

THE IMPORTANCE OF THE SERRA DO JAPI FOR THE CONSERVATION OF STREAM FAUNA.

Theme: Biodiversity conservation indicators

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Over the last 30 years, the conservation of terrestrial fauna and flora has been the main reason for the creation of the majority of protected areas and, as these comprise bodies of water, many of these areas also end up protecting biodiversity in freshwater environments. However, the lack of studies that inventory species in these locations makes it difficult to assess the importance of these areas for the conservation of aquatic biota. Given this scenario, the aim of the present study was to survey stream fauna, detect species threatened with extinction and evaluate the role of the *Serra do Japi* (the Jundiá-Cabreúva EPA's) as a local, regional, continental and global reserve of aquatic biodiversity. To this end, eight stretches of streams were sampled in the *Serra do Japi* between 2005 and 2007 for the community of benthic macroinvertebrates (Surber-Type sampler), fish (dragnet, sieves and hand nets) and, potentially, amphibious Anura. Results indicated that the *Serra do Japi* is contributing towards the conservation of 138 taxonomic units of aquatic biota and shelters a rich and representative biodiversity of freshwater fauna: world (0.2%), neotropical region (0.9%), Brazil (2.4%) and the state of São Paulo (17.9%). The streams in the EPA's help to protect taxa listed as vulnerable to extinction in the state, namely *Neoplecostomus paranensis* and *Pareiorhina*, and they shelter freshwater animals whose distribution is restricted to the continent of South America: Aeglidae, *Trichodactylus fluviatilis*, *Waltzoyphius*, *Zelus*, *Gripopteryx*, *Paragripopteryx* and *Tupiperla*, Callichthyidae and Erythrinidae and; those restricted to Brazilian territory: *Aegla paulensis*, *Macrobrachium iheringi*, *Tupiara*, *Kempnya*, *Guaranyperla*, *Mextrichia*, *Hypostomus ancistroides*, *Oligosarcus paranensis*, *Astyanax paranae*, *Characidium oiticicai*, *C. gomesi*, *Geophagus brasiliensis*, *Phalloceros reise*, *P. harpagos*. The *Serra do Japi* is also seen as a significant haven for hitherto unknown and/or disappeared species such as the coleopteron *Huleechius*, the fish *Pareiorhina* and the tree frog *Hyalinobatrachium*.

Keywords: Atlantic Forest, River Tietê, Pisces, EPT, Centrolenidae

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