climate habitats (Crawford *et al.*, 2003; Kirpotin *et al.*, 2009; Payette and Delwaide, 2004). The European situation differs from that in North America. A time series analyses of a 22-year record of satellite images, in which the American Arctic is widely defined in terms of latitude (60–90 °N), has shown that only about 15% of this extended region displays significant positive warming trends. of which just over half involved temperature-related increases in growing-season length and photosynthetic intensity. As well as areas affected by paludification, there are others where trees growing north of 60 °N were found to have suffered a decline in photosynthetic activity, possibly due to drought as there was no noticeable change in growing-season length (Goetz *et al.*, 2005)

ACCLIMATIZATION AND NATURAL DISPERSAL OF GAME ANIMALS IN THE EUROPEAN NORTH OF RUSSIA

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The issues discussed are the changes in the game fauna, range and abundance dynamics in the European North of Russia over the 20th – early 21st centuries. We assess the role of anthropogenic and natural factors in these processes: **acclimatization** (muskrat, Canadian beaver, raccoon dog, American mink, wild boar, roe deer, Sika deer, reindeer, white-tailed deer); **the set of factors modifying animal habitats** – clear-cutting of old-growth forests, construction of summer cottage communities, forest drainage, etc. (mole, brown hare, polecat, badger, wolverine, otter, taiga reindeer); **endogenous factors that trigger intrapopulation phenomena** such as multiannual periodic fluctuations of the species abundance and range or so-called “life waves” (brown

hare, wild boar, moose, roe deer). In discussing the results of acclimatization we have attempted to identify the time when the introduced species populations entered the "acclimation outbreak" stage, to determine the reasons for introduction success or failure.

SOME RESULTS OF GAME STUDIES IN AREAS ON THE BORDER BETWEEN RUSSIA AND FINLAND

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Zoological investigations in border areas of Russia and Finland have for many years been very intensive on both sides. They are necessitated by continuous exchange of animals in border areas, in spite of the so-called technical engineering facilities line (on the Russian side) and so-called deer fence (northern areas on the Finnish side), and their further expansion in-depth of both Russian and Finnish territory. Thus, the new mammal species we have recently "received" from Finland is the Canadian beaver, "in exchange for" the raccoon dog. Another new species – American mink, has equally succeeded in colonizing both sides of the border, and forced the native European mink out. Roe deer started expanding from the Karelian Isthmus, Leningrad Region, to resettle in Finland. Wild boar has also arrived in Finland from the Karelian Isthmus and from the Karelian part of south-western Ladoga area. The white-tailed deer – a species new for the Palaearctic region, has been sighted in the Karelian Isthmus (vagrants from Finland).

The most precious "gift" from us to Finland has been resettlement of the taiga reindeer. Joint research into the ecology of its seasonal movements, condition of the pastures, etc. is underway. The dynamics