

Biodiversity Record: Malayan flat-shelled turtles at Nee Soon swamp-forest

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Subjects: Malayan flat-shelled turtle, *Notochelys platynota* (Reptilia: Testudines: Geoemydidae).

Subjects identified by: Law Ing Sind and Poh Faye Fann Gabrielle.

Location, dates and times: Singapore Island, Central Catchment Nature Reserve, Nee Soon swamp-forest; 9 March 2026 at around 1210 hrs, and 24 March 2026 at around 1630 hrs.

Habitat: Freshwater stream in swamp-forest (Figs. 1 & 2).



Fig. 1: Habitat where the female subject was observed submerged in a slow-flowing stream beneath the roots of *Pandanus*. Fig. 2: Habitat where the male subject was observed fully submerged by the edge of the stream. (Photographs by: Tan Robbin).

Observers: Tan Robbin, Poh Faye Fann Gabrielle, Dhanushri Lakshani Munasinghe and Low Bi Wei.

Observations: 1) An adult female of approximate 21 cm carapace length and 10 cm carapace width (Figs. 3 & 4) was observed submerged in a shallow, slow-flowing freshwater stream underneath a clump of *Pandanus* sp. (Fig. 1) on 9 March 2026. 2) An adult male of approximate 25 cm carapace length and 10 cm carapace width (Figs. 5 & 6) was observed two weeks later on 24 March 2026 in the same area, approximately 5 metres downstream from the first subject in moderate-flow conditions (Fig. 2).

Remarks: These sightings mark the first documented occurrences of *Notochelys platynota* in Singapore in 20 years, following the previous record from the Nee Soon Swamp Forest in 2006. The species was first recorded in Singapore in 1908, but was apparently not reported again in the country until 1990, after 82 years (Figuroa et al., 2023). In Singapore, it is regarded as ‘Critically Endangered’, and believed to be restricted to the Central Catchment Nature Reserve and the Western Catchment (Thomas et al., 2024; Figuroa et al., 2023). The species is distributed across Myanmar, Thailand, Malaysia and Indonesia, and listed as a ‘Vulnerable’ species (Kusrini et al., 2021).



Fig. 3. Dorsal view of the female. Fig. 4. Latero-frontal view of the female, noting the lack of distinct markings on her face. (Photographs by: Tan Robbin).



Fig. 5. Dorsal view of the male. Fig. 6. Latero-frontal view of the male, noting his yellow snout with a bright red tip. (Photographs by: Poh Faye Fann Gabrielle).

Notochelys platynota is a medium-sized turtle that reaches a maximum size of about 33 cm carapace length (Brophy & Ernst, 2004). This species is characterised by having 6–7 vertebral scutes and carapace with a flat dorsal surface (Law et al., 2025). It is omnivorous and typically inhabits streams and other shallow freshwater bodies. The swamp-forest stream habitat in which the featured two individuals were found has waters that are on the acidic side from deposits of organic detritus like leaf litter and the tannins that leach out of them (Ho et al., 2016).

Notochelys platynota exhibits sexual dimorphism, with males possessing a slightly concave plastron and relatively thicker tails compared to females, which have a flat plastron (Brophy & Ernst, 2004). In addition, carapace colouration differs between sexes and age classes. Males typically are buff to yellow brown irregularly mottled with darker brown. Females and immature individuals tend to be more uniform olive- to reddish-brown. The featured male has a distinctive yellow snout with a bright red tip (Figs. 5 & 6) which may be present during the breeding season.

These observations of two separate adult *Notochelys platynota* of different sexes within the same stream, albeit two weeks apart, provide encouraging evidence for the continued survival of this species in Singapore. It highlights the importance of conserving the Nee Soon swamp-forest, and further contributes to the findings of the Comprehensive Biodiversity Survey of the Central Catchment Nature Reserve.

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