# Big, friendly giants

Tourists and wildlife conservation don't mix – or so say many experts. But others, such as **Charles Munn**, argue that responsible eco-tourism is the best hope for some threatened areas and species. Here, he explains how human visitors have provided an extraordinary lifeline for one family of giant otters in the Brazilian Pantanal.

**The giant otter was hunted for its skin until the 1980s and was eliminated from all but the remotest rivers of tropical South America. It has traditionally been thought to be a sensitive species that suffers from human incursion into its territory, but in one instance, this has proved not to be the case.**

The otter family rushes into the water after fish tossed from the tourist boat.

Luiz Claudio Marigo

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The otters are fed fish species that are part of their natural diet, such as yellow-bellied piranhas.

The wiry, tanned boatman steering the six-passenger boat shut off the motor and let the craft drift along the 70 metre-wide, cocoa-coloured river. Suddenly, without any warning, he started snorting loudly and made tremulous trumpeting sounds while wiggling his Adam's apple with his finger. We were even more bewildered when we heard loud replies, sounding almost like echoes. These responses came from just 20 metres away, in the thick, floating layer of water hyacinth and lilies that blanketed a small cove near the riverbank.

Then a brown, whiskered head, resembling the top of a stovepipe hat, stuck up out of the water just six metres from our boat – then another, and another. In moments, we were surrounded by 11 curious giant otters. Some of these muscular predators were snorting at us from just a couple of metres away – and the boat had worryingly low sides. They bobbed up and down, revealing the white blotches on their throats, uniquely patterned for each individual like fingerprints. The three otters closest to us snorted regularly and forcefully, simultaneously opening their mouths slightly and inhaling as if to get a better sniff of the human intruders. We wondered when they were going to attack and eat us.

**The animals reacted with an astounding display of speed and power as they raced each other to the fish.**

At a distance of 10 or 20 metres, these otters look like larger versions of the European species. But close up they terrified us with their huge, gleaming incisors and emotionless, bloodshot brown eyes.

The boatman unnerved us further by tossing a few freshly caught piranhas 10 metres beyond the closest otters. The animals reacted with an astounding display of speed as they raced each other to the fish, churning up the water like a fleet of hydrofoils. The impressive wakes of each racing otter were created by the up-and-down pumping of their muscular, cricket-bat-shaped tails, powered by enormous rump muscles.

Then the boatman dangled two fish from his hands, little more than a metre above the water. A pair of otters leapt up, powering most of their bodies out of the water to pluck the fish straight from his hands. After 10 action-packed minutes, the boatman had exhausted his supply of pre-caught piranhas, and the otters melted back into the floating vegetation. It had been the most exciting wildlife encounter I have had in 29 years of research in the tropical forests of South America.

## Victims of the skin trade

I first met this family of otters in 1997, living in an easily accessible river in the Brazilian Pantanal (see map, p39). On interviewing local boatmen and tour operators, it turned out that these otters had recolonised the river in 1995 after an absence of 30 years. Their disappearance from this, and most other accessible parts of the Pantanal and Amazon, was due to pressures from skin hunters, who for decades had been shooting otters to the brink of extinction.

I was already familiar with the species. Between 1980 and 1990, I directed a research project on the giant otters of Peru's Manu National Park (the first ever extended observation research on this species). Unlike the tourists in Brazil, I found these Peruvian animals elusive and hard to study. But my local and international colleagues eventually managed to habituate several families in Manu, and amassed more than 5,000 hours of otter observation.

As a by-product of our basic ecological research, we worked out a method for allowing one tourist boat at a time to watch ▶

The otters are not shy about getting what they want, leaning into the boats for free fish. The otters clearly appreciate the extra food they recieve from tourists, but does it reduce them to the status of performing circus animals?

An otter approaches the boats in search of another fish. Clearly, it does not feel threatened by the tourists or the boatmen.

wild giant otters on lakes in the Amazon without intruding on their lives. This involved stationing otter guards with hand-held radios to tell the tourist canoes where a particular otter group was eating, sleeping or sunning. The guard then directed the tourist boat to the correct position to permit excellent views from 15 or 25 metres. This short distance was well within trophy photo range, but did not disturb the otter family.

In this way, in full view of amazed tourists, the otters conducted the most intimate aspects of their family life – from mating, feeding young and grooming to sharing food with each other and fighting epic battles with large black caimans. It worked like a charm. Families of otters accepted this one-boat-at-a-time model. Yet even with this success, I never dreamed it would be possible to feed the otters without them – or the tourists – coming to some harm.

But feed them you can, as the inadvertent experiment in the Brazilian Pantanal has shown. It has been going for 10 years now and, so far, not a single tourist or boatman has been bitten. Furthermore, the otters only receive these handouts during the June to October tourist season, and even then only sporadically. So, they never stop fishing for themselves, and the food they are given would be part of their normal diet, anyway.

The otters do appear to be benefiting. In 10 years of feeding, this most visited and viewed family has continuously produced bumper litters every year, and large numbers have survived to adulthood. Even better, these offspring have gone on to recolonise many of the rivers of a 1,000km$^2$ area of the Pantanal. While one might naturally disapprove of hand-feeding the otters, there does seem to have been a benefit for the 'exploited' animals. Meanwhile, tourists are enjoying the unparalleled experience of being right in the middle of a family of these splendid creatures.

