

Occurrence of Elongated Tortoise from the reserved forest area of Pauri Garhwal in Uttarakhand, India



Image 1. *Indotestudo elongata* found on 24 May 2019 in Pauri Garhwal, Uttarakhand. © Keyur Naria.

The Elongated Tortoise *Indotestudo elongata* also known as Pineapple Tortoise, is a species belonging to the family Testudinidae (Das & Gupta 2015). The genus *Indotestudo* consists of three species of tortoise from southern and southeastern Asia, namely Elongated Tortoise *Indotestudo elongata* (Blyth, 1853), Forsten's Tortoise *Indotestudo forstenii* (Schlegel & S. Muller, 1845), and Travancore Tortoise *Indotestudo travancorica* (Boulenger, 1907) (Iverson 1992). The Elongated Tortoise is currently classified as Critically Endangered (CR) under criterion A2cd by the International Union for Conservation of Nature (IUCN) and the

current population trend shows a decrease in its population (Rahman et al. 2019). It is listed in Appendix II of CITES and is protected under Schedule IV of Wildlife Protection Act 1972 in India (Das & Gupta 2015; Ihlow et al. 2016).

The Elongated Tortoise is widely distributed throughout southern and southeastern Asia, including eastern and northeastern India (Das 1985; Iverson 1992; Rahman et al. 2019). Kaleshwar Wildlife Sanctuary in the foothills of the Himalaya in the Aravalli Range is the western-most boundary of the species range (Rahman et al. 2019). In the Chota

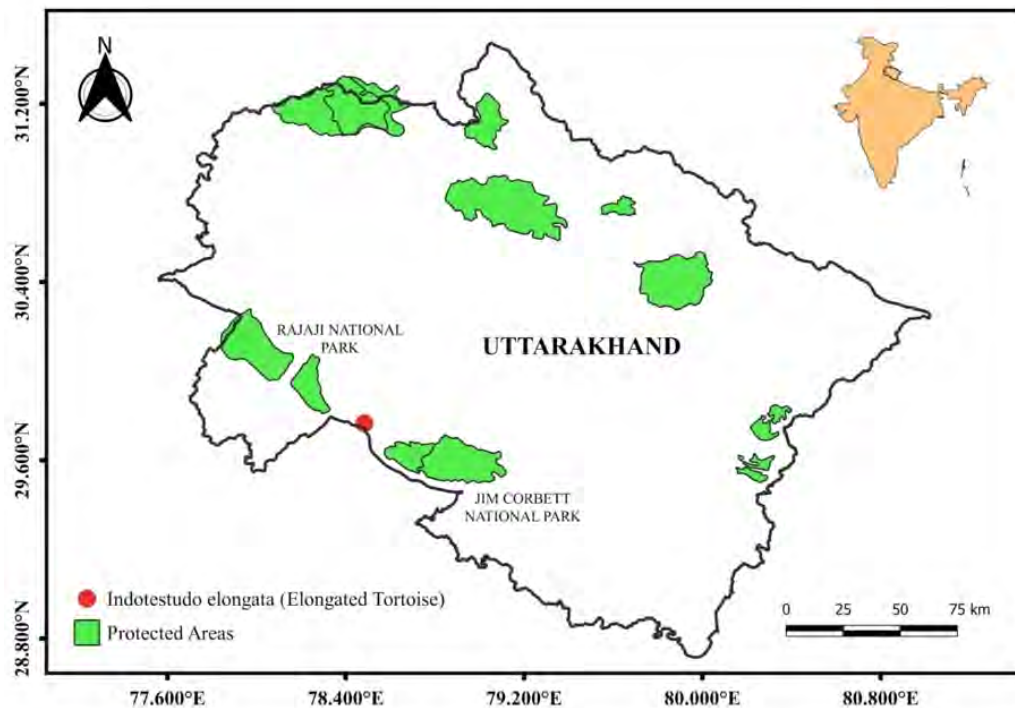


Figure 1. Map showing the occurrence of *Indotestudo elongata* in the reserve forest area of Uttarakhand.

Nagpur Plateau of eastern India, a disjunct subpopulation of *I. elongata* is present. The population might have been isolated from the Himalayan foothills by the alluvial plain and changing environmental conditions after the formation of the Indo-Gangetic Plain (Ihlow et al. 2016). Although the status and distribution have been well documented recently (Khan et al. 2020), its distribution in western Himalaya is from Phandowala (Frazier 1992), Lansdowne Forest Division (Bhupathy et al. 1994; Khan et al. 2020), Siggudi Forest near Kotdwara (Whitaker 1979; Bhupathy et al. 1994), Rajaji National Park (Khan et al. 2020), and Corbett National Park (Khan et al. 2020), the present record is from a different location in the Pauri Garhwal of Uttarakhand. The current note presents the occurrence of an Elongated Tortoise

from the Lansdowne Reserved Forest area (29.766°N & 78.483°E) of Pauri Garhwal in Uttarakhand State. The Lansdowne Forest Division is located between 29.616–30.033°N and 78.320–78.717°E and is surrounded by two national parks, i.e., Rajaji situated at 32km approximately in the north-west direction and Corbett situated at 38km approximately in the south-east direction from the site.

