

An Ophiological Survey in Madhya Pradesh Bundelkhand Region of Central India

Sandeep Fellows

DCF (IT) M.P Forest Department, Satpura Bhawan, Bhopal

Abstract: Bundelkhand lies between the Indo-Gangetic Plain to the north and the Vindhya Range to the south. It is a gently-sloping upland, distinguished by barren hilly terrain with sparse vegetation, although it was historically forested. Bundelkhand region comprises of thirteen districts - seven districts of Uttar Pradesh viz., Jhansi, Jalaun, Lalitpur, Hamirpur, Mahoba, Banda and Chitrakut and six districts of Madhya Pradesh viz., Datia, Tikamgarh, Chhatarpur, Damoh, Sagar and Panna.

Bundelkhand is a hot and semi-humid region with moderate annual rainfall, ranging from around 750 mm in the northwest, to 1250 mm in the southeast. The soils fall into two categories: red soils and black soils.

In Madhya Pradesh the Total forest area is 34.94 % but it's not equally distributed in all districts of Madhya Pradesh. The forest of Bundelkhand are rapidly tapering because of aggressive human activity, it has been a major source of livelihood for poor people of Bundelkhand, the notified forest area is high in Panna and Damoh districts, and quite high in Sagar and Chhatarpur. However, a notified forest is quite different from an actual forest. Much of 'notified' forest land has ceased to be a forest due to overexploitation, mining and quarrying, encroachment and other reasons. Bundelkhand has a wide variety of flora and fauna like Panther, Wolf, Bear, Jackal, Chital, Sambar, Neelgai, Birds and reptiles etc. Floral species like Salai (*Boswellia serrata*), Seesham (*Dalbergia sissoo*), Dhau (*Anogeissus latifolia*), Jamun (*Syzizium*), Seja, the karondha (*Carissa spinarum*) shrub and occasionally, teak are found in abundance. Teak are also found in the southern Bundelkhand Upland sub-region (Panna, Chhatarpur, Tikamgarh), besides the above-mentioned species. In the Damoh and Sagar plateaus, we also see trees locally known as Dhawda (*Anogeissus latifolia*), Tinsa (*Augenia delbergiodes*) and Bija (*Pterocarpus marsupium*). Many of the wild animals have become a rare sight in Bundelkhand, even in designated sanctuaries. Extensive forests are now found only in the hilly areas of southern Bundelkhand. This paper examines the distribution of snake species in Bundelkhand region out of 200 species of snake reported in India, in which 31 species occur in the Madhya Pradesh. During the study, we recorded 14 species of Snake presenting 06 different families and study area. No earlier Study was conducted in Bundelkhand area. In this study, we recorded 14 species of snake presenting 06 different families. During the study of Bundelkhand region, we find two new species of Snake *Atrretium schistosum* (Jatuni Doriaa or Olive keelback snake) and another is *Coluber ventromaculatus* (Glossy-bellied racer or Hardwicke's rat snake or Gray's rat snake).

Keywords: Ophiology, Bundelkhand, Herpetology, Amphibian, Cobra, Viper, Keel Back

1. Introduction

All over the world there are 2000 species of snakes, about 200 are found in India. Snakes range in size from small in cm (worm snake) to many feet in length. The skin of snakes is made up of scales that may be smooth or ridged. The scales on the belly (called scutes) are thicker than those on the sides and back of a snake to provide protection as it moves. The field of herpetology research has always received less priority in Madhya Pradesh. The illegal trade related to wildlife crime including the snakes capturing, trading for skin, poaching and local medicinal use is strictly controlled by the government agencies such as ministry of Forests and environment and state forest team with the help of wildlife protection act.

2. Study Area

Bundelkhand is land of Culture, Archeological, Spirituality and also rich in Flora Fauna Diversity, Bundelkhand region is located between 23°20' and 26°20' N latitude and 78°20' and 81°40' E longitude. The plains of Bundelkhand are intersected by two mountain ranges, the Vindhya, and Bander chains, the highest

elevation not exceeding 600 meters above sea-level. Bundelkhand is a hot and semi-humid region. The monsoon comes from the southwest in mid-June and ends in mid-October. The average rainfall of the state is about 900 mm.

3. Methodology

The Methodology is based on data obtained from different published research paper, Encounter, Habitat Survey and sharing Knowledge with Snake Charmer, Discussion with local people and analyzing different pictorial books of snakes. This study was conducted from 2013 to 2014 Specially in monsoon Season in the region of Orcha, Chanderi & Sagar.

4. Results and Discussion

No earlier Study was conducted in Budelkhand area. During the study, we recorded 14 species of Snake presenting 06 different families and study area, we observed new spices of Snake is *Coluber ventromaculatus* (Glossy Bellied Racer) genus- *Coluber* family- *Colubridae* reported from Ganesh Nagar, Near Orcha(lat 24°39' and 39°70' N, long 79°03' and 42°32' E) *Coluber ventromaculatus*, (Glossy-bellied racer or Hardwicke's rat snake or Gray's rat snake) is a species of rat-snake or racer snake with smooth, round, elongate, gradually tapering body moderately narrow head. A cross-bar and two stripes on the nape.



