

Original article

DOI 10.24419/LHI.2304-3083.2022.2.07

The Influence of Grass-Roots Fires in the Volgograd region on the Grass Cover of Protective elm Forest Strips

Evgeniy K. Vereshchagin¹

Abstract. On the example of the Gorodishchensky district of the Volgograd region, the consequences of pyrogenic impact on the vegetation cover of shelterbelts from small-leaved elm are analyzed. Performed monitoring of the restoration of herbaceous vegetation under the influence of ground fires was carried out in 6 experimental plots laid on the burnt areas in 2017. The results of studies conducted in 2021 showed that 5 years after the fires, plant associations in the elm forest shelter belts had not fully recovered, characterized on average by lower yields and Jaccard indices. Only in some experimental plots, the original vegetation has changed cardinally. It has been revealed that the most resistant to changes in soil and climatic conditions as a result, of fires are representatives of the family Chenopodiaceae.

Key words: landscape fires, pyrogenic succession, herbaceous vegetation, forest belts, projective cover.

For citation: Vereshchagin E. The Influence of Grass-Roots Fires in the Volgograd region on the Grass Cover of Protective elm Forest Strips // Forestry information. 2022. № 2. P. 77–89. DOI 10.24419/LHI.2304-3083.2022.2.07

¹ Federal Scientific Center of Agroecology, Integrated Land Reclamation and Protective Afforestation of the Russian Academy of Sciences (Volgograd, Russian Federation), vereshagin-e@vfanc.ru