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ANIMAL DIVERSITY OF RAMNA RESERVE FOREST OF SAGAR (M.P.)

Dr. Mukesh Kumar Napit*

Department of Zoology, Govt. SPM Science and Commerce College Benazeer Bhopal.

***Corresponding Author: Dr. Mukesh Kumar Napit**

Department of Zoology, Govt. SPM Science and Commerce College Benazeer Bhopal.

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ABSTRACT

Wild life conservation includes all human efforts to preserve wild animals from extinction. It involves the protection and wise management of wild species and their environment. Some species have become extinct due to natural causes but the greatest danger to wild life result from human activities. Thus we ourselves have created this need for wild life conservation. The progress of man throughout has been beneficial for the human race but it is the wild that has suffered through the years. Invention of sophisticated weapons, industrialization, urbanization, ever increasing human population have been some of the major causes for the dwindle of our once rich wild life resource. Hunting, clearing of forests, draining of swamps and damming of rivers for irrigation and industry, this is what we appraise of man's progress. These activities have vastly reduced the natural habitats of our wild life and many species are endangered or nearly extinct.

KEYWORDS: Flora and Fauna, Diversity, Endangered species, Conservation.

INTRODUCTION

Ramna reserve forest is a unique protected area where in major river basins of Sonar. There fourths of the falls in the in the Sonar catchment. This protected area is located in two districts of M.P. namely Sagar and Damoh with Sagar as its Head quarters thus it is one of the unique protected area where such a great transitional biodiversity exist. The forest is continuous and has similar ecological and geomorphological characters in the three districts. Mishra (1961), worked on ecological studies of some forest of sagar Madhya Pradesh.

Raman reserve forest which is situated on the left bank of Sonar river and 56 km east of Sagar on Garhakota-Patharia road. Reserved since 1945, the forest remains rich in diversity of its mammalian fauna. However at present this diversity is limited to few large mammals only. Because of the remote location and difficult approach the true nature of this wild life resource has remained unknown.

The topography is generally undulating and the underlaying geological system is basically basalt and Vindhyan sandstone. Major formation of Ramna reserve forest is Vindhyan sandstone and shells. At foot of hills soil is dark red and clayey while soil colours vary from light brown to redish brown on slopes and plateau.

Ramna reserve forest is a unique protected area where in two major river basins of India are encompassed, namely the Betwa and Narmada. There fourths of the falls in the in the Narmada catchment. This protected area is located in three districts of M.P. namely Sagar, Damoh and Narsingpur with Sagar as its Head quarters thus it is one of the unique protected area where such a great transitional biodiversity exist. The forest is continuous and has similar ecological and geomorphological characters in the three districts. Mishra (1961), worked on ecological studies of some forest of sagar Madhya Pradesh.

AREA AND TOPOGRAPHY

Climatic Conditions

The climate of Sagar is seasonal with three well marked seasons viz. rainy, winter and summer on the basis of temperature, rainfall and relative humidity.

According to climatic condition, rainy season in Sagar begins from the middle of June and continues up to September. Annual rainfall in Sagar during study period March 2012 to July 2013 was recorded. Rainfall was respectively maximum in July, August and mid September, Thus during the one consecutive years viz March 2012 to July 2013 total maximum rainfall recorded was 1100^0C.

Temperature

On the basis of past one year temperature record, it is moderate with average minimum and maximum temperature of 13.42^0C and 41.40^0C respectively. In summer the temperature goes up to 47^0C and in winter are of high magnitude, mostly mean maximum and minimum temperature range from 41.40^0C to 11.44^0C respectively.

Relative Humidity
Humidity is an important factor which is recorded with the growth of herbaceous layer, micro flora and disappearance of dead plant material. It was higher in rainy season, moderate in winter and least in summer season.

MATERIAL AND METHODS

Field studies were conducted on a full time basis. All these areas were visited regularly form March 2018 to July 2021. The observation presented in this paper are based on direct observation as well as identification and analysis of field symptoms and keeping the wild animals under observation for a length of time. The field observation were made in certain definite points in the forest reserves. Time of observation made in certain definite points in the forest reserves. Time of observation was restricted to few hours in the morning and evening as well as.

Technique and procedure undertaken was is mainly based on keen observation to locate and identify the specific animals. Animal evidences are normally concentrated along the routes frequently visited by wild animals. Wild animals move along selected routes in the forest. Observations were facilitated by use of binoculars and cameras, diary and pen. Most efficient method of observing animals directly was from trees or Machans, Basic field observation were based on direct observations, identification and interpretation of field symptoms.