(a)



(b)



(c)



(d)

Fig. 1: Picture showing the Different species Snake of Bundelkhand Platue
(a) *Naja naaja* (Monocled cobra) (b) Saw Scaled Viper (c) Wolf Snake (d) Checkered Keel Back

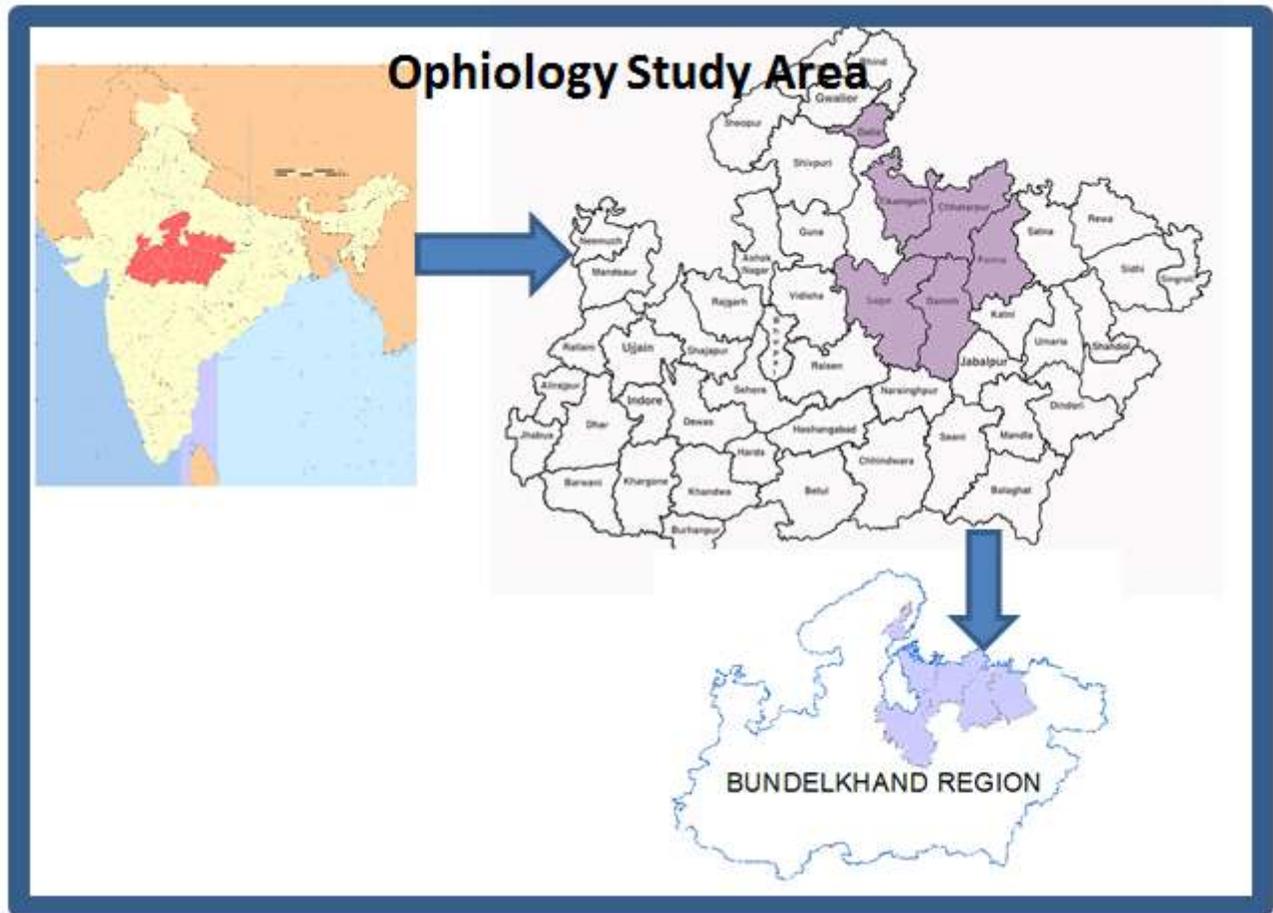


Fig. 2: Map of the study area

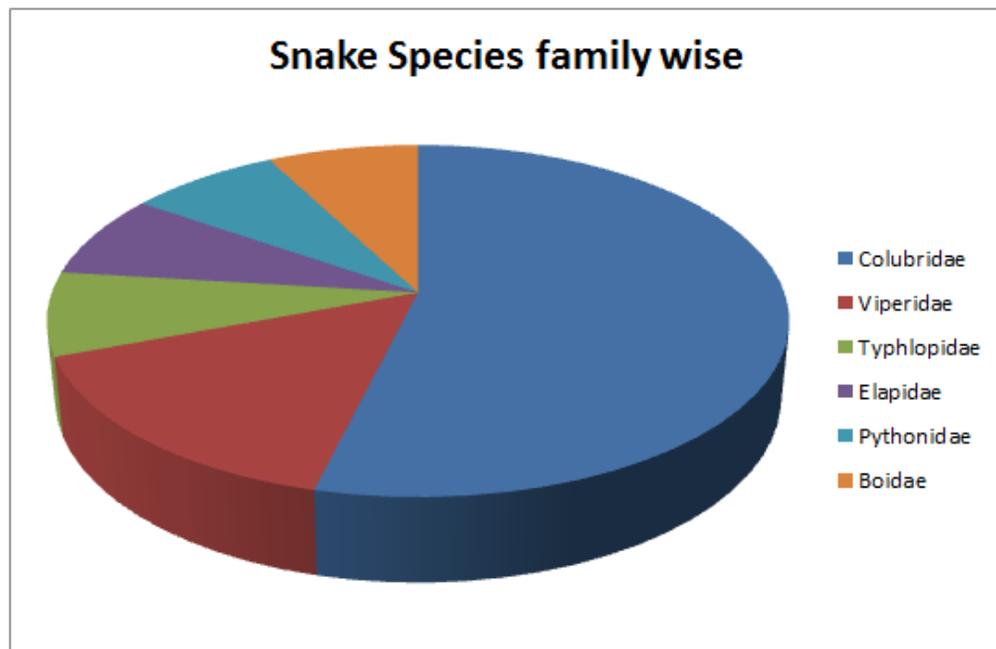


Fig. 3: Different species of snakes found in the study

TABLE 1: List of snakes found in the study

S.No	Common Name	Zoological Name	Family
1	Sand Boa	<i>Eryx johnii</i>	Boidae
2	Indian Rat snake, or Dhaman	<i>Ptyas mucosa</i>	Colubridae
3	Python	<i>Python molurus</i>	Pythonidae
4	Monocled cobra	<i>Naja kaouthia</i>	Elapidae
5	Spectacled cobra	<i>Naja naja</i>	Elapidae
6	Gray's rat snake, or Glossy-bellied racer	<i>Coluber ventromaculatus</i> (New Species)	Colubridae
7	Common Kukri Sanke	<i>Oligodon arnesis</i>	Colubridae
8	Common Korial or Indian Wolf Snake	<i>Lycodon aulicus</i>	Colubridae
9	Common Satak or Duméril's Black-headed snake	<i>Sibynophis subpunctatus</i>	Colubridae
10	Paniyal or Checkered keelback	<i>Xenochrophis piscator</i>	Colubridae
11	Brahminy blindsnake	<i>Ramphotyphlops braminus</i>	Typhlopidae
12	Jatuni Doriaa or Olive keelback snake	<i>Atretium schistosum</i> (New Species)	Colubridae
13	Russel Viper	<i>Doboi russelli</i>	Viperidae
14	Saw Scale Viper (Golden)	<i>Echis carinatus</i>	Viperidae

5. Acknowledgement

