

whose southern limit happens to be on the Bhutan-Assam border, so that only a marginal part of its range lies within the Indian territory. And obviously for its meagre records from the limited study area in Assam-Bhutan border, it was, so far, regarded as a rare species of primates and included in the list of vanishing and endangered species of wildlife. To the contrary, the Golden Langur, non-aggressive, docile and forest-dwelling monkey, a unique discovery of recent times, is thriving well and has a peaceful home in the

luxuriant forests in the lap of the sacred and unperturbed grandeur of the Black Mountain in Central Bhutan, in the little montane kingdom of Bhutan, the dragonland.

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## 2. SOME OBSERVATIONS ON INTER-OESTRUS INTERVAL IN CAPTIVE TIGRESSES [*PANTHERA TIGRIS* (LINNAEUS)]

The Felidae appear to be seasonally polyoestrus in temperate regions and completely polyoestrus in tropical regions (Asdell 1964). About cats in general Prater (1971) states that no definite knowledge is available about sexual periodicity and the intervals of time which elapse between the periods when fe-

males are in condition to breed. The present communication gives some data on the interoestrus interval of the tigress (*Panthera tigris*) observed at Nandankanan Biological Park, Orissa during the period from September, 1970 to August, 1977.

The tigers of the Park are kept in pairs and



TABLE

Sl. No.	Name of the tigress	Date of last mating observed (oestrus period) without conception	Dates of subsequent mating observed (oestrus period) with or without conception	Inter-oestrus interval in days
1	2	3	4	5
1.	Tigress "Rani"	3-9-1970 to 5-9-1970 (3 days)	22-12-1970 to 25-12-1970 (4 days)	107
2.	"	22-12-1970 to 25-12-1970 (4 days)	2-4-1971 to 6-4-1971 (5 days)	97
3.	"	2-4-1971 to 6-4-1971 (5 days)	1-6-1971 to 5-6-1971 (5 days)	55
4.	"	1-6-1971 to 5-6-1971 (5 days)	23-7-1971 to 27-7-1971 (5 days)	47
5.	"	4-6-1974 to 11-6-1974 (8 days)	2-8-1974 to 6-8-1974 (5 days)	51
6.	"	2-8-1974 to 6-8-1974 (5 days)	23-9-1974 to 29-9-1974 (7 days)	47
7.	"	21-6-1976 to 27-6-1976 (7 days)	13-11-1976 to 20-11-1976 (8 days)	138
8.	"	13-11-1976 to 20-11-1976 (8 days)	3-2-1977 to 10-2-1977 (8 days)	74
9.	Tigress "Rekha"	6-12-1975 to 7-12-1975 (2 days)	4-1-1976 to 6-1-1976 (3 days)	27
10.	"	4-1-1976 to 6-1-1976 (3 days)	1-2-1976 to 4-2-1976 (4 days)	25
11.	"	1-2-1976 to 4-2-1976 (4 days)	24-3-1976 to 26-3-1976 (3 days)	48
12.	"	24-3-1976 to 26-3-1976 (3 days)	7-5-1976 to 10-5-1976 (4 days)	41
13.	"	7-5-1976 to 10-5-1976 (4 days)	26-6-1976 to 30-6-1976 (5 days)	46
14.	"	26-6-1976 to 30-6-1976 (5 days)	29-8-1976 to 4-9-1976 (7 days)	59
15.	"	29-8-1976 to 4-9-1976 (7 days)	9-1-1977 to 14-1-1977 (6 days)	126



the expectant mothers are separated about a fortnight before the expected date of parturition till the cubs are about 9 months old. The observed period of mating is taken as the period of oestrus.

#### OBSERVATIONS

The details of our observations are given in the Table.

#### DISCUSSION

A study of the table reveals that the inter-oestrus interval observed in fifteen cases among two tigresses varies from 25 to 138 days with an average of 65.9 days. The oestrus period observed in nineteen cases among these two tigresses varies from 2 to 8 days with an average of 5.2 days. One or the other tigress was in oestrus in all the months of the year except in October.

Schaller (1972) reports that the oestrus in one tigress at the Basel Zoo was observed 21 times with an average interval of 51.9 days (range 20-84 days), and in another tigress it was recorded 18 times with an average interval of 54.2 days (range 27-83 days). Sadleir (1966) states that the interval between mid-points of 3 consecutive oestrus periods in one

tigress varied from 45 to 55 days and the average length of receptivity during 14 oestrus periods was 7.1 days. The tiger breeds all the year (Asdell, loc. cit.). According to Crandall (1965) the female of this species is polyoestrus, heat recurring at intervals of about 3 weeks and receptivity continues for about 5 days.

#### SUMMARY

The present communication embodies data on interoestrus interval of tigress (*Panthera tigris*) observed at Nandankanan Biological Park, Orissa during the period from September, 1970 to August, 1977.

The interoestrus interval observed in fifteen cases among two tigresses varies from 25 to 138 days with an average of 65.9 days. The oestrus period observed in nineteen cases among these two tigresses varies from 2 to 8 days with an average of 5.2 days. The observations of earlier workers have been cited.

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