



## UNRAVELING THE COILS OF MYSTERY : A BRIEF ACCOUNT OF PYTHON (REPTILIA: SQUAMATA: PYTHONIDAE) DIVERSITY IN WEST BENGAL

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**ABSTRACT** Pythons (Reptilia : Squamata : Pythonidae) are an ancient group of snakes that have slithered across the swamps, grasslands and rainforests of the world from the Miocene till the present day. The name python was first proposed by Francois Marie Daudin in 1803. In West Bengal, an Indian State on the eastern part of the country, is the host of three major python species – Indian rock python (*Python molurus*) in the savanna regions; Burmese python (*Python bivittatus*) in the temperate wetlands and the mangroves and the longest extant snake, the Reticulated python (*Malayopython reticulatus*) in the mangrove regions of Sundarbans. Once abundant, these giant reptilians are now on the brink of extinction due to habitat loss and illegal hunting and other anthropogenic encroachments in their natural habitats.

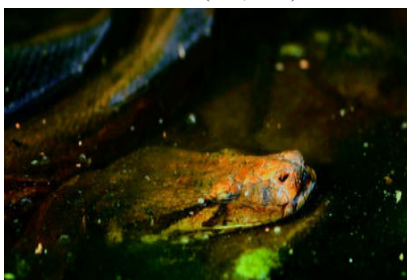
**KEYWORDS :** Pythons, West Bengal, Anthropogenic.

### INTRODUCTION

Pythons are giant, primitive snakes belonging to Class: Reptilia, Order: Squamata, Family: Pythonidae, endemic to Africa, South-East Asia and Australia. The term was first coined by Francois Marie Daudin in 1803. Pythons are a celebrated animal in Bengali culture and folklore and they are both feared and respected. These misunderstood animals are known as “Ajagar” and “Myal” colloquially and are now staring at the face of extinction due to anthropogenic interference in their habitats and biological cycles. This article briefly discusses about the three major python species found in Bengal – *Python molurus*, *Python bivittatus* and *Malayopython reticulatus*, their habitats, distribution reproductive cycles, conservation status and threats to their survival in West Bengal.

#### A. INDIAN ROCK PYTHON (*Python molurus*):

*Python molurus*, also known as the Indian rock python is the most abundant giant constrictor found in West Bengal. It is found in the savanna and semi-arid habitats in the districts of Paschim Medinipur, Purulia, Bankura, Birbhum and also in the temperate wetland of Coochbehar, Jalpaiguri, Alipurduar and in the mangroves of Sundarbans in South 24 Parganas (Das, 2021). They can grow upto 3m in length and can weigh upto 52kg (Wall, 1912). Mostly found near waterbodies, they are excellent swimmers and good climbers and are effective pest controllers as they feed mostly on rodents, amphibians, birds, other reptiles and even their own kind. Females are oviparous with a clutch size of about 100 eggs which they protect and incubate mostly inside abandoned termite mounds. Reproductive period is between the months of June-July. Classified as 'Near Threatened' on the IUCN Red List, mostly due to a likely population decline of ~30% over the decade 2010-2020, caused by habitat loss, over-exploitation and lack of conservation actions (Das, 2021).

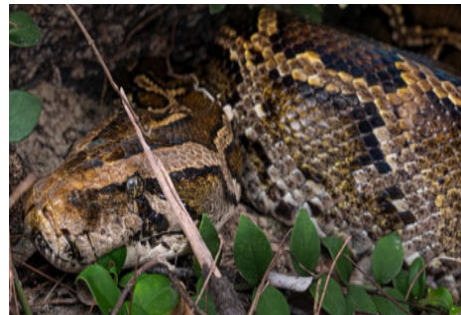


**Fig. 1. Indian Rock Python (*Python molurus*). Courtesy: Rudrajit Sarkar. Location: Paschim Medinipur, West Bengal, India.**

