

Twin birth of Ratel (*Mellivora capensis indica*) in captivity: A case study at Nandankanan Zoological Park

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The Ratel (*Mellivora capensis*) also known as the honey badger is a member of the Mustelidae family of order Carnivora. This species is found across the greater part of Africa, south of the Sahara and extending through Arabia, Iran and western Asia to Turkmenistan and the Indian peninsula (Neal, 1986; Begg *et. al.* 2003; Vanderhaar and Hwang, 2003). There are ten subspecies of Ratels from which the subspecies *Mellivora capensis indica* found in peninsular India (Vanderhaar and Hwang, 2003).

The captive population of Ratel in India consist of seven individuals (M-5, F-2) in four Indian zoos (Panda *et. al.* 2010). Nandankanan Zoological Park is having the experience of maintaining Ratel in captivity since August 1967 (Acharjyo and Patnaik, 1990). A male (rescued on 16.09.99 at young age) and female (rescued on 16.01.08 as adult) individual are with Nandankanan Zoological Park housed in specially designed enclosure of dimension 5.6m X 4.7m X 3.3m with soil as substrate over reinforced concrete floor and hollow pipes as artificial burrows for hide out.

Dietary husbandry for these ratels include 200gm of goat meat, 400gm of buffalo meat, 20 gm honey and 200 gm ripe banana every day with periodic multivitamin and mineral supplement. The routine husbandry consisted of enclosure cleaning, water maintenance and health monitoring. The mating behaviour including repeated scent marking, mutual flehman and mounting was observed between 17.07.2011 and 19.07.2011. The female gave birth to two cubs on 02.09.2011. One of the new borns was mutilated and thrashed, the other one was measured 21.4 cm from tip to tip including 4.1 cm tail and weighed 85gms. The eyes were not open at birth and the cub was unable to crawl. The new born cubs had no hair on the body surface. Both cubs were rejected by her mother and died on same day.

Gestation recorded for captive ratels in Israel was 62–72 days (Mendelssohn & Yom-Tov, 1999). For African ratels gestation period was 50–70 days (Begg *et.al.* 2005). Two female African ratel in Howletts Zoo, England were reported

to show delayed implantation with a gestation period of 153 and 162 days (Johnstone-Scott, 1981). The present study found the gestation period is about 48 days. The litter size of African Ratels of single cub (N=27 litters) in the Kgalagadi Transfrontier Park, South Africa and of two cubs (n=6 litters) in Howletts Zoo, England (Johnstone-Scott, 1981). The birth also marked the first time that a captive birth ratel was occurred in Indian zoo.

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