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NATURAL ZONALITY OF THE FOREST BELT OF NORTHERN EURASIA: MYTH OR REALITY? PART 1 (LITERATURE REVIEW)

O. V. Smirnova[1], A. P. Geraskina[1], V. N. Korotkov[2]

[1] *Center for Problems of Ecology and Productivity of Forests, Russian Academy of Sciences, 84/32 Profsoyuznaya Street, Moscow, 117997, Russia*
E-mail: ovsinfo@gmail.com

[2] *Yu. A. Israel Institute of Global Climate and Ecology, 20B Glebovskaya st., Moscow, 107258, Russia*
E-mail: korotkovv@list.ru

Abstract. The state of the Earth's living cover raises serious concern about its ability to successfully exist and fully implement its ecosystem functions in modern conditions. Hence the need to revise our relationship with the Nature on the basis of modern scientific achievements reflected in the concept of complementarity which is mutual favour of living beings during their lives and after death. Data analysis has shown that complementary relations on the territory of Northern Eurasia were most developed during the Miocene – Pliocene period, which resulted in a huge biodiversity, the highest productivity, as well as the maximum implementation of climate-regulating functions of the Biota. Mass destruction of the giant herbivores of the mammoth fauna who organized complementary systems had global consequences, i.e. changes in the temperature regime, reduction of feed resources, decreased soil fertility, changes in the size and boundaries of ranges of animals, plants, fungi and representatives of other kingdoms as well as the replacement of complementary systems of giant herbivores and grasses by systems dominated by trees which made these landscapes unsuitable for remaining the herbivores. Further transformations of the Biota of Northern Eurasia were determined by human activity.

Keywords: complementarity, biota, giant phytophagous animals, climate, biodiversity, habitat, ecosystem, human activity.