

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  $\chi^2$  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

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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.



Samples were taken from locations with no traces of beaver activity, from beaver ponds, and downstream of the dam.

All in all, 28 algal species of 9 divisions were found: Bacillariophyta, Cyanophyta, Rhodophyta, Chlorophyta, Pyrrophyta, Chrysophyta, Xanhophyta and Euglenphyta. The most abundant were blue-green (7 species) and green (6 species) algae. All these species were widespread, no specialized forms were detected. The diversity in all the waterbodies surveyed was higher in the ponds upstream of the dam (20 species). Algal diversity decreased downstream of the dam (13 species). The species composition was the poorest in the samples taken upstream of the beaver activity zone (3 species).

The most typical and dominant species were Cryptomonas erosa and C. ovata (Cryptophyceae). Also, quite abundant in the Luga River flood-plain meadows, in many locations upstream of the dam, was Oocvstis borgei (Chlorophiceae).



## USING GPS COLLARS ON ORPHAN BEAR CUBS RELEASED INTO THE WILD

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Monitoring adaptation of orphan bear cups after release into the wild involves the challenges of registering the traces of their activities and movements around the territory. Not all cubs stay in the release area in the first year. After turning 3 years of age they would leave to areas over 50 km away. E.g., a male (#868) released in 1993 was taken in an oats field in August 1996. The straight-line distance from the release site to the last registration site was 120 km. In the period from 1996 to 2005, we released 12 bear cubs. In 1996, the first two ear radio tagged