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Analysis of the Frequency and Causes of Natural Fires in Federal Protected Areas

Mikhail E. Konyushenkov¹Alexandra A. Razdymakho²

Abstract. The article provides regression equations for the relationship between the relative density of fires and the population and attendance of territories in the form of a third-degree parabola for all specially protected natural territories (SPNA) and protected areas of the forest zone. It has been established that more than half of the protected areas are characterized by a low frequency of wildfires, while the number of fires on the territory of national parks is twice as high as on the territory of state nature reserves. For all protected areas, a very weak and weak correlation was found between the frequency of fires and all the factors studied – the total area of protected areas, population density and attendance of territories, the area of infrastructure facilities, and forest cover. Positive correlation (an increase in frequency with an increase in the intensity of the factor's influence) have been established for all protected areas and protected areas of the forest zone by such parameters as the area occupied by infrastructure facilities and lands covered with forests; for protected areas of the non-forest zone (forest-steppe, steppe, desert/semi-desert) – for the total area of protected areas and forested areas.

Key words: specially protected natural territories of federal significance, wildfires, forest fires, causes of fires, frequency of occurrence of wildfires, density of fires.

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¹ All-Russian Research Institute for Silviculture and Mechanization of Forestry, Chief Analyst (Pushkino, Moscow region, Russian Federation), 4x4drive@mail.ru

² All-Russian Research Institute for Silviculture and Mechanization of Forestry, Leading Engineer of the Department of Forest Pyrology and Forest Fire Protection – Center for the Development of Priority Unmanned Technologies in the Forest Industry (Pushkino, Moscow region, Russian Federation), razdymakho00@mail.ru