

FORECAST (FROM POPULATION POSITIONS) ON DEVELOPING FORESTS ON THE VOLGA UPLAND WESTERN SLOPES

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Abstract. *Background.* The vegetation cover of the forest-steppe of the western slopes of the Volga Upland has been subjected to intense anthropogenic impact for a long time. The most significant and dramatic changes are associated with the destruction of forests during the development of territories. *Materials and methods.* The study of forest vegetation was carried out during route and stationary studies on trial plots (SP) with a size of 10 m x 10 m (100 m²). Geobotanical descriptions were carried out within the framework of the natural contours of plant communities with indication of the projective cover of plants as a percentage. For each woody plant, the following was noted on the SP: age state, origin (seed or vegetative), height, belonging to a layer, vitality (most often on a three-point scale). The obtained geobotanical descriptions served as material for the analysis of biodiversity. The structural diversity of communities was estimated by the ratio in the composition of the plant cover of ecological-coenotic groups (ECG) of species. The assessment of ecological regimes of habitats of communities was carried out using the range ecological scales of D. N. Tsyganov. *Results and conclusions.* The revealed differences in the ontogenetic composition of tree species are explained by the ecological conditions of the habitats, as well as by the different history of the economic use of forests. Always under the influence of anthropogenic activity, there is a depletion of the species composition and the same age of tree tiers, a violation of the mosaic-tiered organization of phytocenoses. Without the maintenance of oak populations by artificial means, even under the condition of conservation, after several generations, the formation of phytocenoses without the participation of oak is possible. In large areas with a predominance of shade-tolerant species, the formation of oligo- and monodominant communities is most likely.

Keywords: western slopes of the Volga Upland, forest vegetation, ontogenetic spectrum

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