

A Kopstein's bronzeback snake at a wasp nest

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Subjects: Kopstein's bronzeback, *Dendrelaphis kopsteini* (Reptilia: Squamata: Colubridae);
Paper wasp, *Ropalidia sumatrae* (Insecta: Hymenoptera: Vespidae).

Subjects identified by: Nick Baker.

Location, date and time: Singapore Island, Thomson Nature Park; 31 August 2020; 1731-1820 hrs.

Habitat: Secondary forest.

Observer: Nick Baker.

Observation: At 1731 hrs, a Kopstein's bronzeback, with an estimated total length of 1 m, was spotted with its head and the front part of its body inside a nest of the paper wasp, *Ropalidia sumatrae*. (see Soh et al., 2016). The nest was located 5 metres up on a tree trunk, and near a stream (Fig. 1). The snake's body was slowly moving forward into a cavity within or behind the wasp nest. At 1736 hrs, the snake's head and anterior part of its body started to emerge from the opposite side of the wasp nest (Fig. 2).

By 1738 hrs, half of the snake had emerged from the wasp nest. Wasps could be seen on the head, neck and anterior part of the snake's body. Some of the wasps had the tip of their abdomen in contact with the snake's skin, and it is presumed that they were stinging the snake (Fig. 3). At this point, the snake was moving very slowly. By 1757 hrs, the snake had stopped moving entirely and was hanging limply from the wasp nest (Fig. 4). It was observed motionless up till 1820 hrs when the observer left.

The observer visited the wasp nest the following morning, but the snake could not be found.

Remarks: The featured observation is interesting because it raises some questions, and is open to various speculations. However, none of which can be proven from lack of evidence.

Why did the snake enter the wasp nest? As bronzeback snakes do not eat wasps, they are assumed to avoid wasp nests under normal circumstances. That this snake had stuck its head deep into the nest, or a cavity behind the nest, could suggest that it was in pursuit of prey, perhaps a small arboreal lizard, that had taken refuge inside the wasp nest. The snake could have seen the prey entering the nest, or it could have tracked the prey by scent.

Was the snake fatally stung by the wasps? Curiously, there was a relatively small number of wasps on the snake, and the snake did not cause most of the wasps to descend on it. If the snake was being stung, it (strangely) did not react violently as the stings are expected to be painful, and the snake would have been desperate to escape. However, it is assumed that the snake was getting stung because it became sluggish, and then motionless.

What happened to the snake? At least three possibilities: 1) It died and dropped to the forest floor where it was consumed by a scavenger. 2) It died and remained stuck to the nest, and was removed by an arboreal predator or scavenger. 3) The snake did not die. It could have been temporarily incapacitated by the wasp stings, recovered, and left by itself.

The author and his wife have encountered Kopstein's bronzeback in Thomson Nature Park and along Old Upper Thomson (sometimes as roadkill) on many occasions (e.g. Baker, 2020). It appears to be one of the most commonly encountered snakes, and by far the commonest species of *Dendrelaphis* in the area.

References:

- Baker N (2020) Predation of brown tree skink by a Kopstein's bronzeback snake. Singapore Biodiversity Records, 2020: 13-14.
- Soh ZWW, Ngiam RWJ, Ng W & Ngon SK (2016) Paper wasp *Ropalidia sumatrae* nest in Central Catchment Nature Reserve. Singapore Biodiversity Records, 2016: 151-152.



Fig. 1. 1731 hrs. Snake sticking its head deep into the wasp nest. side of the nest.



Fig. 2. 1736 hrs. Snake's head emerging from the opposite wasp nest.



Fig. 3. 1738 hrs. Some wasps appear to be stinging the snake, but did not elicit a violent response from the snake.



Fig. 4. 1757 hrs. The snake hanging limp and motionless from the wasp nest.

Photographs by Nick Baker