

REPORT

RECORDS OF THE GIANT OTTER, *PTERONURA BRASILIENSIS*, FROM GUYANA

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Abstract

The results of interviews and surveys of status of the giant otter are presented. These include information on *Pteronura* on the upper Potaro River and other rivers in Guyana. Suggestions are made for future work on giant otters on the Potaro Plateau. These include monitoring the effects of mining, studies of mercury poisoning, ecotourism feasibility studies and autecological studies.

The 1996 IUCN Red List categorizes the giant otter as VU A2cd* (BAILLIE and GROOMBRIDGE, 1996). In a recent review of the biology of the species, CARTER and ROSAS (1997) called for the species to be placed in the 'endangered' category. The IUCN-SSC Otter Action Plan (FOSTER-TURLEY et al., 1990) consider the species to be severely threatened (p. 64) and call for more field surveys and refined distributional data (p. 82). Within Guyana, they consider distribution and status surveys to be conservation priorities for the species (p. 70).

In their review of the status of *P. brasiliensis* CARTER and ROSAS (1997) note that Guyana is one of the species' last major strongholds (see also FOSTER-TURLEY et al., 1990). In Guyana *P. brasiliensis* has been recently recorded from several river systems including the upper Mazaruni, upper Essequibo, Abary, Rupanuni and upper Potaro (see CARTER and ROSAS, 1997). However, many of these records are more than a decade old. Here we report recent sightings of *P. brasiliensis* on the Potaro Plateau, western Guyana, and other localities within the country.

Between June 20 and August 4 1998, AB, BS, PB and EH conducted zoological surveys on the south-western portion of the Plateau as part of the Potaro Plateau Expedition (PPE). Questions relating to otters were included as part of a broader interview on the region's mammals (Barnett, Shapley, Henry, Benjamin in prep.). Interviews were conducted in the Patamona indigenous villages of Chenapou and Tiger Bay and at Kaieteur Falls (the warden's house). Question protocol followed that

* Vulnerable. Declining population. Population decline projected or suspected based on, decline in area of occupancy/quality of habitat, actual or potential levels of exploitation.

used by CUNHA and BARNETT (1989) and was designed to avoid leading questions (see BELLANY, 1993). Laminated colour photocopies of appropriate plates from EISENBERG (1989) and REID (1998) were used as visual aids.

Between July 28 and 1 August 1998 (wet season), we actively searched for *P. brasiliensis* at two locations, Mori-mori Creek and Anamuri Creek in the eastern part of the Plateau. Both are left bank tributaries of the Potaro River. Choice of these locations followed the advice of local fishermen. Both are small creeks (no more than 4m wide), less than 3m deep, and are frequently crossed by fallen trees. The creek banks are of mud and white sand, and at the time of the survey were between 0.5 and 1.5m above water level. Because of the black-water nature of the river, aquatic plant biomass is low (see GOULDING et al., 1988; JUNK and FURCH, 1985). On July 28 two giant otters were seen entering the water as we approached an otter camp-site. The site, estimated at 10m long and 3m wide, contained numerous fresh piles of fish bones. Samples were collected and the contents are being identified by William Saul (Philadelphia Academy of Natural Sciences). The site had an in-use holt under tree roots. The holt entrance was approximately 60cm high and 40cm wide and lay within 3m of a very gently sloping muddy bank that led to a small shallow embayment. The site was surrounded by tall primary riverine forest, with a sparse understory.

