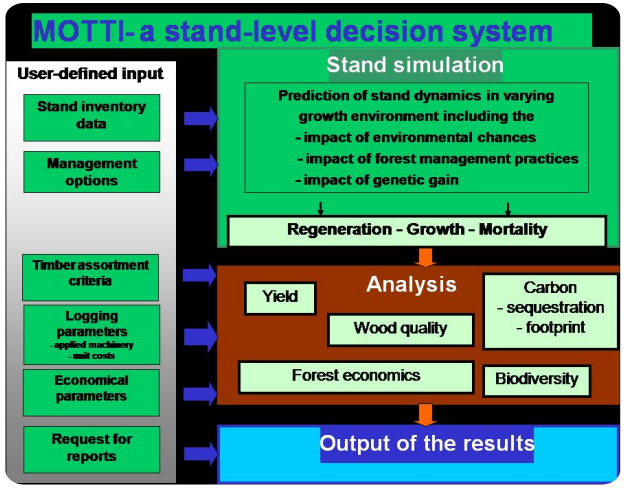
MOTTI software



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.

DETAILS

HERKUNFT DES HOLZES

Wald

ART DES HOLZES

Stammholz

ART DES BETROFFENEN HOLZES

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

AUSWIRKUNGEN AUF UMWELT UND BIODIVERSITäT

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

EINKOMMENSEFFEKT

Not possible to assess.

VERWERTUNGSPOTENZIAL

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NABE

Nördliches Drehkreuz

WIRTSCHAFTLICHE AUSWIRKUNGEN

MOBILISIERUNGSPOTENZIAL

Not possible to assess.

POTENZIAL FüR NACHHALTIGKEIT - WERT

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LEICHTE IMPLEMENTIERUNG

Easy

LEICHTE IMPLEMENTIERUNG - BEWERTUNG

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WICHTIGE VORAUSSETZUNGEN

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).

ART DER VERANSTALTUNG, AUF DER DIESE BPI VORGESTELLT WURDE

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ARBEITSPLATZEFFEKT

Positive, helps in planning of forest operations

KOSTEN DER IMPLEMENTIERUNG (EURO - €)

Positive, helps in planning of forest operations	--

SPEZIFISCHES WISSEN ERFORDERLICH

Normal IT skills

MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

5. Verbesserung der wirtschaftlichen und ökologischen Leistung der forstwirtschaftlichen Forstlieferketten

DOMäNE

Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz

ART DER LöSUNG

Design-Software

SCHLüSSELWöRTER

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DIGITALE LöSUNG

Ja

INNOVATION

Nein

HERKUNFTSLAND

Finnland

UMFANG DER ANWENDUNG

Grenzüberschreitend/multilateral

ANFANGS- UND ENDJAHR

2005 -

KONTAKTDATEN

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REPORTER

REFERENCES AND RESOURCES

HAUPT-WEBSITE

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

RESSOURCEN

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PROJEKT-WEBSITE

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PROJEKT-REFERENZ

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LOGO DER BEST PRACTICE

LOGO DER HAUPTORGANISATION

PROJEKT, IN DESSEN RAHMEN DIESES FACTSHEET ERSTELLT WURDE

Rosewood

BEITRAGSDATUM

17 Sep 2019

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY