

## Commensal herpetofauna at Villa Borobudur, Central Java, Indonesia

Nick BAKER  
[nbaker@ecologyasia.com](mailto:nbaker@ecologyasia.com)

**Observers:** Nick Baker, Sophia Sak.

**Photographs by:** Nick Baker.

**Subjects identified by:** Nick Baker, Leong Tzi Ming.

**Location:** Hillside overlooking Borobudur, Kedu Valley.

**Elevation:** 430 metres (around 200 metres above Kedu Valley). (Lat 7° 37.99'S Long 110° 12.42' E)

**Habitat:** Secondary / cultivated hill forest.

**Date:** 31 January 2017 to 01 February 2017.

### Identity of subjects and descriptions of records:

- 1) River Toad, *Phrynoidis aspera* (Amphibia: Anura: Bufonidae), one large specimen, with estimated snout-vent length of 14 cm, found on a tiled patio during heavy rain on 31 January, 20:58 hrs (Fig. 1).
- 2) Common Tree Frog (Four-lined Tree Frog), *Polypedates leucomystax* (Amphibia: Anura: Rhacophoridae), one medium specimen, with estimated snout-vent length of 6 cm, found amongst aquatic plants in an ornamental water feature on 31 January, 20:52 hrs (Fig. 2).
- 3) Common Tree Frog (Four-lined Tree Frog), *Polypedates leucomystax* (Amphibia: Anura: Rhacophoridae), one very large specimen, with estimated snout-vent length of 9 cm, initially observed perched beneath an open roof 2.5 metres from the ground on 31 January, 17:49 hrs (Fig. 3a), later seen clinging to ornamental woodwork on 31 January, 20:23 hrs (Fig. 3b).
- 4) Common Sun Skink (Many-lined Sun Skink), *Eutropis multifasciata* (Reptilia: Squamata: Scincidae), four seen, including three large adults with an estimated snout-vent length of 10 cm, and one smaller specimen with snout-vent length of 5 cm (Fig. 4), all active by day on 31 January.
- 5) Tokay, *Gekko gecko* (Reptilia: Squamata: Gekkonidae), one large specimen, living in roof space of villa, seen on 01 February, 21:55 hrs (Fig. 5).
- 6) Flat-tailed Gecko, *Hemidactylus platyurus* (Reptilia: Squamata: Gekkonidae), one spotted example, with partly moulted skin and regrown tail, seen beneath roof, on 31 January, 20:47 hrs (Fig. 6).
- 7) Garnot's House Gecko, *Hemidactylus garnotii* (Reptilia: Squamata: Gekkonidae), three seen beneath roof, example shown from 31 January, 20:46 hrs (Fig. 7).



Fig. 1.



Fig. 2.



Fig. 3a.



Fig. 3b.



Fig. 4.



Fig. 5.



Fig. 6.



Fig. 7. (inset shows margin of base of tail)

All images © Nick Baker.

**Remarks:** Five of these six species are typical commensal herptiles in many parts of Southeast Asia, the exception, perhaps, being *Phrynoidis aspera*, which is typically found in streamside settings but in some areas is known to explore away from streams (the author has found large specimens of *Phrynoidis aspera* at Fraser's Hill, Peninsular Malaysia, many hundreds of metres from even the smallest of streams). The villa featured here is located at an elevation of 430 metres, around 200 metres higher than the Kedu Valley, and the nearest stream is 200 metres away, along contour.

Both *Polypedates leucomystax* and *Phrynoidis aspera* are apparently common in Java (Manthey & Grossmann, 1997, as *Bufo asper* & *Polypedates leucomystax*), and Java is the type locality for both species.

*Polypedates leucomystax* occurs in two colour morphs in Java: (i) dull greyish to greenish-brown with darker spots all over the body (as in the examples shown here) and (ii) dull brownish or yellowish with 4 to 6 darker stripes on the dorsum (Iskandar, 1998). The two examples shown here are of the spotted form, with the huge female (Fig. 3b) being considerably darker than the smaller specimen (Fig. 3a). Both colour morphs can be found in a single clutch of eggs, and amplexing pairs are often from different colour morphs (Iskandar, 1998).



The three *Hemidactylus garnotii* are identified as such based on the margin of the base of the tail, which is finely denticulate, with equally-spaced larger scales (Fig. 7 inset), rather than there being whorls of spiny scales as in the case of the closely-related *Hemidactylus frenatus*.

All four lizards species have long been documented in Java (de Rooij, 1915, as *Mabuia multifasciata*, *Gekko verticillatus*, *Hemidactylus platyurus* & *Hemidactylus garnoti*): Java is recognised as the type locality for the first three of these species (Reptile Database, 2017).

#### References:

- de Rooij, N. D. (1915). The Reptiles of the Indo-Australian Archipelago. I. Lacertilia, Chelonia, Emydosauria. E.J. Brill Ltd, Leiden. 384 pp.
- Iskandar, D. T. (1998). The Amphibians of Java and Bali. Research and Development Centre for Biology, Indonesia. xix + 117 pp., 26 colour plates.
- Manthey, U. & Grossmann, W. (1997). Amphibien & Reptilien Südostasiens. Natur-und-Tier-Verlag. 512 pp.
- Reptile Database (2017), <http://www.reptile-database.org> (accessed 04 March 2017).