

## **THE MAP OF THE PERSPECTIVE TERRITORIES FOR THE DEVELOPMENT OF NEW NATURE RESERVED AREAS OF RUSSIA**

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Management of the land biological resources, estimating and forecasting of biosphere changes need knowledge of the processes regulating ecosystem functions, its biological productivity and circulation of chemical elements. At present time, when the human activity is permanently extending, the nature reserves are the only base for preservation of plant and animal biodiversity and reference objects for comparison with their anthropogenically transformed analogues. The network of nature reservations and national parks is the main base for the long-term organization of ecological researches.

There are 101 state nature reservations in Russia nowadays (their total area reached up to 27,7 mln. ha.) and 36 national parks. Thirty one natural reserves and 5 national parks were annexed to the International Network of Biosphere Reserves of UNESCO. The state network of reserved areas has started to develop since 1916. A great number of native reserves (47) were organized in the period from 1985 to 2000. The main idea was focused on the organization of nature reservations and national parks along all bioclimatic zones of Russia, which might be represented by different virgin landscapes. However, it is not always properly recognized that geomorphic and geological components (such as relief, groundwater, and chemical and physical properties of parent rocks) significantly affect the diversity of biocenoses together with general biospheric (zonal and provincial) regularities of flora and fauna distribution. Geomorphic and geological factors affect the composition and functioning of biocenosis through the soil, because the latter is the link between geospheric and biospheric components of the general cycle of matter and energy. Hence, preservation of natural diversity of ecosystems is impossible without preservation of the diversity of natural soils.

Representation of Russian reserved areas network for conservation of natural soil diversity was estimated on the base of cartographic information (Soil Map of the Russian Federation on a scale of 1:15 M edited by I.S. Urusevskaya, I.A. Martynenko and I.O. Alyabina (2007) and Geographic Database of Federal Protected Areas of Russia (2002-2010). This analysis has shown that reserve areas are irrationally allocated and not sufficient for comprising of Russian soil diversity by reserves and national parks. The 24 out of 76 cartographic divisions are not represented in reserves and national parks. Taking into account the soil regulation role in biocenoses we suppose, that the main principles for selecting reference soils can also be applied to reference natural biogeocenoses.

The small-scale (1:30M) map of territories perspective for organization of reserves and national parks was created as the result of our investigations. We believe, that the development of new natural reservations in designated areas will contribute to the optimization of reserved areas network of Russia. The compilation of Red Data Book of Russian Soils is shown to be promoted for conservation of soil diversity of the country.