

Age Structure, Sex-ratio and Reproduction of Roe Deer (*Capreolus capreolus* L.) in the Maremma Regional Park, Central Italy

*Marco Manetti*¹, *Peter Genov*², *Ivan Petrov*³

Abstract: Our aim was to analyse the age classes, sex-ratio and reproduction rate. We used eight line transects from 5 to 8 km long. Each transect was checked monthly from September 1994 to November 1996.

The great number of observations was recorded in March 1995 (n=104) and March 1996 (n=125) and the following age classes were assessed for 1995: adults 60%, sub-adults 20% and juveniles 20%; while in 1996 we recorded 61% adults, 16% sub-adults and 23% juveniles. In 1995 the sex-ratio was 1,1 males to 0,9 females. In May 1996 we observed different sex-ratio (1.6:0.4) probably due to the increased density of vegetation, which gives the females a shelter and they are difficult to be found. Results referred to the reproductive rate showed that 33% of the female in 1995 and 44, 5% in 1996 were not able to reproduce; furthermore the average number of young per female was 0.7. It was very low for an unharvested population. The new-born calf percentage was around 20-25% for the two-year study. Probably the main causes of this reproductive loss are wood management and consequential reduction of suitable habitats for food (cuttings), and the contemporary increase of the fallow-deer population.

Key words: roe deer, age, sex-ratio, reproduction.