

ASSESSMENT OF FAUNAL DIVERSITY IN PANNA TIGER RESERVE

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ABSTRACT: Panna Tiger Reserve located in north central part of the state spreads over the districts of Panna and Chhatarpur. The whole tiger reserve makes the catchments of Ken River. Panna Tiger reserve consists of three units, namely Panna National park, Gangau Wildlife Sanctuaries and Ken Gharial Wildlife Sanctuaries. Panna Tiger Reserve is very rich Biodiversity because of its variety of geology land shapes plateau, plane, valley and hill area. There are variety of climate and altitudinal variations complied with varied ecological habitats. The present study deals with the Assessment of Faunal diversity in Panna Tiger Reserve. The best known areas of animal distribution occur in Madla and Hinauta ranges. The Reserve harbors a wide range of faunal diversity. Tiger is the top carnivore in the reserve its nearest competitor being the Leopard. Tiger reserve has typical central Indian fauna with more than 200 species of birds, common reptiles and large number of aquatic animals have also been recorded in this areas.

KEYWORDS: Panna Tiger Reserve, Faunal diversity, Assessment.

INTRODUCTION:-

Biological diversity or biodiversity is the variety and variability of flora and fauna in an Ecosystem. We can say richness of species genera & families at a place. CBD convention of Biological diversity states that biological diversity means variability among living organism form all sources. This Includes diversity with in species, between species and Ecosystem D.L. Perinan & F. Adelson define variety & variability among living organism and the ecological complexes in which they occur. International council for Bird preservation 1992 define "Biodiversity is the total variety of life on earth. It Include all genes species and ecosystem and the ecological process of which that are part....". Biodiversity is the totality of genes, species and ecosystem in a region. The wealth of life on earth today is the product of hundreds of millions of years of evolutionary history. Panna Tiger is one of the most important Tiger habitats in the central India for the long-term conservation of "Flagship" species Tiger. Nature

has bestowed is with many floral and faunal diversity. However managed forest outside the protected area network also support large population of wild species (Giles, 1971). Ken river is the life line of the Tiger reserve as it flows about 56 km inside the reserve. There are a number of small perennial streams Joining Ken river. Therefore, area around Ken river is good as for as water resources are concerned. The forest cover for wild animals is thin and open. It is only during the rainy season that the cover is really dense mainly due to grasser, which are thick and varied. In some of the plateaux e.g Bhadar, Badgadi, Nararan, Panna and Seha, the grasses all tall, up to nearly 2 m and provide very good cover to cornivores and herbivores alike. The slopes of hills have better tree density with the presence of thickets of bamboo clumps. Sudden drop from ridges to valleys makes safe and suitable shelters for wildlife with some availability of water. These drops locally called seha are generally approachable from One side only. There places are quiet and secure. Very good rock shelters or small caves can also be seen here at the base. While numerous small and big ledges up on the cliffs provide roosting sites to birds like vultures, kites, owls, doves etc. Reptiles specially Lizards, common Indian monitor, various snakes, skink etc, are also found in the Seha.

METHODOLOGY:-

Gopal and Shukla (2001) have described the status and management strategies of Kanha Tiger Reserve. The Biogeographical classification of the study area has been suggested by Rodgers & Panwar (1988), Prater(1948), Roberts (1977) have also described the typical fauna of the central Indian highlands. Peterson & Mateny (1986) have Introduced the Importance of newly developed geographical Information system (GISs) for wild life and natural resources managers. Rickers et. al. (1995) have emphasized its role in ecological studies, and for developing wildlife habitat models. Giles (1971) has explained the need of well defined objectives and scientific methodology for the study of plant communities harboring wild animals. Sale and Berkmuller (1988) and Rodgers (1991) have employed methods for the estimation of population density of wild life. The present study has been conducted in following three phases to cover different study aspects.

Phase-I Collection of Back ground information

Phase-II Assessment of Faunal diversity

Phase-III Interpretation and synthesis

RESULT AND DISCUSSION:-

The rich habitat diversity of Panna tiger Reserve supports abundant animal communities viz; Mammals, birds, Reptiles and the large number of aquatic animal. The above typical fauna of the central Indian highlands part of the Oriental- Zoological Realm, is an amalgam of the Indo-Chinese, Ethiopian and palaeartic elements (Prater, 1948, Roberts, 1977). The heterogeneity of habitats influences the distribution of Mammals. Tiger is the top carnivore in the reserve its nearest competitor being the Leopard. The best known areas of animal distribution occur in Madla and Hinouta ranges. Open and peripheral plateaux of these ranges in Particular have good populations of Chinkara, and Nilgai, sloth bear and Pigs. The other animals include Jackal. (*Canis aureus*), Hyena, Langur (*Presbytis entellus*), and Leopard. sighting/ other evidences of tiger movements are occasional to fairly frequent. Sambar (*Cervus unicolor*) is generally found in denser areas to ecotons between forest and plateau grassland. Chousingha (*Tetracerus quadricornis*) is met with mostly in thick grassy areas and in patches of good undergrowth. Chital (*Axis axis*) in small groups, is found in wooded grassy areas, mostly away from habitation. The entire panna range is frequented by sloth bear and Nilgai. Leopard is more common in this range than tiger which is generally confined to Talgaon circle. The Rhesus monkey (*Macaca mulatta*) is confined to Bhairon ghat, Sukwaha ghat and possibly a few more sites. Wild cat can be frequently seen in Bhadar and Badgadi stretch of Hinouta range and in all well wooded areas of the reserve.

More than 200 species of birds, which include host of migratory have been recorded in the reserve. Some of commonly seen birds include, Paradise flycatcher, Pond heron, cattle egrets, lesser adjutant stork, crested serpent

eagle, Indian long billed vultures, Partridges, quails, peafowls, doves, Parakeets, nightjar, Indian roller, black drongo mynas, bulbuls, blue jay, baya, black bird, crow pheasants, cuckoo, jungle crow etc. common reptiles found in the reserve are common Indian monitor, lizards, chameleon, Indian python, cobra, and crails.

A Large number of Aquatic animals Including long snouted Crocodile-Gharial (*Gavialis gangeticus*) and marsh Crocodile, Mugger (*Crocodylus palustris*), and several kinds of fish found in Ken river.

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