

Reproductive behaviour of captive Sumatran rhinoceros *Dicerorhinus sumatrensis*)

Abstract

The Sumatran rhinoceros (*Dicerorhinus sumatrensis*) is on the verge of extinction in Malaysia. At the Sumatran rhinoceros Conservation Centre in Sungai Dusun, the reproductive behaviour of two female and two male rhinoceroses were studied for 8–10 months during attempts to breed them in captivity. Due to the paucity of scientific information on the reproductive biology of the Sumatran rhinoceros, this study was conducted to obtain information on the reproductive behaviour of this species. The male rhino was introduced to a female rhino in the morning for 1–2 h daily in order to observe for behavioural oestrus. Observations were made on the signs of oestrus and mating behaviour. Oestrus was determined by receptivity towards the male and lasted about 24 h. Common signs of oestrus were an increase in frequency of urine spraying, tail raising or swinging, anogenital and other contacts. Although the males exhibited mounting, the inability of the male to achieve intromission was poor. The study demonstrated that the pattern of courtship and copulation of the captive Sumatran rhinos were comparable with those of other rhino species, reported previously by other scientists and flehmen reflex was also exhibited by the male Sumatran rhinos. In a captive breeding programme, it is recommended that only an oestral female is introduced into a male enclosure due to the male solitary behaviour and to avoid serious injuries inflicted onto the females.

Keyword: Behaviour, Sumatran rhinoceros, Extinction