

# THE USE OF ARTIFICIAL RESERVOIRS BY MIDDLE- TO LARGE-SIZED MAMMALS IN A SILVICULTURAL LANDSCAPE OF SOUTHERN SÃO PAULO, BRAZIL

**Theme:** Biodiversity conservation indicators

LACÔRTE Marina C.<sup>1</sup>, GHELER-COSTA Carla, SPINELLI Myldred O. & VERDADE Luciano M.<sup>1</sup>

<sup>1</sup>University of São Paulo, PO Box 09, Piracicaba, SP 13418-900 BRAZIL.

Livestock production is being currently replaced by *Eucalyptus* plantations in Southeastern São Paulo, Brazil, especially in areas with poor soil fertility and harsh topography. In such situation a relatively large number of small artificial reservoirs originally built for cattle water supply remain on site. In addition, industrial *Eucalyptus* plantations usually keep areas of reserve, according to the Brazilian Environmental Law. These characteristics may be potentially beneficial for generalist species of middle- to large-sized mammals. In this study we surveyed their frequency of occurrence by vestiges (i.e., tracks, scats, burrows and markings) and sights around 50 artificial reservoirs (originally built for cattle water supply) and streams in five remaining gallery forests associated with a new (1 – 2 years) *Eucalyptus* plantations in Três Lagoas Ranch, in Alto Paranapanema River basin, Southeastern São Paulo, Brazil. This study was carried out from August 2008 to July 2010 in bimonthly field campaigns. As a result we detected a total of 20 species, 18 around artificial reservoirs and 17 in streams of gallery forests. In comparison to similar studies, carried out in the same biome and similar conditions, these results represent a relatively high species richness in both habitats. However streams of gallery forests had a significantly higher species richness and frequency of occurrence than artificial reservoirs. There is currently a strong political pressure against the Brazilian Forest Code that can result on a drastic reduction of gallery forest width and massive deforestation. The present results stress the importance of the remaining fragments of native vegetation into silvicultural/agricultural landscapes. They also suggest that artificial reservoirs can increase habitat carrying capacity for middle- to large-sized mammals in such circumstance.

Key-words: middle- to large sized mammals, Brazilian Forest Code, gallery forests, agricultural landscapes.

Financial support: Fundação de Amparo à Pesquisa do Estado de São Paulo - FAPESP