



National University of Life
and Environmental
Sciences of Ukraine



Global Fire Monitoring
Center (GFMC)



State Forest Resources
Agency of Ukraine



State Emergency Service
of Ukraine

Regional Seminar and Consultation

**Wildfires in the Eastern European Region: Science, Policies and Management
and
Inauguration of the Regional Eastern European Fire Monitoring Center (REEFMC)**

National University of Life and Environmental Sciences of Ukraine
Institute of Forestry and Landscape-Park Management
Kyiv, Ukraine
4 March 2013

Introduction

During the past decade significant changes of occurrence and impacts of fires affecting forests and other vegetation in the Eurasian Region have resulted in severe environmental damages, high economic losses and considerable humanitarian problems. Several key issues affecting wildland fire in the cultural and natural landscapes of temperate-boreal Eurasia have been identified:

- Increasing rural exodus and urbanization, resulting in abandonment of traditional land cultivation (agriculture, pastoralism, forestry) and thus an increasing wildfire hazard;
- Urbanization resulting in a reduced rural work force, including availability of rural firefighters
- Re-privatization of formerly nationalized forests resulting in vacuums of forest and fire management in smallholder forest estates
- Increasing occurrence of wildfires affecting the perimeters of metropolitan areas, settlements and developments dispersedly located in wildlands
- Secondary problems associated with wildfires, e.g., those burning on territories contaminated by radioactivity and remnants from armed conflicts (e.g., unexploded ordnance, land mines, uranium-depleted
- Wildfires affecting agricultural lands treated with pesticides; landfills, other industrial waste and structures containing hazardous materials, especially at the urban / residential perimeters
- Consequences of climate change on cultural fire regimes and ecosystem vulnerability, e.g., transformation of former fire-excluded or -protected natural ecosystems or land-use systems such as peat bogs, or high-altitude mountain ecosystems.

Besides the direct fire damages of agricultural crops and forests, there are additional secondary and transboundary impacts of fires, e.g.:

- Effects of gas and particle emissions from human health
- Emissions from vegetation fires affecting the atmosphere and contributing to climate change
- Transboundary impacts of fire emissions on ecosystems, e.g. the consequences of deposition of fire-emitted black carbon to the arctic environment

Within countries there are different State agencies concerned with the prevention, control and mitigation of fire and fire effects and include Forestry Agencies, Emergency or Civil Protection Agencies, Public Health Agencies, Meteorological Services, and National Space or Remote Sensing

institutions. Scientific institutions active in the research of the reason for fire use and the causes wildfires, the impacts of fire on ecosystems, environment and society, are calling for a more interactive and synergistic fire management approach at landscape level, involving strong inter-agency cooperation. The involvement of civil society to take more responsibility in fire prevention and self-defense of villages and other rural assets is needed.

The transboundary impacts of fire emissions, and sometimes border-crossing fires, are calling for enhanced cross-border cooperation in fire management.

Inauguration of the Regional Eastern European Fire Monitoring Center (REEFMC)

In 2012 the National University of Life and Environmental Sciences of Ukraine, Institute of Forestry and Park Management, in cooperation with the Global Fire Monitoring Center (GFMC) and the UNECE/FAO Team of Specialists on Forest Fire, financially supported by the Council of Europe, decided to establish the Regional Eastern European Fire Monitoring Center (REEFMC) as a center of excellence in wildland fire research and for regional fire information management and exchange. The REEFMC will work at the interface of science and the user communities, particularly by serving national agencies in Ukraine and neighboring Eastern European countries with data and information, capacity building (training) and advisory services for developing fire management policies, and enhancing local and national fire management capabilities. The cooperation between Eastern European countries in fire management is necessary in order to share experience and – in case of fire emergencies – human and technical resources. The REEFMC, in conjunction with the UNECE/FAO Team of Specialists on Forest Fire and the UNISDR Regional Eurasia Wildland Fire Network, will cooperate with state agencies, the scientific community and civil society groups on a voluntary basis and through official agreements.

After the National University of Life and Environmental Sciences of Ukraine decided to host and co-sponsor the REEFMC, initial investments by NULES / NULESU were made in 2012 and early 2013, cosponsored by the Council of Europe and the GFMC, so that the REEFMC will start its work in March 2013. National agencies responsible for fire management, regional partner institutions, and academia and non-government organizations are invited to the official inauguration on 4 March 2013.

Scope of the Regional Seminar and Consultation

In order to support future cooperative work in fire science and fire management in the Eastern European region the Seminar and Consultation “Wildfires in the Eastern European Region: Management, Science and Policies” will be held at opening of the REEFMC. The aim of the seminar is to bring together experts, politicians and professionals in fire management, as well as representatives of the non-governmental sector for wide discussion about current problems and challenges related with topic of the seminar. A Regional Eastern European Cooperation and Action Plan on Fire Management as base for the common vision will be discussed and formulated during the seminar.

