

Biodiversity Record: Blue bronzeback feeding on spotted house gecko at MacRitchie forest

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Subjects: Blue bronzeback, *Dendrelaphis cyanochloris* (Reptilia: Squamata: Colubridae);
Spotted house gecko, *Gekko monarchus* (Reptilia: Squamata: Gekkonidae).

Subjects identified by: Alex Figueroa and Joys Tan.

Location, date and time: Singapore Island, Central Catchment Nature Reserve, MacRitchie forest at Thomson Ridge, Prunus Boardwalk; 20 September 2021; 1216–1236 hrs.

Habitat: Edge of secondary forest.

Observers: Alex Figueroa and Joys Tan.

Observation: At 1216 hrs, the posterior end of a blue bronzeback of approximately 1.1 m total length was spotted wrapped around the trunk of a sapling, its anterior part stretched out across another sapling about 1 m above the forest floor (Fig. 1). Upon closer inspection, the snake was observed grasping in its jaws a spotted house gecko (of about 13 cm in total length) by the head (Fig. 2). The tail of the gecko was missing and its stump was covered in fresh blood (Figs. 2, 3), which suggests that the loss had occurred during the struggle that followed when the gecko was captured by the snake. The consumption phase proceeded very slowly while the snake, with the fore part of its body suspended in the air, was holding onto the gecko by its neck (Fig. 3). After five minutes of repositioning, the snake was able to shift the gecko onto a leaf, at which point the gecko's adhesive toe pads provided enough counter-friction to allow the snake to move its jaws over the gecko's mouth (Fig. 4). By then, 10 minutes had elapsed, and consumption was proceeding more quickly (Fig. 5). By the time the snake had swallowed the gecko's head, the gecko was no longer grasping onto the leaf (Fig. 6). At 1233 hrs, the snake began ascending a branch with only the gecko's rear legs sticking out of its mouth (Fig. 7). The snake ascended about 1 m up the tree, where it moved onto a horizontal branch about 2 m off the ground. There, it continued to ingest its prey (Fig. 8), and fully consumed the gecko at 1236 hrs (Fig. 9). The snake remained motionless at the spot when the observers left shortly after. The entire predation event lasted about 20 minutes, from when the snake was first spotted, to when the snake had fully consumed the gecko.

Remarks: Not much is known regarding *Dendrelaphis cyanochloris* in Singapore as it is a rare species (Baker & Lim, 2012) known only from a handful of reported observations (Baker, 2005; Leong, 2005; Thomas, 2014; Law et al., 2016; Teo & Thomas, 2019). The presence of this species in Singapore was first documented in 2005 from a roadkill specimen found at Mandai Track 15 in October 2002 (Leong, 2005). On the contrary, *Gekko monarchus* is a locally widespread and common species that occurs in forests as well as in urban areas (Baker & Lim, 2012). This may be the first published observation in Singapore of a *Dendrelaphis cyanochloris* consuming prey.

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Fig. 1. In situ lateral view of a *Dendrelaphis cyanochloris* wrapped around a tree sapling and holding onto a *Gekko monarchus* by the head. The heads of both snake and gecko are hidden behind the leaf indicated by the arrow. (Photograph by: Joys Tan).



Fig. 2. The snake grasping the gecko by its neck. (Photograph by: Alex Figueroa).



Fig. 3. The snake maintaining its hold on the gecko as the latter clings with its feet to a leaf. (Photograph by: Alex Figueroa).



Fig. 4. The snake beginning to consume the gecko. (Photograph by: Alex Figueroa).



Fig. 5. Close-up of the snake after having swallowed the gecko's head. (Photograph by: Alex Figueroa).



Fig. 6. Close-up of the snake consuming the torso of the gecko. Note that the prey is no longer clinging to the leaf. (Photograph by: Alex Figueroa).



Fig. 7. The snake ascending a branch with the gecko's hind legs sticking out of its mouth. (Photograph by: Alex Figueroa).



Fig. 8. Latero-ventral view of the snake resting on a horizontal branch, about to swallow the gecko's hind limbs. (Photograph by: Alex Figueroa).



Fig. 9. Latero-ventral view of the snake shortly after it finished consuming its prey. (Photograph by: Alex Figueroa).