RESEARCH NOTES

(I)

UNUSUAL DEATH OF TWO SAMBAR STAGS (*RUSA UNICOLOR*) IN SIMILIPAL TIGER RESERVE - ODISHA, EASTERN INDIA

Similipal Tiger Reserve (20°17' to 22°34' N latitude and 85°40' to 87°10' E longitude) is located in Mayurbhani district of Odisha state, eastern India. The tiger reserve is dominated by moist deciduous forest, thick undergrowth and high degree of undulating terrain, which is a favorable habitat for browsers like sambar. During the study of ungulate density in Similipal Tiger Reserve (STR), two sambar stags (Rusa unicolor) were found dead in the Jenhabil range on 7th April 2012. The place where the incident happened was an open grassland adjacent to a moist deciduous forest. The incident came to our notice when the carcasses started stinking and after searching for about 200m from the Jenhabil-Jamuna road the dead bodies were discovered. From the surrounding situation it was clear that both the individuals had a tragic death due to interlocking of their antlers. On closer examination, it was found that the relatively smaller stag died an early death and the head was turned, for which it was assumed that the animal probably died due to cervical dislocation. The larger stag died later after struggling for at least 36-48 hours, which was evident from the carcass condition and the surrounding situation. From the surroundings, it was assumed that both the individuals were fighting and somehow their antlers got interlocked and when the larger stag tried to unlock the antlers the head of the smaller stag turned backward and the animal died. The bodies were intact and not eaten by any scavengers (Fig. 1). Death due to interlocking of antlers is reported in spotted deer stags (Axis axis) from elsewhere of Madhya Pradesh in India (Prater, 2005) and such type of death in sambar was not reported, hence this observation



Fig. 1 : Sambar stags (Rusa unicolor) dead due to interlock of antlers in Similipal Tiger Reserve, Odisha.

is worth recording.

Sambar is a polygynous species, fights usually occur amongst males, who compete for access to mates during the rutting period. In cervids, antlers are used for display and fighting as intraspecific weapons. In STR, peak rutting period of the sambar is the rainy season, i.e. September-October (Singh, 2011), and the species mate and reproduce round the year. Sometimes sambar stags fights for territory, for the possession of favored valley, and for the right to summon the hinds living on it (Prater, 2005). These factors may be encouraged sambar stags for intraspecific fighting.

A detailed study on ecology of sambar is required in this eastern India landscape, which is lacking, in comparison to other parts of India.

Acknowledgements

Authors are grateful to Shri A.K. Nayak, Field Director, Similipal Tiger Reserve for his guidance and permission to study in Similipal Tiger Reserve. Also thankful to Shri H.K Sahu, P.G. Department of Zoology, North Orissa University for his support and guidance.

References

Prater, S. H. (1971). The Book of Indian Animals. Bombay Natural History Society and Oxford University Press, Mumbai, India, 324 pp. Singh, L.A.K. (2011). Editorial comments. In Savanth, V. V., P.C. Saseendran, K.S. Anil, V. Ramnath, J. Davis & A. Prasad. 2011. Observations on Sambar *Rusa unicolor* (Cetartiodactyla: Cervidae) stags during hard and velvet stages of antler cycle in captivity, *Journal of Threatened Taxa*, 3(10): 2128–2135.

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