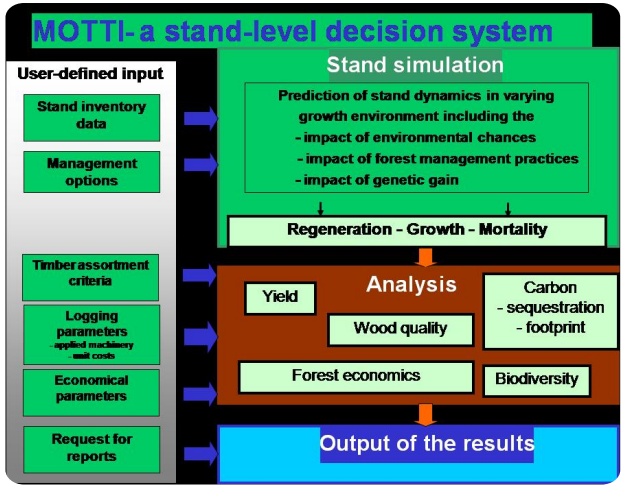
# MOTTI software




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

### OPPRINNELSE FOR TRE

Skog

### TYPE TRE

Tre fra rundtvirke

### TYPE TRE INVOLVERT

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

### PåVIRKNING På MILJø OG BIOLOGISK MANGFOLD

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

### INNTEKTSEFFEKT

Not possible to assess.

### UTNYTTELSESPOTENSIAL

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### HUB

Northern Hub

### ØKONOMISK PåVIRKNING

### MOBILISERINGSPOTENSIAL

Not possible to assess.

### BæREKRAFTPOTENSIAL - VERDI

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### ENKEL IMPLEMENTERING

Easy

### ENKEL IMPLEMENTERING - EVALUERING

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### VIKTIGE FORUTSETNINGER

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).

### TYPE BEGIVENHET DER DENNE BPI HAR BLITT OMTALT

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### EFFEKT På ARBEIDSPLASSER

Positive, helps in planning of forest operations

### KOSTNADER MED IMPLEMENTERING (EURO - €)

| | |
|---|---|
| Positive, helps in planning of forest operations | -- |

SPESIFIKKE KUNNSKAPSBEHOV

Normal IT skills

## MER INFORMASJON

UTFORDRING ADRESSERT

5. Forbedre den økonomiske og miljømessige ytelsen i skogbrukets forsynings kjede

DOMENE

Skogforvaltning, skogskjøtsel, økosystemtjenester

TYPE LøSNING

Mjukvare for design

NøKKELORD

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DIGITAL LøSNING

Ja

INNOVASJON

Nei

OPPRINELSESLAND

Finland

POTENSIALE

Grenseoverskridende/transnasjonal

START OG SLUTT åR

2005 -

## KONTAKT INFORMASJON

EIER ELLER FORFATTER

**Natural Resources Institute Finland (Luke)**

hannu.salminen@luke.fi

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

RAPPORTøR

## REFERENCES AND RESOURCES

HJEMMESIDE (HOVEDSIDE)

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

RESSURSER

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PROSJEKTETS HJEMMESIDE

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REFERANSE TIL PROSJEKT

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LOGO FOR BESTE PRAKSIS

LOGO FOR HOVEDORGANISASJON

Luke
NATURAL RESOURCES INSTITUTE FINLAND

PROSJEKT SOM DETTE FAKTAARKET ER OPPRETTET UNDER

Rosewood

INNLEGGSDATO

17 sep 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