

## Biodiversity Record: Prey of Wagler's pit-vipers in Singapore

Aman John, Koh Ke Han\*, Kripa Dubey & Yap Chuan Joo Gary

Email: [aman.john@gmail.com](mailto:aman.john@gmail.com) (Aman), [kohkehan@hotmail.com](mailto:kohkehan@hotmail.com) (\*corresponding author), [gnt7512@yahoo.com](mailto:gnt7512@yahoo.com) (Yap)

**Recommended citation.** Aman J, Koh KH, Dubey K & Yap CJG (2022) Biodiversity Record: Prey of Wagler's pit-vipers in Singapore. Nature in Singapore, 15: e2022115. DOI: 10.26107/NIS-2022-0115

---

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

**Subjects identified by:** Yap Chuan Joo Gary, Kripa Dubey and Kelvin K. P. Lim.

**Location, date and time:** Two separate observations on Singapore Island, at the north-western edge of the Central Catchment Nature Reserve; 25 March 2022 at around 2030 hrs; 13 August 2022 at around 2130 hrs.

**Habitat:** Mature secondary forest.

**Observers:** Yap Chuan Joo Gary, Aman John, Koh Ke Han and Kripa Dubey.

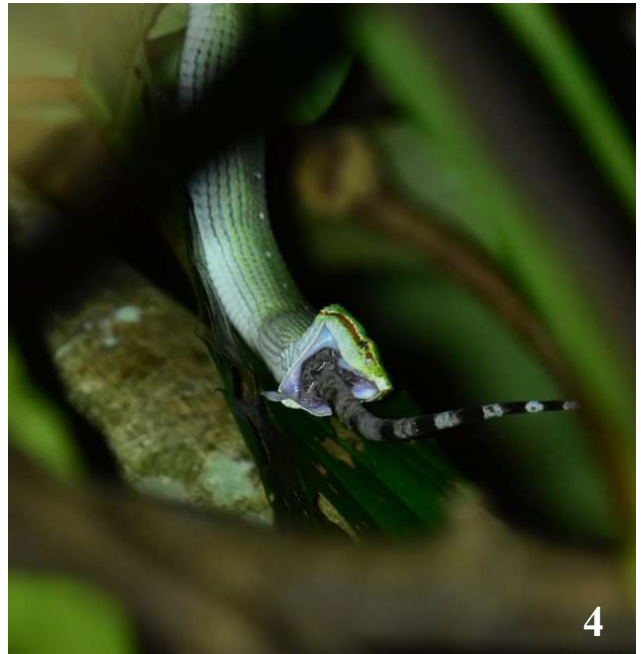
### Observations:

1. On 25 March 2022 at around 2030 hrs, Yap Chuan Joo Gary observed a male Wagler's pit viper in the act of swallowing a spotted house gecko. The viper, about 30–40 cm in total length, was perched about 2 m above the ground on a simpoh air tree. The gecko appeared to be dead as the snake was swallowing it head first (Figs. 1–4). The prey was fully ingested after about 30 minutes.
2. On 13 August 2022 at around 2130 hrs, a loud shriek alerted Aman John, Koh Ke Han and Kripa Dubey to investigate its source. They found a female Wagler's pit viper of about 60–70 cm in total length with a lesser dog-faced fruit bat in her mouth. The bat appeared to be dead when the observers arrived at the scene, which was about 5–10 minutes after they heard the shriek. The viper was perched in a fig tree at about 1.7 m above the ground. The prey was swallowed head first (Figs. 5–10), and was fully ingested under 5 minutes without any apparent difficulty (Figs. 11 & 12).

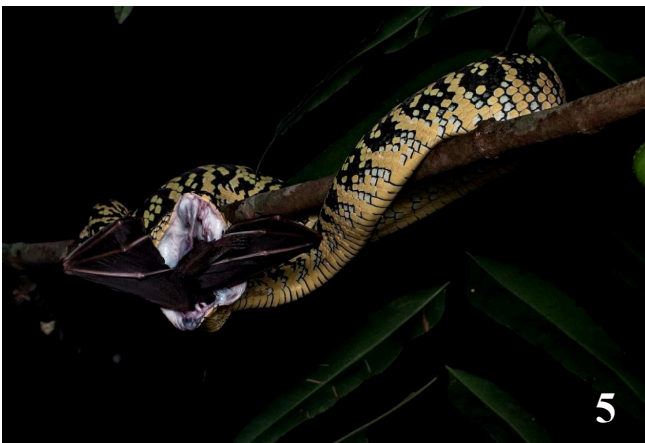
**Remarks:** The Wagler's pit-viper is sexually dimorphic, with the males maturing and remaining at a much smaller size than the females (see Baker & Lim, 2012). This size discrepancy directly influences the snakes' prey preferences. In Singapore, a male Wagler's pit-viper has been recorded feeding on a Malayan rock gecko (Law, 2020) and a larger female was observed attempting to consume a fruit bat (Tan & See, 2021). The present observations somewhat mirror the two earlier records. They show the tendency of male and juvenile female Wagler's pit-vipers to feed on lizards, and the larger and bulkier adult females to take on bats and possibly other larger prey.

