

Biodiversity Record: Malayan water monitor preying on Gerard's water snake

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Subjects: Malayan water monitor, *Varanus salvator* (Reptilia: Squamata: Varanidae); Gerard's water snake, *Gerarda prevostiana* (Reptilia: Squamata: Homalopsidae).

Subjects identified by: Koh Ke Han.

Location, date and time: Singapore Island, Sungei Buloh Wetland Reserve; 6 November 2022; around 1400 hrs.

Habitat: Mangrove forest.

Observers: Koh Ke Han and others.

Observation: A juvenile Malayan water monitor of about 60 cm total length was spotted with its jaws clamped onto the neck of a Gerard's water snake, which was estimated to be around 30 cm in length (Fig. 1). The snake was still alive and had its body coiled around the neck and body of the lizard. After maneuvering the head of the snake in between its jaws (Fig. 2), the lizard chewed the head of the snake for some time until the snake became visibly weaker and loosened its hold on the lizard (Fig. 3). Then, the lizard let go of the snake's head and held on to various parts of the snake's body and proceeded to flail the snake about (Fig. 4). Despite its injuries, the snake attempted to escape into nearby crevices or hold onto mangrove roots, but was pulled away by the lizard. This was repeated several times until it saw an adult monitor of about 1 m total length came into the vicinity. This appeared to spook the juvenile lizard. Biting the snake at the middle of its body, the juvenile monitor hastily carried its prey up a tree (Fig. 5). At this point, the snake was still alive but eventually became limp and motionless as it was held in the tree at a height of about 4 to 5 m. The snake was then consumed head first by the juvenile monitor. The entire encounter lasted about 30 minutes.

Remarks: This observation shows that juvenile monitor lizards do actively hunt and eat smaller reptiles, and that they, in turn, are vulnerable to competition and possibly predation by their larger conspecifics. As shown here, one of the strategies of avoiding conflict or being eaten, is to climb trees. Younger and smaller individuals are likely to be faster and more agile at this feat.

Malayan water monitors do not appear to be particularly selective with their food. They eat all manner of small animals alive or dead, that are obtained by hunting or scavenging. The Gerard's water snake is a locally uncommon semi-aquatic snake of the mangrove that seems to specialize in eating newly moulted crabs (see Baker & Lim, 2012). This observation may be the first time a *Varanus salvator* is recorded subduing and eating a *Gerarda prevostiana* (see Murphy, 2007).

Literature cited:

Baker N & Lim KKP (2012) Wild Animals of Singapore. A Photographic Guide to Mammals, Reptiles, Amphibians and Freshwater Fishes. Updated edition. Draco Publishing and Distribution Pte. Ltd. and Nature Society (Singapore), Singapore, 180 pp.

Murphy JC (2007) Homalopsid Snakes. Evolution in the Mud. Krieger Publishing Company, Malabar, Florida, viii + 249 pp.



Fig. 1. Juvenile monitor with its jaws clamped onto the neck of a Gerard's water snake, which responded by throwing coils over the lizard's neck and body.

Fig. 2. Having maneuvered the head of the snake between its jaws, the monitor began chewing on it.

Fig. 3. The snake became weak and loosened its coils on the monitor.

Fig. 4. Clamping onto the middle part of the snake, the monitor proceeded to flail the snake about.

Fig. 5. Monitor hastily carrying its prey up a tree with the appearance of a larger lizard in the vicinity.

(Photographs by: Koh Ke Han)