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BEHAVIOUR OF CAPTIVE ELEPHANT SHREWS DURING PARTURITION

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Short-eared elephant shrews (Macroscelides proboscideus) have been kept at Moscow Zoo since 1991. During the last few years we have conducted a series of observations to study different aspects of their behaviour. In July 1996 we succeeded in videotaping an elephant shrew female giving birth.

The female was born at the zoo in March 1995. She was caged with a male permanently, and in April 1996 she gave birth to her first litter. We subsequently decided that this female was again pregnant, as she gained weight from 50 g (20 May) to 68 g (13 June). The probable date of birth was determined by adding the mean duration of pregnancy (60 days) to the date when the female's sexual behaviour was most noticeably expressed. We did not notice mating that day, but naso-anal contacts with the male were followed by lordosis intention movements in the female: she displayed a sharp raising of the base of the tail.

We started observations on 15 June 1996 at 1.50 a.m. The female was rushing about the cage. She lay down frequently, breathing interrupt-ediy with her mouth opened widely. The male followed the female with short naso-anal contacts, occasionally mounting her. The female paid no attention to him. We took the nest-boxes out of the cage to make videotaping easier.

About 19 minutes after observation started, it

became obvious that the female was experiencing light muscular contractions in her hindquarters. We noticed that her vagina was opening gradually. Seven minutes later the contractions intensified. They lasted from two to 15 seconds and started approximately every 30 seconds, though one interval lasted for 135 seconds. During some of them we could see a part of the foetus. In the intervals between contractions the female rushed around the cage or lay down with her mouth open. The male's behaviour did not change, but when an infant started to appear he began to lick the female's genitals, biting the infant gently from time to time. At 2.35 a.m., when we could see half of an infant and the male began to investigate it, the female turned abruptly and the whole infant appeared. The umbilical cord was broken and the infant found itself in front of the female. It immediately looked for the nipple and started to suck. The male became excited and ran around, sniffing the infant and biting it gently. The female gave birth to a second infant very quickly, only three minutes after the birth of the first one. The first infant was sucking for two minutes in all, with short intervals. While suckling, the female held her foreleg aside. When the first infant stopped sucking, the female sniffed it and then turned to the second one. Her moving caused the cord to break off.

At 2.45 a.m., when the infants moved around the cage and squeaked from time to time, we put a nest-box into the cage. The female immediately carried them into it. Two minutes later she began to chase the male very aggressively, and we were compelled to separate him. Thus our observation finished; it had lasted for 60 minutes without interruption. At 4.00 a.m. two placentas were found in the cage, and during the next two hours the female ate them both. That morning we did not see the mother suckling her cubs, as they stayed

in the nest-box all the time. When born the cubs weighed 8.5 g (female) and 8.0 g (male); the next day both weighed 8.5 g. The young elephant shrews were separated from their mother at the age of 30 days, when they weighed 26 g and 22.5 g respectively.

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