

TOKAY GECKO

Note on *Gekko gekko* (Linnaeus, 1758) with its recent sighting in Meghalaya



Tokay Gecko spotted in Nongkhrah, Ri-Bhoi District, Meghalaya. Photo credit: Ananta Rai

IUCN Red List:
Not Assessed

Reptilia
[Class of Reptiles]

Squamata
[Order of Scaled reptiles]

Gekkonidae
[Family of Geckos]

Gekko gekko
[Tokay Gecko]

Species described by
Linnaeus in 1758

Tokay gecko *Gekko gekko* (Linnaeus, 1758) is the second largest gecko belonging to the family Gekkonidae (Manthey & Grossmann 1997). This nocturnal gecko is found throughout southeastern Asia, including northeastern India and Nepal (Das 2010; Caillabet 2013). In India, it is mostly distributed in the northeastern states of Assam (Das et al. 2009), Mizoram (Lalrinchhana & Solanki 2015), Meghalaya (Schleich & Kästle 2002), West Bengal (Ahmed et al. 2009), and Tripura (Majumder et al. 2012). Though there are sporadic reports on the occurrence of Tokay Gecko in Meghalaya, Nagaland, and Manipur, there is no scientific documentation to date.

During the fieldwork in Meghalaya on 22 November 2018, a female Tokay Gecko was sighted in Nongkhrah in Ri Bhoi District (25.930°N & 91.885°E) at an elevation of 550m. The

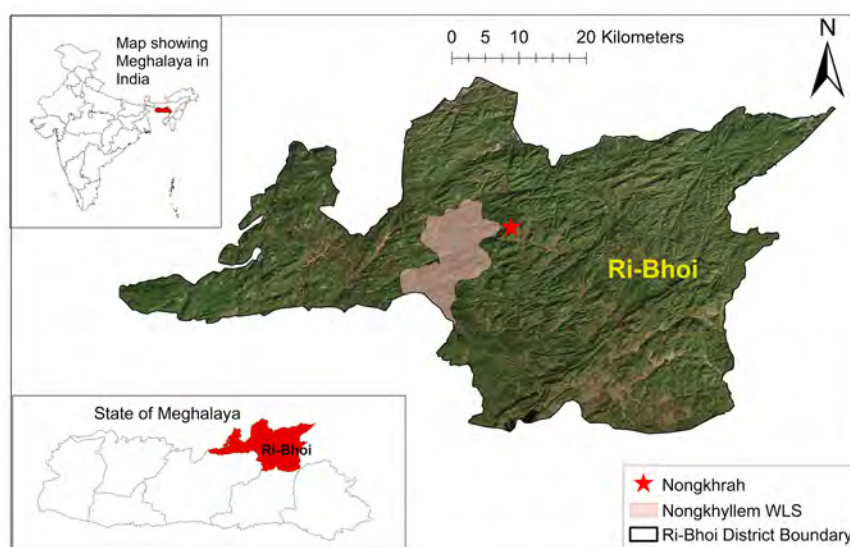
species was found inside the crevices of big stones and the root extension of a Guava tree. While attempting to catch it, it opened its mouth wide and produced a typical ‘to-kay’ sound. With much difficulty, the species was caught and the basic morphometry and pholidosis were noted after which it was released back into the natural habitat. Morphometry measurements taken by digital vernier callipers (precision 0.1mm) are as follows: snout-vent length (SVL) 160mm, tail length (TL) 71mm, jaw length (JL) 30.88mm, head length (HL) 43.29mm, head width (HW) 32.22mm, length of the longest hindlimb digit (fourth) 15.63mm, length of the shortest hind limb digit (first) 8.91mm, length of the longest forelimb digit (fourth) 13mm, length of the shortest forelimb digit (first) 8.18mm. Fourth toe lamellae 18 on both sides, first toe lamella 14 on both sides, 12 supralabial, 11 infralabial, three large internasal scales, and 28 supraciliary scales. Body with olive grey or brown tetrahedral granules intermixed with few large granules along with orange floral blotches. Six femoral pores on each side with a single scale separating them. Ventral scales larger than dorsal scales, imbricate with scattered orange blotches.

