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Book of abstracts

Organizer:

Faculty of Applied Ecology Futura, Singidunum University

Citation
International conference
“Ecological improvement of devastated locations for
sustainable development”

Publisher
Faculty of Applied Ecology Futura, Belgrade

Editor
Gordana Dražić

Technical editors
Sladana Đorđević
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Belgrade
September, 2014

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**IDENTIFICATION OF
ECOLOGICAL STATUS OF
DEVASTATED SITES OF
INDUSTRIAL HERITAGE**

EVALUATION OF FORESTS IN THE AREA OF MOUNTAIN KOSMAJ IN RELATION TO THEIR ENVIRONMENTAL, SOCIAL AND ECONOMIC FUNCTIONS

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ABSTRACT

The paper presents a special evaluation of environmental, social and economic functions of forests by applying Vyskot's methodologies of objectification, systematization and evaluation of forest functions. To the method utilization, area of Mountain Kosmaj is chosen, where the processes of urbanization have caused the greatest change in use of natural resources, especially forests. For this reason, the need for multi-functional use of forests is justified. Applying the methodology of objectivity, systematization and evaluation of forest functions (Vyskot et al, 2003), a financial evaluation of forest functions is carried out. As a special part of the research, determination of the level of contamination by heavy metals (Pb, Ni, Mn, Zn and Fe,), and their accumulation in plants on the mountain Kosmaj was carried out. Evaluation of forest functions of the study area have been based on data on forest area that have taken from the General management plan for "Posavsko – podunavsko forest area (2001-2010)". The financial value of each function is expressed in € per m³, which is currently the only reliable method of assessing functions. Use of this method, and data received from this research in area of Mountain Kosmaj creates the basis for the implementation of the concept of functionally integrated forest management. We will receive a more reliable data for managing state forests, as well as data to perform inspection of the state forests. There will be more reliable data to be used for forest management planning, silviculture, forest objective categorization.

Key words: *Kosmaj, evaluation, multifunctional use of forests, heavy metals.*