

FORSITE | Dynamic ecological forest site classification



A lack of forest site information in Styria asks for a new approach to forest site classification and mapping. In this project the forest site classification will be based on a GIS-based geo-ecological stratification model.

A lack of forest site information in Styria created a need for a new approach to forest site classification and mapping, considering the changing climatic conditions, which will affect the classification of forest sites and the choice of tree species. Theoretical concepts for a new approach in "dynamic site classification" existed, but the implementation of an integrated site and forest classification in for the whole forest area in Styria has been a scientific challenge. In this project the forest site classification is based on a GIS-based geo-ecological stratification model. The database is based on a digital elevation model, a geological base map, digitally available site and climate data as well as empirical site parameters. A map of forest types is derived based on several thematic maps, including information about energy, water and nutrient balance. Those parameters are modeled on the basis of point and area related data, which are then combined into forest types with a uniform combination of factors. The model allows a stratification of the forest types on all sites based on digital geo-ecological parameters. In addition to the ecological facts, each forest type is characterized by a description of silvicultural guidelines containing information on the appropriate choice of tree species, potential hazards and adaptation methods. These guidelines also describe previous experiences with the tree species and their mixtures, and will provide recommendations for the future forest management with regard to climate change.

RIEŠENá VÝZVA

1. Zlepšenie odolnosti lesov a adaptácie na zmenu klímy Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolnosť

KľúčOVé SLOVá

Silviculture; Forest ecology; Forest growth; Soil science; Tree Species suitability; climate change; Site classification; Silvicultural Guidelines;

KRAJINA PÔVODU

Rakúsko

DOMAIN

DIGITALNE RIEŠENIE

áno

ROZSAH APLIKáCIE

Regionálny/

TYP RIEŠENIA

Modelovanie, simulácia, optimalizácia

INOVáCIE

Áno

ZAČIATOK A KONIEC ROKA

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**KONTAKTNé
úDAJE**

VLASTNÍK ALEBO AUTOR

University of Natural Resources and Life Sciences, Vienna (BOKU)

Harald Vacik

harald.vacik@boku.ac.at

[https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht?](https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht?sprache_in=en&menue_id_in=300&id_in=12683)

REPORTéR

Holzcluster Steiermark GmbH

DI Masa Jasarevic

info@holzcluster-steiermark.at

**REFERENCES
AND RESOURCES**

HLAVNÁ WEBSTRÁNKA

[https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht](https://forschung.boku.ac.at/fis/suchen.projekt_uebersicht?sprache_in=en&menue_id_in=300&id_in=12683)

ZDROJE

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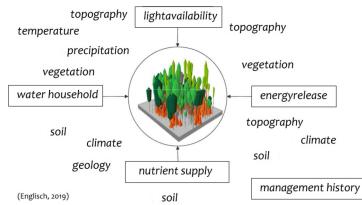
PROJEKTOVÁ WEBSTRÁNKA

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REFERENCIA PROJEKTU

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LOGO NAJLPEŠEJ PRAXE



LOGO HLAVNEJ ORGANIZÁCIE



PROJEKT, V RÁMCI KTÓRÉHO BOL TENTO INFORMAČNÝ PREHĽAD VYTVORENÝ

Rosewood 4.0

DÁTUM ODOSLANIA

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