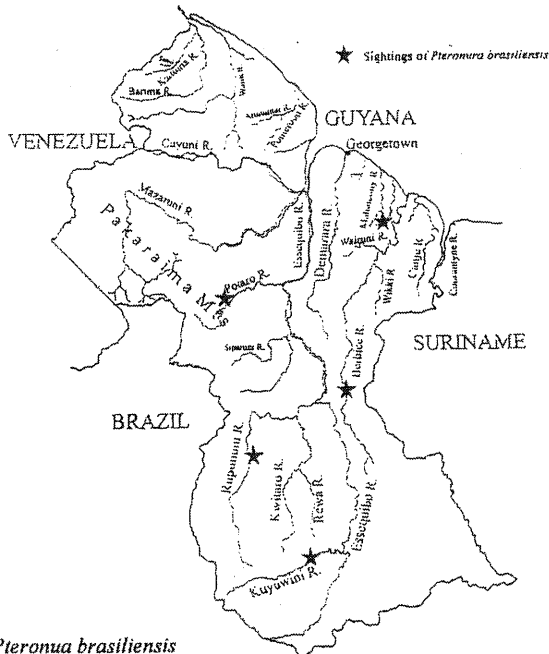


Figure 1. Sightings of *Pteronura brasiliensis*

Subsequently four giant otters were seen some 200m upstream. They showed little fear of us, supporting the opinion of local people who said they did not hunt

them. despite considerable focus, no clear views were obtained of the individually characteristic throat colour patterns. Three individuals appeared to be approximately the same size, the fourth animal appearing a little larger and with a bigger head. This may indicate a pair, accompanied by last year's young. Eleven more camp sites were seen in the estimated 5km of the creek we travelled. None were in use, all being overgrown to some extent with vegetation or sprouting seedlings.

On July 30, two adult-sized giant otters were seen on Anamuri Creek 9.5 Km upstream from Muri-muri. The two creeks are not connected. However, given the variation in reported group home range size for *P. brasiliensis* (3 km by DUPLAIX, 1980; 32 km by LAIDLER, 1984), it is possible that they may have been part of the group seen previously on the Muri-muri. However, the lack of throat pattern data thwarted identification attempts. Again, the creek showed evidence of prolonged usage by the otters, with 8 former campsites being counted in the 4 Km stretch surveyed. An old, disused, holt with an entrance some 50x30cm, was found. It was dug beneath the roots of a large tree, on a steep muddy bank, less than 1m from the river. The surveyed portion of the creek is probably the only part that is habitable by otters. After this, the banks become very steep and rocky as the creek flows over a ridge system.

Prior to the sightings by the PPE, SL had visited Muri-muri Creek in March 1995 (dry season) on foot from Kaieteur Falls. Two *P. brasiliensis* were seen and a number of bank-side resting spots were found. In interviews, local informants reported that the species was common in the region of the falls, particularly along some of the more remote streams. None of the 7 local people interviewed by SL reported giant otter hunting in the region.

In interviews for the PPE, AB found the giant otter was reported as well-known by all 27 interviewees (all either Patamona indigenous people or other long-term residents). In all cases it was considered common in small creeks, but rare on the main river. It was reported to be present in the creeks in the dry season, while in the rainy season the species was considered to range more widely through the wet and flooded forest. Though local knowledge of the region's waterways was extensive and detailed, all 7 interviewees who expressed an opinion on the matter gave the same four creeks as supporting otters. This indicates some degree of habitat specificity. The local (Patamona) name for the giant otter is *turáclá*.

Though the species was not sighted, we had frequent reports of Neotropical river otter *Lutra longicauda* in the region. In contrast to the giant otters, these were considered to live almost exclusively in the main river and rarely, if ever, enter the creeks. The Patamona name for this species is *saró*. By contrast, SL, working mostly with miners in the Kaieteur Falls region of the park, did not receive any reports of *L. longicauda* in the region.

At several locations on the Plateau's rivers dredging operations occur, seeking to extract diamonds and gold from the riverine sands. They cause considerable sedimentation to the waters (C. KELLOFF, pers. comm. to AB and BS; AB and BS

pers. obs). Interviewees reported that such operations cause the giant otters to shift. One river, the Ireng, formerly considered rich in otters, was now said to be too polluted by mining activities to be habitable by them. But other rivers were said to have been recolonized after mining operations had ceased.

Though subject to some detailed botanical work (MAGUIRE et al., 1948; HENKEL, 1994; KELLOFF and FUNK, in press), the Potaro Plateau has been little studied by zoologists. Only one previous published record of giant otter exists for the Plateau, a sighting of a family of six on the Kwitaro River by Elizabeth and Keith Laidler in 1981. This brief visit, an adjunct to P.L. Laidler's PhD fieldwork, was reported only in the popular book *The River Wolf* (LAIDLER and LAIDLER, 1983, p. 162) and did not appear in her thesis (LAIDLER, 1984). CARTER and ROSAS (1997) cite the record, but they do not give the locality. The Kwitaro is some 7.5 land Km/ 17.75 river Km upstream from the current localities. The Laidlers considered the Plateau's *P. brasiliensis* population to be 'healthy'. Our brief survey indicates that this is probably still the case in the region.

