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Nest and eggs of the southern Central American endemic Tawny-chested Flycatcher *Aphanotriccus capitalis*

by Luis Sandoval

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The *Aphanotriccus*, *Lathrotriccus* and *Cnemotriccus* clade (Cicero & Johnson 2002, Ohlson *et al*. 2008, Tello *et al*. 2009) comprises five species of tyrant flycatcher that inhabit dense second growth, disturbed forest, riverine forest and forest edges (Stiles & Skutch 1989, Ridgely & Tudor 1994, Fitzpatrick 2004). These species show generally patchy distributions due to appropriate habitats being isolated from one another (Stiles & Skutch 1989, Ridgely & Tudor 1994, Fitzpatrick 2004). The breeding biology of the species in this clade is reasonably well known (Fitzpatrick 2004), with good descriptions of the nest and eggs of Fuscous *Cnemotriccus fuscatus*, Euler's *Lathrotriccus euleri* and Grey-breasted Flycatchers *L. griseipectus* (Fitzpatrick 2004, Greeney 2014). On the other hand, the breeding biology of both *Aphanotriccus* species is poorly known (Fitzpatrick 2004) and restricted to an observation of nestbuilding and an adult carrying food to another nest of Tawny-chested Flycatcher *A. capitalis* at La Selva Biological Station, Costa Rica (Young & Zook 1999).

Here, I provide for the first time information concerning nest architecture and describe the eggs of Tawny-chested Flycatcher, based on another nest found in Costa Rica. This flycatcher is endemic to the Caribbean slope of south-east Nicaragua (where it is scarce) and north-east Costa Rica, from sea level to 1,100 m (Stiles & Skutch 1989, Garrigues & Dean 2014, Martínez-Sánchez *et al*. 2014). It inhabits dense vegetation at forest edges, in secondary forest and riverine forest (Stiles & Skutch 1989, Garrigues & Dean 2014).

The nest was discovered and collected by Mario Olmos, on 2 June 1996, at Rancho Naturalista, Turrialba, in Cartago province (09°49'N, 83°33'W; 970 m). This area is in the Caribbean foothills of the Talamanca Mountains and has a natural cover of premontane forest, heavily logged around the lodge and at different successional stages across the property, ranging from grass fields with a few remnant trees to primary forest. The steep terrain has many banks, much vertical vegetation and dark conditions ideal for nesting. The nest (MNCR54) and eggs (MNCR338) were deposited at the Museo Nacional de Costa Rica, San José.

Description of the nest and eggs.—The nest was sited between the leaf bases of a bromeliad and the main trunk of a tree, 0.4 m above ground. It was an open cup composed of two layers (Fig. 1): an external layer of loosely woven plant fibres such as mosses, dead leaves and dry twigs; and an internal layer of more tightly woven pale rootlets and plant fibres. External measurements (obtained with dial callipers ± 0.01 mm) were: nest height = 85 mm, nest diameter 140 mm, and walls 89 mm and 12.5 mm. The walls varied because the inner cup was not centred within the external layer (Fig. 1). Internal measurements were: inner cup diameter = 48.10 ± 2.13 mm (mean ± SD of four internal diameters) and inner cup depth at the centre = 23 mm. The clutch size was three eggs. Eggs were pale pinkish in ground colour with round sparse dark red spots forming a wreath at the larger end (Fig. 2). Egg size was: 17.3 × 12.9 mm, 17.7 × 13.1 mm and 16.1 × 12.0 mm.

Discussion.—The nest of Tawny-chested Flycatcher is cup-shaped, similar to those described for the other two genera in the clade (*Cnemotriccus* and *Lathrotriccus*), with a loosely woven external layer and a more tightly woven internal layer (Greeney 2014).

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Figure 1 (above). Lateral and upper views of the Tawny-chested Flycatcher *Aphanotriccus capitalis* nest deposited at the Museo Nacional de Costa Rica collection (MNCR54) and found at Rancho Naturalista, Cartago province, Costa Rica, on 2 June 1996 (Luis Sandoval)

Figure 2 (left). One of the three eggs in the Tawny-chested Flycatcher *Aphanotriccus capitalis* nest found at Rancho Naturalista, Cartago province, Costa Rica, on 2 June 1996 (Luis Sandoval)

Unlike the previous two nests reported for this species, both of which were constructed within a tree or bamboo cavity (Young & Zook 1999), the nest reported here was 0.4 m above ground in the fork between a bromeliad and trunk, indicating that nests of this tyrant flycatcher are not necessarily sited in cavities. Furthermore, the Tawny-chested Flycatcher nest described here is very similar to nests described for Euler's and Grey-breasted Flycatchers, which species also constructs nests between epiphytes (Di Giacomo & López Lanús 1998, Fitzpatrick 2004, Greeney 2014). This may indicate that such situations do not represent unusual nesting behaviour.

The eggs' pale pinkish ground colour and spot pattern are similar to those previously reported for both *Lathrotriccus* species (Greeney 2014) and Tufted Flycatcher *Mitrephanes phaeocercus*, a closely related species whose eggs are also well described (Stiles & Skutch 1989, Cicero & Johnson 2002, Ohlson *et al*. 2008, Tello *et al*. 2009, Greeney 2014). The similarities of nest and eggs between species of different genera within the clade demonstrate that they share many nesting traits, providing further evidence of their close relationships.

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