

REPORT

NEW CONFIRMED RECORDS OF THE GIANT OTTER (*Pteronura brasiliensis*, GMELIN, 1788) IN ARGENTINA

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Abstract: Here, we report two independent and confirmed observations of solitary giant otters (*Pteronura brasiliensis*) recorded in December 2021 and September 2022 in Argentina. The former observation, a male first seen in El Impenetrable National Park in May 2021, was recorded in Buenos Aires province, which lies outside the historical distribution known for giant otters. The latter observation, an adult of unknown sex, was recorded in the Iberá Park, Corrientes province, where giant otter vanished more than 30 years ago. These records highlight the urgency for management strategies directed to enhance the recovery of giant otter populations in their historical range.

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INTRODUCTION

Giant otters (*Pteronura brasiliensis*) are globally endangered and regionally extinct in Argentina (Di Martino et al., 2019), where the last confirmed record of the

species dates from 1986 (Chebez and Bertonatti, 1994). Afterwards and until 2010, a handful of observations, always of solitary individuals, have been reported in the northeastern region of the country but all these records lacked supporting evidence like signs (i.e., tracks and scats) and images. However, in May 2021 an adult male was first observed, then photographed, while swimming in a pond formed by old meanders of the Bermejo River in El Impenetrable National Park (EINP) in the Chaco region (Leuchtenberger et al., 2021). Further monitoring using camera traps found no evidence of other accompanying giant otters. No other report of a giant otter has been published for Argentina since then. Here, we present two new and confirmed observations of solitary giant otters in Argentina.

MATERIAL AND METHODS

The first individual was recorded in the Pampas region, Buenos Aires province, near Villa Roch (Fig. 1). Here, land use is characterized by intensive cattle ranching and farming (Fig. 2). Small- to medium-sized lagoons (up to 300 to 400 hectares) and artificial channels, some of which connect with the La Plata River, can be found in the area. At this latitude (-36.2766°S) the La Plata River meets the Atlantic Ocean, resulting in brackish waters. This location lies outside the known historic distribution of the species.

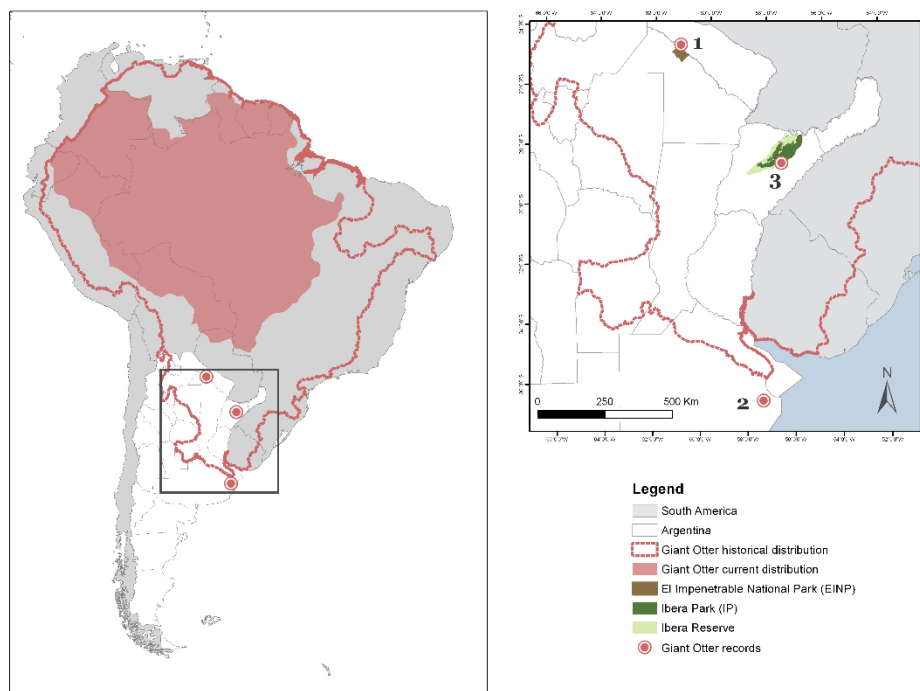


Figure 1. Map presenting the locations where giant otters were recorded in Argentina between May 2021 and September 2022: 1 – former location (Leuchtenberger et al., 2021) of the solitary male in El Impenetrable National Park; 2 – record of the same male in Villa Roch locality in Buenos Aires province; 3 - photographic record of a solitary giant otter in the Iberá Park, Corrientes, Argentina. The blue line shows the possible path followed by the solitary male between records 1 and 2 (limits of current and historical distribution range were developed by the committee of the Brazilian Action Plan for Giant Otters' conservation).



Figure 2. Representative picture of Buenos Aires province landscape where a giant otter male was recorded in December 2021 by a farmer.

The second individual was recorded in Iberá Park (IP), Corrientes province. This park, a complex of protected areas including the Iberá National Park and the Iberá Provincial Park (both IUCN Category II), encompasses 756,000 ha (Fig. 1) and conserves an extensive wetland characterized by swamps, bogs, lagoons, streams, grasslands, and patches of forests (Fig. 3). This location lies inside the known historic distribution of the species (Beccaceci and Waller, 2000), although giant otters vanished from Corrientes more than 30 years ago (Beccaceci et al., 1995).



Figure 3. Representative picture of the Iberá Park landscape where a solitary giant otter of unknown sex was recorded by a camera trap in September 2022.

