



School of Forest Resources, University of Maine

Speaker Series Seminar

Land Use History, Climate Change, and War Drive Forest Cover Loss in Eastern Ukraine

Brian Milakovsky, Senior Forester, New England Forestry Foundation

Russia's invasions of eastern Ukraine in 2014 and 2022 greatly accelerated a tendency towards fragmentation and forest cover loss on the sandy landscapes of the Siversky Donets basin. The conditions for this process were put in place by centuries of land use that transformed a diverse mosaic of forests, open woodlands and dry grasslands into a nearly uniform landscape of Scots pine plantations, by the drastic reduction in institutional capacity to fight fires in recent decades, and by climate change that is increasing moisture stress across this steppe region. War eliminates what institutional capacity remains, making firefighting dangerous or impossible, and massively increases the sources of ignition. The result has been loss of nearly 100,000 hectares of forest cover since 2014, or the majority of pine forests in the Siversky Donets basin. In some cases, this loss is patchy, with the potential for natural regeneration of Scots pine, silver birch, pendunculate oak, black alder and other species from residual forest areas. At present, official regeneration strategies for damaged forests in eastern Ukraine center on establishing similar high-density pine plantations to what was present before forest cover loss. We argue that the dominance of such plantations throughout the 20th and 21st centuries helped create the conditions for extreme fire risk, and that foresters should embrace a more diverse mosaic of closed canopy forests, woodlands and dry grasslands. Ukraine should also reform its institutionally fragmented system for forest fire detection and fighting to establish a unified force that can attack fires on any category of land in their earliest stages.

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Ukraine's Red Zone. What does it Mean?

Lloyd Irland, Faculty Associate, School of Forest Resources, University of Maine

A Red Zone is an area where land cannot be used, or even visited, due to the presence of unexploded ordinance, mines, and other explosives. It still yields an "iron harvest" and some of it is still dangerous. This short talk will outline the history of the Red Zone and put some dimensions on the Red Zone in Ukraine. The work will be multi-decadal that will follow Peace.



12:00 PM- 12:50 PM (EST), Wednesday, March 5th, 2025

Room No.204, Nutting Hall,

Zoom Link:

<https://maine.zoom.us/j/88210366729?pwd=cue2VM64pKMdmpGq7VPHh9YwHoYC5r.1>



All are welcome!

