

Original article

EDN IGFWTH

DOI 10.24419/LHI.2304-3083.2025.2.03

The Influence of Various Factors on the Carbon Cycle in the Oak Forests of the Forest-Steppe and Steppe of the European part of Russia

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Abstract. On the basis of literary sources, the influence of various factors on the carbon cycle in the oak forests of the forest-steppe region and the steppe region of the European part of the Russian Federation is analyzed. The ongoing climatic changes have a significant impact on the process of carbon deposition and the rate of decomposition of organic matter in the soil, which leads to an increase in emissions and a decrease in carbon dioxide runoff by forest ecosystems, contributes to an increase in the occurrence of forest fires, the number and duration of droughts with minimal precipitation. The most important factors of the external impact on the carbon cycle are forest fires and other damage to forests, the implementation of various forestry activities, of which only reforestation and afforestation contribute to the annual accumulation of carbon reserves in forest ecosystems. In this regard, their volumes in the conditions of the forest-steppe and steppe of the European part of Russia (EDR) should be significantly increased, emphasizing.

Key words: carbon cycle, oak forests, steppe, forest-steppe, forestry activities.

For citation: Musievsky A., Bushueva A. The Influence of Various Factors on the Carbon Cycle in the Oak Forests of the Forest-Steppe and Steppe of the European part of Russia. – Text : electronic // Forestry Information. 2025. № 2. P. 37–58. DOI 10.24419/LHI.2304-3083.2025.2.03. <https://elibrary.ru/igfwth>.

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