



## **Important Forest Fire Issues in Russia**

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In the late 20<sup>th</sup> – early 21<sup>st</sup> century, critically high fire rates turned forest fire into a problem of an unprecedented scale in the humankind history. There are many reasons for it ranging from the obvious climate change towards warming and aridity to extremely adverse consequences of many years of economic activities within forest areas resulting into grave structural transformations in the Forest Fund and stands, accumulation of forest fuels in great amounts, and impaired natural fire resistance of forests. Many forest regions of the world see the emergence of paradox outcomes of the earlier widely-used system of forest protection against fire lacking scientific justification: the more thoroughly and the longer fire impact on forest ecosystems was suppressed without a well-planned system of forest management activities to counteract the natural and unavoidable up-building of fire danger in forests, the more preconditions arose for the occurrence of catastrophic fires at a certain stage. Such a trend is most common for large forest areas in North America and Eurasia, but it has not passed by Australia, Southeast Asia, the Mediterranean and other regions, either.

The international community's concern over the high fire rates and perceptions of fire in the forest in a broader historical context were discussed at a number of major conferences on wildfire, including those supported by UN and the World Bank. Following-up such events, the MNR held an international seminar supported by the World Bank, in Khabarovsk on 9-12 September 2003.

The theme of the Seminar - "New Approaches to Forest Protection and Fire Management at the Ecoregional Level" - implicitly contains the notion of search for essentially new region-specific forest fire management strategies and technologies, really differing from the conventional ones. No doubt, the search for silviculturally, environmentally and economically efficient approaches and practices of forest protection against fire is of particular importance for Russia possessing over one billion ha of most diverse forests growing in various natural and economic conditions. For over eight decades, this vast area has been protected against fire according to a single stereotype established under the centrally planned, input-based inefficient economy. The system practically neglected recommendations of Russian and international forest pyrology.

Clearly, Russia must not mechanically transfer into its reality everything which is acceptable for other regions of the world – overdoing may be harmful in this sense. It is notably applicable to the concept of "fire management" which has been recently in vogue among certain circles. In this case, it should be born in mind that it is usually impossible "to manage a fire as a process of spontaneous spread of burning over a forest area" unless it is a prescribed burning for resource management purposes rather than a wildfire. Obviously, the term should be understood as the management of the pyrogenic factor through regulating the periodicity of fire impact on forest ecosystems with varying intensities of burning, and in some cases, complete elimination of this factor. The objective is to create such a regime of pyrogenic impact on forest ecosystems which would make it possible to preserve the whole range of dynamic plant communities and preclude the occurrence of destructive fires. Approaches to addressing this task should integrate prescribed burning as a tool for lowering the risk of abundant accumulation of surface fuels and fire regeneration under the canopy of commercially valuable coniferous stands.

A flexible approach to regulating the periodicity and extent of fire impact on forest ecosystems pre-determines various levels of forest protection against fire with each of them requiring certain financial inputs per protected area unit and appropriate technical and technological support. All these issues were touched up and more or less thoroughly discussed in the Seminar Proceedings. The publication reflects international experience and will be useful when addressing the complex and multi-faceted problem of forest fire.