



Campos do Jordão 2010 25th International Ornithological Congress 22-28 August 2010 (www.i-o-c.org)

Interaction between buff-necked ibises and towers for high voltage transmission lines in Brazil

A. C. Oliveira 1 and R. H. Macedo 2

1 Post-Graduate Program in Animal Biology, IB, University of Brasília, 70910-900, Brasília, DF, Brazil

2 Animal Behavior Laboratory, IB, University of Brasilia, 70910-900, Brasília, DF, Brazil

Email: ailtonoliveiraster@gmail.com

The buff-necked ibis *Theristicus caudatus* is typical of open, dry landscapes in South America. Between August 2005 and December 2007 we monitored populations along electrical transmission lines in central Brazil. These birds use the transmission facilities for roosting and nesting, and are often responsible for energy interruptions, with consequent high costs for repair paid by the utility companies. The objective of this study was to evaluate the forms of interaction of ibises with the towers. We considered habitat, and behavioral and reproductive variables for this species along the transmission lines. We examined 535 towers, 21% of which were occupied by ibises. Of the evaluated towers 74% were in disturbed areas and 26% in natural areas. There was a statistical association between tower design and habitat, with respect to occupation by buff-necked ibises, with a preference for SB towers within disturbed landscapes. No significant difference in occupation was found between towers in natural versus disturbed areas. Clutch size for the 49 nests found varied between one ($n = 2$), two ($n = 22$) and three ($n = 18$) eggs, with a mean of 2.21 eggs per nest. Egg laying occurred from April to December. Knowledge of ecological, behavioral and reproductive traits is essential to understand the use of high voltage transmission towers by buff-necked ibises. Such information will allow the development of mitigation measures to avoid interruption in energy supply and negative impact on the species.