The species generally prefers trees with high basal areas and canopy cover. Due to a reduction in the number of trees, however, it shifted its habitat to human settlements, especially preferring cracked walls of mud houses. Deforestation, especially cutting of large canopy trees, is affecting the population of Tokay Gecko (Singh & Choudhury 2016). While habitat loss is the prime cause for most species decline, this species faces the additional threat posed by illegal trade in most of the countries. The species

Global Distribution :

Native: Bangladesh, India, Nepal, Bhutan, Myanmar, Thailand, Cambodia, Laos, Vietnam, Malaysia, China, Philippines, Singapore, Hong Kong, Indonesia, Sulu Archipelago, Timor-Leste.

Introduced: USA, Martinique (Caribbean), Madagascar, Lesser Antilles and Belize (Caillabet 2013)



Nongkhrah and Nongkhyllem WS in Ri-Bhoi District in Meghalaya, northeastern India



is claimed to have medicinal value and is used in the treatment of asthma, diabetes, skin ailments, cancer (Chuang et al. 1999), HIV/AIDS (Caillabet 2013), erectile dysfunction, and persistent cough (Nguyen 1993). In some countries, they are consumed in the form of an energy drink for vitality (Bauer 2009). They are also traded as pets, especially in Europe and USA (Caillabet 2013).

Various countries give conservation importance to the species — in peninsular Malaysia under Wildlife Conservation Act, 2010, in China in Appendix II under Wild Animal Protection Law of the People's Republic of China (Yinfeng et al. 1997), and in Philippines under Republic Act No. 9147 or Wildlife Resources Conservation and Protection Act 2001 (Lim et al. 2012). In other countries like Thailand, Indonesia, and Vietnam, however, the species is not covered by any national law or act (Caillabet 2013). The population, in general, is under threat due to overexploitation despite its wide distribution, high fecundity, and ability to thrive in human-modified landscapes.

Northeastern states of India like Assam, Manipur, Mizoram, West Bengal, and Nagaland are the focal points for poaching and trading of this gecko to the neighbouring countries such as Myanmar and China. There were many incidences wherein geckos trapped illegally for trading were rescued by police authorities and forest officials in Manipur, West Bengal, and Assam (Sarkar 2018).

In India, Ministry of Environment and Forests, Government of India, enlisted it under Schedule IV of the Wildlife (Protection) Act, 1972. Despite all efforts by the government, wildlife trade still persists in India. Due to lack of comprehensive data, this species is not assessed by the IUCN Red List of Endangered Species. The proposal was submitted to CITES for its inclusion but has not yet been evaluated (Singh & Choudhury 2016). Since it is not listed in CITES, international trade of Tokay Gecko is not regulated. Many studies show a considerable decline in the population of the species in Bangladesh (Caillabet 2013), China (Chan et al. 2006), Indonesia, Thailand (Caillabet 2013), and Nepal (Shrestha 2000). Its status in other countries is still not evaluated.

Minor vertebrates always receive less attention in terms of conservation while protected areas designed for higher vertebrates may not do equal justice to them (Vasudevan et al. 2006). Hence, this study recommends higher conservation protection for this species than its current status.



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Acknowledgements: We thank the Meghalaya Forest Department for permission to carry out our research. We are thankful to the Department of Zoology, Sikkim University, for the facilities and support. We are also grateful to Narayan Chettri and Rodeson Thankhiew for their help in the field continuously. We would also like to thank Mr. Sailendra Dewan for his help in map preparation.

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Citation: Rai, A. & B. Chettri (2019). Tokay Gecko: note on *Gekko gecko* (Linnaeus, 1758) with its recent sighting in Meghalaya. *Reptile Rap* #192. In: *Zoo's Print* 34(3): 11–14