This record was obtained on 24 May 2019, as a part of regular bird watching trip around the reserved forest area of Pauri Garhwal (Figure 1). At around 18.21h, we heard some rustling through the fallen leaves. We searched the ground and finally found a tortoise when it came out into the open. Later, with the descriptions from Ihlow et al. (2016)

we confirmed it as an Elongated Tortoise owing to its greenish-yellow carapace and irregular black spots or blotches on each of its shield (Image 1). Although we did not handle the specimen, the body length was approximately 25–27 cm and it was a female. The location was at an altitude of 402m in deciduous forest, with some patches of semi evergreen and forests of *Sal Shorea robusta* (Image 2). There are only two published records of Elongated Tortoise in the Lansdowne Forest Division of Pauri Garhwal, Uttarakhand (Bhupathy et al. 1994; Khan et al. 2020) and the recent closest published locality record is about 20km away in Lansdowne Forest Division in Uttarakhand (Khan et al. 2020). The nearby area is a reserved forest and a corridor connecting Rajaji and Corbett national parks.

Out of five birding trips in the area, we saw this species only once. The species was photographed with the help of Canon 750D with 55–250 mm lens at the location 29.766°N and 78.483°E in the fairly open patch of the deciduous forest. The location was about 0.54km north from the Koh River Tributary separating Satichaur and Neenbuchaur. This record adds to the occurrence data and the conservation importance of the reserved corridor forest of Pauri Garhwal landscape in general.

From the available literature, it is seen that the population of the species has declined 80% throughout its distributional range due to habitat loss and illegal collection for pet trade (Moll 1989; Ihlow et al. 2016; Rahman et al. 2019). The area where we sighted



Image 2. *Indotestudo elongata* in its habitat. © Keyur Naria.



the Elongated Tortoise is approximately 200m close to the concrete road, human settlements, and farm. Some people cut trees for fodder requirement for their livestock. Also, construction of a road in the nearby area is in progress. However, the major threats to the habitat and species are human encroachment and livestock grazing in the area. Therefore, an eco-development plan should be made in such areas to reduce the biotic pressure from the villagers on the forest areas so that villagers, wildlife, and forests, can all co-exist in harmony. Further, as shown by Khan et al. (2020), that > 90% of the predicted distribution area falls outside of the PA network in the Indian Subcontinent, the present sighting is also from reserved forest land, which does not fall in the PA network. Hence, we suggest that such corridors and reserved forest areas should be given more protection.

References

- Bhupathy, S., C.S. Silori & S.F.W. Sunderraj (1994).** Additional locality records for two Indian tortoise species. *Journal of the Bombay Natural History Society* 91(1): 149–150.
- Das, I. (1985).** *Indian Turtles: A Field Guide*. World Wildlife Fund-India, Calcutta, India, 119pp.
- Das, K.C. & A. Gupta (2015).** New distribution records of tortoises (Chelonia: Testudinidae) from Barak Valley, Assam, northeastern India with notes on ecology and vernacular traditional taxonomy. *Journal of Threatened Taxa* 7(3): 7017–7023. <https://doi.org/10.11609/JoTT.o3623.7017-23>
- Frazier, J. (1992).** The land tortoise in Nepal: a review. *Journal of the Bombay Natural History Society* 89(1): 45–54.
- Ihlow, F., J.E. Dawson, T. Hartmann & S. Som (2016).** *Indotestudo elongata* (Blyth 1854) – Elongated Tortoise, Yellow-headed Tortoise, Yellow Tortoise. In: Rhodin,

A.G.J., P.C.H. Pritchard, P.P. van Dijk, R.A. Saumure, K.A. Buhlmann, J.B. Iverson & R.A. Mittermeier (eds.). *Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group*. Chelonian Research Monographs 5(9): 096.1–14. <https://doi.org/10.3854/crm.5.096.elongata.v1.2016>.

Iverson, J.B. (1992). *A Revised Checklist with Distribution Maps of the Turtles of the World*. Privately published, Richmond, Indiana.

Khan, S., A. Nath & A. Das (2020). The Distribution of the Elongated Tortoise *Indotestudo elongata* on the Indian subcontinent: implications for conservation and management. *Herpetological Conservation and Biology* 15(1): 212–22.

Moll, E.O. (1989). *Indotestudo elongata*, Elongated Tortoise, pp. 116–117. In: Swingland, I.R. & M.K. Klemens (Eds.). *The Conservation Biology of Tortoises*. Occasional Papers of the IUCN Species Survival Commission, No. 5. IUCN, Gland, Switzerland.

Rahman, S., K. Platt, I. Das, B.C. Choudhury, M.F. Ahmed, M. Cota, T. McCormack, R.J. Timmins & S. Singh (2019). (errata version published in 2019). The IUCN Red List of Threatened Species 2019: e.T10824A152051190. Accessed on 04 March 2020. <https://doi.org/10.2305/IUCN.UK.2019-1.RLTS.T10824A152051190.en>

Whitaker, R. (1979). The crocodilians of Corbett National Park. *Indian Forester* 2: 38–40.

Acknowledgments: We are thankful to Shruti Patel for accompanying us in field survey. We are also thankful to one anonymous reviewer for commenting on the initial draft of this manuscript.

Keyur Hareshbhai Naria¹ & Hiren Jayantilal Patel²

¹School of Science, Navrachana University, Vadodara, Gujarat 391410, India.

²Sardar Patel Zoological Park, Kevadiya, Gujarat 393151, India.

Emails: ¹keyurnaria3@gmail.com (corresponding author),

²hirenp9408@gmail.com

Citation: Naria, K.H. & H.J. Patel (2021). Occurrence of Elongated Tortoise from the reserved forest area of Pauri Garhwal in Uttarakhand, India. *Reptile Rap* #205, In: *Zoo's Print* 36(3): 10–13.