# **R E P O R T**

## DIET OF THE RIVER OTTER Lutra longicaudis IN FURNAS RESERVOIR, SOUTH-EASTERN BRAZIL

### PASSAMANI, M.\*, CAMARGO, S.L.

Ecology, Conservation and Wildlife Management, ICB, Universidade Federal de Minas Gerais, Av. Antônio Carlos 6627, 31270.901, Belo Horizonte, Mg, BRAZIL \* present address: Department of Ecology and Natural Resource, Universidade Federal do Espírito Santo, Av. Fernando Ferrari, 29060-900, Vitória, ES, BRAZIL

#### **INTRODUCTION**

The otter *Lutra longicaudis* is an animal with semi-aquatic habits, mainly nocturnal, that live in pairs or solitary. It is geographically distributed in South and Central America, from Mexico to Uruguay and through almost all Brazil (EMMONS, 1990), always associated with river and lake surroundings. *L. longicaudis* has been included in the Brazilian Red Book of Mammals threatened with extinction (FONSECA et al., 1994), with its natural populations decreased in consequence of habitat destruction and water pollution.

Little is know about its feeding habits. There are some articles that report this species mainly as piscivorous, completing its diet with crustaceans, amphibians, mammals, insects and birds (EMMONS; 1990; JOSÈ and ANDRADE, 1991), however no detailed studies about its diet were performed. This study reports the feeding habits of otters (*L. longicaudis*) in Furnas Reservoir, Minas Gerais, Brazil.

#### METHODS

From June 28 to July 5, 1994, eight samples of scats from otters were collected alongside Furnas reservoir, in order to analyse the diet. All the scats were analysed in the laboratory with a stereoscopic microscope and the remains of the preys (otoliths, scales and spiny rays) were identified with analogy to a reference collection of the fish structure found in the region. The remains of insects could not be identified to lower levels due to the complexity of this group. Each sample with the prey category was considered one record for the item, independent of the quantity of structures present in the sample (frequency occurrence).

#### **RESULTS AND DISCUSSION**

The results of scat analysis of L. longicaudis in Furnas reservoir showed that fish are the most important food item eaten, being present in all the analysed samples, while the insects form a minor portion of their diet. This information is in agreement with the data obtainent by JOSÉ and ANDRADE (1991), analysing the scats of L. longicaudis in the State of Espírito Santo. Individuals of the Cichlidae family were the most common eaten fish, occuring in 88.9 % of the analysed samples. The Anostomidae family was the second in number of specimens encountered in the scats (55.5 %), followed by the Characidae and Pimelodidae families (44.4 %). In one sample, the family of the fish could not be identified. The predominance of scales and otoliths from specimens of the Cichlidae family, mainly Tilapia (Tilapia rendalli) and Acará (Geophagus brasiliensis) in the samples, demonstrated a feeding preference by the otters for these species. Cichlidae have sedentary habits and prefer habitats near the river and lake banks (VIEIRA, pers. Comm.). Some species like G. brasiliensis can form groups, and this may facilitate its capture by otters. KRUUK and MOORHOUSE (1990) verified that Lutra lutra hunting during the periods of inactivity of its prey, took a substantial part of the total population. The fish more often eaten by Lutra canadensis were those moving slowly or which show quick fatigue, with low capability of sustaining swimming to escape the predation by the otters. This suggests that otters catch the fish in a direct proprtion of its abundance and in an inverse proportion of its ability to swim (STENSON et al., 1984).

Insects were encountered in six samples, occuring in 66.7 % of the samples analysed. LARSEN (1984) comments that the invertebrate fragments found in *Lutra canadensis* scats were very little and because of that they might be first swallowed by fish, molluscs or birds and then eaten by the otters. However, the presence of relatively big insect remains in the majority of our samples suggests that the otters use this item constantly in their diet, rather than eventually. One sample consisted almost exclusively of insects thus confirming our hypothesis. The insects may be an important food source when the preferred prey species became scarce. The presence of this item in the otter diet confirms the results obtained by JOSÉ and ANDRADE (1991) for Lutra longicaudis in the state of Espírito Santo.

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