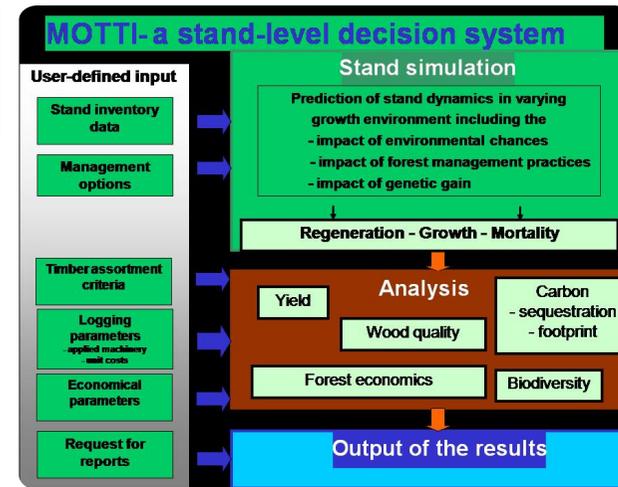


# MOTTI software



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.

## PODROBNOSTI

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### PÔVOD DREVA

Les

### DRUH DREVA

Kmeňové drevo

### UVAŽOVANÝ DRUH DREVA

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

### VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU

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

### DOPAD NA PRÍJMY

Not possible to assess.

### POTENCIÁL VYUŽITIA

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### ROZBOČOVAČ

Severný uzol

### EKONOMICKÝ VPLYV

### MOBILIZAČNÝ POTENCIÁL

Not possible to assess.

### POTENCIÁL UDRŽATEĽNOSTI - HODNOTA

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### UĽAHČENIE IMPLEMENTÁCIE

Easy

### UĽAHČENIE IMPLEMENTÁCIE - HODNOTENIE

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### Kľúčové PREPOKLADY

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 PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ

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### DOPAD NA ZAMESTNANOSŤ

Positive, helps in planning of forest operations

### NÁKLADY NA IMPLEMENTÁCIU (EURO - €)

Positive, helps in planning of forest operations

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**POTREBA ŠPECIFICKÝCH ZNALOSTÍ**

Normal IT skills

## VIAC INFORMÁCIÍ

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### RIEŠENÁ VÝZVA

5. Zlepšenie hospodárskej a environmentálnej výkonnosti dodávateľských reťazcov v lesníctve

### Kľúčové SLOVá

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### KRAJINA PôVODU

Fínsko

### DOMAIN

Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolnosť

### DIGITALNE RIEŠENIE

áno

### ROZSAH APLIKÁCIE

Cezhraničný/multilaterálny

### TYP RIEŠENIA

Návrhový softvér

### INOVÁCIE

Nie

### ZAČIATOK A KONIEC ROKA

2005 -

## KONTAKTNÉ ÚDAJE

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### VLASTNÍK ALEBO AUTOR

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

### REPORTÉR

## REFERENCES AND RESOURCES

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### HLAVNá WEBSTRáNKA

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

### PROJEKTOVá WEBSTRáNKA

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### REFERENCIA PROJEKTU

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### ZDROJE

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PROJEKT, V RÁMCI KTORÉHO BOL TENTO INFORMAČNÝ PREHĽAD VYTVORENÝ

Rosewood

DÁTUM ODOSLANIA

17 sep 2019



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

