

Observations on the nest of Woodworth's Frog *Limnonectes woodworthi* and predation of its eggs by ants

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Photographs by: Jake Wilson B. Binaday.
Subject identified by: Jake Wilson B. Binaday.

Location: Sitio Nagsipit, Brgy. Mariroc, Municipality of Tabaco, Albay Province, Luzon Island, Philippines (13.305588°N, 123.688988°E; WGS 84).

Elevation: 399 metres.

Habitat: Dry riverbed within semi-disturbed secondary-growth forest.

Date and time: 11 June 2017, 18:09 hrs and 18 June 2017, 08:21hrs.

Identity of subject: Woodworth's Frog, *Limnonectes woodworthi* (Amphibia: Anura: Dicroglossidae).

Description of record: On the evening of 11 June 2017, an adult vocalizing male *Limnonectes woodworthi* was observed along with a clutch of eggs, on a moist narrow rock platform, approximately 1 metre above a small and shallow pool of water (Figs. 1 to 3). The area is along a relatively dry stream bed (Fig. 3), which seems to only have flowing water when there has been continuous heavy rains for several days. The eggs were observed to be around Stage 11 to 12 based on Gosner (1960). On the morning of 18 June 2017, the nest site was revisited and it was in the process of being actively predated by ants (Figs 4 & 5).



Fig. 1. Adult male *Limnonectes woodworthi* perched on nest.

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Fig. 2. Close-up of *Limnonectes woodworthi* nest and eggs.

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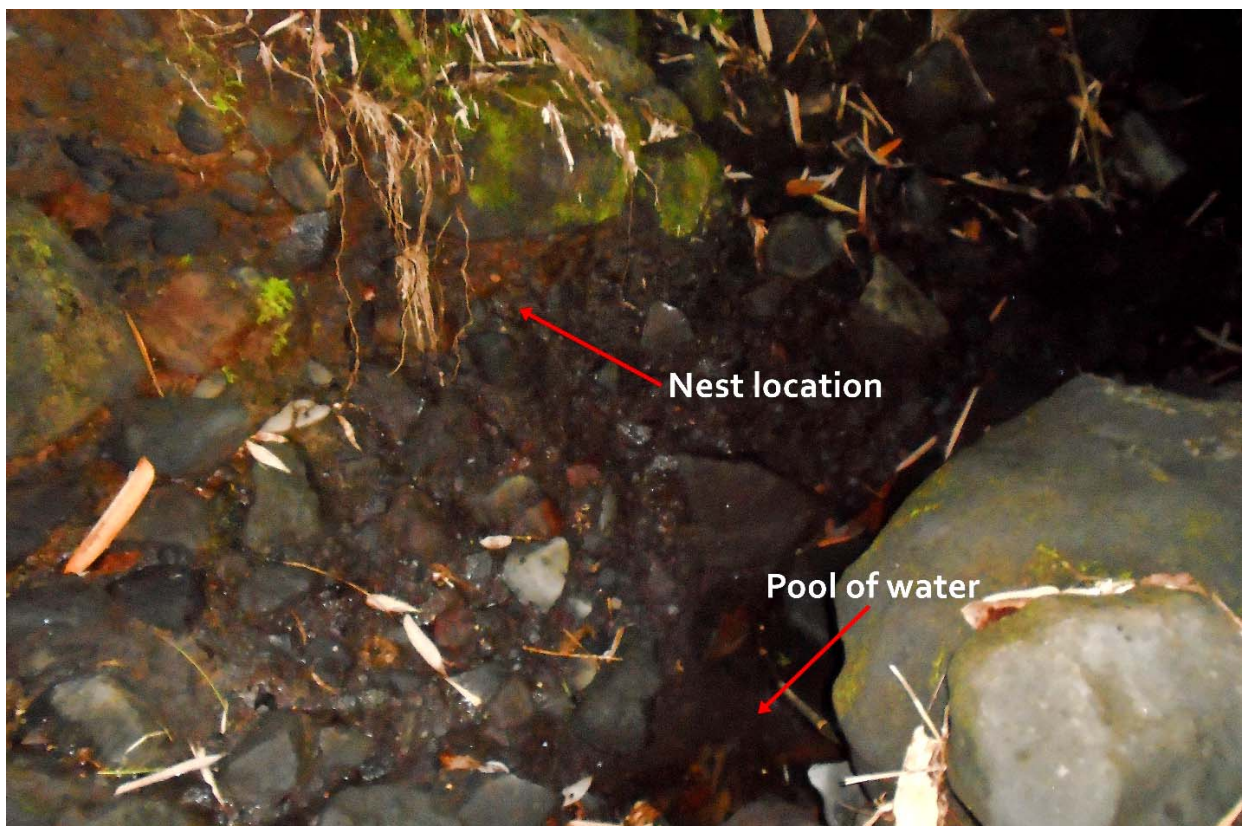


Fig. 3. Location of *Limnonectes woodworthi* nest along a dry riverbed

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Fig. 4. Predation of ants on *Limnonectes woodworthi* eggs.

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Fig. 5. Close-up of predation of ants on *Limnonectes woodworthi* eggs.

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Remarks: The adult frog was identified as *Limnonectes woodworthi* based on its (i) distinctive advertisement call, (ii) dorsal and dorso-lateral folds, (iii) dark tympanic region and (iv) medium body size (McLeod *et al*, 2011).

There is no existing reference on identifying this species' eggs. Considering the fact that the only anuran species observed on the site other than *L. woodworthi* were; *Platymantis dorsalis* and *Platymantis corrugatus*, which are direct developers; *Polypedates leucomystax* which is a foam nester; *Occidozyga laevis* which is almost a purely aquatic species, it is highly likely that the observed nest is that of *L. woodworthi*.

The nest was situated just above a pool of water. It is expected that when the eggs hatch, the tadpoles will fall down to the pool of water below. The hatching will most probably occur during a downpour to ease the tadpoles movement from the nest to the pool of water. Considering the nest site was located in a dry riverbed, it would be interesting to know whether *L. woodworthi* individuals habituating streams and rivers have similar nesting site preference.

Woodworth's Frog is known to occur throughout Luzon and nearby islands in the Philippines (Diesmos *et al*. 2015). It is a Dicroglossid or 'fanged frog' species that is commonly encountered in riparian habitats throughout its range. Currently, only limited knowledge exists on the reproductive biology of this species. This observation of the species' nest provides new information on the species' nesting preference and the predators of its eggs.

References:

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