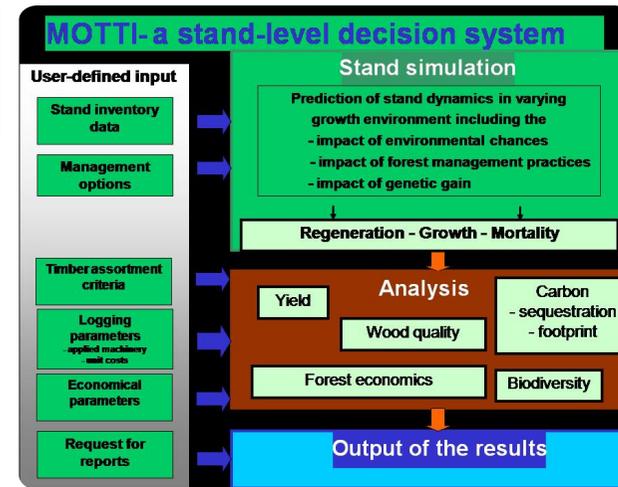


MOTTI software



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.

DETALJER

VEDENS URSPRUNG

Skog

TRÄTYP

Rundvirke

TYP AV TRÄ

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

PÅVERKAN PÅ MILJÖ & BIOLOGISK MÅNGFALD

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

EKONOMISK EFFEKT

Not possible to assess.

KOMMERSIELL POTENTIAL

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NAV

Norra navet

EKONOMISK PÅVERKAN

MOBILISERINGSPOTENTIAL

Not possible to assess.

HÅLLBARHETS POTENTIAL - VÄRDE

--

ENKEL IMPLEMENTERING

Easy

ENKEL IMPLEMENTERING - UTVÄRDERING

--

NYCKEL FÖRUTSÄTTNINGAR

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).

TYP AV EVENEMANG DÄR DENNA BPI HAR PRESENTERATS

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EFFEKT ANTAL ANSTÄLLDA

Positive, helps in planning of forest operations

KOSTNADER FÖR IMPLEMENTERING (EURO - €)

Positive, helps in planning of forest operations

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SPECIFIKA KUNSKAPSBEHOV

Normal IT skills

MER INFORMATION

UTMANING SOM ADRESSERAS

5. Förbättra ekonomisk och miljömässig prestanda för skogsförsörjningskedjor

DOMÄN

Skogsförvaltning, skogskjötsel, ekosystemtjänster

TYPE AV LÖSNING

Designmjukvara

NYCKELORD

--

DIGITAL LÖSNING

Ja

INNOVASION

Nej

UPPHOVSLAND

Finland

POTENTIAL

Gränsöverskridande/transnationell

START OCH SLUTÅR

2005 -

KONTAKT INFORMATION

ÄGARE ELLER FÖRFATTARE

Natural Resources Institute Finland (Luke)

RAPPORTÖR

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<https://www.luke.fi/en/>

REFERENCES AND RESOURCES

HEMSIDA (HUVUDSIDA)

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

RESURSER

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PROJEKTETS HEMSIDA

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PROJEKTFERENS

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PROJEKT SOM DETTA FACTSHEET SKAPATS INOM

Rosewood

DATUM FÖR INLÄGG

17 sep 2019



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

