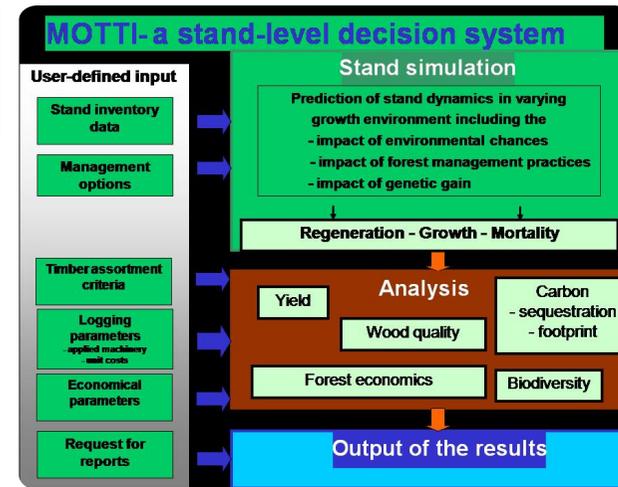


MOTTI software



MOTTI is a stand-level analysis tool and decision support software by Luke. It contains the key results of the growth and yield research carried out by Luke, which can be used to predict the growth of forests managed using different techniques. The software also enables making comparisons between different silvicultural methods. MOTTI can also be used to investigate the effects of forest management or non-management, selection of tree species, regeneration chains or individual silvicultural measures, for example, on forest growth, harvesting volumes, profitability of forestry or the amount of carbon sequestered by forests.

MOTTI is widely used among professional foresters, forest owners, teachers, researchers, authorities and companies in Finland. It has been updated regularly with the newest growth models. It has also been tailored for special purposes, e.g. for teaching and for calculating economic effects of forest protection. It has been published in several languages (Finnish, Swedish, English, Russian) and it has also been piloted in other countries and tree species.

The core of MOTTI is a stand-level simulator, which includes growth and yield models for e.g. natural regeneration, growth and mortality. It is designed to simulate stand development under alternative management regimes and growth conditions in Finland.

MOTTI predicts the development of the user-defined initial stand until the end of the rotation. The user can define various management schedules including management practices, such as precommercial and commercial thinnings, fertilization, and ditch network maintenance in peatland forests. The user can adjust parameters such as timing and intensity of thinning and proportions of tree species, and define the timing of final cut. Timber assortments include logs, pulpwood and energy wood compartments. If the user do not define management practices, MOTTI simulates a default management program for the stand based on the current recommendations for forestry practice in Finland.

For the economic analysis (net present value and bare land value), the user can enter stumpage prices by tree species and timber assortments, costs (e.g. costs of first commercial thinnings, fertilisation and ditch network maintenance) and interest rate. The results will be presented in the form tables, graphs and

files exportable to Excel.

DETALLES

ORIGEN DE LA MADERA

Bosque

TIPO DE MADERA

Madera en rollo

TIPO DE MADERA AFECTADA

Stemwood; Above and below ground woody biomass (ex. shrubs, wood for fibres, wood for energy)

IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD

Positive, versions of software for carbon sequestration and economical impacts of protected forests are available

EFECTO SOBRE LOS INGRESOS

Not possible to assess.

POTENCIAL DE EXPLOTACIÓN

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HUB

Eje Norte

IMPACTO ECONÓMICO

POTENCIAL DE MOVILIZACIÓN

Not possible to assess.

POTENCIAL DE SOSTENIBILIDAD - VALOR

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FACILIDAD DE APLICACIÓN

Easy

FACILIDAD DE IMPLEMENTACIÓN - EVALUACIÓN

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PREREQUISITOS CLAVE

Application loadable on Luke web pages (Windows 7):

<http://www.metla.fi/metinfo/motti/asennus.htm> (Finnish version)

<http://www.metla.fi/metinfo/motti/index-en.htm> (English version)

New versions will be published in 2019 (Windows 10).

TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS

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EFECTO SOBRE EL EMPLEO

Positive, helps in planning of forest operations

COSTES DE IMPLEMENTACIÓN (EURO - €)

Positive, helps in planning of forest operations

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CONOCIMIENTOS ESPECÍFICOS NECESARIOS

Normal IT skills

Más DETALLES

RETO ABORDADO	DOMINIO	TIPO DE SOLUCIÓN
5. Mejorar el rendimiento económico y medioambiental de las cadenas de suministro forestal	Gestión forestal, silvicultura, servicios ecosistémicos, Software de diseño resiliencia	
PALABRAS CLAVE	SOLUCIÓN DIGITAL	INNOVACIÓN
--	Sí	No
PAÍS DE ORIGEN	ESCALA DE APLICACIÓN	AÑO DE INICIO Y FIN
Finlandia	Transfronterizo/multilateral	2005 -

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REPORTADOR

REFERENCES AND RESOURCES

SITIO WEB PRINCIPAL

<https://www.luke.fi/en/natural-resources/forest/silviculture/motti-software-enables-the-comparison-of-different-techniques/>

SITIO WEB DEL PROYECTO

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REFERENCIA DEL PROYECTO

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RECURSOS

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LOGO DE LA BUENA PRÁCTICA

LOGOTIPO DE LA ORGANIZACIÓN PRINCIPAL



PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood

FECHA DE MENSAJE

17 Sep 2019



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

