



# Sighting of threatened amphibians from the Avalanche Forest in Western Ghats, Nilgiris, Tamil Nadu

In India, approximately 410 species of amphibians are found, (www.indianamphibians.org), among which 239 are reported from the Western Ghats (Dinesh et al 2017). Avalanche, is an important tourist place in the Nilgiri District situated 25km from Ooty; it comprises of the shola-grassland complex, unique to the Western Ghats. The elevation range varies between 1800m and 2600m with the temperature ranging between 5 and 25 degree Celsius. The Avalanche forest and its surrounding areas get around 5,000mm of rainfall annually. In this, area many endemic faunal species are recorded.

## Sighting of three threatened amphibians:

### 1. Star-eyed Bush Frog – *Raorchestes signatus* (Boulenger, 1882)

*Raorchestes signatus* a bush frog was observed during the field visit on 7 August 2014. This species was sighted nearby Avalanche forest department guest house (11.2993 “N 76.5922 “E) and the surrounding area that is fully covered by the shola

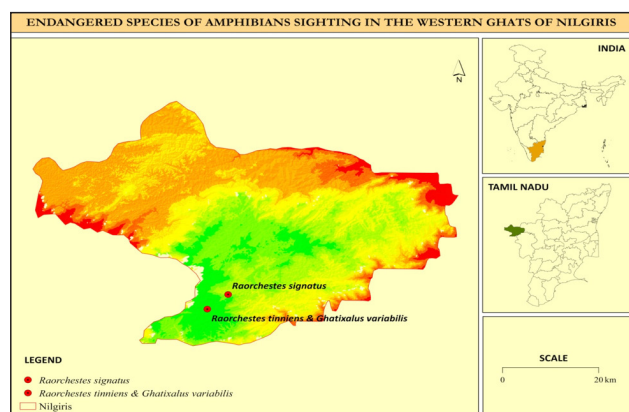


*Raorchestes signatus.*

vegetation. The dorsal colour of the bush frog varies from light-grey to black. The eye colour is black with white stripes. This species is restricted to the Nilgiri Hills of the southern Western Ghats. It is a highland species occurring up to 2,000m (Bossuyt & Dubois 2001).

### 2. Nilgiri Bush Frog – *Raorchestes tinniens* (Jerdon, 1853)

The Nilgiri Bush Frog (*Raorchestes tinniens*) is known from the Nilgiri Hills and surroundings. It is a terrestrial species found on the ground or under the vegetation. This species is yellowish-brown, with black eyes. Ventral side light whitish-yellow with dark spots. This species was sighted on 16 August 2014 near Upper Bhavani dam area with the surrounding area fully covered by the grassland and small patches of shola vegetation (11.2676 “N 76.5533 “E). The Bush frog has also been sighted by others near Emerald Valley (1,975m; Princy et al. 2017) and Mukurthi National Park (2,200–2,250 m) of Nilgiri District. The landscape is



## Study area.



*Raorchestes tinniens.*

covered by different types of vegetation such as, shola forest, grassland, wattle plantation etc. According to Kumar et al. (2017) and Princy et al. (2017), *R. tinniens* is the main diet for predators like *Ahaetulla perroteti* and *Salea horsfieldii* because of its smaller size (adult male 20.5mm and female 26.8 mm; Biju & Bossuyt 2009). This species is listed as Endangered due to predation and several anthropogenic activities.

### 3. Green Tree Frog – *Ghatixalus variabilis* (Jerdon, 1853)

This is a medium-sized frog we sighted on 20 April 2015 near Upper Bhavani dam surrounded by the grassland and small patches of shola vegetation (11.2676 “N 76.5533 “E). Dorsally brownish-green with irregular dark green or brownish blotches, boreal and tympanic region dark grey with brown spots, iris brownish, encircled by a golden ring. This taxon was recently



*Ghatixalus variabilis.*

reallocated to the new genus *Ghatixalus* and is considered to be the sister species of *Ghatixalus asterops* (Biju et al. 2008). The species can be locally abundant, although it is not uniformly common throughout its range. Loss of habitat and human interference are the two most common threats facing amphibians in India.

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