

A Narrow-billed Woodcreeper, *Lepidocolaptes angustirostris*, nesting in a mailbox

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ABSTRACT: Documenting the adaptations of birds to live in urban areas is important in a context of an anthropogenically altered world where such areas may represent novel ecological opportunities for birds. Here I report on a nest of the Narrow-billed Woodcreeper *Lepidocolaptes angustirostris* in a wooden mailbox in a suburban area. The nest was found in the first week of November 2016 with three eggs, and later two nestlings that died within approximately one week likely due to water leaking into the box. The ability of *L. angustirostris* to use man-made structures for foraging and nesting, and its typical occurrence in open areas (thus differing from the family pattern of predominantly forest species) are factors permitting the occupation of urban habitats.

KEY-WORDS: breeding biology, Dendrocolaptidae, nest box, suburban, urban adapter.

The utilization of man-made structures for foraging and nesting may represent novel adaptations that permit the occupation of urban environments by birds. Documenting such adaptations is important in a context of an anthropogenically altered world where the area occupied by cities is increasing, which represents threats to many bird species (Loss *et al.* 2014, Woinarski *et al.* 2017) but ecological opportunities for others (Hill-III & Scherer-Neto 1991, Petri *et al.* 2013). Here, I report on a nest made by the Narrow-billed Woodcreeper *Lepidocolaptes angustirostris* in a mailbox in a suburban area (*sensu* Marzluff *et al.* 2001) in southeast Brazil.

Lepidocolaptes angustirostris inhabits a variety of habitats, from open woodlands to deciduous forests, plantations and the periphery of cities (Marantz *et al.* 2003). It nests in natural and woodpecker cavities, but also in crevices present in man-made structures such as cement column, bridges, and electric poles (de la Peña 2010). Nesting occurs from October to January in Argentina, Uruguay, Paraguay, south and southeast Brazil (Marantz *et al.* 2003). Nests in natural cavities in Argentina had an average clutch size of 3.0 eggs (range 2–4 eggs, $n = 4$) and were situated 2.2 m above the ground (1.4–3.2 m, $n = 8$; de la Peña 2010), while in the *Cerrado* of central Brazil nests had 1.7 eggs (1–3, $n = 7$) and were 2.0 m high ($n = 8$; Marini *et al.* 2012).

The nest was found in the first week of November 2016 in a wooden mailbox (30 × 30 × 18 cm) located below a *Licania tomentosa* tree (Chrysobalanaceae) in the outskirts of Rio Claro (22°21'50.86"S; 47°31'27.08"W),

southeast Brazil. The mailbox was supported by a 1.2 m wood pole, and had a rectangular entrance (4 × 17 cm) positioned in the upper third portion of the box and protected by an overhanging shelter (Fig. 1A). The nest was lined by a bed of bark flakes, apparently from an *Eucalyptus* species (several *Eucalyptus* trees were in a forest fragment 50 m from the nest), and contained three eggs when discovered. Unintentional disturbance by the mailbox owner caused the breakage of one egg, but two nestling were present one week later (Fig. 1B). According to the owner, a severe storm provoked water leaking into the mailbox causing the death of nestlings when they were approximately one-week old.

Nest boxes are used as nesting sites by a variety of birds, but as far as I know this is the first report of a woodcreeper using such a structure for nesting. The fact that *L. angustirostris* naturally nests at low heights likely contributed to the adoption of the mailbox as a nest site. The behavioral and ecological flexibility of the species is another factor to consider. For instance, *L. angustirostris* forage in walls and cement columns (Batisteli *et al.* 2017, pers. obs.), and can breed in abandoned *Eucalyptus* plantations (Pereira *et al.* 2015). These traits, together with the fact that it typically occurs in open areas (Marantz *et al.* 2003), most probably permit the status of “urban adapter” for this woodcreeper species and help to explain its geographic expansion into deforested areas of Atlantic Forest (Maldonado-Coelho *et al.* 2017).

As secondary-cavity nesters, woodcreepers are likely subjected to shortage of nest sites (Cockle *et al.* 2010),



Figure 1. (A) Front view of the mailbox where *Lepidocolaptes angustirostris* made its nest. Note the rectangular entrance protected by a shelter. (B) The interior of the box showing two nestlings to the right and lining of bark flakes.

which lead Sick (1997) to suggest that the provision of nest boxes might help to maintain populations of woodcreepers in forests where appropriate cavities for nesting is in short supply. This suggestion was apparently supported by his observation that certain woodcreepers (*L. angustirostris* and *Lepidocolaptes squamatus*) occasionally nest in buildings (Sick 1997, see also Jesus & Mikich 2013), indicating that they might accept man-made structures for nesting. Besides adding another man-made structure to the list of potential nest sites for *L. angustirostris*, the observation reported here indicates that this and possibly other woodcreeper species may indeed use nest boxes as Sick (1997) envisaged.

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