Russian Plain (Titov et al., 2010). The two belts converge in the north and in the south forming a kind of the "Green Ring of Fennoscandia", which creates the framework of the nature conservation system in the north of Europe. To enhance the strength of the system one should maintain the existing waterside protection buffers, which connect the PAs in a natural way, and promote latitudinal connectivity of the PAs, focusing primarily on boreal corridors (Lindèn et al., 2002; Kurhinen et al., 2009) which connect the Fennoscandian and the East-European taiga biomes.

DEVELOPMENT OF THE NUMBER OF INDIVIDUALS IN THE KUHMO-KAMENNOJEOZERO SUBPOPULATION OF THE WILD FOREST REINDEER (*RANGIFER TARANDUS FENNICUS* LÖNNB.) FROM 1950´s TO 2010 WITH SPECIAL REFERENCE TO THE PASSED DECADE

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The wild forest reindeer was hunted to extinction in Finland in the early 20th century. The subspecies survived in the area of the Russian Karelia, from where the reindeer returned to Finland in the 1940s through the eastern parts of Kuhmo. During the 1960s a permanent, calving reindeer population was established in the Kainuu region, the population being common with Kostomuksha in the Republic of Karelia (the Kuhmo-Kamennojeozero subpopulation). In the 1970s the population grew steadily and in the early 1980s consisted of over 500 animals. In the 1980s the growth almost halted and the population

reached the size of 1000 reindeer only in the mid-1990s when a fence was constructed at the southern border of the reindeer-breeding zone in 1993. In late 1990s (1996-1999) the growth rate of the Kainuu population was at 12.8% at the highest, the size of the population being the biggest in 2001 (1700 animals). After this the population started to diminish, the growth being -19.7% at the worst point in 2003-2005. The causes for this have been thought to be found in both direct (traffic and hunting) and indirect (for example changes in the environment) actions of humans, as well as the development of the great predator populations, the effect of parasites and diseases and the migration of the animals. After the mid-2000s the decline in the population seemed to have slowed, but the counting of the animals in 2010 shows that the decline is continuing and the number of individuals is at the level of the early 1990s, at 800 animals.

The wild forest reindeer in Kainuu area have been counted every 1 to 3 three years since 1971, either from ground or from air. The most efficient of the methods is counting the animals from a helicopter, which is performed in February or March as the animals are in their winter grazing areas. The method is based on mapping out the distribution area of the reindeer, dividing the area into suitable parts and then flying over the area along lines set out at 150 to 1000 metres. The space between the lines, the flying altitude and the flying speed are planned out based on the terrain, the visibility and the density of the animals in the area. Every individual in the area is counted, determined and photographed by circling over them at a suitable distance. The counting crew is composed of the helicopter pilot and 2 to 3 counters. The flying course and all the observations are marked on a computer mapping program on a laptop, in addition to two handwritten backups.