

Probable breeding pair of grouper

Subjects: Grouper, *Epinephelus* sp. (Teleostei: Serranidae).

Subjects identified by: Contributors and Kelvin K. P. Lim.

Location, date and time: Singapore Strait off the western shore of Singapore Island; 25 June 2015; 1149 hrs.

Habitat: Marine. Artificial coral reef, at depth of between 2 and 3 m.

Observers: Brian Cabrera & Desmond Ong.

Observation: Two individuals of at least 60 cm and 80 cm in total length were observed swimming around and interacting with each other in an apparently non-aggressive manner (Figs. 1 & 2).

Remarks: The exact identity of the featured fish could not be confirmed. The colour pattern on the body does not appear to match any of the known species in the Indo-Pacific area (see Allen & Erdmann, 2012; Craig et al., 2011). From the shape of the fish, the small white spots on the dark areas of the body and the dark markings on the fins, they may be the giant grouper, *Epinephelus lanceolatus* (see Craig et al., 2011: 168-170).

The exact purpose of the featured interaction between the two groupers is not clear. The actions between the two were apparently non-aggressive, and suggest courting behaviour. Although the giant grouper (*Epinephelus lanceolatus*) can be artificially reproduced in captivity, the breeding behaviour of wild fish is not known. The species grows to a recorded total length of 270 cm, and is thought to mature at around 129 cm (Craig et al., 2011: 168-170). If the two featured examples are giant grouper, this suggests that the species mature at a much smaller size. It has been suggested that many of the large-sized groupers form spawning aggregations (Craig et al., 2011: 170). In the present encounter, only two individuals were observed. It is possible the colour pattern on the featured fish is exhibited only during the breeding period.

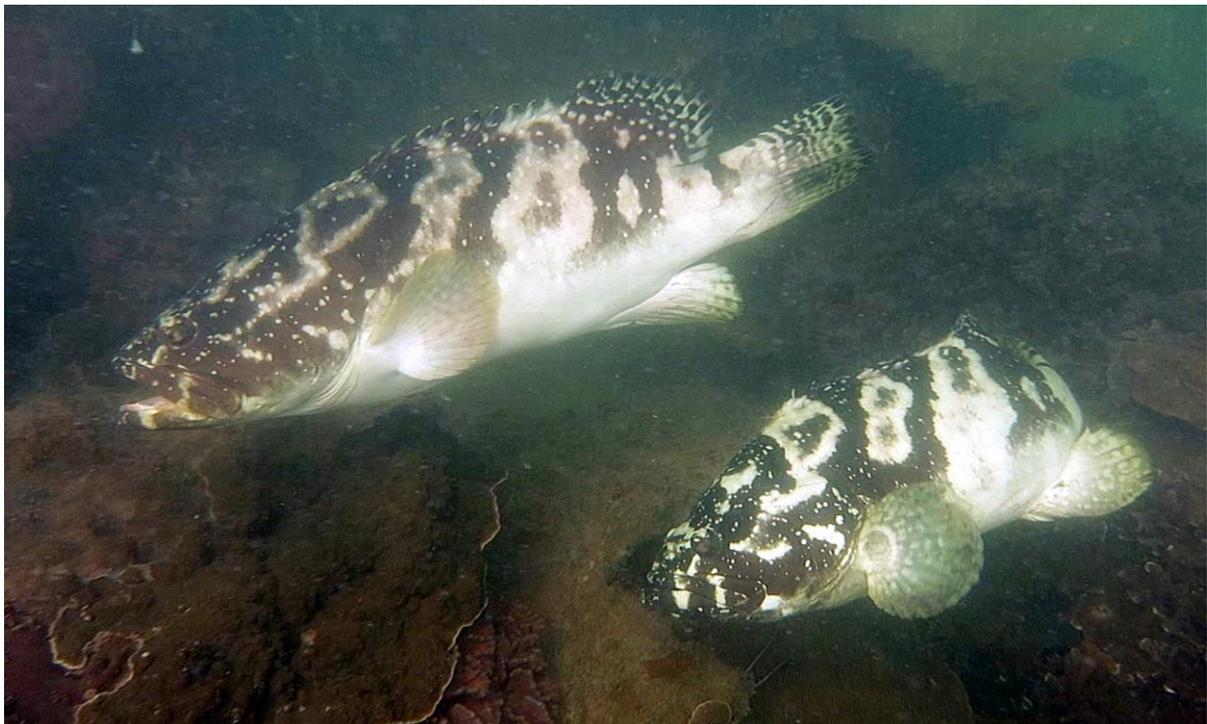


Fig. 1. The two groupers swimming in close proximity to each other. Photograph by Brian Cabrera.

