

Biodiversity Record: A juvenile Asiatic softshell turtle at Upper Seletar

Chen Xuanhe* & Luqmanul Hakim Bin Othman

Email: xuanhezen@gmail.com (*corresponding author), luqmanulhakimtwgs@gmail.com

Recommended citation. Chen X & Luqmanul HBO (2024) Biodiversity Record: A juvenile Asiatic softshell turtle at Upper Seletar. Nature in Singapore, 17: e2024095. DOI: 10.26107/NIS-2024-0095

Subject: Asiatic softshell turtle, *Amyda cartilaginea* (Reptilia: Testudines: Trionychidae).

Subject identified by: Chen Xuanhe and Luqmanul Hakim Bin Othman.

Location, date and time: Singapore Island, Upper Seletar; 27 July 2024; around 0019 hrs.

Habitat: Freshwater stream with clear flowing water and sand substrate in swamp forest.

Observers: Chen Xuanhe, Luqmanul Hakim Bin Othman and Jay Lim.

Observations: A juvenile specimen was found submerged in the stream and buried within the substrate with only the anterior portion of its head protruding. It extended its neck to reach for air at the surface of the water (Fig. 1). The turtle was temporarily removed to have its entire body photographed (Fig. 2), and for measurements to be taken. It was 53 mm in carapace length, 48 mm in carapace width, 41 mm in plastron length and approximately 18 grams in weight. After that, the individual was promptly returned to the stream.



Fig. 1. Dorsal view of the subject's head in-situ showing multiple yellow spots. Fig. 2. Dorsal view of the subject ex-situ displaying the dark saddle-shaped band, a series of longitudinal ridges and yellow spots on its carapace (Photographs by: Chen Xuanhe).

Remarks: In Singapore, *Amyda cartilaginea* is regarded as a vulnerable species (Thomas et al., 2024) that is believed to consist of both native and introduced individuals (Figueroa et al., 2023 as *Amyda* cf. *cartilaginea*). The native population is probably restricted to water bodies in the Central Catchment Nature Reserve (Baker & Lim, 2012). The individual reported here is, therefore, likely to be part of the native population. It bears the prominent dark saddle-shaped band on the anterior half of its carapace, which is covered with small yellow spots, and a series of longitudinal ridges that break up into tubercles posteriorly (Fig. 2). Examples of *Amyda cartilaginea* with a similar colour pattern have been recorded from Lower Peirce forest (Baker, 2014) and Thomson Nature Park (Baker, 2020).

Amyda cartilaginea was recognized as a species complex by Fritz et al. (2014). Specimens from Peninsular Malaysia and Singapore were not examined in that study and their taxonomic status was not discussed, but the one herein featured, as well as those reported by Baker (2014, 2020), largely resemble the subspecies *Amyda cartilaginea maculosa* from western Borneo and eastern Sumatra. It remains to be seen if local individuals are genetically identifiable as that subspecies (see Figueroa et al., 2023 as *Amyda cf. cartilaginea*).

Literature cited:

- Baker N (2014) Asian softshell turtles at Lower Peirce forest. Singapore Biodiversity Records, 2014: 272.
- Baker N (2020) Asian softshell turtle at Thomson Nature Park. Singapore Biodiversity Records, 2020: 29.
- 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), 180 pp.
- Figueroa A, Low MEY & Lim KKP (2023) Singapore's herpetofauna: updated and annotated checklist, history, conservation, and distribution. Zootaxa, 5287: 1–378.
- Fritz U, Gemel R, Kehlmaier C, Vamberger M & Praschag P (2014) Phylogeography of the Asian softshell turtle *Amyda cartilaginea* (Boddaert, 1770): evidence for a species complex. Vertebrate Zoology, 64: 229–243.
- Thomas N, Law IS & Lim KKP (2024) Checklist of reptile species with their category of threat status for Singapore. In: Davison GWH, Gan JWM, Huang D, Hwang WS, Lum SKY & Yeo DCJ (eds.) The Singapore Red Data Book. Red Lists of Singapore Biodiversity. Third edition. National Parks Board, Singapore, pp. 672–674.