# On some aspects of reproductive pattern of the Indian Chevrotain or Mouse-Deer *(Tragulus meminna)* in captivity

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The Indian chevrotain or mouse-deer *(Tragulus meminna)* is an interesting and smallest wild ruminant belonging to the Family - Tragulidae and Order – Artiodactyla. It differs from the wild ruminants in having a three, instead of an usual four chambered stomach and has no antlers like musk deer. But it has canines in both jaws and these are well developed in the upper jaw of the males into tusks. According to Crandall (1965) the breeding habits of this species are not well known. Though this species is exhibited in many Indian zoos from time to time, information on its reproductive pattern is seldom reported. Therefore, in this communication, an attempt is made to record on some aspects of reproductive pattern of the Indian Chevrotain or Mouse-Deer observed at Nandankanan Zoological Park, Bhubaneswar (NKZP) during the period from 1971 to 2004.

These animals are housed in special covered enclosures only to protect from predators found in and around the park area. They are fed with milk, boiled rice, ripe banana, carrot, sweet potato, pumpkin, green bean, “doob” grass and other edible greens and vegetables.

Birth season: So far 15 births were recorded in all the months of the year except in April and July as follows: “January - 1; February – 1; March – 2; April – 0; May – 1; June - 3; July 0; August – 1; September – 2; October – 1; November – 2 and December -1” suggesting that this species has no fixed birth/breeding season in captivity.

Fifteen births of Delhi Zoological Park has been recorded in all the months of year except October, November and December (Sankhala and Desai, 1969). The distribution of 27 births of this species in Ahmedabad zoo as given by Arora (2002) is as follows: January- 5, February- 2; March- 1; April- 1; May- 2; June, 4; July- 0; August- 5; September- 1; October- 4; November- 2 and December- 0. The female of this species brings forth its young at the end of the rains or the commencement of the cold season (Prater, 1998). In India this species ruts in June and July and young are born at the close of the rainy season (Asdell, 1964). Mating of this species takes place in June and July or throughout the year depending on the locality (Walker *et al.* 1964).

Gestation Period: Mating could not be observed and so it was not possible to record the gestation period. However, the gestation period is given as 120 days (Asdell, 1964; Walker *et al.* 1964).

Litter Size**:** The litter size of fifteen births recorded at Nandankanan Zoological Park was always one and never twins.

The litter size of all the 15 births recorded at Delhi Zoological Park was always only one (Sankhala and Desai, 1969). The litter size given as generally, two (Asdell, 1964, Prater, 1998) and one rarely two (Walker *et al.* 1964).

Sex Ratio at Birth: Among the 15 new born fawns, there were four males and eleven females with a remarkable uneven sex ratio at birth, with the females out numbering the males (36 males to 100 females)

Informations on this subject could not be known from the available literature.

Inter-parturition Interval: The inter-parturition intervals recorded five times among three females of Nandankanan Zoological Park were varying from 171 to 289 days with a mean of 219.6 days.

No information on this aspect could be found from the available literature.

Weight and size at birth: A female fawn of this species born at Nandankanan Zoological Park weighed 203 grams, measured 27 cm. in total length and had a shoulder height of 12.5 cm. (Acharjyo and Mishra, 1972). The weight and size at birth of four mouse-deer fawns recorded at Nandankanan Zoological Park was varying from 288-382 grams. (mean 319 grams), total body length from tip to tip was varying from 26.5 - 30.5 cm. (mean 27.9 cm.) and shoulder heights were varying from 14.0 - 16.0 cm. with a mean of 14.6 cm. (Acharjyo and Mishra, 1981).

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