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A Preliminary Survey of Snake Fauna in and around Chincholi Forest, Kalaburagi District Karnataka, India

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ABSTRACT

An annotated checklist of snakes is prepared on basis of the collected information from survey during Jan.2015-Jan.2016. The objective of the study included evaluation of species composition, relative abundance and distribution of snake fauna of the chosen region. A total of 14 species belonging to 5 families were recorded of which 10 Non Venomous species and 4 venomous were identified. Among the species recorded 1species where from Typhlopidae, 2 from Boidae, 1 from Pythonidae, 7 from Colubridae and 3 from Elapidae family. This information will helps to provide information, awareness and conservation of the fauna in Chincholi forest, Kalaburagi district.

Keywords: Abundance, Chincholi forest, Snakes.

I. INTRODUCTION

Snakes represent the most fascinating and dreaded group of animals in the class of Reptilia together with lizards, crocodiles, turtles and tuatara.Curiously the snake never attack or bite a human being unless there is a threatening of life. Further although they are considered by most of the human mind as enemy, they constitute important component of ecosystem and contribute greatly in crop protection by devouring the field rats.

The snake probably originated well before Cretaceous period, but the oldest fossil record of snakes was from the early Creataceous (130 million years ago) and this group became abundant in late Creataceous period (Rage, 1987). India has wide diversified geographical and climatic conditions to support varied life forms. Living snakes are found on every continent except Antarctica and on most islands. Fifteen are currently recognized, comprising 456 and over 2,900.

In India scientific evaluation and documentation of serpents was initiated in the 19th century mostly by the British officers and naturalists, and some well knitted authoritive books were published (Gunther 1864, Boulenger 1890, Cazaly 1914, Smith 1943). Snakes are depicted as important objects of ecosystem in all types of literature since Vedic period (Prakash. 1991). However, public in general and biologist in particular pay little attention to the conservation of snakes. The loss of earth's biodiversity has attracted much attention and debate world over, only from the last decade, but mainstream conservation literature is found to be seriously lacking in the mention of snakes while discussing biodiversity loss even though this group is known to have high diversity among the tetra pods.

Consistent methods of ecological status determination and the development of management strategies for snake population in India have yet to be developed. Whereas a review of literature (Sharma. 1982: Murthy.1985: Bhupathv and Vijayan, 1989) may not supply a biologically rigorous assessment of the snakes, it provides a starting point for evaluating our meager knowledge of snake ecology.

The present study reveals preliminary survey of snake and provides information, awareness and conservation of the fauna in Chincholi region, Kalaburagi district of Karnataka state.

II. METHODS AND MATERIAL

The study region includes Chincholi taluk. Chincholi Forest has finally been declared as a dry land wildlife sanctuary in 2011 with an area of 134.88 sq.km. With Chincholi, the state now has a total of 24 wildlife sanctuaries, which is home to hyena and wolves. This sanctuary is the only area in Hyderabad-Karnataka region with features of Western Ghats and is therefore of importance from a biodiversity point (fig 1).

A Survey was made from Jan 2015 to Jan 2016. Sampling was done during both morning and Evening hours. In addition secondary information was collected on different species of snakes from native peoples by interviewing and showing colors photographs of the species to them. All collected specimens were examined and carefully identified by using keys given by Whitakar and captain (2004). An Annotated checklist of snakes is prepared on basis of the collected information from above mention sources.

III. RESULTS AND DISCUSSION

Diverse habitats of the district are rapidly changing due to irrigation projects and industrialization. Forest areas are being denotified for implementing development projects such as mining, communication and tourism. This has resulted in shrinkage, fragmentation, degradation and destruction of natural habitats. (Gohil, 1983; Ufri, 1999; Vyas, 2000).From urban areas indicate that natural habitats of snakes are under severe anthropogenic pressure (Joshi Prasanna Subhash, 2011). The present study reveals that study area includes rich diversity of snakes in and around Chincholi forests.

Survey shows the abundance of total 14 snakes species belonging to 5 families are reported (Table 1). From the total identified species 10 are non-venomous and 4 are venomous. In non-venomous some species of snakes are *Ramphotyphlos braminus,Gongylophis conicus, Python m. molarus.Eryx johii, Coelognathus helena helena, Ptyas mucosa, Oligodon linereuss, Lycodons striatus, Argyrogena fasciolata, Sibynophis subpunctata* and some of venomous snakes are *Bungarus caeruleuss, Boiga trigonata,Bungarus sindanus walli and Naja naja* ..

There are, in future, required more extensive exploration of the work. The anthropogenic activities are affecting the abundance of snake fauna. The present study will may help to develop awareness in people and to conserve the snakes fauna in Chincholi forest of Kalaburagi district.

IV. ACKNOWLEDGEMENTS

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Table 1. Snakes of Chincholi forest, Kalaburagi district

Sl .No	Family	Scientific Name	Common Name
1	Typhlopidae	*Ramphotyphlps braminus*	Brahminy worm snake
2	Pythonidae	*Python m.molarus*	Indian rock python
3	Boidae	*Gongylophis conius* *Eryx johnii*	Common sand boa Red sand boa
4	Colubridae	*Coelognathus helena Helena* *Ptyas mucosa* *Argyrogena fasciolata* *Oligondon linereus* *Lycodon striatus* *Sibynophis subpunctatus* *Boiga trigonata*	Common trinket snake Rat snake Banded racer Banded kukri snake Barred wolf snake Dumeril's black headed snake Common cat snake
5	Elapidae	*Bungarus caeruteus* *Bungarus sindanus walli* *Naja naja*	Common Indian krait Wall's sindh krait Spectacled cobra

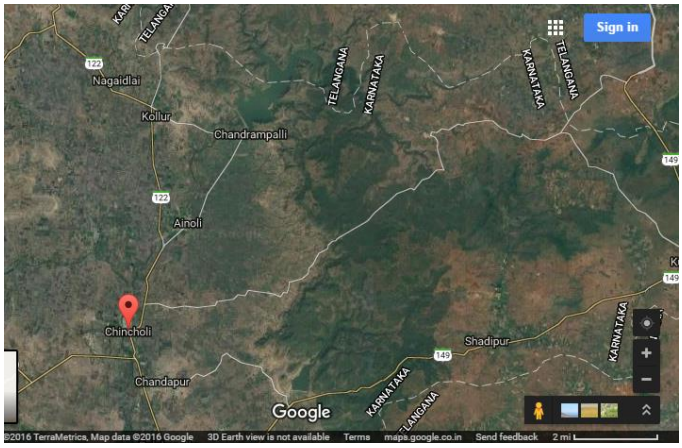

Figure 1: Photograph of the Study Area

V. CONCLUSION

During our studies, we have observed 14 species of snakes amongst which 10were non-venomous and 4 venomous snakes. The area with lush green vegetation, hilly terrain suitable habitat for other reptilians also but they are under threat due to anthropological activities development in these areas. Presently many snakes have made their appearance in an around areas with proximity to human population due to loss of habitats and environmental stress. When the goal of a conservation programmed is to ensure the long-term survival of snake species, its habitat will have to be conserved. Short-term conservation programmed, which attempts to prevent loss of the complete genetic complement of some species. But our approach must be for long term conservation programmers, which attempt to preserve evolutionary potential, i.e. ecosystem protection.

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