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[The influence of soil properties alteration on growth of wildfires using the Tomsk’s region (Siberia) as an example]

A.G. Dykarev and E. Panchenko

Institute of Monitoring of Climatic and Ecological Systems (IMCES) SB RAS, Department of Ecological Research, Tomsk, Russian Federation (pakatya@sibmail.com)

Wildfires have significant influence on all levels of ecosystem. At the present time the annual growth of wildfires amount is observed. It has pernicious effect on different forest's functions, eco-geomorphic processes, vegetation cover and soil properties.
However alteration of soil properties under influence of anthropogenic factors also can affect increasing of wildfires.
The investigated object is the territory between the rivers Ob and Tom. These interfluves are rather important territory in the economic and ecological aspects for Tomsk (560 31 N-85008 E).
The underground water deposit is located on the territory of interfluves using for city drinking water supply (population size 500.000).
Under influence of intensive water-intake the vast cone of depressions at the interfluves was formed.
In the result of laboratory studies and field measurements have found that the dehydration of forest landscapes, disturbance of water balance and dry out marshes is observed at the territory. It leads to increasing of wildfires and probability of peat's ignitions.
During the period from 2003 to 2007 there were 711 cases of fires (969.62 ha) at the territory. Loss of wood was 28953.5 m^3 and loss of young growths was 7.9 ha for 5 years. The centers of wildfires appear mainly on territories with subjected to maximum influence of the water intake.
On the basis of carried out researches the typology of transformed and fire-prone territories, suggested layout of ecological zoning interfluves taking into account a set of parameters was elicited. This enables to assume the measures for decrease of ignitions and negative consequences of wildfires.