

Biodiversity Record: Predation of fruit bat by Wagler's pit-viper

Craig Justin Tan^{1*} & Serene H. Y. See²

¹Mandai Wildlife Group, 80 Mandai Lake Road, Singapore 729826; Email: craigjustintan@gmail.com (* corresponding author)

²Clementi Street 14, Singapore 120103; Email: serene0see@gmail.com

Recommended citation. Tan CJ & See SHY (2021) Biodiversity Record: Predation of fruit bat by Wagler's pit-viper. Nature in Singapore, 14: e2021128. DOI: 10.26107/NIS-2021-0128

Subjects: Wagler's pit-viper, *Tropidolaemus wagleri* (Reptilia: Squamata: Viperidae);
Lesser dog-faced fruit bat, *Cynopterus brachyotis* (Mammalia: Chiroptera; Pteropodidae).

Subjects identified by: Craig Justin Tan.

Location, date and time: Singapore Island, Old Upper Thomson Road, 40 m from the entrance to the Macaque Trail of Thomson Nature Park; 7 July 2021; around 2000–2030 and 2245 hrs.

Habitat: Edge of mature secondary forest, on a *Ficus fistulosa* tree.

Observers: Craig Justin Tan and Serene See.

Observations: At 2000 hrs, the authors came upon an adult female Wagler's pit-viper of around 70 cm total length, dangling from a branch about 4 m off the ground with a fruit bat in her jaws. The authors did not witness the snake capturing the bat, and the bat had appeared dead when it was first noticed. The pit-viper held the head of the bat in her mouth, and was walking her fangs down the nape of the bat (Fig. 1). Between 2000 and 2030 hrs, the pit-viper did not swallow the bat, but repositioned it in her jaws three times. At one point, she was holding on to the bat by one of its wings. Concerned that they may have disturbed the viper in her feeding, the authors left. They returned to the spot at 2245 hrs, but found that the snake had not yet ingested the prey. The bat remained in the jaws of the viper when the authors left shortly after. It is not known if this viper did eventually ingest her prey.

Remarks: Wagler's pit-vipers feed on small vertebrates (Baker & Lim, 2012: 120) such as rodents and birds (Das, 2021: 148). This predation event is interesting in that it is probably a rare documentation of a fruit bat being taken by a Wagler's pit-viper. It is believed that the snake had struck and caught the bat as it was flying or hovering near, very likely attracted to the figs on the tree trunk (Fig. 1).



Fig. 1. Wagler's pit-viper feeding on a lesser dog-faced fruit bat along Old Upper Thomson Road, Singapore. (Photograph by: Craig Justin Tan).

The curious thing about the featured predation event is that the snake did not succeed in ingesting the prey after two hours, despite repositioning the prey with her jaws at least three times. For reasons unknown to the observers, she seemed to have great difficulty swallowing the bat.

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., Singapore, 180 pp.
Das I (2021) A Naturalist's Guide to the Snakes of Southeast Asia. 3rd Edition. John Beaufoy Publishing, United Kingdom, 176 pp.