

# First description of the nest of the Yellow-eared Spiderhunter *Arachnothera chrysogenys*

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## INTRODUCTION

Spiderhunters are generally known to build their nests, with or without an entrance tunnel depending on the species, on the under-surface of large leaves, especially those of banana or wild ginger plants. These nests are attached to the underside of such leaves by spider silk ‘stitching’ (Wells 2007). The available literature provides limited information on the nesting of the Yellow-eared Spiderhunter *Arachnothera chrysogenys*, merely suggesting that it might be stitched under a large leaf like a typical spiderhunter nest, or that it might resemble the nests of sunbirds (Cheke & Mann 2001, Wells 2007). In Peninsular Malaysia, Wells (2007) stated that there has been ‘no authentic description’ of a nest for the species. Of five nests reported to be of this species, two were subsequently re-identified as those of the Spectacled Spiderhunter *A. flavigaster* and one of the Long-billed Spiderhunter *A. robusta*. Another may also have been of a Spectacled Spiderhunter, while the last remains uncertain (Wells 2007). This short note describes an active Yellow-eared Spiderhunter nest for the first time, and provides specific details on the construction of the nest and the early stages of occupation.

## OBSERVATIONS

The nest was first observed on 20 July 2014 at the Kledang-Sayong Forest Reserve, Ipoh, Perak, Malaysia. The area surrounding the nest location was primary dipterocarp forest. Two adult Yellow-eared Spiderhunters were observed carrying nesting material to a site completely embedded in the vegetation supporting the nest, which hung 7–8 m above the forest floor. The tree was overgrown with numerous epiphytes, including mistletoes, wild orchids, creepers and other plants. The nest was built inside a mass of epiphytes attached to a dead, broken branch of the tree (Plate 1). The branch was still connected to the main tree by vines. It was mobile but appeared secure. The nest entrance was circular, large and located at the upper aspect of the supporting vegetation.

The birds were very active in nest construction and were seen bringing nesting material every 0.5–5 minutes during a two-hour observation period. Both adults were involved in nest-building activities (Plate 2). One adult would spend more time in the nest, pressing down the nesting material and using its body and beak to shape the nest. There were some pauses during nest-building and these may have been because the birds went to forage. No other bird was observed approaching the nest. More than 40 nest construction visits were observed over the two-hour period. Among the nesting material brought were spiders’ webs (more than one third of visits) (Plate 3), dried leaves, dried ‘veins’ of leaves, moss (Plate 4), dried fungi, netted ferns/fungi and dried Dragon’s Scale Fern *Pyrrosia piloselloides*.

Three further visits were made to the nesting site on 29 and 31 July and 5 August. By 29 July the nest was complete and both parents were actively incubating (Plates 5 & 6). Two incubation swaps between the pair over the space of two hours were observed. During a final visit to the site on 10 August, the nest was no longer present and had possibly been destroyed by a severe storm the night before. Construction on a broken branch may have rendered the nest vulnerable to the storm. It was not possible to find remnants of the nest on the forest floor.

## DISCUSSION

It is often assumed that all spiderhunters build similarly structured nests on the under-surfaces of leaves (Cheke & Mann 2001). The shape and structure of the Yellow-eared Spiderhunter’s nest documented here is unusual because it does not conform to this nest style. A search of the peer-reviewed literature did not reveal any information on the description of the Yellow-eared Spiderhunter’s nest. However, an image uploaded to the online platform Flickr on 8 July 2015 (Sgijk 2015) showed a similarly structured Yellow-eared Spiderhunter nest under construction at Panti Forest Reserve, Johor, Malaysia. The nest observed at Panti was suspended about 10 m above the ground. During those observations, a pair of spiderhunters was observed for about two hours bringing various nesting materials such as spider webs, moss and twigs to the nest.

Moyle *et al.* (2011) analysed the phylogenetic relationships of spiderhunters and noted a clade of three closely-related taxa consisting of one widely distributed species (Yellow-eared Spiderhunter), one endemic to the mountains of Borneo (Whitehead’s Spiderhunter *A. juliae*) and one endemic to the Philippines (Naked-faced Spiderhunter *A. clarae*). Assuming that the phylogenetic relationships among the three species offered clues to the nest-building behaviour of each species, I searched for additional documentation of the nests of the other two species to make comparisons.

There is at least one documentation of a nest of the Naked-faced Spiderhunter based on an image taken in Mindanao, Philippines (Foley 2014). The nest structure of the Naked-faced Spiderhunter appears very similar to the one reported here for the Yellow-eared Spiderhunter. Similarly, the closely-related Whitehead’s Spiderhunter was described to build a nest similar to that of the Yellow-eared Spiderhunter, consisting of a bowl lined with fine bark material inside a naturally occurring hanging ball of moss 19 m above the ground in a large tree (Brady & Burner 2015). Additionally, there are reports of a nest of Whitehead’s Spiderhunter observed by J. Babbington in 1992 on Gunung Kinabalu in Sabah which was more than 40 m above the ground and was described as ‘football-sized’, apparently made of leaves and twigs and attached to a thin dangling branch (Clive Mann, pers. comm. 2020).

My observations, in addition to reports of others (e.g. Foley 2014, Brady & Burner 2015), suggest that these three closely-related spiderhunters do not make their nests under leaves, unlike other spiderhunter species, but instead build similarly structured nests that are embedded in supporting vegetation (e.g. a mass of epiphytes), often quite high up in trees. Such a nest structure could potentially offer added protection against predation, especially by arboreal mammals.

## REFERENCES

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**Plate 1.** Yellow-eared Spiderhunter *Arachnothera chrysogenys* nest in dense epiphytes attached to a broken tree branch, 20 July 2014.



**Plate 2.** Both adults engaged in nest construction, 20 July 2014.



**Plate 3.** Adult bringing nesting material, in this case spider's web, 20 July 2014.



**Plate 4.** Adult bringing nesting material, in this case moss, 20 July 2014.



**Plate 5.** Yellow-eared Spiderhunter incubating, 29 July 2014.



**Plate 6.** Side view of completed nest with Yellow-eared Spiderhunter incubating (beak visible on the right-hand side), 29 July 2014.

ALL IMAGES TAKEN AT KLEDANG-SAYONG FOREST RESERVE, IPOH, PERAK, MALAYSIA, BY AMAR-SINGH HSS.