## An alternative strategy

In Peru, however, where my study took place, the story is now very different. New environmental regulations have closed more than half of the best giant otter viewing lakes in Manu National Park to tourism. The net result is that the giant otters of Manu are now seen by fewer tourists than five years ago, and nobody sees them as well or as close as the 6,000-8,000 tourists, mostly Brazilians, who visit the hand-fed wild family in the Pantanal each year. Surely these giant otters can be tourism stars while benefiting wildlife and the local economy?

Since 2000, I have been involved with a not-for-profit conservation group (Tropical Nature) that experiments with new methods for adding value to wildlife and wildlands. I believe it is a mistake to overly restrict experiments in giant otter tourism, and I propose that, as the most easily managed and viewed large mammal predator in neotropical rainforest, giant otters can and should become a key eco-tourism icon, akin to the lions of east and southern Africa. But we need to be cautious.

## Dangers of exploitation

Having written so favourably about the surprising and apparently positive interaction between this one family of giant otters and 50,000 tourists over 10 years, I believe that the hand-feeding, in particular, should be reassessed, and that we should find a more educational means of allowing access to this species. For example, researchers need to develop a safer method for feeding the animals, thus offering tourists spectacular photo opportunities without the risk of someone receiving a bite on the hand from an over-eager otter.

It is also important to maintain the dignity of these creatures by preventing them from being cast in the role of performing circus animals in the eyes of the tourists. It's hard for visitors to appreciate the unique biology and behaviour of these impressive mammals – or take on board the fact that they are wild animals that ultimately require our protection – if they are treated like pet dogs.

There is a great opportunity here, and with refined methods, Brazilian researchers can encourage otter tourism in scores of locations less than three hours' travel from airports in the Amazon, Pantanal and Orinoco. Sensitively designed tourism projects could create thousands of jobs and thus generate economic and political support for the long-term protection of increasingly threatened South American rainforests.

Two members of the family relax on a fallen tree trunk. Giant otters have few natural predators and can even overcome caimans in a group. They therefore approach tourists with confidence.

Fernando Barros

## Giant otter factfile

- **Scientific name** *Pteronura brasiliensis*
- **Range** Most major rivers of tropical South America
- **IUCN status** Endangered Wild population less than 3,000 individuals in 1990 but has increased since
- **Length** 1.7-2m
- **Weight** 26-32kg
- **Group size** 2-12, but usually 6-12 in good habitat

**Breeding**
The single breeding female in the group gives birth annually to 2-4 cubs. Young stay in the group for 2-5 years or more and help babysit new cubs, which involves protecting them from caimans and other predators.

**Diet**
Each adult otter eats 6-10 kilos per day of fish of all sizes, though typically in the range of medium-sized piranhas (about 1kg). These otters also eat any other vertebrate that is not fast enough to get away from them. Researchers have seen giant otters eat 20kg catfish, anacondas, other snakes, caimans and even careless herons.

**Predators**
Jaguars probably take young and lone otters in semi-flooded forest during the flood season, and large black caimans and anacondas probably can take a lone otter. My research team witnessed several bloody fights between black caimans and family groups of otters. In one fight, a four-metre-long caiman struck an otter a blow from its massive tail, hurling the creature clear out of the water and up onto the lake bank. In another fight, a family of otters fought a black caiman for 45 minutes, resulting in the caiman losing a leg.

**Charles Munn** has helped create 5 million hectares of wildlife reserves in South America. He now directs Tropical Nature, which promotes conservation through eco-tourism, and thanks Carolina Ribas of EMBRAPA – a Brazilian research institute – for her help with this article.

Juveniles that have dispersed from the hand-fed family have colonised other rivers in the area. The species has even begun to recolonise rivers within cities, such as Corumbá in Brazil.

Claus Meyer/Minden Pictures/FLPA

## Where to see giant otters in South America

**1** The otter-feeding boat trips described here take place on the Pixaim River in the northern Pantanal, Brazil. **Places to stay:** Fazenda Santa Tereza Hotel ☎ (0055) 65 9971 9417; www.santaterezahotel.hpg.ig.com.br; Mato Grosso Pantanal Hotel ☎ (0055) 65 628 1500.

**2** There are lots of otter families within a 1-2 hour boat trip of the hotel at Passo do Lontra in south-west Pantanal near Corumbá, Brazil. **Places to stay:** Passo do Lontra Parque Hotel ☎ (0055) 67 231 9494; www.passodolontra.com.br/ingles

**3** Karanambo Ranch, southern Guyana, is a giant otter rehabilitation centre run by Diane McTurk. **Contact:** Diane McTurk, c/o Wendela Jackson, 300 New Garden Street, Queenstown, Georgetown, Guyana ☎ (00592) 225 3750.

**4** There are two otter families within a 10-minute walk or 20-minute boat trip from the Centre at Manu Wilderness Area, Peru. Includes Manu National Park, Amarakaeri Communal Reserve and the private reserve of the non-profit conservation group Peru Verde, Peru. **Places to stay:** Manu Wildlife Centre ☎ (0051) 1 440 2022; www.manu-wildlife-center.com

**5** An otter family can be seen within a short walk or boat trip from the lodge at Tambopata National Reserve, south-east Peru. **Places to stay:** Sandoval Lake Lodge ☎ (0051) 1 440 2022; www.inkanatura.com; Posada Amazonas ☎ (0051) 1 421 8347; www.perunature.com

**6** There is a giant otter family in residence on the lake at Yasuní National Park in eastern Ecuador. **Places to stay:** Napo Wildlife Centre, run by conservation group Eco Ecuador. www.napowildlifecenter.com

To find out more about giant otters and where to see them, visit www.tropicalnature.org