RESULT AND DISCUSSION

To conclude the study of fauna diversity shows that many wild animal which were found in these forest areas many years back have now vanished or reduced to a very few due to human interference. Unprotected areas of forest also need to be protected so that the fauna diversity of these regions is conserved.

The forest in the sanctuary are heterogeneous in composition, extent and distribution. They occur in extensive compact tracts as well as interspersed variety informs of structural development. The wide diversity occur not only in extent and distribution of forest but arises also due to seasonal variation in the phenology of the numerous species constituting the deciduous mixed forest crops. These conditions provide a variety of food and cover throughout the year for the animals. Thakur (1994), studies on the biology and ecology of *chital* wild life in relation to feeding habitat Nouradehi forest area.

Fauna and Animal Diversity: The forest remains rich in diversity of its mammalian fauna, Amphibians, Reptiles and Birds are also seen.

Amphibians: Toad (Bufo melanosictus), Rana (Rana tigrina).

Reptiles: Calotes (Calotes calotes), Chamaeleo (Chamaeleon chamaeleon), Varanus (Varanus Salvator), Cobra (Naja naja), Python (Python molonus) and Krait (Bungarus).

Aves: Pigeon (Columba livia), Parrot (Psittacula eupateria), Quail (Eudynamys livia), Crow (Corvus splendens), Baya or weaver bird (Ploceus philippinus weaver).

Mammals: Chital (Axis axis), Nilgai (Boselaphus tragocamelus), Sambhar (Cervus unicolar), Chinkara (Gazella gazella), Wild Rat (Golunda ellioti), Red and black faced monkeys (Semno-pithecus entellus entellus) and (Presbytus entellus entellus).

In the Ramna reserve forest the dominant animal species are Chital (Axis axis), Nilgai (Boselaphus tragocamelus), Indian bison (Boselaphus gaurus).

CONSERVATION ASPECTS

The habitat loss due to following factors viz: fire, illicit felling, over-grazing and natural calamities has resulted in the loss of diversity. Endangered species have particularly suffered from lack of effective pollinators, viable seed formation and natural regeneration, disease etc. Resulting in the depletion and erosion of the diversity in them.

No conservation strategy can be effective unless taken care of the basic need of the local communities. A good deal of biodiversity is also protected through folk tradition. The establishment of Nauradehi wild life sanctuary is an appropriate step in promoting ***in-situ*** conservation of wild animals and plant genetic resources at the government level.

Displacement of enclave villages; the fifteen villages are located in side the forest area, should be rehabilitate outside the protected area by providing the suitable compensation. This will minimize the problem of grazing and cattle pressure on flora of sanctuary. The harmful weed flora should be uprooted, burnt at vegetative stage and replaced by grasses and bamboos.

The huge amounts of over burden are dumped around the forest land nearer to protected area and it is completely barren land. Therefore the indigenous plant species should be planted on over burden dumps. The nallah carring polluted water with heavy metal or washout water of Diamond. Protected area in favour of wild-life as well as plant species. Diamond mining and stone quarries should be operated by scientific manner, without much destruction of vegetation and minimum disturbance to wild life.

Considering the prevailing situation and diverse plant wealth of the area, emphasis must be laid on the conservation measures, both *in-sit* and *ex-situ*. The *in-situ* approach however needs priority for the protection

of endangered species, which have already lost the diversity and are not able to adjust. For effective conservation of forest diversity in-situ preservation plots in different forest ecosystems can be established. Preservation plots are precise example of local level management norms of biodiversity plots as "demarcated forest area set aside in perpetuity for the preservation of the forest with no human interference beyond what is necessary for their protection and maintenance".

REFERENCES

1. Mishra, G.P. (1961), Ecological studies of some forest of Sagar (M.P.) faculty of life sciences department of Botany. Dr. Hari Singh Gour Vishwavidyalaya Sagar, (M.P.) India, 1961.
2. Thakur, S.S. (1994), studies on the biology and ecology of chital wildlife in relation to feeding habitat of Nauradehi forest. Department of zoology faculty of the science. Dr. Hari Singh Gour Vishwavidyalaya Sagar, (M.P.) India, 1994.
3. Vishwakarma, R. (1996), Geographical study of diet and health in Sagar city, department of Geography. Dr. Hari Singh Gour Vishwavidyalaya Sagar, (M.P.) India, 1996.
4. Suman, N.R. (2007), Study of Flora and Fauna animal diversity of Panna Tiger Reserve of MP.