BURMESE PYTHON

Python bivittatus: An addition to the reptiles of Hastinapur Wildlife Sanctuary, Uttar Pradesh, India

Pythons are the large non-venomous snakes belonging to family Pythonidae. These ambush predators are found in sub-Saharan Africa, South-east Asia and Australia (McDiarmid et al. 1999). Thirty one python species are found worldwide, of which three i.e. Reticulated Python (Malayopython reticulatus), Indian Rock Python (Python molurus), and Burmese Python (Python bivittatus) are found in India. Earlier, the Burmese Python was considered as Indian Rock Python (Whitaker and Captain 2004) however now both are considered as distinct species (Jacobs et al. 2009).

Morphologically, both species can easily be differentiated through the position of labial scales, head markings and colour of their bifurcated tongue. Indian Rock Python is distinguished with sixth/seventh labial touched the eye, having unclear lance-shaped mark on the top of the head and pink tongue in adults. While in Burmese Python, the labials are separated from the eye...
by sub-oculars, lance-shaped mark on the head is clear and darker tongue i.e. blue-black in colour (Smith 1943; Daniel 2002; Whitaker and Captain 2004).

Burmese pythons are found throughout Southern and Southeast Asia, including eastern India, Nepal, western Bhutan, south-eastern Bangladesh, Myanmar, Thailand, Laos, Cambodia, Vietnam, northern continental Malaysia, Southern China (Barker and Barker 2010), Hong Kong, and Indonesia (Barker and Barker 2008). An introduced population of Burmese Pythons has also survived in South Florida since the late 1990s (Pyron et al. 2008) where it has had detrimental impacts on native fauna, and has recently been blamed for localized declines of up to 99% in encounter rates of several common native mammal species since 2000 in some parts of the Everglades National Park, as well as the apparent loss of introduced rabbits and foxes from these sites (Dorcas et al. 2012). Three isolated sub-populations have been reported form India i.e. (1) Corbett-Rajaji subpopulation in Uttarakhand (Bhupathy 1995; Joshi and Singh 2015), (2) North-east subpopulation along Brahmaputra (Barker and Barker 2008), and (3) Eastern subpopulation in Kolkata and Bhitarkanika National Park (Barker and Barker 2008).

The species is predominantly associated with rivers and lakes (Goodyear, 1994) found in tropical lowland forest, mangroves, rain forests, wet grasslands and coastal plains habitat in its distribution range (Barker and Barker 2008). There are evidence of extensive and widespread population declines of the Burmese Python throughout its range of distribution (Stuart et al. 2012). According to an estimate its population have been declined by at least 30% over the past ten years across its global range as a result of over-harvesting for a variety of uses, to some extent compounded by the effects of habitat loss, and with the drivers of this decline not having ceased. The species is therefore classified as Vulnerable in IUCN RedList (Stuart et al. 2012).
While conducting a survey of Gharials *Gavialis gangeticus*, two consecutive observations of adult Burmese Python were made in the Hastinapur Wildlife Sanctuary (29°25′ to 29°40′N & 78°5′ to 79°5′E) in Uttar Pradesh, India in 2009. The sanctuary is spread over an area of 2,073 km² along the banks of River Ganges in western Uttar Pradesh.
Pradesh. It was established in 1986 to conserve the fast vanishing, unique Gangetic grassland-wetland complex locally known as Khadar (Khan et al. 2003). It is unique in the sense that it presents a variety of landforms and habitat types that include wetland, marshes, dry sandy beds and gently sloping ravines (Khan et al. 2014). River Ganga and its old bed, locally called as Boodhi Ganga forms the drainage system of the Sanctuary. Due to extensive agriculture practices most of the Boodhi Ganga has drained out and converted into agriculture field. These discontinuous marshy patches of Boodhi Ganga with the profuse growth of vegetation like Phragmites sp., Arundinella sp. and Typha sp. etc. gives an ideal habitat and escape cover to the species. The first observation was made on November 14, 2009 in the sugarcane field in Hastinapur Range (29°00’ 04.51.40”N, 78°03’ 46.10”E), and the other was made on December 28, 2009 near the Forest rest house of Hastinapur Range (29°09’ 16.73” N, 77°59’ 58.44”E). Both the snakes were adults and all identification features were clear. The lengths of the snakes were 2.3m and 3.1m respectively. On both incidences, the photographs were taken using digital camera. The species was identified based on the identification features described by Smith (1943), Daniel (2002), and Whitaker & Captain (2004). This is the first reporting of this species from Hastinapur Wildlife Sanctuary. The present finding increased the number of reptilian’s species found in Hastinapur Wildlife Sanctuary to 31 and now it includes 13 turtle species, four lizards/skinks, two crocodilians and 12 snakes (Table 1).

Globally, the species is under threat due to illegal trade; It has been heavily impacted by overexploitation for food and skins (CITES 2011). It is also export to supply the pet trade, and consumption in snake wine (Stuart et al. 2012). In India, there is baseline data on the conservation status and distribution of the species. Pythons also often become victims of human-animal conflict. Increasing developmental activities along its distribution range, habitat destruction, lack of awareness among locals about the species,
are some obvious threats to the species.

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References


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