

## Estimation the impact of climate change on the emergence and spread of forest fires in the Northwest Russia

*E. A. Shunkina – Saint-Petersburg Forestry Research Institute, postgraduate student*

*Today the main cause of forest destruction are forest fires. The main factor affecting the fire situation in forests are the weather conditions. Structure and stock of combustible materials, not good organization of forest protection and the prevention of fires contribute a large spread of fires. Natural fires have had a devastating impact on forest ecosystems. Projected climate change may influence a significant impact on the number and size of forest fires and their impact on forest ecosystems. Estimation of the number of forest fires correlation with expected climate change is needed to ensure the security of the national system of forest management. The article assesses the impact of climate change on the occurrence of forest fires in the forests of the North-West of Russia. According to the study there is a link between extreme increase in air temperature and the number of forest fires. In the context of future climate change, we can talk about increasing the fire risk period to 20 days, with an increase in air temperature of 2 °C. On the basis of the data in the article concluded that at higher temperatures and increases the duration of the fire season in the first place under the threat of forest will be the Republic of Komi, Arkhangelsk Oblast and the Republic of Karelia.*

**Keywords:** *forest fires, climate change, increasing the fire season, the risk of forest fires.*