Project Database of ICP Forests
PROJECT DESCRIPTION

PROJECT INFORMATION

Project title: Carpathian Forests' Health and Risks

Project ID: 97

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Introduction

The Carpathians are the second longest mountain range in Europe (approx. 1500 km), a unique natural treasure of ecological and economical value, and home for several major rivers. The Carpathians are an important cultural and social environment in the very heart of Europe, an important asset for the inhabitants of 7 countries. This region is an important reservoir for biodiversity, a sanctuary for many unique habitats and Europe's last refuge of well-known large mammals (e.g. bear, wolf). The post-communist economic difficulties and the transition to the market economy hang in a delicate balance with the sustainable development based on the rich natural, environmental, cultural and human resources of the region and with the conservation of the natural and cultural heritage for the next generations. In this context, the Carpathians hold a significant strongpoint set against global change within wide national and European stakeholder interactions, as value added capabilities and support of social and ecological systems.

Objectives

The main objective of the project is to outline the Carpathian forest health status over their entire range, across the borders of the countries Czech Rep., Slovakia, Poland, Ukraine, Hungary, Romania and Serbia. The preliminary results will be presented during the international conference Forum Carpaticum, in September 2016.

Scientific background

The starting assumptions are related to the significance of the main driving forces of the forest health status (e.g. air pollution, meteorological parameters, extreme events, site index, biotic factors, and management practices).
The risk analysis will be considered as a function of probability and intensity of damaging factors upon the forest condition, and the outcomes will be discussed in relation to the sustainability of management policies.
The crown condition dynamics over the mountain range will be assessed considering the biotic, abiotic and anthropogenic disturbances. The average annual growth in volume will be analyzed in terms of specific conditions of vegetation, air pollution, climate and site and an estimation of the potential growth losses will be given.