

Non-native fishes observed in marsh pond at West Coast Park

Subjects: Mozambique tilapia, *Oreochromis mossambicus* (Teleostei: Cichlidae); Fig. 1.
Red tilapia, *Oreochromis* hybrid (Teleostei: Cichlidae); Fig. 2.
Mayan cichlid, *Cichlasoma urophthalmum* (Teleostei: Cichlidae); Fig. 3.
Three-spot cichlid, *Cichlasoma trimaculatum* (Teleostei: Cichlidae); Fig. 4.
Zebra tilapia, *Tilapia buttikoferi* (Teleostei: Cichlidae); Fig. 5.
African sharp-tooth walking catfish, *Clarias gariepinus* (Teleostei: Clariidae); Fig. 5.

Subjects identified by: Contributor.

Location, date and time: Singapore Island, West Coast Park, marsh pond near mouth of Pandan River, off Pandan Crescent; 16 June 2011; 1450-1500 hrs; 16 December 2013; 1030-1045 hrs.

Habitat: Semi-natural, tidal open marsh pond with brackish water, a sand-mud substrate and earth banks with mangrove vegetation.

Observer: Contributor.

Observation: A mixed assemblage of fish comprising of non-native species inhabiting brackish water was observed on two occasions. On 16 June 2011, a male *Oreochromis mossambicus* in breeding colours was displaying at its circular depression on the substrate (Fig. 1) and a group of four *Oreochromis* hybrid swam past in the shallows (Fig. 2). On 16 December 2013, a pair of *Cichlasoma urophthalmum* was observed at a depression on the mud, probably made by them for spawning (Fig. 3). In addition, a solitary *Cichlasoma trimaculatum* (Fig. 4), large numbers of *Tilapia buttikoferi* (single individual in Fig. 5), and three large *Clarias gariepinus* (between 30 and 80 cm total length) were seen in deeper waters. Among the alien species, native estuarine fishes such as grey mullet (*Liza* sp.) and tenpounder (*Elops haiwaiiensis*) were also noted.

Remarks: This appears to be the first record of the fish fauna inhabiting the brackish water marsh pond at West Coast Park. Except for *Cichlasoma trimaculatum*, all the non-native species have been recorded from reservoirs and other waterways in Singapore (Ng & Tan, 2010). *Cichlasoma trimaculatum*, which is used in the cultivation of the flowerhorn cichlid, seems to be a new record for Singapore.

Reference:

Ng H. H. & H. H. Tan, 2010. An annotated checklist of the non-native freshwater fish species in the reservoirs of Singapore. *COSMOS*. 6 (1): 95-116.



Fig. 1. A displaying male *Oreochromis mossambicus* on 16 June 2011. Photograph by Tan Heok Hui



Fig. 2. Red tilapia (*Oreochromis hybrid*) on 16 June 2011.



Fig. 3. Pair of *Cichlasoma urophthalmum* on 16 December 2013.



Fig. 4. A solitary *Cichlasoma trimaculatum* on 16 December 2013.



Fig. 5. *Clarias gariepinus* (70-80 cm total length) with *Tilapia buttikoferi* (above) on 16 December 2013.

Photographs by Tan Heok Hui

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