

Red Mountain Keelback *Hebius sanguineum* at Fraser's Hill, Peninsular Malaysia

Nick BAKER & Kelvin K. P. LIM

nbaker@ecologyasia.com (Baker), nhmlimkp@nus.edu.sg (Lim)

Identity of subjects: Red Mountain Keelback, *Hebius sanguineum* (Reptilia: Squamata: Natricidae).

2009 RECORDS :

Observers: Kelvin K. P. Lim with Norman Lim, Chan Kwok Wai, Alan Yeo and others.

Photograph by: Kelvin K. P. Lim.

Subject identified by: Kelvin K. P. Lim.

Location: Road to Jeriau Waterfall, Fraser's Hill, Peninsular Malaysia.

Habitat: Seepage area at roadside, adjacent to primary, lower montane forest.

Elevation: Around 950 metres.

Date and time: 12 September 2009, 21:50 hrs.

Description of observation: One example of about 30 cm total length was found crawling at the side of a road that was flooded with water (Fig. 1). It appeared to be hunting. There were a few individuals of the 'Tanahrata Wart Frog' *Limnonectes nitidus* in the vicinity, but the snake seemed eager to avoid the observers' torchlights.



Fig. 1 : Example at roadside seepage area on road to Jeriau Waterfall on 12 September 2009. © Kelvin K. P. Lim

Observers: Kelvin K. P. Lim with Norman Lim, Chan Kwok Wai, Alan Yeo and others.
Photograph by: Kelvin K. P. Lim.
Subject identified by: Kelvin K. P. Lim.

Location: Jalan Girdle ('Telecom Loop'), Fraser's Hill, Peninsular Malaysia.
Habitat: Man-made, concrete-lined, roadside gully in lower montane, primary forest.
Elevation: Around 1250 metres.
Date and time: 13 September 2009, 00:50 hrs.

Description of observation: An example of around 30 cm total length was seen crawling in a dry part of the drain (Fig. 2). There were spawning aggregations of the Malayan Mountain Jade Tree Frog *Rhacophorus prominanus* in the drain, but the snake did not show any interest in them or their spawn.



Fig. 2 : Example in drain along Jalan Girdle on 13 September 2009.

© Kelvin K. P. Lim

2011 RECORD

Observer: Nick Baker.
Photographs by: Nick Baker.
Subject identified by: Kelvin K. P. Lim.

Location: Jalan Girdle ('Telecom Loop'), Fraser's Hill, Peninsular Malaysia.
Habitat: Man-made, concrete-lined, roadside gully in lower montane, primary forest.
Elevation: Around 1250 metres.
Date and time: 15 November 2011, 21:30 hrs.

Description of observations:

The subject, with an estimated total length of 60 cm, was observed for 5 minutes as it explored a water-filled, man-made roadside drain (Fig. 3). At times its head and body were fully submerged beneath the water (Fig. 4). After 5 minutes it retreated into a narrow, dry space beneath the drain. In the same drain were at least 10 tadpoles, each measuring an estimated 4 cm total length, which were later identified as those of the Malayan Mountain Jade Tree Frog *Rhacophorus prominanus*. Adult *Rhacophorus prominanus* were photographed in the adjacent forest, just 3 metres away, on 14 November 2011 and 16 November 2011



Fig. 3 : Example in drain along Jalan Girdle on 15 November 2011.

© Nick Baker



Fig. 4 : View of entire snake in drain at Jalan Girdle on 15 November 2011.

© Nick Baker

Remarks: The subjects are identified as *Hebius sanguineum* (generic allocation follows Guo et al., 2014) based on its colour pattern, and body and head shape. This species is endemic to mountain areas of Peninsular Malaysia, having previously been recorded at Cameron Highlands, Pahang, and Gombak Valley, Selangor (Das, 2010). The species is not listed in the herpetofaunal list for Fraser's Hill (Norhayati et al, 2011) and these finds constitute a new record for the area.

The total length of the example observed on 15 November 2011 was an estimated 60 cm, which is considered the maximum length for the species (Das, 2010). It is postulated that the subjects may have been hunting for tadpoles, emergents or young frogs, either of *Rhacophorus prominanus* or of other species. Amphibians appeared to be the only potential vertebrate prey item in these drains and seepage areas : no fish were seen in these locations.

References:

Das, I. (2010). *A Field Guide to the Reptiles of South-east Asia*. New Holland Publishers (UK) Ltd. 376 pp.

Guo, P., Zhu, F., Liu, Q., Zhang, L., Li, X., Huang Y.Y. & Pyron, R.A. (2014). A taxonomic revision of the Asian keelback snakes, genus *Amphiesma* (Serpentes: Colubridae: Natricinae), with description of a new species. *Zootaxa*. 3873 (4): 425-440.

Norhayati, A., Farah, A.D., Chan, K.O., Daicus, B. & Muin, M.A. (2011). An Update of Herpetofaunal Records From Bukit Fraser, Pahang, Peninsular Malaysia. *Malays. Appl. Biol*, 40(2), 9-17