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Two syntopic walking catfishes at Upper Seletar

Subjects: Slender walking catfish, *Clarias nieuhofii* (Teleostei: Clariidae); Fig. 1.

Forest walking catfish, Clarias leiacanthus (Teleostei: Clariidae); Fig. 2.

Subject identified by: Contributor.

Location, date and time: Singapore Island, Upper Seletar Reservoir Park; 5 December 2009; 2244-2252 hrs.

Habitat: Small, shallow, freshwater stream at the edge of secondary forest.

Observer: Contributor with Vilma D'Rozario and others.

Observation: A large *Clarias nieuhofii* of about 40 cm total length was found at around 2244 hrs in a shallow pool of water fed by a small stream. It was partially covered by dead leaves that had accumulated at the bottom (Fig. 1). It stayed motionless for at least ten minutes, with a few (around 6) *Rasbora einthovenii* swimming around and over it, seemingly oblivious to the presence of the catfish. At 2252 hours, a *Clarias leiacanthus* appeared beside the rear flank of the *Clarias nieuhofii* (Fig. 2). The *Clarias leiacanthus* was considerably smaller, about 8 cm total length, and had apparently popped out from beneath the leaf litter.

Remarks: Both species of walking catfishes are similar in appearance, but *Clarias leiacanthus* has a distinctly shorter body (Fig. 2, white arrow points to the rear end of its dorsal fin) with the rear ends of its dorsal and anal fins separate from the caudal fin. *Clarias nieuhofii* has a comparatively longer body, and the rear ends of its dorsal and anal fins are partially fused to the caudal fin near the base (Baker & Lim, 2012: 39). Although both species are nocturnally active, carnivorous, and inhabit shaded forest streams with acidic waters, it is not known how the two syntopic (occurring in the same habitat) species are partitioned in their niche preferences.

Clarias nieuhofii is regarded as 'critically endangered' in Singapore (Lim et al., 2008: 149) but its apparent rarity could be due to its nocturnal and secretive habits. Both Clarias nieuhofii and Clarias leiacanthus are listed as 'restricted to a few areas and rare' in Baker & Lim (2012: 157). On Singapore Island, these two species have never been found outside the Central Nature Reserves, and their survival there appears to be dependent on relatively undisturbed forest streams with clean water. Apart from Singapore Island, Clarias nieuhofii has also been reported from Pulau Tekong (Baker & Lim, 2012: 39).

References:

Baker, N. & K. K. P. Lim, 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.

Lim, K. K. P., H. H. Tan & J. K. Y. Low, 2008. In: Davison, G. W. H., Ng, P. K. L. & H. C. Ho (eds.). *The Singapore Red Data Book. Threatened Plants & Animals of Singapore*. Second Edition. The Nature Society (Singapore). pp. 145-154.

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Fig. 1. Slender walking catfish Clarias nieuhofii with Rasbora einthovenii at 2244 hrs.



Fig. 2. Forest walking catfish Clarias leiacanthus in front of Clarias nieuhofii, at 2252 hrs.

Photographs by Kelvin K. P. Lim