First description of the nest and eggs of Fawn-breasted Wren *Cantorchilus guarayanus*

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Se brinda la primera descripción del nido y huevos de la Ratona Pecho Ocre *Cantorchilus guarayanus*. Los nidos son estructuras elaboradas de tejido, típicas de las hechas por el género. Los huevos son azul blancuzco pálido con puntos marrón rojizos en el extremo obtuso. Los nidos eran conspicuos, estando situados muy bajo en palmas espinosas en bosque ripario. Se sugiere que una preferencia por palmas espinosas podría proveer protección adicional a los nidos, de otra forma expuestos.

Fawn-breasted Wren *Cantorchilus guarayanus* is a locally common inhabitant of thickets and undergrowth adjacent to wetlands and riparian areas, in lowland Bolivia, adjacent western Brazil and extreme northern Paraguay[3]. In the latter country it is restricted to the north-eastern Chaco in northern dpto. Alto Paraguay, in the southernmost part of the Pantanal[8]. Little has been published concerning the species' biology, and its nest has not been described[10]. Here I provide a description of the nest and eggs from Paraguay, with additional notes on the species in its southernmost range.

Description of nest

Three nests were found on 13–14 November 2012 at the Tres Gigantes Biological Station, dpto. Alto Paraguay, Paraguay (20º04.602'S 58º09.328'W; 90 m) in riparian forest undergrowth, typical of the Pantanal. Two nests were complete (one with eggs) and one was under construction, and all were similar in design and situation. They were sited conspicuously near a forest trail at heights of <1.5 m in the spiny palm *Bactris glaucescens* (Arecaceae / Palmae) and were within 25 m of the río Negro.

All nests were elaborately woven structures comprising a concealed nest chamber and a short, untidy entrance tunnel. All were draped over a branch of the palm, with the entrance tunnel inclined, consistent with the closed/retort/pensile nest type[14]. They were tightly woven structures of dry grass and palm fibres, with the chamber almost spherical, although longer pieces of material hung well below it, presumably as an aid to concealment. The nest chamber was unlined. A nest with eggs had the following max. dimensions: length 220 mm, width 100 mm, depth 120 mm; chamber: length 75 mm, width 100 mm, depth 100 mm; entrance tunnel: length 145 mm, width 75 mm, depth 40 mm; entrance hole: width 50 mm, depth 35 mm; height above ground: 120 cm.

Description of eggs

One nest held three conical eggs that were pale bluish white with reddish-brown spotting, densest at the larger end. The amount of spotting varied considerably between the three eggs. A previous report of this species' clutch size mentioned just two eggs[10]. The three eggs were being incubated and had the following dimensions: 18 × 14 mm; 18 × 12 mm; 17 × 13 mm.

Discussion

As might be expected, my observations for *C. guarayanus* strongly recall what is known of the reproduction of the more widespread and closely related Buff-breasted Wren *C. leucotis*. Sick[13] provided a diagrammatic sketch of the nest of *C. leucotis*, which closely resembles those of *C. guarayanus*. He noted that *C. leucotis* nests are placed 1–2 m above water, comprise straw and roots, and possess a long extension over the entrance so that the opening is concealed and points downwards. Additionally, he stated that eight nests of Moustached Wren *Thryothorus genibarbis* were constructed in a stinging nettle-like plant. An association with nesting in plants that provide additional protection from vertebrate predators has been suggested for several other species of wrens, e.g. Rufous-naped *Campylorhynchus rufinucha*[2,4], Cactus *C. brunneicapillus*[12] and White-bellied Wrens *Uropsila leucogastra*[15]. However, Robinson *et al.*[11] concluded that nests of Song Wren *Cyphorhinus phaeocephalus* placed in ant acacias in Panama did not experience lower rates of nest predation than those in sites not defended by ants. The location of the Paraguayan nests described here, in spiny palms, may suggest a tendency for such relatively conspicuous and hence vulnerable nests to be located where additional protection is present. However, *C. leucotis* uses a wide variety of substrates for nesting across its range, only some of which possess properties that may provide additional protection[6]. Although the possibility is interesting, additional data are required to confirm that the potential link with spiny palms holds true across the range of *C. guarayanus*, and that it has a positive impact on reducing nest predation.

Figure 1. Lateral view of the Fawn-breasted Wren *Cantorchilus guarayanus* nest described in the text (Paul Smith)
Figure 2. Entrance to the Fawn-breasted Wren *Cantorchilus guarayanus* nest (Paul Smith)
Figure 3. Location of the Fawn-breasted Wren *Cantorchilus guarayanus* nest in a spiny palm *Bactris glaucescens* (Paul Smith)
Figure 4. Clutch of three eggs of Fawn-breasted Wren *Cantorchilus guarayanus* showing variation in density of spotting (Paul Smith)

Ahumada[1] reported the clutch size of *C. leucotis* in north-east Colombia as 2–3 eggs (2.8 ± 0.38, *n* = 23), and described the eggs as 'cream colored, speckled with brown, and blue, especially at the larger end'. Similar clutch sizes have been reported in Panama[5,7]. Although Ahumada[1] apparently measured eggs, no data on egg dimensions are presented. Both clutch size and egg colour of *C. guarayanus* appear to be closely similar to those of *C. leucotis*.

Gill[5] described cooperative breeding by *C. leucotis* in Panama and Ahumada[1] referred to 'dormitory nests' that are not used for reproduction. Whilst it is tempting to suggest that the close proximity of the nests reported here, coupled with the fact that only one had eggs, may indicate the use of dormitory nests by *C. guarayanus*, more observations are required to confirm whether these noteworthy aspects of the breeding system of *C. leucotis* are repeated in *C. guarayanus*.

In reporting the species' presence in Paraguay, Hayes *et al*.[9] referred to an observation of a Fawn-breasted Wren on 15 August 1988 'repeatedly carrying fine twigs to a large (c. 25 × 25cm), partially constructed nest suspended about 4m from the ground'. This description is inconsistent with the observations reported here and descriptions of nests of other '*Thryothorus*'. F. E. Hayes (*in litt*. 2013) now doubts the validity of his record of nest building; consequently the nests reported here provide the first detailed breeding data for the species.

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