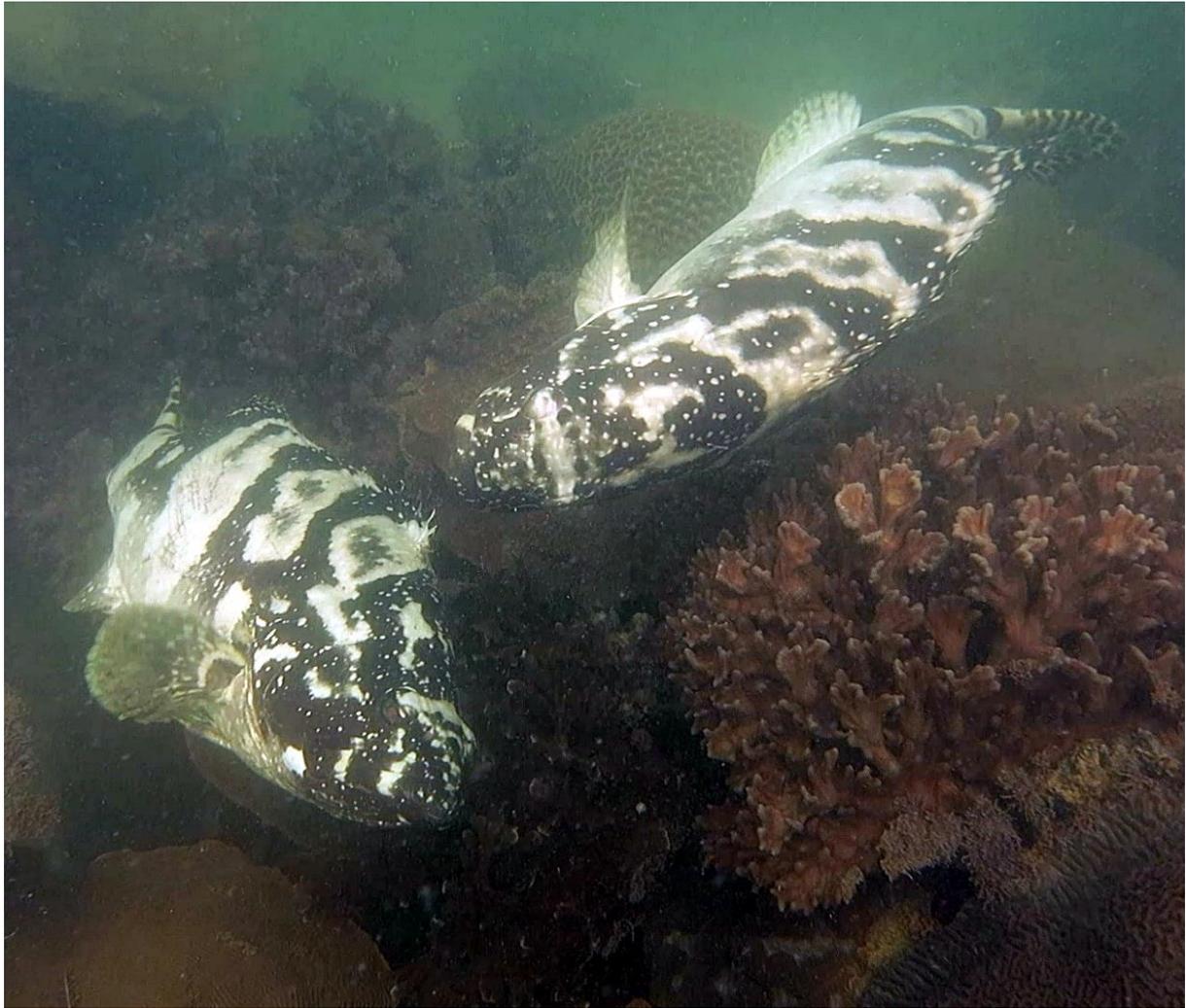


Fig. 2. One fish approaching the other swimming sideways. Photograph by Brian Cabrera.

References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies. Volume I*. Tropical Reef Research, Perth, Australia. xiii + 424 pp.
- Craig, M. T., Y. J. Sadovy de Mitcheson & P. C. Heemstra, 2011. *Groupers of the World. A Field and Market Guide*. NISC (Pty) Ltd, Grahamstown, South Africa. xix + 356 pp.

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