

A new record of White-winged Nightjar *Caprimulgus candicans* in Emas National Park, Goiás, Brazil

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O bacurau-rabo-branco, *Caprimulgus candicans*, é uma espécie rara, pouco conhecida e está ameaçada de extinção. Encontramos um macho de *C. candicans* em novembro de 1997 no Parque Nacional das Emas, Goiás; o indivíduo foi localizado em cima de um cupinzeiro a 100 m da estrada, em uma área de “campo sujo” recém queimada. Este bacurau parece ser especialista em área queimadas, de acordo com os poucos registros existentes, o que pode estar relacionado à abundância de insetos durante a rebrota. A utilização de queimadas controladas como ferramenta de manejo pode favorecer populações de muitos animais no Parque Nacional das Emas, e ser importante para a manutenção dessa espécie rara.

Introduction

White-winged Nightjar *Caprimulgus candicans* was described in the nineteenth century from Oriçanga, São Paulo, Brazil. Subsequent records come from: Cuiabá, Mato Grosso, Brazil^{4,12}, Beni Biological Station, Bolivia⁵ and eastern Paraguay (first recorded by Azara, although there was no substantiating data for that country^{4,6} until recently, when a population was found at Reserva Natural del Bosque Mbaracayú⁷). The species has also been recorded in Emas National Park, Goiás, Brazil, principally in August–October during the 1980s and 1990s^{4,10}. In September 1985, c.12 individuals were seen, in September 1986 six in a single night, in September 1989 two were observed, and in October 1990 one bird was observed⁴. There have been no subsequent published records in Brazil⁷.

New observation in Brazil

We observed and captured an adult male *Caprimulgus candicans* (body length c. 20 cm) at Emas on 7 November 1997 at 21h00. It was photographed and all the salient plumage features noted. The bird was c.100 m from a road when it was located with a high-power headlight. It perched on a 20 cm-tall termite mound where it was photographed and subsequently caught by hand (Fig. 1). The habitat in this area consisted of shrubby grassland that had been burnt in September 1997; the vegetation was beginning to regenerate. Open grassland, especially in the vicinity of recent burns, are considered to be the preferred habitat of this species^{4,7}, and our observation conforms with this pattern.

Discussion

C. candicans appears to display a preference for recently burnt areas^{4,7}. Emas is subject to periodic burning of large areas due to the dry vegetation biomass which accumulates over a 3–4 year period. On occasions, such burns can be uncontrollable and

extremely harmful to the large mammal fauna⁸. Prescribed burns have been recommended by several authors as an important means of preventing such large-scale burns^{9,10,11,13}. Controlled fire management may also be important in sustaining viable populations of certain rare species that specialise in utilising recently burnt areas (fire trackers¹⁵). *C. candicans* appears to be one such species which profits from these burns, probably due to the volume of insects attracted to the high-quality regrowth vegetation^{8,16}.

Emas is the largest protected area of cerrado in Brazil and comprises a mosaic of habitats ranging from open grasslands to dense xeromorphic savanna (cerrado *sensu strictu*) and gallery forests. Grasslands are the most important of these biomes. Four species of *Caprimulgus* have been recorded in Emas, in distinct habitats: Little Nightjar *C. parvulus* inhabits cerrado *sensu strictu*, Rufous Nightjar *C. rufus* gallery forests, Spot-tailed Nightjar *C. maculicaudus* wet fields and White-winged Nightjar *C. candicans* open grasslands. The last two-named species are rare and dependent on open areas. Both species' ecological requirements remain largely unknown. Clay *et al.*³ present the first substantial biological data for White-winged Nightjar, providing an estimate of territories, and descriptions of female plumage, roost sites and a nest. Emas is listed as a key area for bird conservation in Latin America¹⁴ with seven threatened species, but additional rare species, not included in this list, also occur. Avifaunal studies have recorded 354 bird species, including three new for Goiás¹. Emas supports populations of nine threatened species listed by Collar *et al.*⁴: *Nothura minor*, *Taoniscus nanus*, *Mergus octosetaceus*, *Harpyhalietus coronatus*, *Caprimulgus candicans*, *Euscarthmus rufomarginatus*, *Poospiza cinerea*, *Sporophila hypochroma* and *Sporophila palustris*, and two others listed in Bernades *et al.*²: *Spizastur melanoleucus* and *Culicivora caudacuta*. However, the grasslands

surrounding the national park have been largely converted to soybean fields and the few fragments which persist have closed vegetation (dense forms of cerrado). Extensive grasslands, such as in Emas, are now uncommon in the cerrado biome making Emas of critical importance for threatened grassland fauna conservation.

