SINGAPORE BIODIVERSITY RECORDS 2013: 81

Date of publication: 29 November 2013. © National University of Singapore

Call of the masked swamp frog

Subjects: Masked swamp frog, *Limnonectes paramacrodon* (Amphibia: Anura: Dicroglossidae).

Subjects identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Island, Central Catchment Nature Reserve, Nee Soon swamp-forest; 29 August 2009; 2000-2230 hrs.

Habitat: Freshwater swamp-forest, along the edges of, and within, a shallow stream no more than 20 cm deep, flowing across a shaded, grassy trail about ten metres wide. The substrate was generally muddy with leaf litter, and lush growths of the aquatic aroid Cryptocoryne griffithii and the hairgrass Eleocharis. Water in the stream was flowing swift and clear.

Observers: contributor and Timothy K. A. Pwee.



Photograph by Kelvin K. P. Lim

Observation: Four frogs were observed in an area of about 4 m in diameter, sitting on mud banks among vegetation, including one of about 4 cm snout-vent length partially submerged in the stream (see photograph). Two of these, including the submerged frog, were observed calling, and at least three more individuals were heard in the area. The call consists of fairly loud, sharp rubbery squeaks of 5-8 notes in rapid succession, rather like sliding the tip of one's finger pressed hard on a pane of wet glass. Each call is repeated at intervals of about 5-10 seconds (an audio file of the call recorded by Timothy K. A. Pwee is attached herein). While emitting a call, the frog thrust its head forward with the hind part of the throat partially inflated, simultaneously vibrating the sides of the body. The photograph shows a frog poised in between calls. Many identical calls were heard emanating from pools of water within the swamp-forest. The calls were first heard after sunset, at about 8 pm, and until 9:30 pm. They were not heard again when we returned to the site at around 10:30 pm. The sky was slightly cloudy. There had been rains over the previous two days, but the afternoon had been hot and sunny. The moon was about two-thirds full.

Remarks: The calling frogs were about 3 to 4 cm in snout-vent length, and are presumed to be males. Of the two frogs not observed to be calling, one was about 4 cm and the other, 2 cm. As Limnonectes paramacrodon males lack vocal sacs, the species was previously not known to call (Inger & Stuebing, 2005: 132; Baker & Lim, 2012: 58). The call of the masked swamp frog was apparently first mentioned by Lim (2012: 121).

References:

Baker, N. & K. K. P. Lim, 2012. Wild Animals of Singapore. A Photographic Guide to Mammals, Reptiles, Amphibians and Freshwater Fishes. Reprinted with corrections and updates. Draco Publishing and Distribution Pte. Ltd. and Nature Society (Singapore). 180 pp.

Inger, R. F. & R. B. Stuebing, 2005. A Field Guide to the Frogs of Borneo. Second revised edition. Natural History Publications (Borneo) Sdn. Bhd., Kota Kinabalu, Malaysia. vii + 201 pp.

Lim, K. K. P., 2012. Amorous anurans. In: Wang L. K., D. C. J. Yeo, K. K. P. Lim & S. K. Y. Lum (eds.). Private Lives - an Expose of Singapore's Rainforest. The Raffles Museum of Biodiversity Research, National University of Singapore. pp. 120-121.

Contributor: Kelvin K. P. Lim

Contact address: dbslimkp@nus.edu.sg