Though several interviewees reported that giant otter steal fish from nets, all were adamant that they took no punitive action and that the giant otter was not hunted on the Plateau. This, the absence of commercial fisheries in the region and the proximity of the observed sites to the airstrip near Kaieteur Falls, would make the site a promising one for future fieldwork. This might also be important for the conservation of the Plateau's giant otters. The two creeks are less than 15 Km from the commercial community of Menzie's Landing, which is itself close to the airstrip at Kaieteur Falls. Several thousand tourists visit the Falls every year (ANDERSEN, 1996; WORLD BANK, 1998) and it must be considered a strong possibility that unregulated ecotourism could develop offering visits to see the giant otters. Ecotourism has been shown to be a potent source of stress for *P. b. brasiliensis* in Peru (STAIB and SCHENCK, 1994). Base-line ecological studies could establish the feasibility of such operations and study acceptable limits for the frequency of such visits.

As part of a country-wide primate survey (LEHMAN, 1998), SL conducted interviews with inhabitants of many of the country's river systems (see map). These interviews also included questions on giant otters. Responses indicated that, in Guyana, giant river otters are fairly wide-spread, except near urban areas and much of the coastal plains. They were observed along the Mahaicony River and far up the Berbice River ("The Gate") and its smaller tributaries in eastern Guyana. As on the upper Potaro most informants reported that the species was hunted neither for its skin nor for food. Interviews by SL revealed two exceptions: one apparently well-travelled informant, interviewed at Kaieteur Falls, said that otters were hunted near some of the bauxite mines in eastern Guyana and bush negro inhabitants of the Canje River said that they hunted and ate *P. brasiliensis*. No otters were seen along this river. Terry Henkel (pers. comm. to SL) reports that giant river otters were recently seen along the

Sipu River in and they were very abundant along the Kuyuwini River (SE of Aishalton).

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RESÚMEN

Registros de nutria gigante *Pteronura brasiliensis* de Guyana

Se realizaron relevamientos en la Meseta Potaro, O de Guyana, y otras localidades. Como parte de una entrevista mayor sobre los mamíferos de la zona, se realizaron preguntas sobre nutrias en las villas indígenas de Chenapou y Bahía del Tigre, y en las cataratas de Kaieteur, al SO de la meseta. Entre el 28 de julio y el 4 de agosto de 1998 (estación húmeda) se procuró localizar activamente a ejemplares de *P. brasiliensis* en 2 localidades en la región E de la meseta, siguiendo el consejo de pescadores locales. Se registraron varios animales, que demostraron poca aversión hacia los observadores, lo que concuerda con la aseveración de los habitantes locales de que ellos no cazan a estos animales. Aunque no se registró a ningún ejemplar de nutria neotropical, existen reportes de la especie en la región. La población de *P. brasiliensis* en la meseta parece ser saludable, aunque podría haber problemas vinculados a la explotación minera y el ecoturismo en la zona. La especie está ampliamente diseminada en Guyana, excepto cerca de zonas urbanas y costeras.

CALL FOR INFORMATION

Dear colleagues,

Sorry for not answering any sooner.

I am very pleased we are now a little group of vets interested in otters. I have to collect the emails addresses of 10 more vets of whom I have only their normal addresses.

In a near future I think it would be nice to know what literature each of us has got about otters.

If you have any other ideas of what we can do together, please tell me.

For now we have to answer two questions coming from two vets :

- how many lobes there are in the liver of *Aonyx cinerea* (Asian Small Clawed Otter) (Eva Petit)?
- is there a cartilage boneplate in the third eyelid of *Lutra lutra* (Eurasian Otter) and is it possible there is a prociidence of the third lid for a while like it is the case for cats (Alfred Melissen)?

Thanks in advance
Best wishes
Hélène Jacques