

Biodiversity Record: New record of the moray eel, *Gymnothorax pictus*, in Singapore

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Recommended citation. Huang W-C & Tan R (2025) Biodiversity Record: New record of the moray eel, *Gymnothorax pictus*, in Singapore. Nature in Singapore, 18: e2025004. DOI: 10.26107/NIS-2025-0004

Subject: Peppered moray eel or paint-spotted moray eel, *Gymnothorax pictus* (Teleostei: Anguilliformes: Muraenidae).

Subject identified by: Wen-Chien Huang.

Location, date and time: Singapore Strait, East Coast Park off Bedok; 29 August 2011; around 0556 hrs.

Habitat: Marine. Intertidal sandy shore with scattered rocks covered in seaweed.

Observer: Ria Tan.

Observation: A large individual, estimated to be more than 60 cm in total length, was observed in very shallow water near the high-tide line (Figs. 1–3). It was highly active and occasionally moved out of the water.

Remarks: This appears to be the first record of *Gymnothorax pictus* in Singapore (see e.g., Fowler, 1938; Jaafar et al, 2024). Its presence there is expected because the peppered moray is widely distributed across the Indo-Pacific, from South Africa and the Red Sea, through Indonesia, the Philippines, Hawaii, to the eastern Pacific from Mexico to Panama (Smith & Böhlke, 2022). It is a diurnal species that inhabits shallow waters in intertidal zones, feeding primarily on crabs. This species of moray is well known for its dramatic behaviour, often leaping out of water to capture crabs and frequently exposing its entire body while hunting (Chave & Randall, 1971; Graham et al., 2009).

The colouration of *Gymnothorax pictus* varies greatly among individuals, and the patterns change with growth. Dark-greyish spots may be evenly distributed across the body, giving the fish a generally lighter appearance. Alternatively, some spots may cluster into 3–5 rows of large, rounded patches along the body. Despite this variation, *Gymnothorax pictus* can be easily identified and distinguished from other moray species by the presence of four or five symmetrical black spots around the margin of the eye (see Fig. 2; Chen et al., 1994; Smith et al., 2019). *Gymnothorax pictus* is a large moray with a relatively short and robust body, that possibly attains a total length of 140 cm (Smith & Böhlke, 2022).

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Fig. 1. Dorso-lateral view of *Gymnothorax pictus* out of the water in-situ. Fig. 2. Dorsal view of the eel's head showing five symmetrical black spots around the margin of the right eye. Fig. 3. Dorsal view of the eel. Note the left eye has four symmetrical spots around its margin (Photographs by: Ria Tan).