ASSESSMENT OF THE CURRENT STATUS OF UNGULATE POPULATIONS IN KARELIA

D.V. Panchenko

Institute of Biology, Karelian Research Centre, Russian Academy of Science, Petrozavodsk, Russia

The current status of ungulate populations in Karelia is discussed. The population of one of the republic's main game species – moose, is steadily growing. Like before, its maximal numbers are recorded from the south of the republic. The population of the taiga reindeer is close to its minimum. The main reason for that is poaching. The subspecies' distribution range has shrunk, and the herd size has decreased compared to high abundance years. Measures need to be taken to effectively protect taiga reindeer. Better landscape and climatic conditions for the wild boar in the south of Karelia coupled with a more extensive agricultural utilization of the territories predetermine higher abundance of the species there. The number of roe deer visits in Karelia is growing, presumably due to a rise in the species abundance in the areas of its residence.

GENETIC DIVERSITY OF THE MOOSE POPULATION IN KARELIA: MICROSATELLITE ANALYSIS

D.V. Panchenko, L.V. Topchieva, N.L. Rendakov, P.I. Danilov, V.V. Belkin

Institute of Biology, Karelian Research Centre, Russian Academy of Science, Petrozavodsk, Russia

The results of research into the genetic diversity of the moose population in Karelia carried out using microsatellite analysis are

presented. The genotypes of 113 moose specimens from different districts of the republic were determined by 4 microsatellite loci. The expected heterozygosis values obtained by the intermicro- and microsatellite analysis techniques are comparable with those in native moose populations of Europe and North America. Mean values of observed and expected heterozygosis at all the loci investigated were 0.59 and 0.66, respectively. Determination of the χ^2 value and the probability ratio revealed no deviations from the Hardy-Weinberg equilibrium in the frequencies of genotype. Analysis of molecular variability showed there was no differentiation in the moose population in Karelia. The results prove the population maintains high genetic diversity.

EFFECT OF THE EUROPEAN BEAVER (*CASTOR FIBER* L.) CONSTRUCTION ACTIVITY ON ALGAL COMMUNITIES IN SMALL STREAMS IN SOUTHERN AND NORTH-EASTERN PARTS OF LENINGRAD REGION

M.N. Pashchenko[1], T.E. Mironova[2], S.A. Kostousov

[1]Science Methodology Centre, Vyborgsky District, St. Petersburg;
[2]Child & Youth Creativity Centre, Vyborgsky District, St. Petersburg, Russia

To generate the conditions best suiting their needs, beavers modify the habitat conditions for other organisms in the waterbody through their construction activities. The current slows down, the water level rises, water chemical composition changes. The present study aimed to determine the impact of European beaver on algal communities in the bodies of water the animal colonises.

The surveys were carried out in Leningrad Region. The territories were studied for the qualitative and quantitative composition of algae.