An Annotated Study Of Mammalian Fauna Of The Sajjangarh Wildlife Sanctuary, Udaipur, Rajasthan (India)

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INTRODUCTION

It is well known that state of Rajasthan exhibits a diverse geographical topography because of the Aravallis Ranges, which divide the State into two distinct unequal regions viz. the northwestern and the southeastern. This provides a range of diverse climatic conditions. On the northwest of Aravallis is the Great Thar Desert and on the southeast there is rich green carpet of natural beauty. Thus, the Aravalli Ranges (hill tract) typify an ecotone that presents an extremely delightful sight of flora and fauna of the two sides.

The district of Udaipur is situated in the southeast part of the State. The Udaipur Wildlife Division includes four Wildlife Sanctuaries viz. Kumbhalgarh, Jaisamand, Phulwari and Sajjangarh Wildlife Sanctuary and one closed area – the Baghdara Closed Area.

Among these, the Sajjangarh Wildlife Sanctuary is a recently developed one. Although it is very closed to the city, but yet it has not been explored scientifically by the researchers. This sanctuary has remained unexplored because the area was not open for the public due to security reasons. . Only some scattered reports are available, but they are not based on any systematic study. No information, especially, on the scientific taxonomic data of the mammalian diversity of Sajjangarh Wildlife Sanctuary is available in the literature. However, a few recordings such as that of pale hedgehog *Paraechinus micropus* (Vyas, 2002), albino common mongoose *Herpestes edwardsi* (Tehsin and Chawra, 1994), flying squirrel and mouse deer (Tehsin, 1980), have been made from the area surrouding the sanctuary that exhibits a similar habitat. Thus, a more detailed study of Sajjangarh Wildlife Sanctuary was needed to investigate and prepare a scientific taxonomic record of the mammalian fauna. In view of the above, the present study was taken up to explore and prepare a scientific and authentic taxonomic record of the diverse mammalian fauna of the sanctuary.

STUDY AREA

Sajjangarh wildlife sanctuary is the smallest sanctuary of Rajasthan. It is situated in the southern Aravallis on the out skirts of Udaipur city in the Bansdara hills lying between 73 ° 37’ E to 73 ° 40’ E longitude and 24 ° 35’ N to 24° 39’ N latitude surrounding the Sajjangarh palace. This palace, also known as monsoon palace, was built by Maharana Fateh Singh of Mewar in 1899 AD. Once there was a time when the

Bansdara hills were covered with dense vegetation and were a home of many animals including the big cats. It was used as the hunting ground by the erstwhile rulers of Mewar. Unfortunately due to non-judicious harnessing of biological and non-biological resources of the Aravallis, by the year 1986, the wild life of the area was critically destructed.

Later, by realizing its strategic location and importance from environmental and ecological point of view, this area was declared as wildlife sanctuary in 1987. This sanctuary covers an area of 5.19km sq. The altitude varies from 630 to 938 m above MSL. It receives an average rainfall of approximately 650 mm annually and the highest temperature reaches to about 42 °C. It is one of the well-protected sanctuary having a concrete wall around it. Floral cover is represented by tropical dry deciduous forest dominated by *Anogeissus pendula, Boswellia serrata, Acacia senegal and Acacia leucopholea.* A rare and endangered plant species *Commifera whighti* is found in abundance. Along with these, *Santalum album* and *Dicleptera* species are also found here.

METHODOLOGY

The inventory was carried out during the period of January 2004 to February 2005, and a total of 120 days (4hrs /day) were spent for the fieldwork. This work is a part of project undertaken to study the complete faunal biodiversity of the sanctuary. In addition, information is also being gathered through interviews made with local people living in the surrounding villages namely Chhota Hawala , Bada Hawala, Badi, Rampura and Gorella and also with the forests personnel.