The authors are grateful to Shri Narendra Kumar (CWLW MP) Mr R.P Singh (Field Director) Shri S.S Rajpoot (CCCF NVDA) Shri . Dhriendra Bhargav (CCF IT), Madhya Pradesh for facilities given to undertaken the study. And thankful to Dr Javed sir, Shri Mehra Inbesat Khan, Hemant Singh for field work and support and also staff and friends who given support in studies.

6. References

- [1] Urban Herpetofuna :a Case study in Guwahati City of Assam ,India Herpetology Notes Volume 4:195-202(2011),by Jayaditya Purkayastha, Madhurima Das and Saibal Sen Gupta ,2011
- [2] A NORTHERNMOST RECORD OF THE GRASS SNAKE (*Natrix natrix*) IN THE BAIKAL LAKE REGION, SIBERIA. Litvinchuk, S. N.; Kuranova, V. N.; Kazakov, V. I.; Schepina, N. A. // Russian Journal of Herpetology;Jan-Mar2013, Vol. 20 Issue 1, p43
- [3] Snakes of India, The Field Guide by Romulus Whitaker (Author), Ashok Captain (Author) Publisher: Draco Books; Hard cover First Reprint edition (1 January 2008)
- [4] The Book of Indian Reptiles and Amphibians (English) First Edition By :- DANIEL J. C. , Publisher Oxford University Press
- [5] BNHS ,Basic Course of Herpetology 2015 Lore Note on Herpetology .
- [6] Study of Impact wildlife Protection Act 1972 on the Livelihood of snake charmers (Speras) of Madhya Pradesh ,2005, By Sanjay Thakur, Indian Institute of Forest Management ,Bhopal
- [7] Distribution of forest floor reptile in the rain forest of Kalakad –Mundanthurai Tiger reserve Soputh India. N.M Ishwar , Ravi Chelaam and Ajit Kumar ,Current Science Vol 80No-3 ,10 Feb 2001 413-408