildbiologische Gesellschaft München, with the assistance of Peruvian boatdriver Jesus Huaman, began work in the southeastern part of the Peruvian rainforest. The project is financed by the Frankfurt Zoological Society. We are now in the second year of field work, which is to be followed by one year of analyzing.

Our study area is the Department Madre de Dios, lowland rainforest with big rivers in the southeastern edge of Peru, not far from Brazil and Bolivia, and not far from the Andes. There we chose three main streams: First the Manu river inside the Manu national Park, a more or less well protected 1,8 million hectare area; second the Tambopata river in the so called "zona reservada", with a size of 1,4 million hectare, an area with a special name but still without special law; and third the Madre de Dios river, a totally unprotected area with goldminers, settlers, hunters and wood cutters.

### METHODS

In these areas we are investigating big rivers, small rivers (quebradas), and in oxbow-lakes for direct or indirect (tracks, dens, campsites) signs of giant otters. These surveys are done mainly once in the dry and one in the rainy season. When we see otters we try to get photos or videos of their individual neck patterns. With that we have something like a finger print for each giant otter. We are then sure that we do not count any otter twice, and with the data of these surveys we get information about stability or changes in or between the otter groups.

In the lakes, the preferred areas of the giant otters, we carry out a habitat analysis built up by the following: Mapping the lakes with a rangefinder and a compass, taking down the vegetation type of the shore-line, measuring the conductivity and the visible depth of the water, making profile-transects with a computer sonar, investigating the fish population with gill-nets (fish-densities, species), mapping the campsites (marking places of the giant otters, sometimes with dens) and counting the number of fish-eating birds by day and caimans at night. Furthermore we collect faecal-samples for the later analysis. Beside this we make observations on behaviour, observing mainly from specially built hiding places or from a distance in the inflatable boat to minimise the observer influence. We use tele-lenses, video-camcorders, binoculars and taperecorders to get information to the hunting technique, the fishing success, the time budget or the social behaviour. In all the different investigation areas we look for the human influence and we ask local people like settlers, natives or gold-miners to get an idea of threats to the otters.

## **PRELIMINARY RESULTS**

In the Manu National Park we counted 40 otters in two surveys in 24 large and smaller lakes (500 to 5000 m long, 40 to 200 m wide). We got the neck pattern of 34 animals. In the Tambopata area we counted 20 otters in two surveys in 7 lakes and we obtained neck patterns of 12 animals. It is possible, that the population density of giant otters inside the protected areas is near to the carrying capacity. This fits the otter habitat data: the conductivity of the water systems is low, but the density of fish is high. The problem is, that the otters are concentrated on the rivers and lakes, therefore their population density for the whole area is low, populations are often isolated, and the otters use the same areas as do people.

The otter groups stay for a long time (years), in the same areas. They have a main lake, where they spend most of their time and nearby waterbodies are visited periodically. The mean group size is about 4-5 animals. Sometimes the groups are up to more than 9, but then they divide. There are also solitary otters, which wander through huge areas and normally do not have contact with the groups.

The giant otters are extremely peaceful animals. We never observed real aggression between group members or between different groups. They hunt together and sleep together, and grooming and playing are important parts of their daily routine. We could not see a clear hierarchy in the groups, and our main study group is now led by two adult females.

The main problem for giant otters in protected areas like the Manu National Park seemed to be the uncontrolled or badly managed tourism. Tourism can be very disturbing and could force otters to leave their area. On the other hand, when tourism is well organised and when there are well-educated guides, tourism can be a promising argument to establish protected areas like national parks. Outside the protected areas hunting in low numbers is still going on. In the past 1.5 years we found 4 new giant otter pelts and obtained information of some more shot animals. It seems that a real pelt market does not exist. For all the hunters it was difficult to sell the pelts. Disturbance, habitat destruction and overfishing are the main factors what make survival for the otters difficult or impossible, even in areas with low human densities. We are still collecting data on these problems and building up a conservation plan for the otters in southeastern Peru. We hope that we are not to late.