

Report of auto-sexual behaviour in a captive Sloth bear (Melursus ursinus) at Sardar Patel Zoological Park, Gujarat - India

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Sloth bear (*Melursus ursinus*) are endemic to Indian subcontinent and widely distributed in the India. At least 85% of the present sloth bear population occurs in India. Although sloth bear still found scattered across much of its former range, their actual distribution is now highly fragmented and confined mainly to five distinct regions, namely northern, northeastern, central, south-eastern, and south-western. Sloth bear subsists primarily on termites, ants, and fruits. Fruits may comprise 70–90% of the diet during the fruiting season, whereas termites and other insects may comprise >80% of the diet the rest of the year (Dharaiya et al., 2016).

The adult pair of Sloth bear (*M. ursinus*) is kept at Sardar Patel Zoological Park, Gujarat state India. In an enclosure of 100m^2 areas of kraal, there are total 4 shelter houses. The animals are released into enclosure from 7:00am to 6:00pm six days a week and they keep in the kraal for one day. In captivity, sloth bear are provided with the diet 60% of mix fruits and vegetables, 20% boiled rice, 10% boiled eggs and 10% yellow meal worm (*T. molitor*) along with honey. In the present behavioural study, we observing sloth bear on regular basis and we reported a unique behaviour performed by male sloth bear.

The behavioral study on captive sloth bears was carried out from January 2022 to till on continuous basis. Observations were carried out on one pair of adult sloth bears (1 male and 1 female) displayed in Sardar Patel Zoological Park. Observations were made on daily basis during in the morning from 7:30am to 10:30am and in the evening from 4pm to 6pm.

The bears are mostly active in the mid-afternoon (4:00pm) to the late morning (11:00am) and found performing mainly two types of behavior: Active behavior (e.g. foraging, locomotion, climbing, digging, rolling, playing etc.) and Passive behavior (e.g. seating, roosting and maintenance).

On June13th, 2022a pair sloth bear released in the kraal from shelter house. At 11:00ama female foraging on the ground of kraal and at the same time male was seating on the ground in luge position balancing by hind limbs; after sometime male wrapped its penis by fore limb



(Fig. 1) and ejaculate semen. After ejaculation it has tried to suck the semen by licking the penis (Fig. 2). Generally, this type of behavior we have observed in our zoo in exotic primates, like Tufted Capuchin (*Cebus apella*) and Squirrel Monkey (*Saimiri sciureus*); however, it was observed for the first time in sloth bear and it is not reported earlier from any Indian zoos.





Figure. 1: M. ursinus wrap its penis by fore limb.

Figure. 2: M. ursinus trying to suck semen by licking its own penis.

This observation suggests that sloth bears might display such behaviour of auto-sex or masturbation in wild but due to its secretive nature, it may not be reported. This observation can open the new areas to study sexual behaviour of sloth bear in captivity. Veeraselvam et al., 2013 and Pastorino et al., 2017 studied the behaviour of sloth bears in captivity at Arignar Anna Zoological Park, Chennai and Zoological Society of London respectively and noted several activities like foraging, locomotion, climbing, digging, rolling, playing, seating, roosting and maintenance; however, auto-sexual behaviour was not observed.

References:

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