

Ukraine forest fires prevention in times of war



“Ukraine forest fires prevention in times of war”

Capacity building and knowledge exchange workshop for fire season 2023
organized by FOREST EUROPE

Take-home messages by FOREST EUROPE Secretariat, Bonn

The FOREST EUROPE capacity-building workshop on “Ukraine forest fires prevention in times of war” on March 1st was successful with 100 guests online during the entire event. This workshop was organised by the Liaison Unit Bonn in the framework of the [Ministerial decision to support the Ukrainian forest sector](#).

Renowned experts in the field of fire management from different pan-European countries shared their experiences in dealing with landscape fires on contaminated by UXO terrains, and the Ukrainian experts presented their needs and challenges in times of war, also amplified by climate change. The Ukrainian authorities mentioned the following issues in the upcoming fire seasons as:

- Large areas of forests contaminated by UXO with a high level of risk and danger for forest workers and civilians
- 80% of the fire suppression equipment is at least 30 years old and requires updating and replacement of damaged and destroyed ones due to military activities
- Strengthening of capacity building (i.e. basic fire management trainings (for 6000 employee) and Incident Commanders training) and long-term planning
- Lack of resources and equipment such as 2 thousand sets of firefighting clothes are still needed

The intensive discussion led to the following key recommendation about how to prevent forest fires in season 2023:

- **Agree on a “common” definition** of landscape fires as an umbrella for unwanted fires in natural landscapes (forest fires, fires in protected areas, grass fires on abandoned lands) and in cultural landscapes (fires on agricultural lands), and prescribe burning as controlled planned fires applicable in Ukraine and beyond as starting point for further collaboration and exchanges
- **Improve coordination** among different agencies in the country to enable a multidisciplinary approach (e.g. integrated landscape fire management), better access to equipment and methodology also in other sectors, and combined intelligence is necessary
- **Improve knowledge exchange** among different national and international actors, building on the existing knowledge produced (i.e. Regional Eastern European Fire Monitoring Center

(REEFMC) in Kyiv in continuing cooperation with the Global Fire Monitoring Center – GFMC and beyond). Creating a dedicated scholarship program could be a possibility.

- Take into consideration for developing **prevention measures** during the 2023 seasons the following elements:
 - Rely on solid and complete meteorological data and risk assessments with clear data transfer (e.g. maps)
 - Consider the landscape approach (e.g. agricultural land prone to wildfire), and further develop and implement an Integrated National Landscape Fires Preparedness Plan
 - Ensure good forest roads networks (i.e. able to enter with heavy machinery) and to fight fires from a safe place
 - Create safe prescribe burning and backfire protocols approved officially based on meteorological, geographical conditions, distances from the upcoming fire, the existence of evacuation possibility in case of need) and implement them into curriculum of the National Firefighters Training Center and others
 - Formulate principles and criteria for establishing fuel breaks as a tool of better control of large fires (corresponding to clean areas), through prescribed burning for example
 - Formulate scientifically proven methodology of increasing resilience of landscapes via application of silvicultural measures to increase share of hardwoods in pure pine stands and forests edges bordering with fire prone agricultural lands and settlements
 - Improve a complete comprehensive national system of fire detection and beyond on fire prone landscape via installation of surveillance cameras for detecting fires on early stage (10 minutes) and detect illegal logging, for instance, supported by forest maps and routing services, and trained personnel
 - Increase interagency preparedness for fires of level of complex incidents (level of emergency by State emergency services of Ukraine (SESU))
- **In contaminated areas by UXO** the following additional actions would be required:
 - Developing maps of UXO contaminated terrains based on available information from no-technical survey teams of SESU, FSD and others and making them available to all interested parties (e.g. local population, agencies, local authorities) via modern web-technologies, booklets and risk awareness seminars
 - Early detection of fires on UXO contaminated terrains via drone reconnaissance in cooperation with territorial defence units or via patrolling of safe hard roads along the borders of the contaminated zones
 - Develop regulation for forestry to use of safe distance in the case when a fire occurs, and rely on hard roads (see point above)
 - Ensure the protection of houses and the safety of rural citizens from large forest fires via reduction of fuel load inside and outside of settlements located near pine forests
 - Consider the possibility to use airplanes to extinguish the wildfire, in combination with ground actions, and guarantee efficient use of resources available in case of permission of security and military authorities
 - Use special robotic equipment to ensure backfires on borders with UXO contaminated zones

- it is recommended to set up **trainings** for firefighters focusing on
 - Prevention in contaminated areas
 - Suppression in contaminated areas
 - Learning how to act in and outside UXO areas
 - Incident commander (IC) training in the short term, and in the long-term (i.e. 3-5 years) adaptation system like Incident Command System for Ukraine

Notes: State emergency services of Ukraine (SESU) currently perform firefighting in Ukrainian cities, meanwhile, in forests the forest service is responsible for prevention, initial attack and leading fire suppression operations.

During the workshop hints for support were made by Portugal, Italy, DOK-ING (private company), Croatia and BWI which will be subject for additional coordination as a follow up by LUBo and exchanges between the potential donor and the respective Ukrainian authorities.

Recommendations with recording material, presentations and background information will be distributed among participants and presented to the next FOREST EUROPE network meeting on 23rd March 2023 (see session below). The role of LUBo in this context is to facilitate the support work and to bring potential donors and relevant Ukrainian authorities into contact

Additional learning material:

[Presentations in English](#) and [Presentations in Ukrainian](#)

[Full workshop recording in Ukraine language](#) available until 17.03.2023

[Decree-Law No. 82/2021 establishing the Integrated Management System for Rural Fires in continental territory and defining its operating rules. | UNEP Law and Environment Assistance Platform](#) (by Carlos Trindade)

Website of GFMC, supported by REEFMC / Kyiv, on fire management on contaminated terrain:

https://gfmc.online/globalnetworks/SEEurope/SEEurope_1_radio.html

Website on fire management on UXO terrain in Germany:

<https://gfmc.online/programmes/natcon/gfmc-fire-management-uxo-terrain-2006-2014.html>

Publication on use of prescribed fire on UXO terrain: <https://gfmc.online/wp-content/uploads/GFMC-Publication-RX-Burning-UXO-Terrain-2016.pdf>

Guidelines: <https://gfmc.online/globalnetworks/seeurope/OSCE-GFMC-Report-Fire-Management-Contaminated-Terrain-2014-ENG.pdf>

Training examples of REEFMC and GFMC, specific case 2019:

<https://gfmc.online/globalnetworks/balticregion/ukrainefiremanagementweek2019.html>

Website with prescribed burning training in forestry in Ukraine:

<https://gfmc.online/globalnetworks/balticregion/UkraineFireManagementWeek2015.html>

GFMC OPERATIONS: Detailed scientific-technical evaluation of prescribe burning in Ukraine:

<https://gfmc.online/intro/2015/update-1010/REEFMC-Fire-Experiment-Boyarka-Ukraine-2014.pdf>

RESILPINE project web page: <https://gfmc.online/programmes/natcon/gfmc-ukraine-resilpine-2021.html>

Here is GFMC toolbox for integrated fire management: <https://gfmc.online/iwpm/tools-3.html>

mirrored by UN (UNEP/OCHA): <https://www.eecentre.org/?s=GFMC>