

3. FOOD HABITS OF THE FISHING CAT *FELIS VIVERRINA* IN KEOLADEO NATIONAL PARK, BHARATPUR, RAJASTHAN (With a text - figure)

INTRODUCTION

Ecological information not only on the fishing cat but also all other lesser cats of the Indian Sub-continent is scanty. No quantitative information is available on the food habits of fishing cat except the stray observations of Jerdon (1874), Prater (1965), Roberts (1977). According to Sankhala and Sharma (1985), fishing cat is limited only to Keoladeo National Park, in Rajasthan.

STUDY AREA

Keoladeo National Park, ($27^{\circ} 7.6'$ to $27^{\circ} 12.2'$ N and $77^{\circ} 29.5'$ to $77^{\circ} 33.9'$ E) situated 50 km south of Agra has an area of about 29 km². The entire area is flat with a gentle slope towards the centre forming a depression of about 8.5 km² which is the main submersible part of the park. The water is drawn into the park through a canal from Ajan Bund during the monsoon (July-October) and it gradually recedes and the park dries up during summer (March-June), leaving only some pools in the deeper areas. Trees which are planted on the mound inside the wetland are being used by the colonial birds for nest building. For a detailed description of the study area, see Ali and Vijayan (1986).

METHODS

Scats were collected mainly from the banks of the waterspread area and also from the dykes which divide the aquatic area where fishing cats were seen. All the scats were washed, the contents dried and examined under the dissecting microscope. Major taxa of the animal matter were determined and whenever possible prey groups were identified. Hairs, bones, scales and feathers from the scats were identified with the help of reference samples of different animals collected from the park. Frequency

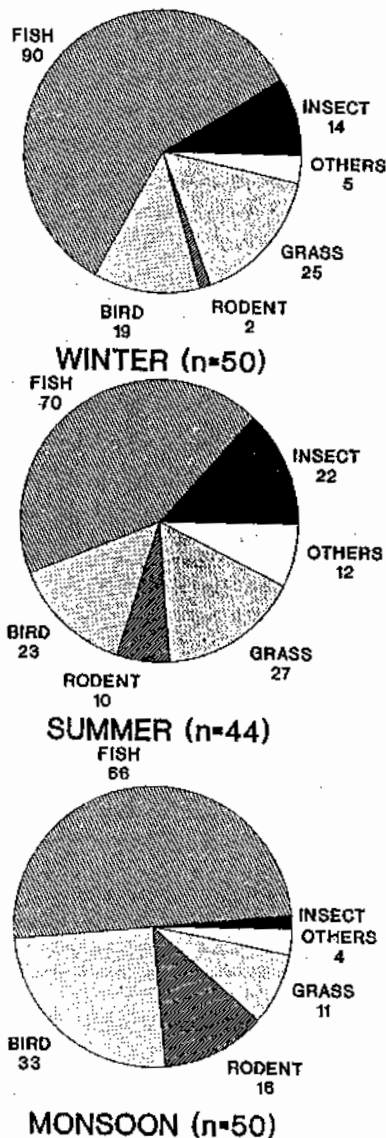


Fig. 1. Percentage of various food remains in the scats of fishing cat.

TABLE 1
PERCENTAGE OCCURRENCE OF FOOD REMAINS IN THE SCATS OF FISHING CAT IN DIFFERENT MONTHS DURING THE STUDY PERIOD

Month	No. of scats	Scats with fish remains	Percentage of scats with the remains of					
			Insects	Fish	Birds	Rodents	Grass	Others
November 1986	12	5	16.1	91.6	16.6	-	16.6	-
December	12	7	-	100	16.6	8.33	16.6	-
January 1987	11	7	18.18	100	-	-	18.18	-
February	15	4	20	66.6	53.33	-	46.6	20
March	13	2	30.76	76.92	53.33	-	38.46	-
April	10	3	20	70	40	20	40	10
May	10	2	20	80	-	-	20	20
June	11	2	18.18	54.54	-	18.18	9.09	18.18
July	12	2	-	41.66	41.66	16.6	8.33	8.33
August	11	2	9.09	63.63	36.36	18.18	-	9.09
September	12	2	-	58.33	41.66	16.6	16.6	-
Oct. 1987	15	8	-	100	13.3	13.3	20	-

TABLE 2

FREQUENCY OF OCCURRENCE OF FOOD REMNANTS IN THE SCATS OF FISHING CAT (N= 144)

	Occurrence	%
Insect	18	13
Fish	109	76
Bird	39	27
Rodent	13	9
Grass	31	21
Others	11	7

of occurrence of each item in the scats was recorded. Altogether 144 scats were collected from November 1986 to October 1987.

The gut contents of the fishing cat found dead outside the park on the Agra-Jaipur highway, 100 m from the park were also examined.

RESULTS AND DISCUSSION

Fish is the staple diet of the fishing cat in the park. Fish remains were present in the scats throughout the year and out of the 144 scats analysed,

76% had fish remains in them (Table 2). Monthly variation in the percentage of scats having fish remains ranged from 41% to 100%. It was the preferred food during winter (Fig.1).

Birds are the next preferred food (27%) of the fishing cat. During different months the frequency ranged from 13% to 53% although bird remnants were not present in the scats during January, May and June. It is difficult to give a valid reason for the absence of bird remains during these months.

Grass formed 21% of the food of fishing cat. It was present in all the months except August. The frequency ranged from 8% to 96% (Table 1). Among the three seasons (Fig.1), grass was preferred equally during winter and summer while least during monsoon.

Insects and rodents were seen in relatively small number of scats 13% and 9% respectively. The maximum number of insects in the scats was in summer followed by winter and the least in monsoon, while the maximum number of rodents was during monsoon followed by summer and the least in winter (Fig.1).

'Others' which formed 7% of the diet included

seeds, hair, of hare and cattle, molluscs, scales of snake and monitor lizard (*Varanus bengalensis*).

The fishing cat found dead just outside the Park on 15 Feb. 1986 was 66 cm in length (Head and Body) with a 24 cm tail. Its weight was 16 kg, and its stomach had fish, scales of snakes, feathers and insects.

Fish is the main food of the fishing cat in Keoladeo National Park. Bhattacharya (1989) reports in the Howrah district that the major food of fishing cat is fish, although goats, chickens and ducks of the nearby villages were killed. This is not reported at Bharatpur. Observations (n=12) made during moonlit night also confirm that they feed mostly on fish by entering water and scooping the prey with their paws. The visual observations also reveal that they feed on grasses and gerbills which

are very common on the dykes of the aquatic area. The presence of cattle hair in the scats of fishing cat shows that they could scavenge (Haque 1988). The gut contents of the dead fishing cat also confirm that fish and bird are the major food. The other small carnivore which feed mainly on fish is Smooth Indian otter (Haque and Vijayan 1988).

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