



2008. Most densely populated were the scrub (356.4 nests/km²) and tussocks (234.2 nests/km²), much less populated – rocks (24.5 nests/km²) and tundra (7.7 nests/km²). Scrub occupies twice smaller area than tussocks. Presumably, the center of the colony is the willow carr in the southern part of the island, where the nesting density is the highest and stay is the longest. The average clutch size is 3.98 ± 0.19 eggs ($n = 43$), the average newly hatched brood size is 4.0 ± 0.3 ($n=12$). About 13.2 % of the nests were ravaged. The first goslings hatched on June 7-8, the majority – from 15th to 20th of June, the latest ones were expected on June 27. The greatest threat to Graylag Goose on Bolshoy Ainov Island during the breeding period are Great Black-backed Gull *Larus marinus*, Herring Gull *Larus argentatus*, Raven *Corvus corax*, Hooded Crow *Corvus cornix*.



SPREADING OF SARCOPTIC MANGE IN ESTONIAN WOLF POPULATION FOLLOWING ANTI-RABIES VACCINATION PROGRAMME

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Rabies was common disease among Estonian wild mammals until 2005. During last decade 12 different wild mammal species were proved to be infected whereby the main vectors were red fox and racoon dog comprising together 97 % of all wild rabies cases. Last peak of the epidemic was in 2003 when 697 cases of positive wild mammals were detected. Oral anti-rabies vaccination of wild predator mammals started in Estonia in 2005 and has been continued until the present. Vaccination was very effective and just two years later only 2 wild rabies cases were detected. Following the vaccination the number of racoon dogs has been increased fast and continuously. During last four



years the number increased from 2,5 (bag statistic) to five (snow track index) times and in 2009 the number has reached the level it has never been before. Quick increase on red fox number was observed in 2009 when the number increased from 1,7 (snow track index) to 2,1 (bag statistics) times. Such a high number of red fox was observed only once before within last 50 years. Scabies (sarcoptic mange) was quickly spread in the abundant populations and became probably one of the most important natural mortality factor of both carnivore populations taking over the previous role of rabies. In 2009 we observed first time a wider spreading of scabies in wolf population while only single observations have been made in the past. We found infections from five different wolf packs and it means that about 20 % of the population was infected. Furthermore, in 2009 we recorded first two cases of scabies from lynx in Estonia. Whilst it's not known how much the sarcoptic mange may increase the natural mortality of wolf it should be seriously considered when planning the wolf management in future.



SEX AND AGE STRUCTURE OF UNGULATE AND BROWN BEAR POPULATIONS IN KARELIA

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We analyse the results of wild ungulates, brown bear and wolf take in Republic of Karelia in the 2009-2010 hunting season. Hunting methods, sex and age structure of the animals taken, hunting intensity by months, effectiveness of hunting in different districts of the republic are discussed.