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References

- Bagno, M. A. & Rodrigues, F. H. G. (1998) Novos registros de espécies de aves para o estado de Goiás, Brasil. *Ararajuba* 6: 64–65.
- Bernardes, A. T., Machado, A. B. M. & Rylands, A. (1990) *Brazilian fauna threatened with extinction*. Minas Gerais: Fundação Biodiversitas.
- Clay, R. P., Capper, D. R., Mazar Barnett, J., Burfield, I. J., Esquivel, E. Z., Fariña, R., Kennedy, C. P., Perrens, M. & Pople, R. G. (1998) White-winged Nightjars and cerrado conservation: the key findings of Project Aguará Ñu 1997. *Cotinga* 9: 52–26.
- Collar, N. J., Gonzaga L. P., Krabbe N., Madroño Nieto A., Naranjo L. G., Parker, T. A. & Wege D. C. (1992) *Threatened birds of the Americas: the ICBP/IUCN Red Data Book*. Cambridge, UK.: International Council for Bird Preservation.
- Davies, S. E. & Flores, E. (1994) First record of White-winged Nightjar *Caprimulgus candicans* for Bolivia. *Bull. Brit. Orn. Club* 114: 127–128.
- Hayes, F. E. (1995) *Status, distribution and biogeography of the birds of Paraguay*. New York: American Birding Association (Monogr. Field Ornithol. 1).
- Lowen, J. C., Bartrina L., Brooks T. M., Clay R. P. & Tobias J. (1996) Project YACUTINGA '95: bird surveys and conservation priorities in eastern Paraguay. *Cotinga* 5: 14–19.
- Prada, M. V., Marini-Filho, O. J. & Price, P. W. (1995) Insects in flower heads of *Aspilia foliaceae* (Asteraceae) after a fire in a central Brazilian savanna: evidence for the plant vigor hypothesis. *Biotropica* 27: 513–518.
- Ramos-Neto, M. B. & Pinheiro-Machado, C. (1996) O capim-flecha (*Tristachya leiostachya* Ness.) e sua importância na dinâmica do fogo no Parque Nacional das Emas. In Miranda, H. S., Saito C. H. & Dias B. F. S. (eds.) *Impactos de queimadas em áreas de cerrado e restinga*. Brasília: Editora UnB.
- Redford, K. H. (1985) ENP and the plight of the Brazilian cerrados. *Oryx* 19: 210–214.
- Rodrigues, F. H. G. (1996) Influência do fogo e da seca na disponibilidade de alimento para herbívoros do cerrado, In Miranda, H. S., Saito C. H. & Dias B. F. S. (eds.) *Impactos de queimadas em áreas de cerrado e restinga*. Brasília: Editora UnB.
- Sick, H. (1985) *Ornitologia brasileira: uma introdução*. Brasília: Editora UnB.
- Silveira, L., Rodrigues, F. H. G. & Jácomo, A. T. (in press) Impact of wildfires on the megafauna of Emas National Park, central Brazil. *Oryx*.
- Wege, D. C. & Long, A. J. (1995) *Key Areas for threatened birds in the Neotropics*. Cambridge, UK: BirdLife International (Conservation Series 5).
- Whelan, R. J. (1995) *The ecology of fire*. Cambridge, UK: Cambridge University Press.
- Vieira, E. M., Andrade, I. & Price, P. W. (1996) Fire effects on a *Palicourea rigida* gall midge: a test for the plant vigor hypothesis. *Biotropica* 28: 210–217.

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b



c

Figure 1. White-winged Nightjar *Caprimulgus candicans* at Emas National Park, Goiás, Brazil (Flávio H. G. Rodrigues):

- a) perched on termite mound;
- b) dorsal view;
- c) ventral view.