

Original article

DOI 10.24419/LHI.2304-3083.2021.2.05

Silvicultural Principles Establishment of Indicators of the Main Factors of Integrated Forest Accessibility

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Abstract. As part of solving a common problem development of scientific foundations and methodological methods for determining the complex accessibility of forests (CAF) for the formation of regimes for their maintenance and use based on the use of effective systems of silvicultural measures, in the work is considered the issues of establishing indicators of factors that significantly affect the possibility of implementing the necessary measures. The identification and substantiation of the initial principles for determining the indicators of factors and conditions of the CAFs based on the results of the analysis and generalization of all historical experience and scientific developments in this area, taking into account the emergence and development of new methods for studying forests, establishing their characteristics, incl. GIS technologies, Earth remote sensing. The initial principles provide for the establishment of indicators factors of CAF on the basis of the developed classification of factors and conditions of forest accessibility for forestry activities with the division of their entire totality into three complexes by origin: anthropogenic-economic, natural and socio-ecological-economic. Wherein, in the first complex are established indicators of factors transport and technical accessibility of forests – objects of forestry – forest management, incl. indicators characterizing the presence and level of quality of transport infrastructure, technical equipment (machines, equipment), ensuring the possibility of implementing systemic silvicultural activities, as well as the availability, capacity and quality degree of the wood processing industry, incl. deep and even environmentally friendly use of all biomass. In the second subsystem of “natural factors” are established of indicators that characterize natural soil-ground, orographic conditions, species-productive properties and quality of forests (including species composition, productivity, available stock of stands), the potential of forest reproduction, ecological, environmental value of forest sites,

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significantly limiting their availability for the implementation of the forestry activities and forest management. Establishment of indicators of socio-ecological and economic factors of forest accessibility (the most complex subsystem) of complex accessibility of forests, determining their social component, linking and largely regulating the influence of all other factors, including the development of science. It is advisable to use the formed methodological principles and techniques in the development of specific methods for determining indicators of both individual factors that determine the corresponding types of forest accessibility, and any of their blocks, taking into account a systematic approach within the framework of a general set of factors and establishing the integrated accessibility of forests, forest areas – objects of forestry, forest use, nature protection.

Key words: *silvicultural accessibility of forests, indicators of factors of accessibility of forests, principles and requirements, maintenance and use of forests.*

For citation: *Zheldak V.I., Sidorenkov V.M., Doroshenkova E.V., Sidorenkova E.M., Lipkina T.V. Silvicultural Principles Establishment of Indicators of the Main Factors of Integrated Forest Accessibility // Forestry information. 2021. № 2. P. 49–64. DOI 10.24419/LHI.2304-3083.2021.2.05.*