

NOTES ON BREEDING OF THE HIMALAYAN BLACK BEAR (*SELENARCTOS THIBETANUS*) AT NANDANKANAN ZOOLOGICAL PARK, BHUBANESWAR

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A pair of Himalayan Black Bears (*Selenarctos thibetanus*) were received at the Nandankanan Zoological Park, Bhubaneswar in July 1978 at an estimated age of about 18 months through an animal dealer. They were housed in a spacious arch-shaped open air enclosure with a water moat on the viewers' side and a 5m vertical high wall made of stone masonry on the remaining portions of the enclosure. Each adult bear was fed with bread (700g), cooked rice (700g), cooked black gram (100g), sweet potato (250g), pumpkin (250g), carrot (250g), banana (250g), milk (500ml), and honey (25ml) per day.

Matings were observed from March to May. The female gave birth to her first litter on 3 January 1982. So far, 15 cubs have been born in ten litters to the female of the pair and one of their female offsprings. The mean litter size was 1.5 cubs per litter. There were seven males, three females and sexes of the remaining five could not be recorded. Seven births were recorded during December and three births during January. The gestation period calculated from the last day of mating to birth observed twice during 1981 and 1985 were 248 and 252 days, respectively.

The eyes of the new born cubs were closed at birth and of the two cubs under observation one opened its eyes on the 33rd day and the other on the 37th day. A female bear born in the Park on 24 December 1988 gave birth to her first litter of two cubs on 28 December 1992 at the age of four years and five days. The inter-parturition interval observed among the two females in eight cases varied from 11 months and 23 days to three years and 14 days. It mostly depended on the period of survival of the new born cubs or period of separation of the

female bear from its male partner. Out of 15 zoo-born cubs, two were still-born, four were cannibalised and three died from various causes within four months of age.

According to Prater (1998), the mating season is late autumn and cubs, usually two or more are produced late in winter and early in spring. Mating was observed in the month of May and two litters of one and two cubs respectively were born during the third week of January 1976 and January 1997 at Jawaharlal Nehru Biological Park, Bokaro Steel City (Chakraborty *et al.*, 1998). They have also given the gestation period on two observation as 243 and 245 days. The birth of a litter of two cubs with their eyes closed was recorded in January 1990 at Kamala Nehru Zoo, Indore (Mahodaya, 1991). The litter size of nine births at National Zoological Park, New Delhi during 1961 to 1969 was one or two with a mean of 1.6 cubs per litter and all the births were recorded during January-March (Sankhla & Desai, 1969). According to Asdell (1964), this species probably mates in autumn and the young, usually two, are born in spring. In India, the usual litter size of this bear is two and they are born with their eyes closed (Walker *et al.*, 1964).

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