

Antagonistic behaviour of African walking catfish at Bishan Park

Subjects: African sharp-toothed walking catfish, *Clarias gariepinus* (Teleostei: Clariidae).

Subjects identified by: Tan Heok Hui.

Location, date and time: Singapore Island, Bishan-Ang Mo Kio Park; 7 August 2015; 1630 hrs.

Habitat: Freshwater in urban parkland. Shallow side stream draining into main channel with artificially planted banks, and running water from a recent heavy rainfall.

Observers: Contributors.

Observation: Two examples between 40 and 50 cm total length were observed thrashing in the shallows with one individual chasing the other. Both fish were positioned either parallel (Fig. 1), or at times, perpendicular (Fig. 2) to each other. Occasionally, they even reared their heads out of the water (Fig. 3). Eventually one fish bit and held on to the snout of the other, and then remained stationary, face to face (Fig. 4). After 2 to 3 minutes, they separated and one of them rested in the shallows, gasping, and revealing patches of torn skin on the sides of its body (Fig. 5).

Remarks: The African sharp-toothed walking catfish has been documented from Singapore in reservoirs (Ng & Tan, 2010; Baker, 2013) and other inland water bodies (Baker & Lim, 2013; Tan, 2014). It has been reported from Bishan Park by Yeo (2013). The present observation on the fish's behaviour seems to agree with that recorded of wild populations in South Africa. The onset of heavy rains triggers individuals ranging from 40 to 50 cm total length to breed. It usually begins with mass aggregations, followed by aggressive behaviour in the males, and then spawning in recently flooded plains next to rivers (Bruton, 1979). No mass aggregation and spawning were noted in the present observation, but the apparently antagonistic display between the two subjects, indicated by the biting action and the scars, could be linked to breeding. If *Clarias gariepinus* is capable of spawning naturally in Singapore, it is possible for this alien species to threaten the survival of native congeners such as *Clarias batrachus* as implied by Ng et al. (2014).

References:

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Fig. 1. Two *Clarias gariepinus* thrashing in shallow water with bodies parallel to each other.



Fig. 2. The same two *Clarias gariepinus* with bodies perpendicular to each other, the head of the left individual thrusting into the mid-section of the other.



Fig. 3. The head of one fish emerging from the water during the struggle.

Photographs by Tan Heok Hui



Fig. 4. The catfish on the right biting the mouth of the other and holding on.



Fig. 5. One of the catfish resting in shallow water after the struggle, revealing wounds on the left side of its body, apparently inflicted by the other fish.

Photographs by Tan Heok Hui