

Use of tree cavities for roosting by the Reddish-bellied Parakeet (*Pyrrhura frontalis*)

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RESUMO. Uso de cavidades em árvores como dormitório pela Tiriba-de-testa-vermelha (*Pyrrhura frontalis*). A utilização de cavidades naturais como dormitório, fora do período reprodutivo não é uma prática comum em psitacídeos. No período de janeiro a setembro de 1996, foram observados indivíduos de *Pyrrhura frontalis* utilizando cavidades em árvores como dormitório em uma floresta composta primariamente por *Araucaria angustifolia* (Araucariaceae) e *Podocarpus lambertii* (Podocarpaceae) em Campos do Jordão, noroeste do estado de São Paulo, Brasil. Durante este período, três indivíduos chegavam diariamente a uma cavidade de *P. lambertii* ao escurecer e saíam ao amanhecer. Outros dois indivíduos foram vistos utilizando uma cavidade em *A. angustifolia* nos meses de julho e agosto. O uso destas cavidades naturais não só fornece proteção aos indivíduos, mas também pode fazer com que os animais não tenham que procurar novos sítios reprodutivos para a próxima estação.

PALAVRAS-CHAVE: Campos do Jordão, dormitório, Psittacidae, *Pyrrhura*.

KEY WORDS: Campos do Jordão, Psittacidae, *Pyrrhura*, roosting.

Roosting in natural cavities is unusual among psittacids. A few exceptions are known. Small flocks (six individuals or more) of Buffy-faced Pygmy Parrot *Micropsitta pusio* and Yellow-capped Pygmy Parrot *M. keiensis* have been observed sleeping in abandoned termitearia at all times of the year (Bergman 1960, Shanahan 1969). Black-winged Lovebird *Agapornis taranta* roosts in natural cavities that are used through the year by small flocks (Forshaw 1981). Sick (1985) stated that the only parrot in Brazil known to roost in a place other than tree branches during non-breeding periods is the monk parakeet *Myiopsitta monachus* which builds colonial nests that are used as roosting site throughout the year.

Between January and September 1996, I observed the Reddish-bellied Parakeet *Pyrrhura frontalis* using tree cavities on 27 days for roosting within a forest composed mostly by *Araucaria angustifolia* (Araucariaceae) and *Podocarpus lambertii* (Podocarpaceae) trees in Campos do Jordão, northwestern State of São Paulo, Brazil (22°45' S, 45°30' W). During this period, three individuals would arrive silently at dusk between 17:15 to 17:40 close to a cavity in a *Podocarpus* tree (the cavity was 12 m high above the ground). Usually, the three birds entered the cavity one after the other, but sometimes, one of them remained outside perched on a tree branch until sunset, and then entering the cavity. By dawn 06:35, the three

individuals would leave the cavity together calling loudly and flying to a nearby *Araucaria* tree circa 25 m away. There they would remain perched and remain there for a few minutes. Then they would fly off with two other passing individuals. This same dawn routine was repeated daily during all months that I observed. I also noted another two birds using a cavity (14 m above the ground) in an *Araucaria* tree in July and August 1996. This pair entered the tree cavity by 17:25h and left also at dawn by 06:35.

The breeding season of *P. frontalis* at Campos do Jordão begins in September through to January (pers. obs.). It is not known if the individuals, that were observed using these cavities during the non-breeding season January-September, had previously nested in these cavities prior to this study.

Many bird species that nest in cavities, use these structures as dormitories before and after nesting because they provide good shelter against inclement weather and predation (Skutch 1961). I note the use of *Araucaria* and *Podocarpus* tree cavities as dormitories for *P. frontalis* and also suggest that these cavities provide not only protection against inclement weather but also against predation. Furthermore, pairs may well use the same cavity during the next breeding season, as observed by Waltman and Beissinger (1992) for Green-rumped parrotlet *Forpus passerinus*. A shortage of natural nesting cavities for hole

nesting bird species in general is a well know restricting influence for breeding success (Waltman and Beissinger 1992). I suspect this may well influence the *P. frontalis* behavior of roosting in cavity sites safeguarding them for their future breeding attempts.

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REFERENCES

- Bergman, S. (1960) The smallest parrots of the world. *Avic. Mag.* 66:209-215.
- Forshaw, J. M. (1981) *Parrots of the world*, 2nd ed. Melbourne: Landsdowne Ed.
- Shanaham, P. J. (1969) The buffy-faced pygmy parrots. *Aust. Avicult.* 23:120-122.
- Sick, H. (1985) *Ornitologia brasileira, uma introdução*, v.1. Brasília: Ed. Univ. Brasília.
- Skutch, A. F. (1961) The nest as a dormitory. *Ibis* 103a:50-71.
- Waltman, J. R. and S. R. Beissinger (1992) Breeding behavior of the Green-rumped Parrotlet. *Wilson Bull.* 104:65-84.