For the proper documentation of the mammalian fauna the entire sanctuary was divided into five sub zones in order to cover the entire field area. Each zone was randomly explored on the basis of habitat structure, availability and possibility of the species. Besides this all the water bodies including natural as well as man made water holes, tanks, ditches, anicuts etc. were observed as these places are frequently visited by the animals to quench their thirst. Both direct and indirect evidences were collected and analyzed by using the standard diagnostic keys available in the literature.

RESULTS

During the present study period approximately 32 mammalian species were recorded in the sanctuary. These mammals belonged to 19 families covering a total of eight orders. These are Artiodactyla (Families – Bovidae, Cervidae and Suidae), Carnivora (Families – Canidae, Felidae, Herpestidae, Hyaenidae, Mustilidae, Viverridae), Chiroptera (Families – Molossidae, Rhinopomatidae, Vespertilionidae), Insectivora (Family – Soricidae) Lagomorpha (Family – Leporidae), Pholidota (Family – Manidae), Primata (Family – Cercopithicidae) and Rodentia (Families – Hystricidae, Muridae, Sciuridae). A detailed list of mammals recorded in the present investigation is provided in Table – 1.

TABLE – 1: **List of mammals recorded from Sajjangarh Wildlife Sanctuary along with their local conservation status.**

S.NO	ORDER	FAMILY	SCIENTIFIC NAME	COMMON NAME	STATUS
1.	ARTIODACTYLA	BOVIDAE	*Boselaphus tragocamelus*	Nilgai	I
		CERVIDAE	*Axis axis*	Spotted deer	I
			Cervus unicolor	Sambar	R
		SUIDAE	*Sus scrofa*	Indian wild boar	R
2.	CARNIVORA	CANIDAE	*Canis aureus*	Jackal	A
			Vulpes bengalensis	Indian fox	R
		FELIDAE	*Panthera pardus*	Panther	C
			Prionailurus rubiginosa	Rusty spotted cat	R
			Felis chaus	Jungle cat	C
		HERPESTIDAE	*Herpestes edwardsii*	Common mongoose	A
			Herpestes smithii	Ruddy mongoose	C
		HYAENIDAE	*Hyaena hyaena*	Stripped hyaena	C
		MUSTELIDAE	*Mellivora capensis*	Ratel	R
		VIVERRIDAE	*Paradoxuurs hermaphroditus*	Toddy cat	A
			Viverricula indica	Small Indian civet	A
3.	CHIROPTERA	MOLOSSIDAE	*Tadarida aegyptiaca*	Free tailed bat	R
		RHINOPOMATIDAE	*Rhinopoma microphyllum*	Rat tailed bat	C
		VESPERTILIONIDAE	*Pipistrellus mimus*	Pygmy pipistrelle	A
4.	INSECTIVORA	SORICIDAE	*Suncus murinus*	Grey musk shrew	A
5.	LAGOMORPHA	LEPORIDAE	*Lepus nigricollis*	Indian hare	C
6.	PHOLIDOTA	MANIDAE	*Manis crassicaudata*	Indian pangolin	R
7.	PRIMATES	CERCOPITHECIDAE	*Semnopithecus entellus*	Hanuman langur	C
8.	RODENTIA	HYSTRICIDAE	*Hystrix indica*	Indian porcupine	C
		MURIDAE	*Bandicota bengalensis*	Indian mole rat	C
			Mus booduga	Indian field mouse	C
			Mus musculus	House mouse	A
			Mus phillipsi	Fawn colored spiny mouse	C
			Rattus rattus	Common house rat	A

	Rattus cutchicus	Cutch rat	C
	Tatera indica	Indian gerbil	A
	Vandeleuria oleracea	Long tailed tree mouse	A
SCIURIDAE	*Funambulus pennanti*	Five stripped palm squirrel	A

I = Introduced (by forest personnel);
A = Abundant; C = Common; R = Rare (according to the numbers encountered)

In the light of the above study, it is observed that the habitat and environment of the sanctuary seems to be suitable for the survival of these species. The introduced animals are also found to adapt well to the prevailing conditions of the sanctuary. It is hoped that the sanctuary can be a home for diverse fauna in future.

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