

Original article

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The Floristic Composition of the Living Soil Cover on Burnt Areas in the Belt Pine Forests of West Siberia

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Abstract. The floristic composition of the living ground cover on burning forests in the belt pine forests of Western Siberia was studied. The assessment of the occurrence of ground cover species is given. The analysis of flora by ecological groups reflecting the humidity of ecotopes is carried out. It has been found that soil moisture of burnt forest areas is a limiting environmental factor in the formation of the composition and structure of the living soil cover on the burnt areas in the belt pine forests. Soil moisture deficit in the root layer leads to increased percentage of xerophytes in the flora of burnt areas: 11.9 % in the southern forest-steppe, 22.2 % in the arid steppe, and 48.7 % in the dry steppe. The ratio of the groups of mesoxerophytes and mesophytes in the flora of burnt areas also changes according to the zonal setting. The groups of mesohygrophytes and hygrophytes “emphasize” the heterogeneity of the forest growth conditions on burnt areas and the presence of ecotopes with different soil moisture. The carried out analysis of the floristic composition of the living soil cover of burnt areas in the belt pine forests of West Siberia made it possible to reveal that the post-fire forest regeneration is not completed. To restore the living soil cover, a tree layer to create the microclimatic conditions characteristic of a forest is needed.

Keywords: burnt forest area, living soil cover, floristic composition, ecotope, belt pine forests.

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