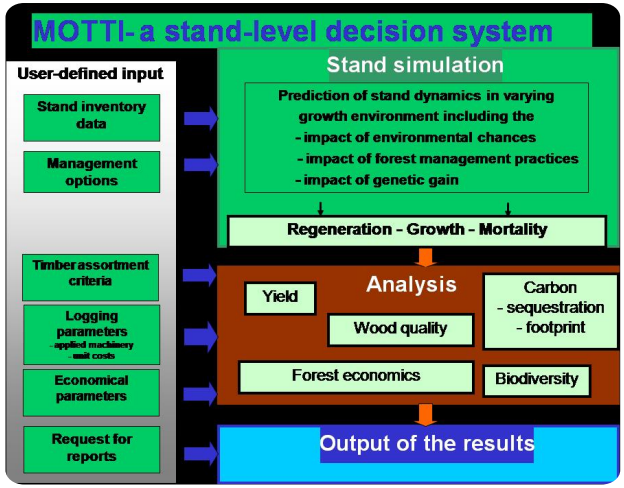
MOTTI software



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.

DETTAGLI

ORIGINE DEL LEGNO

foresta

TIPO DI LEGNO

Fusto

TIPO DI LEGNO IN QUESTIONE

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

IMPATTO SULL'AMBIENTE E LA BIODIVERSITà

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

EFFETTO SUL REDDITO

Not possible to assess.

POTENZIALE DI SFRUTTAMENTO

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HUB

Polo Nord

IMPATTO ECONOMICO

POTENZIALE DI MOBILITAZIONE

Not possible to assess.

POTENZIALE SOSTENIBILITà - VALORE

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FACILITà DI IMPLEMENTAZIONE

Easy

FACILITà DI IMPLEMENTAZIONE - VALUTAZIONE

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PREREQUISITI CHIAVE

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 DI EVENTO IN CUI QUESTO BPI è STATO PRESENTATO

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EFFETTO SUL LAVORO

Positive, helps in planning of forest operations

I COSTI DI ATTUAZIONE (EURO - €)

Positive, helps in planning of forest operations	--

CONOSCENZE SPECIFICHE NECESSARIE

Normal IT skills

Più DETTAGLI

SFIDA RISOLTA

5. Migliorare le prestazioni economiche e ambientali delle filiere forestali

DOMINIO

La gestione forestale, selvicoltura, i servizi ecosistemici, resilienza

TIPO DI SOLUZIONE

software di progettazione

PAROLE CHIAVE

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SOLUZIONE DIGITALE

Sì

INNOVAZIONE

No

PAESE D'ORIGINE

Finlandia

SCALA DI APPLICAZIONE

Transfrontaliera / multilaterale

INIZIO E FINE ANNO

2005 -

CONTATTI

PROPRIETARIO O AUTORE

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REPORTER

REFERENCES AND RESOURCES

SITO PRINCIPALE

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

RISORSE

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SITO WEB DEL PROGETTO

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PROGETTO DI RIFERIMENTO

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LOGO DELLE MIGLIORI PRATICHE

LOGO DELLA PRINCIPALE ORGANIZZAZIONE

Luke
NATURAL RESOURCES INSTITUTE FINLAND

PROGETTO NELL'AMBITO DEL QUALE QUESTA SCHEDA è STATA CREATA

Rosewood

DATA DI INSERIMENTO

17 Set 2019

ROSEWOOD 4.0 Sustainable Wood for Europe

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

cesefor
Centro de Servicios y Promoción Forestal y de su Industria de Castilla y León