## **Virtual Forest 2.0**



Virtual forest is an application, which can be used in participatory planning of land use, guidance of forest owners and for combining interests of different stakeholder groups concerning utilization of natural resources and areas.

Virtual forest 2.0 is a research and development project that has developed a digital application to enable the visualization of forest resources and spatial data in 3D. A virtual forest is software that can be utilized in participatory land use planning, advising forest owners, and taking into account the goals of user and interest groups in the areas. The virtual forest can be used to increase citizens' understanding of different forest management options and to illustrate the landscape effects of a forest plan. The virtual forest can be used to visualize the holdings of any forest owner, and the application is compatible with various information systems in the forest industry. The virtual forest 2.0 uses open QGIS geographic information system to generate changes in forest patterns or tree data, habitat data and terrain data in a virtual 3D-visualization. The free downloadable Virtual Forest 2.0 application was released in October 2020.

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**DETAILS ORIGIN OF WOOD** MOBILIZATION POTENTIAL high TYPE OF WOOD SUSTAINABILITY POTENTIAL - VALUE Medium KIND OF WOOD CONCERNED **EASE OF IMPLEMENTATION** Woodlands and forests Requires IT skills IMPACT ON ENVIRONMENT & BIODIVERSITY **EASE OF IMPLEMENTATION - EVALUATION** High, since the results of forestry operations can be demonstrated in the 3D forest environment **KEY PREREQUISITES INCOME EFFECT** Positive **EXPLOITATION POTENTIAL** TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED HUB JOB EFFECT Northern Hub Positive **ECONOMIC IMPACT** COSTS OF IMPLEMENTATION (EURO - €) Positive

## SPECIFIC KNOWLEDGE NEEDED

Comprehensive database, coding skills, understanding of forestry processes.

MORE DETAILS CHALLENGE ADDRESSED DOMAIN TYPE OF SOLUTION 3.- Activate private owners and cooperative forest Inventory, monitoring Modelling, simulation, optimization Ownership, cooperation management **DIGITAL SOLUTION KEYWORDS** INNOVATION virtual; application; visualization Yes Yes **COUNTRY OF ORIGIN** SCALE OF APPLICATION START AND END YEAR Finland National 2018 - 2020 CONTACT DATA OWNER OR AUTHOR **REPORTER Lapland University of Applied Sciences Lapland University of Applied Sciences** Markus Korhonen Merja Laajanen markus.korhonen@lapinamk.fi merja.laajanen@lapinamk.fi https://www.lapinamk.fi/fi **REFERENCES** AND RESOURCES \_\_\_\_\_

MAIN WEBSITE

RESOURCES

https://virtualforest2.wordpress.com/home/

**PROJECT WEBSITE** 

https://virtualforest2.wordpress.com/fi/

PROJECT REFERENCE

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## PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood 4.0

POST DATE

12 Aug 2021







This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.  $862681 \,$ 

## A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY





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