Hydrological Factors Influence on the Dark Coniferous Forests' Sustainability in the European part of Russia

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Abstract. *The study examines the relationship between dark coniferous forests sustainabilityin various forest conditions and the groundwater level. We have developed the technology allowing to determine the groundwater level and depth based on modern methods of geoinformation analysis of radar survey data and a hydrological objects geographic database. Statistical relationships of total and average dead forests area and groundwater levels were obtained.*

Criteria for reducing dark coniferous forests stability depending on the groundwaterdepth have been established. The study results are of practical interest in effective strategies development for forest management in dark coniferous forests.

Key words: *dark coniferous taiga, drying out, groundwater, droughts, climate change, relief model, European part of Russia.*

For citation: *Sidorenkov V., Achikolova Iu., Astapov D., Lyamtsev N., Sidorenkova E., Bukas A. Hydrological Factors Influence on the Dark Coniferous Forests' Sustainability in the European part of Russia. – Text : electronic // Forestry Information. 2024. № 4. P. 30–41.DOI 10.24419/LHI.2304-3083.2024.4.04. https://elibrary.ru/endeyp.*

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