

Nesting and general behaviour of Hooded Tanager *Nemosia pileata* in French Guiana and Surinam

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Le Tangara coiffe-noire *Nemosia pileata* est assez rare en Guyane française⁹, mais plus commun au Suriname³. Nous relatons la découverte de deux nids à La Digue à Awala-Yalimapo (05°43'N 53°55'W) en Guyane française où l'espèce occupe les lisières d'abattis sur des cordons dunaires boisés anciens, mais aussi le cordon de front de mer, ainsi qu'un nid à Meerzorg près de Paramaribo (05°49'N 55°08'W) au Suriname où l'espèce occupe des plantations abandonnées. Les nids à Awala-Yalimapo étaient installés dans des *Cecropia* en bord de piste à une hauteur de 8.0 à 8.5 m et ont été abandonnés pour des raisons inconnues. Le nid à Meerzorg était construit dans un arbre feuillu non identifié à une hauteur de 8 à 10 m. Le nid est une fragile coupe de brindilles sèches, de vrilles et de toiles d'araignées. Seule la femelle couve. Les dates des nidifications indiquent que sur le plateau des Guyanes le Tangara coiffe-noire niche pendant deux périodes, durant « le petit été de mars », une courte période sèche en mars à avril au c ur de la grande saison des pluies, et durant la saison sèche d'août à décembre. Les juvéniles sont uniformément bleutés avec des pattes rose-orange et l'iris brun pâle. Pendant des interactions intraspécifiques entre mâles, femelles et juvéniles, les oiseaux prennent une posture cambrée, la tête et la queue dressées.

Although Hooded Tanager *Nemosia pileata* is widespread in South America east of the Andes⁸, little is known about the species. We present here observations on the species' general behaviour, on two nests found in French Guiana, at Awala-Yalimapo (05°43'N 53°55'W), and another in Surinam, at Meerzorg, near Paramaribo (05°49'N 55°08'W), and describe the juvenile plumage.

Habitat

In French Guiana the species is rare in old mangrove and the canopy of primary forest in humid areas and alluvial valleys⁹. It is very rare and local in the canopy of *terra firme* forest, e.g. around Saint-Eugène (04°51'N 53°04'W), near Petit Saut barrage (O. Claessens in litt. 2005). At Awala-Yalimapo, *N. pileata* frequents edges of forest on old sand ridges. Principal tree species in these forests are: *Parinari campestris*, *Tapirira guianensis*, *Protium heptaphyllum*, *Simarouba amara* and *Oenocarpus bacaba*. Preferred habitats are semi-open areas interspersed with Amerindian slash-and-burn fields. It also frequents low trees on recently formed coastal dunes where *Hymenaea courbari*, *Protium heptaphyllum*, *Astrocaryum vulgare*, *Eugenia wulfschlaegeliana* and *Cereus hexagonus* dominate the vegetation². Hooded Tanagers are mostly observed in groups of 2–5, moving through tree crowns. They often forage at lower levels in open crowns of fast-growing *Cecropia* trees, systematically inspecting leaves for insects.

In Surinam, the species is common in *Avicenna* mangroves, on wooded sand ridges, in coffee and

other plantations, and in gardens in the coastal region. It has not been found in savanna forests and in more accessible inland forests, and must be uncommon if present in the interior³.

Habitats at Awala-Yalimapo and Meerzorg correspond with this tanager's preferences in Colombia and Venezuela^{4,5,7}.

Nest and reproduction

On 3 February 2004, AR, Claudine Bouffet and Yves Kaiser discovered a nest of Hooded Tanager at Awala-Yalimapo (Fig. 1), a village in north-west French Guiana near the Maroni estuary and the border with Surinam. The nest was c.8.5 m high in the fork of a *Cecropia* tree, total height above ground c.12 m, growing near a dirt road. Its crown was relatively open and the nest was in full sunlight most of the day. From the ground, the cup-shaped nest appeared to be constructed of dry weeds, tendrils of creepers and spiderwebs. The structure appeared fragile. When the incubating female was absent, one could see through the base of the nest.

The male was seen once at the nest, on 3 February, just prior to incubation. Both sexes are known to construct the nest³. On 5–16 February the female was observed incubating the eggs, but on the last date the nest was found destroyed, with only a few dry weeds remaining in the tree fork. Twice while the female was incubating, a male, accompanied by an immature male, was observed foraging in the nest tree, in nearby bushes and in *Cecropia* trees. On 10 March 2004, a female was seen feeding a juvenile in low, c.3 m-high, bushes,

c.100 m from the nest tree. Subsequently, on 26 and 29 March 2005, a pair of Hooded Tanagers was seen feeding a single juvenile in a *Cecropia* in the same area.

