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NESTING RECORD OF RUFOUS-LEGGED OWL (*STRIX RUFIPES* KING) IN CENTRAL CHILE

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The Rufous-legged Owl (*Strix rufipes*) is a relatively unknown species of the temperate forests of South America (Martínez 1993, Martínez and Jaksic 1996, Jaksic 1997). Most studies on this species have focused on its foraging ecology (e.g., Martinez 1993, Martinez and Jaksic 1996, Martinez and Jaksic 1997, Díaz 1999), and virtually no information exists on its breeding biology (del Hoyo et al. 1999). Few anecdotal reports suggest that Rufous-legged Owls may prefer hollow, dead-tree cavities with an upper entrance for nesting (Housse 1945, Johnson 1967). Curiously, the only published nesting record is that of two ground-nests in incubation stage found in exotic Monterrey pine (*Pinus radiata*) plantations by Estades et al. (1998).

Here we report the first nest of Rufous-legged Owl with an owlet, and we describe some aspects of the breeding biology of this species.

METHODS

Our record occurred while monitoring diurnal forest birds in a landscape mosaic of fragmented southern beech (*Nothofagus* spp.) forests and Monterrey (*Pinus radiata*) pine plantations, near the town of Constitución (35°26′S, 72°17′W), central Chile.

On 17 November 2001, we found an occupied nest of a Rufous-legged Owl when an adult owl fortuitously left the nest as the first author was walking in the vicinity.

During 27 and 28 November 2001, we monitored activity at the nest during two nights and one day. Because there was full moon, the available light allowed us to use binoculars (10 × 50) to watch the nest. We made our observations from a point located 30 m away from the nest.

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Additionally, during the following days we collected five pellets produced by the owlet.

RESULTS AND DISCUSSION

The nest was placed on the top of a dead broken hualo (*Nothofagus glauca*) where a cup-shaped cavity had formed 3 m above ground, due to the decay of the inner part of the trunk. The cavity (ca. 30 cm inner diameter on top) contained a nest with a single owlet that, according to growth patterns of other *Strix* species, may have been no more than 1 wk old (Scherzinger 1987, Johnsgard 1998). The tree was on the northwest-facing slope of a pure second-growth hualo stand, ca. 460 m above sea level, surrounded by Monterrey pine plantations.

Shortly after sunset on 27 November 2001, the parent sitting in the nest left the area and returned periodically with food. We assumed that this individual was probably the female because only females are known to incubate or brood young in other *Strix* species (Forsman et al. 1984). Feeding activity started approximately at 2100 H and continued until 0600 H (just before sunrise) of the next morning and although the two parents were in the nest area, we could not accertain whether both individuals of the pair visited the nest. We recorded 30 and 29 visits on 27 and 28 November nights, respectively. The duration of a mean visit was 2.18 ± 0.37 min ($\bar{x} \pm$ SE, $N = 39$), and the interval between visits was 14.79 ± 3.59 min ($N = 42$). Adults brought food to the owlet on 19 visits (42%) out of 45 clearly recorded events. On five occasions the adults regurgitated food perched on edge of the nest and during 14 visits they fed the nestling directly. Owlet activity was constant during the night; the nestling often pecked the nest cavity walls in between parental visits.

During the day, one parent covered the entire nest during the entire period of observation between 0850 H and 2020 H. The bird often dozed briefly, but spent most of its time awake and vigilant.

The morning after the second monitoring night, we checked the nest for the last time, as we had to leave the field site. The chick was surrounded by six long-tailed rice rats (*Oligoryzomys longicaudatus*), one of the most frequent prey of the Rufous-legged Owl in temperate forests of southern Chile (Martínez 1993, Martínez and Jaksic 1996, Martínez and Jaksic 1997). Every carcass was complete, showing no sign of consumption. This storage behavior has been described for other owls and it may be related to high prey abundance periods (Norberg 1987). Our analysis of five pellets from the owlet showed that they contained mostly wood chips (from the nest walls) and some *Achantinodera cumingii* (Coleoptera) parts. This large beetle (7–8 cm) has been recorded as a food item of adults in central Chile (Díaz 1999).

This is not the first nest record for the area (Estades et al. 1998), but it is the first observation of what might constitute use of a ''natural'' nesting site for this species, including the first record of an owlet. Previously, we had seen a Rufous-legged Owl entering a natural lateral cavity in a large coihue (*Nothofagus dombeyi*), approximately 12 m aboveground on the north-facing slope, but we were unable to determine if there was an occupied nest inside the cavity due to its height.

Continuous records of Rufous-legged Owl in this area (Vukasovic et al. 2005) suggest that this species might not be as scarce as reported (Jaksic and Jiménez 1986). However, its nests are found infrequently, likely because the types of nest locations that this species uses are not well documented. The nest we documented was found fortuitously, because the adult flew away while we were surveying the area, but otherwise the shape and position of the cavity, along with the cryptic plumage of the adults, would have rendered detection of the nest a difficult task.

Our finding indicates that the Rufous-legged Owl may nest in different vegetation types (old-growth, second-growth native forests, and exotic pine plantations) in the highly modified landscapes of south-central Chile. Although breeding performance of the owls in each of these environments is still unknown, we suggest that the Rufous-legged Owl may be more of a generalist than previously thought (Martínez and Jaksic 1996).

REGISTRO DE NIDIFICACIÓN DE *STRIX RUFIPES* EN CHILE CENTRAL

RESUMEN.—Reportamos el primer registro de un nido de *Strix rufipes* con la presencia de una cría. Adicionalmente, presentamos algunos datos de actividad nocturna y comportamiento reproductivo. Finalmente, discutimos las posibles razones de la escasez de registros de nidificación de esta especie.

[Traducción del equipo editorial]

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