



## LYNX IMPACT ON ITS MAIN PREY SPECIES ROE DEER IN ESTONIA

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There is a constant debate between hunters and game managers about the number of roe deers killed annually by lynxes in Estonia. Although there are several studies carried out in Europe that have brought light into the subject of lynx predation on ungulates, we can consider Estonias situation different as with the low numbers of hare and galliform birds as alternative prey, the lynx population is almost completely dependent on roe deer alone. To study the kill rate and selectivity for different sex or age classes of prey, 7 lynxes (4 ad males, 2 subad males and 1 ad female) were fitted with GPS/GSM telemetry collars. From the obtained location points all the possible killsites were searched for prey remains and the total of 159 kills were found. The average ( $\pm$ SD) number of days between consecutive kills was  $5,3 \pm 3,0$  for ad males;  $8,7 \pm 4,6$  for subad males and  $4,4 \pm 1,2$  days for adult female lynx with kittens. With the approximate lynx density of  $3,1 \text{ ind}/100 \text{ km}^2$  and the roe deer density of  $504 \text{ ind}/100 \text{ km}^2$ , lynx population was calculated to consume  $25 \pm 2\%$  of the total number of roe deer annually which constituted  $66\% \pm 4\%$  of the species increment (the number of fawns in late summer). Lynx fed on all the available roe deer sex and age classes but the proportion of fawns in the diet varied from 53% in August-September to 20% in February-March.

