Indian Rock Python Python molurus (Linnaeus 1758) Incubating in an Abandoned House in Bhadeli, Gujarat, India

Aadit Patel, Aurobindo Samal, Shreya Pandey*

Department of Animal Husbandry and Dairying, Indira Gandhi National Open University, Bhubaneswar, India

ABSTRACT

The intensification of human activities is responsible for the degradation of habitat which is the major cause of biodiversity regression. Snakes are generally highly secretive animals that spend a lot of time in shelters. Reptiles (lizards and snakes) have limited dispersal abilities and are consequently vulnerable to changes in habitat conditions. Urbanization and developmental activities by humans have led to the alteration of land use patterns and thus there has been degradation in the availability of natural habitats. Cold blooded animals are highly dependent on the presence of warm secretive spots for the purpose of their ecological requirements and regulating their body temperature. Here in we document a female indian rock python *Python molurus* incubating its eggs inside an abandoned old house. The dependency and resource utilization by animals on human habitations can be well presented through this documentation.

Keywords: Artificial refuge; Predation risk; Incubating Indian rock python; Safer microclimate; Thermoregulatory behavior

INTRODUCTION

A significant selective pressure influencing behavior is predation. Predation risk can be decreased by choosing refuges that provide reliable defense. Because of the close relationship between changes in body temperature and performance in ectotherms, the selection of microhabitats in reptiles is primarily influenced by thermal requirements. Reptiles must therefore maximise predator avoidance while decreasing thermal expenses in order to make the best use of their habitats. The capacity of individuals to choose safe and thermally appropriate shelters is a naturally selective behavior [1-6].

Urbanization and settlement expansions have been found to provide animals a place to live in urban habitats, despite the fact that it normally has a detrimental impact on wildlife. This also tends to increase the risks of interactions amongst both humans and animals and pose a significant threat. Due to their life history (limited dispersion capacity and home range) and physiological reliance on environmental factors like temperature and water availability, reptiles are typically vulnerable to habitat alteration. Therefore, compared to other vertebrates, reptiles are more vulnerable to hazards brought on by human activity.

Artificial buildings and infrastructure, which dominate urban landscape changes, can change the local microclimate, which directly affects a reptile's capacity to an age its physiological and behavioral processes. The quality of the breeding site may significantly influence reproductive efforts and breeding success in animals that actively maintain ideal conditions for offspring development. In accordance with the 2010 evaluation of the literature pertaining to the breeding biology of indian rock pythons based on the observations in captivity (*Python molurus*).

Herein we document an instance of an indian rock python, *Python molurus* incubating eggs in an artificial refuge (Figure 1) [7-10].

Correspondence to: Shreya Pandey, Department of Animal Husbandry and Dairying, Chulalongkorn University, Bangkok, Brazil; E-mail: shreyapandey.1899@gmail.com

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Figure 1: A female Indian rock python, *Python molurus* incubating clutch of eggs.

DESCRIPTION

At about 14:00 hrs on 24th June, 2022, the first author discovered a female Indian Rock Python, *Python molurus* inside an abandoned house having a wooden door incubating a clutch of eggs in an abandoned house in Bhadeli (20°48'42.948"N, 73° 3'40.932"E), Gujarat, India. There could be a probable reason that this provided a safer and well thermo regulated artificial habitat amidst the human disturbances for incubating her eggs (Figure 2) [11-16].



Figure 2: Abandoned house having a wooden door providing an artificial refuge.

CONCLUSION

The snake was discovered by the local people. Throughout and after the documentation process the snake was left undisturbed as it was far away from human settlement place. We requested people to avoid visiting the site till the hatchlings are born and did a small awareness campaign.

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CONFLICT OF INTEREST

The authors declare no conflict of interest during the preparation of this article.

REFERENCES

- 1. Webb JK, Pringle RM, Shine R. How do nocturnal snakes select diurnal retreat sites? Copeia. 2004;(4):919-925.
- Lima SL, Dill LM. Behavioral decisions made under the risk of predation: A review and prospectus. Can J Zool. 1990;68(4):619-640.
- Bauwens D, Castilla AM, Mouton PLFN. Field body temperatures, activity levels and opportunities for thermoregulation in an extreme microhabitat specialist, the girdled lizard (*Cordylus macropholis*). J Zool. 1999;249(1):11-18.
- Cooper Jr WE, van Wyk JH, Le FP, Mouton N. Incompletely protective refuges: Selection and associated defences by a lizard, *Cordylus cordylus* (Squamata: Cordylidae). Ethology. 1999;105(8): 687-700.
- Goldsbrough CL, Hochuli DF, Shine R. Fitness benefits of retreat site selection: Spiders, rocks, and thermal cues. Ecology. 2004;85(6): 1635-1641.
- Cooper Jr WE, Wilson DS. Thermal cost of refuge use affects refuge entry and hiding time by striped plateau lizards. *Sceloporus virgatus*. Herpetologica. 2008;64(4):406-412.
- 7. Blouin-Demers G, Weatherhead PJ. Habitat-specific behavioural thermoregulation by black rat snakes (*Elaphe obsoleta*). Oikos. 2002;97(1):59-68.
- Row JR, Blouin-Demers G. Thermal quality influences habitat selection at multiple spatial scales in milksnakes. Ecoscience. 2006;13(4):443-450.
- 9. Downes S. Trading heat and food for safety: Costs of predator avoidance in a lizard. Ecology. 2001;82(10):2870-2881.
- 10. Diamond J. The design of a nature reserve system for Indonesian new guinea. 1986.
- 11. Kerr JT, Deguise I. Habitat loss and the limits to endangered species recovery. Ecol Lett. 2004;7(12):1163-1169.
- Mbora DN, McPeek MA. Host density and human activities mediate increased parasite prevalence and richness in primates threatened by habitat loss and fragmentation. J Anim Ecol. 2009;78(1):210-218.
- Castellano MJ, Valone TJ. Effects of livestock removal and perennial grass recovery on the lizards of a desertified arid grassland. J Arid Environ. 2006;66(1):87-95.
- 14. Huey RB. Temperature, physiology, and the ecology of reptiles. In Biology of the Reptilia. 1982.
- White D, Minotti PG, Barczak MJ, Sifneos JC, Freemark KE, Santelmann MV, et al. Assessing risks to biodiversity from future landscape change. Biol Conserv. 1997;11(2):349-360.
- Ramesh C, Bhupathy S. Breeding biology of *Python molurus* in Keoladeo national park, Bharatpur, India. Herpetol J. 2010;20(3):157-163.