



behaviour of the cats signalled people about ecological trouble (Takeuchi et al., 1962).

It is believed that wild mammals, being most closely related to humans in their biology, are suitable objects for watching the health of the environment of humans and animals (Carpi et al., 2008; Ohno et al., 2009). The question of whether mink (*Mustela vison*) can be used as a potential sentinel species is discussed.



EVALUATION OF THE PHYSIOLOGICAL STATUS OF MAMMALS AS A CONSTITUENT PART OF ECOLOGICAL MONITORING IN THE EUROPEAN NORTH OF RUSSIA

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The physiological-biochemical parameters of mammals inhabiting Karelia, such as two beaver species, mink, reindeer and bank vole, were analysed. The physiological status of minks living in the wild was shown to have changed in connection with an increasing proportion of minks escaped from fur farms in the population, and parasitic infection was proven to have influenced bank vole blood leucocytes. It was illustrated that assessment of the physiological status of mammals plays a significant role among traditional approaches and methods for monitoring the condition of wildlife populations. Analysis of the morpho-functional activity of leucocytes was recommended for *in vivo* diagnostic investigations as a sensitive indicator of environmental impacts.