On 4 February 2007, AR and Marion Rodet discovered a female Hooded Tanager constructing a nest, c.8 m high in a fork of a *Cecropia* (Fig. 2). The choice of site, materials used and nest structure were similar to the nest discovered in February 2004. Daily visits to the nesting area proved that the nest was abandoned for unknown reasons prior to completion.

On 29 October 2007, SLH discovered a nest of a Hooded Tanager c.8–10 m up in a slender, unidentified, broadleaf tree, with foliage mainly at its top, in an area of neglected coffee, citrus and cacao plantations near Meerzorg, which is just east of the Surinam River and opposite Paramaribo. The nest was positioned atop a small branch and next to the main trunk. It was rounded and appeared to be mostly a cup of plant tendrils, some looped over two narrow side branches that provided additional support for the fragile structure. The nest tree was entirely isolated by a gap of at least 3–4 m, a distance probably sufficient to prevent the numerous, predominantly arboreal, omnivorous Squirrel Monkeys *Saimiri sciureus* in the area from reaching it, unless they descended to the ground first. Only the incubating female was observed, but a male did visit the nest tree once, briefly approaching to within c.0.2 m of the nest.

Breeding seasons and breeding success

At Awala-Yalimapo, nesting activities were noted in February–March. Although the long wet season in French Guiana approximately occupies December–July, a drier period of c.2–3 weeks usually occurs in March–April. Insectivores often nest during this short dry season, taking advantage of the abundant insects and temporarily drier weather, which may improve reproductive success.

In Surinam, nest building has been observed on 12 August, an occupied nest found on 26 December, a recent fledgling seen on 2 February³ and now a nest with an incubating female on 29 October. In Venezuela, fledglings have been observed in October¹.

Observations in French Guiana, Surinam and Venezuela suggest that *N. pileata* could have two breeding seasons in the Guiana Shield, one in the short dry season (March–April) and the other in the longer dry season (August–December), probably continuing well into the rainy season or, alternatively, breeding may be protracted, occurring most of the year except during the wettest months.

Although juveniles are regularly observed, not all nests are successful. For example, those

constructed in the open crowns of *Cecropia* or other trees must be especially vulnerable, being easily detected and predated by avian and mammalian predators.

Juvenile plumage

Juveniles (Fig. 3) are entirely pale blue with rose-orange legs and feet (orange-yellow in adults), and pale brown irides (yellow in adults). The pattern is rather uniform, lacking the contrasting blue-and-white coloration of the head and white loreal streak of adults. The underparts are bluish grey and lack the pale buff tinge to the breast of females. Juveniles have conspicuous pale gape flanges on fledging.

Intraspecific behaviour

All intraspecific behaviour described was observed in French Guiana. On 14 March 2004, we twice observed intraspecific behaviour in the area of the first nest described above. During the first, a female perched a few centimetres from a male, c.2 m high in a *Cecropia*. Both assumed a swayback posture, with head, neck and tail held up, facing each other for c.10 seconds while uttering a series of sharp trills, before flying off. Later the same day, two males exhibited similar behaviour in the open crown of a *Cecropia*, one an adult male and the other a subadult male (incomplete black cap and rose-orange feet). They hopped from perch to perch uttering sharp trills, their flank-feathers fluffed, flicking the wings, without, however, becoming really aggressive. A third adult male observed them from a perch c.60 cm higher in the same *Cecropia*. After 3–4 minutes, a Blue-grey Tanager *Thraupis episcopus* arrived and the interaction ceased.

On 4 February 2007, while observing the incubating female, a small flock of three males passed through the *Cecropia* crown. When one approached the nest within c.30 cm, the female adopted a swayback posture. During observations over the following days, at least two pairs and some lone Hooded Tanagers were seen in the nesting area, but no intraspecific interactions were observed.

The interactions described above are a form of agonistic behaviour⁶. The typical swayback posture is a threat posture often seen, e.g., in *Tachyphonus*, *Ramphocelus*, *Thraupis* and *Tangara* species. Such behaviour may occur between adults, juveniles and adults, or males and females. The reason for the agonistic behaviour described here is unclear. As tanagers are not especially territorial⁸, the interactions could have been initiated by a dispute over food or an adult male chasing away juvenile male offspring.



Figure 1. Incubating female Hooded Tanager *Nemosia pileata*, Awala-Yalimapo, French Guiana, 3 February 2004 (Frédéric Le Gouis)



Figure 2. Nest of Hooded Tanager *Nemosia pileata* under construction, Awala-Yalimapo, French Guiana, 6 February 2007 (Alexandre Renaudier)

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Figure 3. Juvenile Hooded Tanager *Nemosia pileata*, Awala-Yalimapo, French Guiana, 29 March 2005 (Alexandre Renaudier)

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