

Original article

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Improvement of Systems of Silvicultural Activities for Forests of a Certain Species Composition

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Annotation. Silvicultural activities mainly for protective forests in the system of renewal of ecological plantings are actually at the stage of development or testing. The purpose of the work: improve the systems of silvicultural activities to increase the efficiency of maintenance and use of forests of a certain species composition. To achieve the goal, a set of tasks was solved using the systemic priority-target method of forestry. The methodology formed on its basis includes, in particular, provisions defining: the use of a calculated and predictive comparative assessment of the effectiveness of new options for measures at all stages of forest growing; choice to substantiate the achievement in the future of the target result of a new development also of individual areas of non-reproducible, as a rule, naturally occurring ecosystems, if there is a potential for their reproduction under these conditions by silvicultural activities. Based on the modern growing needs of society, mainly in plantations that effectively perform various ecological functions, based on data from literary sources, as well as the selection among the existing sites close to the target, reflecting the potential of forest formation processes and biological silvicultural properties of pine and oak, possible target characteristics of socially demanded plantings of these species have been established. Taking into account the assessment of the existing experience in carrying out new activities in pine forests and oak forests, nodal silvicultural activities have been developed for transforming existing plantings in to target ones, including combined types of renewal-reforming, conservation-reforming, as well as formation (thinning, passagefelling) – reforming. With their use, activities have been developed to improve the formational-forest typological systems of silvicultural activities for pine forests and oak forests in the zone of coniferous-broad-leaved forests and the forest-steppe zone of the European part of Russia.

Key words: forest-forming species, silvicultural systems, reforestation, target plantings

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