#### B. BURMESE PYTHON (*Python bivittatus*):

The Burmese python was considered to be a subspecies of *Python molurus*, but since 2009, it is now considered as a distinct species (Jacobs, H.J. 2009). Weighing upto 180-200kg and reaching lengths of about 6m (Groot, T.V. 2003), these giants occupy marshes, wetlands and moist deciduous and tropical rainforest areas of the districts of Jalpaiguri, Coochbehar,

Alipurduar, North and South Dinajpur and also along the gangetic delta regions of North and South 24 Parganas. Diet consists of small to medium sized mammals such as small deer, rodents, fish, small reptiles, birds such as ducks, water fowls. They can live up to 18-20 years in the wild (Barker, D.G. 2012) with females laying up to 12-36 eggs during the months of March and April. The Burmese python is listed on CITES Appendix II (Stuart, B. 2019) and has been listed as 'Vulnerable' on the IUCN Red List since 2012. In West Bengal, females usually lay their eggs and undergo brumation in tea estates of North Bengal where they frequently come across humans and livestock, resulting in loss of livestock and python casualties on a large scale almost every year on a regular basis.



**Fig. 2. Burmese Python (*Python bivittatus*). Courtesy: Rudrajit Sarkar. Location: Gorumara National Park, Jalpaiguri, West Bengal, India.**

#### C. RETICULATED PYTHON (*Malayopython reticulatus*):

The reticulated python, also known as the “Golbahar ajagar” in Bengali, is the least well-known giant snake in West Bengal and most controversial, with the scientific community divided on whether they are found naturally in the state or are an introduced/invasive species, as a result of illegal animal trade. However, Santra et.al. 2012 has dispatched the myth of the invasive species by capturing a live female specimen of 5.26m long and weighing up to 31kg in Hooghly district. This till date, remains the only documented wild specimen in West Bengal. The longest snake on the earth is supposed to occur in the moist deciduous and tropical rainforests of Alipurduar and Jalpaiguri and in the districts bordering Bangladesh and in the Sundarbans of South 24 Parganas. They feed on small rodents, small deers, pigs, aquatic birds. They live mostly in and around fresh water bodies. The females lay upto 15-30 eggs during the months of April-June. These elusive and magnificent giants are restricted and regulated under CITES Appendix II but are not categorized in the IUCN Red List (Auliya et.al. 2002). However, excessive logging, pollution of fresh water streams by industrial effluents and illegal animal trade is supposed to having adverse effects on the wild populations these snakes. Stringent conservation efforts are required to safeguard the future of the world's longest snake species in West Bengal.



**Fig. 3. Reticulated Python (*Malayopython reticulatus*). Courtesy: Society for Nature Conservation Research and Community Engagement. Location : Baidiyabati, Hooghly, West Bengal**

#### DISCUSSION :

West Bengal is extremely biodiverse, thanks to the unique geographical location and geological features it enjoys. Bounded by the Himalayas in the north and the Bay of Bengal in south, the state is home to mangrove, tropical sub-tropical and alpine vegetation, resulting in great reptilian diversity. Pythons have also enjoyed the abundant natural resources in the state and have gone about their mysterious lives for thousands of years. However, 21st Century human development has not been kind to these scaly giants and with each passing day we are getting closer in losing these natural wonders. Greed and negligence has created the perfect recipe for disaster when it comes to pythons and we must spread awareness amongst people about the ecological roles of these snakes and try to attract the attention of local government authorities in order to protect, conserve and secure these ancient predators.

#### ACKNOWLEDGEMENTS:

The author is thankful to the Director, Zoological Survey of India, Kolkata for the support and information provided. The author expresses thanks to the Head, Department of Zoology, University of Calcutta for the laboratory facilities. Author expresses thanks to Dr. Rakhi Roy, Department of Environmental Science, University of Kalyani, for the help in conducting field works. The author acknowledges the Department of Forests, Government of West Bengal for cooperation and conservation of the python.

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