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Title: *CONTEMPORARY ROLE OF NENETS IN TUNDRA ECOSYSTEMS*

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Nenets of the North of Western Siberia, as indigenous peoples of the North, are considered as an integral part of natural ecosystems because their lives are based on the use of natural resources. Currently, in the Yamal-Nenets Autonomous Area (Russia) over 700 thousand head of domestic reindeer are grazed, that is about 40% of the world total number and about 53% of the Russian number. Of these, 380 thousand (21% of the world number) are concentrated in the Yamal peninsula on pasture area of 106 000 km² (3,6 ind.*km⁻²). Uncontrolled growth of the reindeers began at the end 1990-ies and subsequently followed by comprehensive major changes in vegetation and animal life of Yamal. Recent situation is close the total extinction of lichen pastures on the peninsula. Due to overgrazing, total availability of grasses and shrubs has also decreased, in grasses by 1.5-2.0 times, low shrubs - almost 8 times, tall shrubs - 2.0 times. Changes in the animal life are the following. Since 1990 the peaks of lemmings have never reached former high values (200-400 ind./ha) and become locally-limited and patchy. Following this, there was a decrease in number of predators and other tundra birds. Specialized predators (snowy Owl, pomarine Skua) has almost ceased to nest, nesting density of less specialized predators (rough-legged Buzzard, long-tailed Skua) has decreased by 2,5-3 times. The decrease reached almost 2 times lower numbers in geese, 3 times in hygrophillous waders, 5.5 times in Lapland bunting, and 2 times in long-tailed Duck and Willow grouse on watershed.

According to a cultural tradition the Nenets themselves can not control reindeer population, as a main aim of their reindeer husbandry is not to create marketable products for a profit, but increasing the reindeer number of itself. As a result, with the support of the society of their traditional husbandry the Nenets with their attitudes to rampant growth of reindeer have become an important factor contributing to enormous and rapid transformation of tundra ecosystem. Reindeer as the basis of Nenets life-support satisfies all their demands, making their lives isolated from the economic of the rest society. Veterinary disease prevention eliminates natural factors on the regulation of the reindeer number. Conditions for the increase in the Nenets number were created, and this creates the necessity to increase the reindeer number. Natural ecosystems are able to function in wide conditions, but in extreme climates, an overexploitation always pushes them beyond sustainability. Nenets with their tough attitudes to unrestrained breeding of reindeer are destroying the natural basis of their traditional lifestyle.



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