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SPECIES STRUCTURE OF MICROMAMMALS COMMUNITIES (*SORICIDAE, RODENTIA*) IN THE SOUTHERN PART OF THE KOLA PENINSULA

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**M.V. Lomonosov Moscow State University*
1 Leninskiye Gory, 119991, Moscow, Russia. E-mail: biosever@yandex.ru
***Water Problems Institute of the Russian Academy of Sciences*
3, Gubkina Str., 119333, Moscow, Russia. E-mail: phantom-91_91@mail.ru

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In this article, we have summarized the data of the long-term research (2008-2018) of micromammals (Soricidae, Rodentia) in the southern part of the Kola Peninsula in the 2 key areas, the Luvenga cluster of the Kandalaksha Nature Reserve, and Ryashkov Island with adjacent part of the Karelian coast. We used the trap-line method that helped us to identify 7 species in the Luvenga cluster: *Microtus (Alexandromys) oeconomus*, *Microtus agrestis*, *Clethrionomys (Myodes) glareolus*, *Clethrionomys (Myodes) rufocanus*, *Sorex araneus*, *Sorex caecutiens*, and *Sorex minutus*. On Ryashkov Island, there were 4 species: *Microtus (Alexandromys) oeconomus*, *Microtus agrestis*, *Clethrionomys (Myodes) glareolus*, and *Sorex araneus*; and 5 more species on the Karelian coast: *Microtus (Alexandromys) oeconomus*, *Microtus agrestis*, *Clethrionomys (Myodes) glareolus*, *Clethrionomys (Myodes) rufocanus*, and *Sorex araneus*. During the 11 years of research, we registered population peaks of micromammals in 2011, 2015 and 2018, and depressions in 2016 and 2017 in the Luvenga cluster. Low peaks on Ryashkov Island and the Karelian coast were observed in 2011 and 2015, and depressions in 2010, 2012 and 2014.

The most populated habitats were marked for each of the taxocene species of mouse-like rodents and insectivores. It was revealed that the communities in the south of the Kola Peninsula were usually formed by 2 to 4 species, with either one dominant or two that were replacing each other in different years. In the Luvenga cluster, the highest species diversity was registered in the ecotone of birch-pine dwarf shrub forest with spruce and clover-grass meadows on the littoral (on the ecotone line of traps). There was a high abundance of 3 species: *S. araneus* (44 ind. per 100 trap-nights), *C. (Myodes) glareolus* (15 ind. per 100 trap-nights), *C. (Myodes) rufocanus* (14.6 ind. per 100 trap-nights). The dominant in those communities were *S. araneus* (average dominance value – 25.9%) and *C. (Myodes) glareolus* (average dominance value – 14%). Additionally, *C. (Myodes) rufocanus* with an average dominance of 14% had the largest abundance on the ecotone line of traps and in the pine-birch lingonberry green moss forest (14.6 and 14.0 ind. per 100 trap-nights, respectively). The abundance of micromammals was significantly lower in communities of Ryashkov Island and the Karelian coast compared to that of the Luvenga cluster. *C. (Myodes) glareolus* was a little more dominant there, while *C. (Myodes) rufocanus* was absent on the island. At the same time, *C. (Myodes) rufocanus* dominated everywhere on the Karelian coast (up to 5.7 ind. per 100 trap-nights, with the total population of 6.3 ind. per 100 trap-nights). The least common species in the south communities of the Kola Peninsula were *Microtus (Alexandromys) oeconomus* and *M. agrestis*; the former had a small abundance, but was found in all key areas (2.7 ind. per 100 trap-nights), while the latter was recorded in 2008 in the Luvenga cluster (3 ind. per 100 trap-nights on the ecotone line), and in 2011 on Ryashkov Island and the Karelian coast. Further research is required to accurately determine presence or

absence of *M. agrestis* in communities. Lemmings were not registered in the communities of the Luvenga cluster at all. *M. schisticolor* was found in 2012, 5 km from the key area in a mountain taiga spruce blueberry-crowberry green moss forest with birch and rowan (2.9 ind. per 100 trap-nights).

Dead individuals of *Lemmus lemmus* were found in 2012 when its population peaked: 11 were in a pine forest near Kolvitsa Village (14 km from the key area), and 2 more were in a foothill pine blueberry and green moss forest, along the country road from Luvenga Village to the Luvenga Tundra mountains. At that time, the abundance of *Lemmus lemmus* in the communities of the Luvenga Tundra reached 2.0-2.2 ind. per 100 trap-nights.

Keywords: micromammals communities, northern taiga, theriofauna, Kandalaksha Nature Reserve, abundance, dominance index.

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