
Structure of bird communities in cerrado areas in the northeast region of São Paulo state

Maria Elisa de Castro Almeida

Abstract

Concerning that the cerrado region is one of the most threatened ecosystems and that the Ecological Station of Jataí shelters one of the greater remaining of this bioma in the northeast of São Paulo state, this work had two aims: characterize the structure of bird communities of the Jataí Ecological Station and surrounding area, as well as to create a geo-referenced database of local avifauna. Four areas within the city boundaries of Luiz Antônio (São Paulo) were studied: The Jataí Ecological Station and the Luiz Antônio Experimental Station (EEJ/EELA), Oitocentos Alqueires (OIT), a fragment of the Umuarama Farm (UMU) and a fragment of the Nossa Senhora da Aparecida Farm (NSA). The qualitative and quantitative survey resulted in the registration of 211 species at the EEJ/EELA, 55 species at the OIT, 41 at the UMU and 62 at the NSA. As far as species diversity, EEJ/EELA present an index of 3,81; the diversity index at OIT was found to be 3,31, and the index obtained at the fragments was 3,63 (UMU) e 3,45 (NSA). As for IPA, among the less abundant species found in the four areas, there are small frugivorous and nectarivorous represented mainly in the Thraupidae and Trochilidae families, as well as insectivorous represented by the Picidae and Dendrocolaptidae families. Despite the low density of these species, the presence of some frugivorous such as *Penelope superciliaris* and *Trogon surrucura*, possibly indicates that the study area is still relatively well conserved. Some species were deemed of Special Interest for Conservation (IECO); future studies were recommended on the population abundance and density, displacement, genetics and behavior. We underlined the need for monitoring and following these species over the years, by means of regular observations and annual population surveys. All information obtained through the surveys done in this research project was used to build the Geo-referenced Database Jataí-Aves (BD-JATAÍ-AVES). This tool enabled us to relate different species to their environments; determine which were the threatened species and those of Special Interest for Conservation; create maps to indicate areas where various species can be found; and define conservation of local bird fauna proposals. The BD-JATAÍ-AVES is an open repository, where new information on bird fauna of the researched areas can be progressively added, so as to enlarge the base, thus contributing to the establishment of criteria upon which to base decision-making in regional conservation management. The

database can also help produce handout and environmental education material

Key-words: birds, conservation units, geographical information systems, structure of communities

FICHA CATALOGRÁFICA

Almeida, Maria Elisa de Castro.

A447ae

Estrutura de comunidades de aves em áreas de cerrado da região nordeste do Estado de São Paulo / Maria Elisa de Castro Almeida . -- São Carlos : UFSCar, 2003.

134 p.

Tese (Doutorado) -- Universidade Federal de São Carlos,

2002.

1. Aves. 2. Unidades de conservação. 3. Sistema de Informação Geográfica. 4. Estrutura de comunidades. I. Título.

CDD: 598 (20a)