RESULTS

The first individual was filmed and photographed with a smartphone by a farmer on December 1st and 2nd 2021, near Villa Roch, a town located in the Buenos Aires province (36.4836°S, 57.4170°W, 4 m above sea level). Photos and videos were sent in November 2022 to one of the authors (SD), who, in January 2023, visited the area and interviewed the farmer. According to the farmer's account, the giant otter was first seen on Dec 1st 2021 during daylight. This individual was observed first running in the field and then lying down in a small patch of forest, where it stayed until the next day. The farmer speculated that the otter might have reached her property using irrigation canals that drain from the Río de la Plata to her farm.

Subsequent analysis of the otter's throat marks revealed that they were identical to those observed in the solitary male spotted in May 2021 at EINP and surrounding area (Fig. 4). In November 21st, 2021 fresh signs were observed for the last time in the EINP area (eg. tracks, scats), but we didn't get any photographic record of the animal. If these signs observed in November, 2021 at EINP correspond to the same solitary male observed in December, 2021 in Villa Roch, then this individual must have travelled over 2000 km, along the Bermejo, Paraná and La Plata rivers and artificial Canal Number 1, in only 10 days. Previous photographic records of this individual, after its first sighting in May 2021 at EINP, suggest that the maximum distance that it may have traveled was 200 km in, at most, 2 days.



Figure 4. Photographic records presenting the throat pattern of the solitary giant otter male registered by: (left) a camera trap in the El Impenetrable National Park; and (right) by a stream in the Villa Roch locality, Buenos Aires province (right), Argentina. The arrows show the similarity of the shape of the white patch on the throat of both records.

The second individual, an adult giant otter of unknown sex (Fig. 5), was photographed on September 2nd, 2022, at 10:40 by one of the 28 camera traps (Browning Strike Force) that we deploy every year in an area of IP. This camera, located in the area known as Eulogio (28.5812°S, 57.2484°W, 88 m above sea level), took, in a period of 6 seconds, four photographs. Following this finding, we increased the number of camera traps in the area. However, we registered neither this nor other individuals to date. Similarly, and despite intensive searches, we found neither tracks nor scats in the location where the giant otter was photographed.



Figure 5. Photographic record of a solitary giant otter by camera trap located in the Iberá Park, Corrientes Province, Argentina.

DISCUSSION

Here we presented the southernmost observation of a giant otter ever recorded and the first record for the Buenos Aires province. Moreover, the distance travelled by this individual represented the longest dispersal movement known for the species to date. This observation questions available information about the historical distribution of the species (Di Martino et al., 2019), and forces specialists to increase efforts to understand how early Spanish settlers might have affected southern populations of giant otters.

We also reported a second confirmed record of a giant otter in Argentina within an interval of 16 months (Leuchtenberger et al., 2021) and after 36 years of the last confirmed observation in the country (Chebez and Bertonatti, 1994). Like the individual observed first in EINP and then in Buenos Aires province, the origin of the giant otter photographed in IP is unknown, perhaps a migrant from a population in Paraguay being the most plausible, albeit untested, explanation.

Regardless of their origin, the presence of these individuals in Argentina highlights the importance of (1) establishing protected areas such as EINP and IP to conserve suitable habitat and maintaining corridors for dispersing giant otters from stronghold populations, (2) maintaining and increasing survey efforts to detect isolated individuals and even relict populations and (3) conservation translocation actions, whenever possible, to improve the recovery of the species to its indigenous range. Furthermore, the translocation of isolated individuals to current founding nuclei of giant otters, such as those that are being established by the Giant Otter Reintroduction Program at EINP and IP (Zamboni et al., 2018) could reinforce the establishment of a viable population (IUCN/SSC, 2013).

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RESUME

NOUVEAUX ENREGISTREMENTS CONFIRMÉS DE LOUTRE GÉANTE (*Pteronura brasiliensis*, GMELIN, 1788) EN ARGENTINE

Nous rapportons ici deux observations indépendantes et confirmées de loutre géante solitaire (*Pteronura brasiliensis*) enregistrées en décembre 2021 et septembre 2022 en Argentine. La première observation, un mâle vu pour la première fois dans le parc national d'El Impenetrable en mai 2021, a été enregistrée dans la province de Buenos Aires, qui se situe en dehors de la répartition historique connue des loutres géantes. La deuxième observation, un adulte de sexe inconnu, a été enregistrée dans le parc Iberá, province de Corrientes, où la loutre géante a disparu il y a plus de 30 ans. Ces enregistrements soulignent l'urgence de stratégies de gestion visant à améliorer le rétablissement des populations de loutres géantes dans leur aire de répartition historique.

RESUMEN

NUEVOS REGISTROS CONFIRMADOS DE NUTRIA GIGANTE (*Pteronura brasiliensis*, GMELIN, 1788) EN ARGENTINA

Aquí, informamos dos observaciones independientes y confirmadas de nutrias gigantes (*Pteronura brasiliensis*) solitarias, registradas en Diciembre de 2021 y Septiembre de 2022 en Argentina. La primer observación, un macho que había sido visto en el Parque Nacional El Impenetrable en Mayo de 2021, fue registrada en la provincia de Buenos Aires, que está fuera de la distribución histórica conocida de la nutria gigante. La segunda observación, un adulto de sexo desconocido, fue registrada en el Parque Iberá, provincia de Corrientes, donde la nutria gigante desapareció hace más de 30 años. Éstos registros destacan la urgencia de tener estrategias de manejo dirigidas a reforzar la recuperación de las poblaciones de nutria gigante en su área de distribución histórica.