The regional seminar and consultation will also constitute a contribution of Ukraine and the neighbor countries in the preparation of the “UNECE/FAO Forum on Crossboundary Fire Management”, which will be held at the United Nations in Geneva by end of 2013 (28-29 November 2013) and which aims at strengthening fire management capacity in the UNECE / CoE member states by international cooperation.¹

¹ <http://www.fire.uni-freiburg.de/intro/UNECE-Fire-Forum-2013-Draft-Outline.pdf>

Regional Seminar and Consultation
Wildfires in the Eastern European Region: Science, Policies and Management

National University of Life and Environmental Sciences of Ukraine (NULESU)
Regional Eastern European Fire Monitoring Center (REEFMC)
Kyiv, Ukraine, 4 March 2013

Seminar Resolution

1. Develop a strategy for developing of integrated fire management in Ukraine, including protected areas and approve it at the level of the Government of Ukraine. Upgrade the current legal framework of wildfire management to the requirements of the above mentioned strategy.
2. Improve the system of monitoring and prevention of wildfires through: a) improvement of the institutional framework (legislation, responsible public bodies, current state of wildfire management, interagency cooperation and coordination of fire crews); b) analysing of the impact of land use change on wildfire hazard (assess areas of natural regeneration of forests on former agriculture lands); c) wider involvement of local communities and volunteers to wildfire prevention and suppression (information, personal safety, safety of property, awareness, training, planning); d) justification of the strategy of large wildfires risk reduction by fuel reducing and use it as biofuel.
3. Attract more attention of the Government for urgent needs for: a) developing of a digital maps of forest roads for regions of Ukraine with high wildfire hazard; b) creation of a unified information system (e.g. server with different levels of access) for fire departments and agencies with updated information about wildfires status; c) mapping of land coverage for the analysis of land-use changes and optimization of fire management planning, assessing and forecasting of wildfires risks.
4. Establish a centralized training and advance training center for incident commanders and fire-fighters. Develop training manuals and related training programs.
5. Suggest measures to reduce transboundary impact of smoke emissions from fires, impact of wildfires on global climate changes and human health in Ukraine and Eastern European countries, including from wildfires on lands contaminated by radionuclides, landfills, agricultural lands treated with pesticides etc.
6. Organize a series of wildfire field research in fire prone regions of Ukraine with involving of Fire Sciences Laboratory of the National University of Life and Environmental Sciences of Ukraine. Organize series of active wildfire experiments (control burnings) in forests plots of Boyarka Forestry Research Station of the National University of Life and Environmental Sciences of Ukraine to create a demonstration experiments for introducing of its results to representatives of forestry and wider public.
7. Elaborate measures to prevent the occurrence of wildfires in contaminated areas around the Chernobyl Nuclear Power Plant including: a) establishing and implementing a system for early detection of wildfires in forests of the Chernobyl exclusion zone using specialized video surveillance systems and other technical means; b) engage the World and Ukrainian funding sources in the process of regional cooperation and developing of the Action Plan for prevention of a large wildfires in radioactively contaminated areas in the Chernobyl exclusion zone; c) developing fire management plan for areas contaminated by radionuclides; d) improve technical support of fire-fighters for increasing their personal safety during fire suppression operation in contaminated by radionuclides areas.
8. Present new tools and approaches for wildfires monitoring and suppression which used in Eastern Europe at the International Congress and Exhibition on wildfires and climate change which be held in Novosibirsk, Russia, 11-13 November 2013.
9. Create a working group on the implementation of these recommendations in the area of wildfires (public administration, local government, non-governmental organizations, educational and research institutions).
10. Organize I International Conference on "Current status of wildfire management in Ukraine and Eastern European region."
11. Sign an agreement on cooperation in the field of fire prevention and early detection of between the Global Fire Monitoring Center (GFMC), the Regional Eastern European Fire Monitoring Center (REEFMC) and the National Aerospace Agency of Ukraine.

Photo Gallery



Signing of the Agreement between NULESU and GFMC on the establishment of REEFMC



Emblem of the Regional Eastern European Fire Monitoring Center (REEFMC)



REEFMC Opening Ceremony



REEFMC Opening Ceremony



Follow-up consultation on fire management, Simferopol, Ukraine, 27-31 August 2013



Associated field research in Yalta Nature Reserve with *Pinus nigra* stands affected by fires over centuries



Opening of the academic year at NULESU, commemorating students and staff fallen during the World Wars (1 September 2013)



Celebrations of at the opening of the academic year with the Rector of NULESU and directors of REEFMC and GFMC on 1 September 2013