The problem of the interferences has been overcome with high f) charge, as we proposed in our previous experiments.

From September 14th on, 2008, in all the different emissions the activity sensor has not changed: the bird is dead and/or his PTT is detached.

The final result is net: the European interferences have been overcome with this new PTT, during all the time the tracking lasted and in all the different atmospheric circumstances.

(Note: Araba's PTT was recovered in Rantala, region of Suojarvi, Karelia in September, 2009.)



DISTRIBUTION AND ABUNDANCE OF AMERICAN MINK (MUSTELA VISON SCHREB.) IN LENINGRAD AND VOLOGDA REGIONS

I.L. Tumanov, A.A. Zhemchuzhina

Federal Research Institute of the Arctic and Northern Regions. St. Petersburg, Russia

The American mink (Mustela vison Schreb.) is widely spread in the North-West of Russia. It has never been intentionally introduced in Leningrad Region. The species appeared on the border with Karelia in post-war time due to successful acclimatization and actively populated the territory, spreading from Karelia and Finland as well as escaping from fur farms. In the late 1970s already, the migrants completely replaced the native European mink in the waters of the Karelian Isthmus and in the region's eastern areas bordering Karelia. In this territory the density of the mink population was around 0.74 -1.54 ind./1000 ha of suitable habitats, and the range was continuously growing. By the mid 1980s, the combined population of the two mink species reached 20 000-21 000 animals, wherein the American mink's



share was about 87-88%. According to the surveys of 2004-05, it could be found in all districts and its contribution to the total abundance of 21 100 animals of the two species reached 95%.

In Vologda Region, the American mink appeared in 1983-84 along the border with Karelia and Leningrad Region. Within 10 years, it populated most of the forest rivers in the region's north-western districts. By the beginning of the 21st century, the American mink has expanded even further eastwards, thus occupying the whole western part of the study area. In the year 2000 the immigrants contributed 44% to the total of 7 500 minks inhabiting the region. Within the next 5 years the total abundance increased to reach 8 600 individuals, and the share of the American mink in it grew to 48%.

Thus, the expansion of the American mink in the territories in question continues, thus causing major concerns about the future of the native species – the European mink, which has become rare throughout its range.



ROLE OF ISOENZYMES OF LACTATE DEHYDROGENASE IN TISSUES IN ADAPTATION OF GAME ANIMALS

A.R. Unzhakov¹, V.A. Ilyukha^{1,2}, V.V. Belkin¹, N.V. Nikitina²

¹Institute of Biology, Karelian Research Centre of RAS, Petrozavodsk, Russia ²Petrozavodsk State University, Petrozavodsk, Russia

It is known that the level of energy metabolism depends on ecological characteristics of species (Sokolov, 2003). Isoenzymes of lactate dehydrogenase (LDH) are connected to bioenergy processes and play an important role in adaptive responses of the organism (Kozhevnikova et al., 2004).

Our researches have revealed significant interspecies differences between isoenzymatic spectra of LDH of mountain hare and beavers.