

## NEST, EGGS, AND NESTLINGS OF THE FAWN-BREASTED Tanager (*PIPRAEIDEA MELANONOTA*) IN VENEZUELA

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**Ninho, ovos e ninhegos da Saíra-viúva (*Pipraeidea melanonota*) na Venezuela.**

**Key words:** Fawn-breasted Tanager, *Pipraeidea melanonota*, eggs, nest, nestling, Venezuela.

### INTRODUCTION

Data on the behavior, reproduction, and natural history of the Fawn-breasted Tanager (*Pipraeidea melanonota*) are scarce in the literature. This species inhabits woodlands, forest borders, bushy pastures, and cultivated areas with large trees and clearings with scattered trees (Hilty 2002), and is mostly absent from forested regions (Ridgely & Tudor 1989). Its range extends from the northern coastal mountains of Venezuela to the Pacific slopes of Colombia, Ecuador, Peru, Bolivia, and Argentina (Ridgely & Tudor 1989). In Brazil, this species occupies a broader area, from southeastern Bahia, Minas Gerais, and Rio de Janeiro to Rio Grande do Sul, and beyond Brazil it can be found in Paraguay and as far south as Uruguay (Sick 2001). Adult males have a brilliant pale blue crown and nape, with a black mask and a buffy yellow breast. The female and immature are similar, but with duller coloring and may lack the black

mask (Sick 2001). The few data published on this species' ecology and behavior report a diet of fruits and insects, well-lined cup-shaped nests on the edge of pine branches (Isler & Isler 1987), in heights of 15–20 m, concealed with epiphytes and mosses (Hilty 2002). It is known for tanagers in general that females lay 2–3 eggs and incubate them for 12–14 days, and nestlings remain in the nest for 18–22 days (Isler & Isler 1987, Sick 2001).

The purpose of this note is to add information to the natural history of this poorly-known species by describing the nesting chronology, eggs, and nestlings for a nest found in Yacambú National Park, Venezuela. We also present some observations related to parental behavior.

### METHODS

*Study site.* We conducted the study in Yacambú National Park (26,916 ha) located in the state



Fig 1. Nest of the Fawn-breasted Tanager occupying a cavity on the wall of a house in Yacambú National Park, Venezuela.

of Lara, Venezuela (09°42'N, 69°42'W). Yacambú National Park is at the edge of the Andes and contains numerous steep slopes and gorges with altitudes ranging from 500 to 2200 m a.s.l. (Martin & Geupel 1993). The primary vegetation type is cloud forest, but at the northern part of the park there is xeric vegetation, while at lower altitudes there are grasslands. The park shelters a diverse array of species, including some globally and locally endangered fauna as well as 254 identified bird species (ParksWatch 2002).

*Field data.* While searching for nests for another study, we found a Fawn-breasted Tanager nest in construction on 5 May 2009. The nest was located within a cavity in the wall of a park guard house, at a height of 2 m.

The house is located in the touristic part of the park in an open area with few trees and at an altitude of approximately 1000 m a.s.l. We monitored the nest every two to four days during the construction phase and then twice daily during laying, hatching, and fledging. Once the eggs hatched, we took the following measurements of nestlings every 2–3 days: body mass and length of tarsus, tail, folded wing length, full length of P8 (length of the 8<sup>th</sup> primary including the feather sheath and feather vanes), and broken length of P8 (same as above, but excluding feather sheath; see Table 1). We continued monitoring the nest until 11 June, when nestlings fledged. Behavioral observations of parental feeding trips to the nest were conducted with binoculars at a distance of 10 to 15 m.

TABLE 1. Morphological measurements of two Fawn-breasted Tanager nestlings (hatching to fledging) in Yacambú National Park, Venezuela. P8 full refers to full length of 8<sup>th</sup> primary including feather sheath and feather vanes; and P8 broken excludes the feather sheath.

Date (day)	Nestling	Mass (g)	Tarsus (mm)	Wing (mm)	P 8 full (mm)	P 8 broken (mm)	Tail (mm)
25 May (day 0)	1	1.923	-	-	-	-	-
	2	1.803	-	-	-	-	-
27 May (day 2)	1	-	5.67	8.54	-	-	-
	2	-	8.56	8.50	-	-	-
31 May (day 6)	1	13.479	13.93	18.46	5.04	5.04	1.15
	2	11.810	12.88	16.62	5.09	5.09	0.88
3 June (day 9)	1	15.760	17.03	31.46	16.87	16.87	5.21
	2	15.722	16.24	29.21	15.60	15.60	4.36
7 June (day 13)	1	19.802	19.64	47.75	34.98	34.98	13.60
	2	16.780	17.40	45.36	31.54	31.54	12.39
9 June (day 15)	1	18.457	20.87	54.66	39.78	39.78	21.75
	2	16.775	18.77	49.28	38.51	38.51	17.57
11 June (day 17)	1	18.340	18.64	58.98	44.52	44.52	24.57
	2	17.984	17.99	56.10	41.50	41.50	23.50

## RESULTS AND DISCUSSION

The cup-shaped nest had a diameter of approximately 7–9 cm and was composed of moss, sticks, grass, straw fragments, and colored threads (Fig. 1). Two eggs were laid between 11–12 May and incubation started immediately after. We could not define whether only females incubate or if both sexes do so since there is no sexual dimorphism in this species. The average weight of the eggs on the first day after laying was 2.49 g. Shortly before hatching, on day 12 after laying, the average weight of both eggs dropped to 2.22 g. The first egg hatched on the early morning of 25 May while the second egg hatched on the afternoon of 25 May. Thus, the incubation period was 14 days. On the day of hatching, the nestling from egg 1 weighed slightly more than that from egg 2 (difference of 0.120 g). Nevertheless, the second nestling had a larger body size as reflected in the tarsus measurements taken on day 2 after hatching (Table 1). However, from that day on, the

first-hatched nestling maintained an advantage in mass and all other morphological measurements. Both male and female fed the nestlings, usually during the morning. The nestlings fledged on 11 June so that the nestling period was 17 days. The difference in mass between the first and second hatchlings increased slightly during this period and persisted until fledging (0.356 g). On the day before fledging (Fig. 2), nestlings exhibited a dark grey plumage on the entire head, nape, and back, and had buffy cream colored breasts. Nestlings were capable of flight when they left the nest.

The temporal pattern found for this species is similar to others reported before (Isler & Isler 1987, Ridgely & Tudor 1989, Sick 2001), with a difference of only a few days relative to incubation and nestling periods. The natural materials used in the nest (grasses and moss) were similar to what has been described previously. However, we also found some differences towards nests described from more natural areas, since the



FIG. 2. Fawn-breasted Tanager nestling at 16 days of age, just prior to fledging.

present nest was built within a cavity on the wall of a house and was lined with colored threads probably found around the area open to tourists. Additionally, previous reports on the species' breeding biology indicated much higher nesting sites (up to 20 m; Isler & Isler 1987) whereas the nest we describe was positioned at only 2 m. The Fawn-breasted Tanager occupies open habitats, including cultivated areas and gardens, and may extend its range (Isler & Isler 1987), possibly aided by using artificial structures for nesting.

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