### 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.
- Law IS (2020) Predation of Malayan rock gecko by Wagler's pit-viper. Singapore Biodiversity Records, 2020: 47–48.
- Tan CJ & See SHY (2021) Biodiversity Record: Predation of fruit bat by Wagler's pit-viper. Nature in Singapore, 14: e2021128.



Figs. 1–4. Male Wagler's pit-viper ingesting a spotted house gecko. (Photographs by: Yap Chuan Joo Gary)

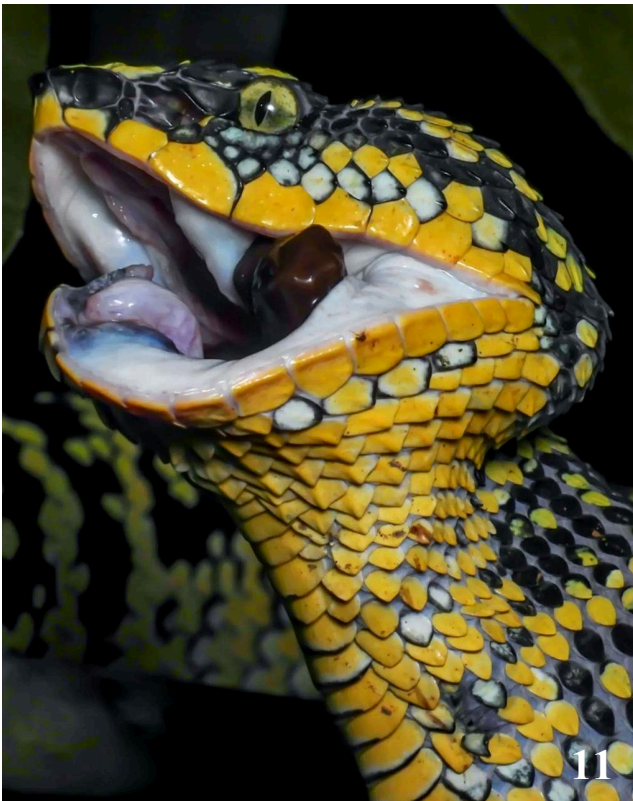
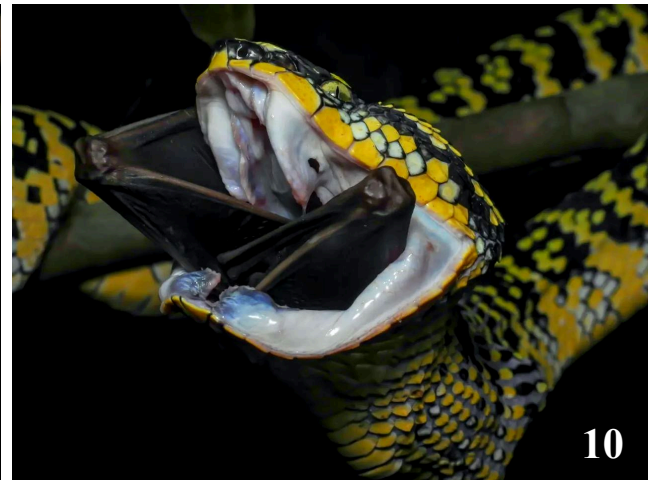


Figs. 5–6. Female Wagler's pit-viper in the act of swallowing a fruit bat. (Photographs by: Kripa Dubey).





Figs. 7–8. Female Wagler's pit-viper swallowing a fruit bat. (Photographs by: Aman John).



Figs. 9–12. Female Wagler's pit-viper fully ingesting a fruit bat. (Photographs by: Koh Ke Han).