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**CAPTIVE REPRODUCTION OF THE NEOTROPICAL OTTER IN THE  
SANTA FE ZOOLOGICAL PARK IN MEDELLIN, COLOMBIA**

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**Abstract:** Knowledge regarding reproduction of *Lontra longicaudis* is lacking. We present the first experience of Neotropical river otters born in captivity in Colombia. Of three parturitions registered, only one was successful. The gestation period for *L. longicaudis* was estimated at 86 days, with no evidence of delayed implantation. This kind of pregnancy can be classified as short and variable. We recommend further research efforts regarding behaviour and reproduction of Neotropical otters in captivity.

## **INTRODUCTION**

Protection and conservation of threatened species is a world-wide priority, however, it is necessary to know the basic aspects of the species' biology, and how it interacts with the ecosystem, in order to make conservation decisions. The study of diet and reproduction probably requires the most research effort since these aspects are essential as regards survival of populations.

The Neotropical otter *Lontra longicaudis* has a range that extends from Mexico to Uruguay, Paraguay, and northern Argentina (LARIVIÈRE, 1999). In general, *L. longicaudis* has been poorly studied, though a number of studies on diet have been reported (GALLO, 1997; QUADROS and MONTEIRO-FILHO, 2001). At present, little is known about the reproductive biology of *L. longicaudis*. This is due in part to the fact that *L. longicaudis* are not commonly observed in the wild. Captive otters provide an opportunity to increase knowledge of the biology of the species, including reproduction. CUBAS et al. (1993) and BLACHER (1994) in Brazil, and JACOME and PARERA (1995) in Argentina, reported on otter reproduction in captivity. BLACHER (1994) provided details from three litters produced by the same female during an eleven-month period in the Curitiba Zoological Park in Paraná. There are, however, no published records regarding reproduction of otters in Colombia, either in the wild or in captivity. In this short notice we report on the first litter born in captivity at the Santa Fé Zoological Park in Medellín, Colombia.

## **RESULTS**

Two otters (a female (3 years old) and a male (4 to 5 months old)) were caught in the municipality of Caucaasia (7° 59' N and 75° 12' W), in the northern section of the department of Antioquia, and were brought to the Santa Fé Zoological Park; arriving on November 1994 and 16 March 1996, respectively.

The couple were observed mating in the water and, so far, three parturitions have been registered, though only one was successful. On all three occasions the female was isolated from the male. On 10 April 1999, the couple mated and, on July 4 of the same year, two young were born but died soon afterwards. We believe the mother accidentally trampled the young. The ultimate cause of death may have been a result of rejection by the mother or the small size of the enclosures. Since that time, the enclosure has been expanded and access to water has been provided for the otters.

On April first 2002, the first otter successfully born in captivity in Colombia was produced (though no mating was registered). On 4 May 2002, this individual was moved to Santa Cruz Zoo in the city of Santa Fé de Bogotá for the purpose of breeding the species there.

On 19 August 2002, a mating was registered in Santa Fé Zoological Park, and on 12 November of that same year an otter was born. Two days later, the young otter was missing. We believe the mother ate the young otter.

## DISCUSSION

The gestation period of *L. longicaudis* was 86 days. This differs from results published by BERTONATTI and PARERA (1994, cited by LARIVIÈRE, 1999) and PARERA (2002), who report periods of 57 days and 60 to 70 days respectively. One explanation for this discrepancy is that it is possible that undetected later copulation resulted in pregnancy. However, the gestation period could also differ from one region to another within the species' distribution range.

Despite the small number of copulation instances registered, retarded implantation did not occur. This coincides with the results of BLACHER (1994) and JACOME and PARERA (1995). AMSTISLAVSKY and TERNOVSKAYA (2000) studied mustelid reproduction in the Northern Hemisphere and reported three kinds of pregnancies: (1) a constant short-term gestation period; (2) a long gestation period (7 to 10 months), in which the development of the embryo includes an obligatory diapause during the blastocyst stage; and (3) a short-term and variable period. According to the information available, *L. longicaudis* appears to belong to the third pregnancy class, i.e. the gestation period is short and variable.

Predation on conspecifics has been reported as one of the most common causes of death for captive *Pteronura brasiliensis* (CARTER and ROSAS, 1997). It is possible that cannibalism occurs in *L. longicaudis*, but there is not sufficient information at this point to support this. Additional research effort is required to better comprehend the behaviour and reproduction of captive *L. longicaudis*.

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## RÉSUMÉ

### REPRODUCTION DE LA LOUTRE A LONGUE QUEUE EN CAPTIVITE, AU PARC ZOOLOGIQUE DE SANTA FE A MEDELLIN, EN COLOMBIE

Les connaissances relatives à la reproduction de *Lontra longicaudis* font défaut. Nous présentons ici le premiers cas de reproduction de loutre à longue queue en captivité, en Colombie. Sur trois parturitions, une seule a été un succès. La période de gestation de *L. longicaudis* est estimée à 86 jours, apparemment sans implantation différée.

Ce type de gestation peut être considéré comme étant court et variable. Nous préconisons des recherches supplémentaires sur le comportement et la reproduction de la loutre à longue queue en captivité.

**RESUMEN**

**REPRODUCCIÓN EN CAUTIVERIO DE LA NUTRIA NEOTROPICAL EN EL PARQUE ZOOLOGICO SANTA FÉ EN MEDELLÍN, COLOMBIA**

Es poco el conocimiento que se tiene sobre los aspectos reproductivos de *Lontra longicaudis*. Presentamos el primer registro para Colombia sobre un nacimiento en cautiverio de nutria neotropical. De tres nacimientos registrados, sólo uno fue exitoso. Se estimó el período de gestación de *L. longicaudis* en 86 días, sin evidencia de implantación retardada. El tipo de preñez de la especie podría ser de gestación corta y variable. Se recomienda adelantar estudios en cautiverio sobre comportamiento y reproducción de la nutria neotropical.