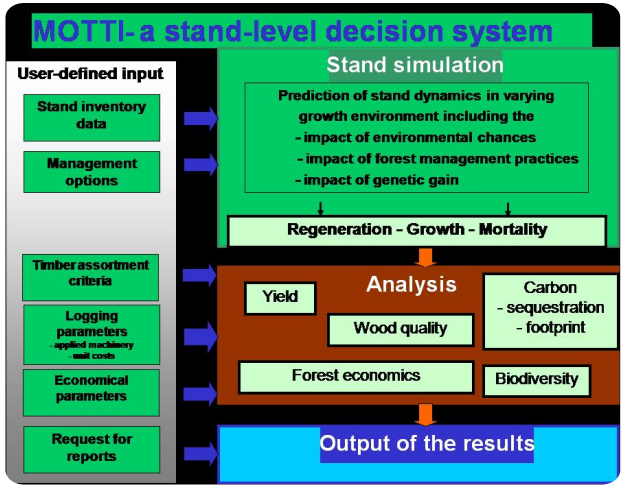
MOTTI software



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.

DéTAILS

ORIGINE DU BOIS
Forêt

TYPE DE BOIS
Grume

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

IMPACT SUR L'ENVIRONNEMENT ET LA BIODIVERSITé
Positive, versions of software for carbon sequestrion and economical impacts of protected forests are available

EFFET SUR LE REVENU
Not possible to assess.

POTENTIEL D'EXPLOITATION
--

HUB
Pôle Nord

IMPACT éCONOMIQUE

POTENTIEL DE MOBILISATION
Not possible to assess.

POTENTIEL DE DURABILITé - VALEUR
--

FACILITé D'IMPLéMENTATION
Easy

FACILITé D'IMPLéMENTATION - ÉVALUATION
--

PRéREQUIS CLéS
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 D'éVéNEMENT Où CETTE ICPE A éTé PRéSENTéE
--

EFFET SUR L'EMPLOI
Positive, helps in planning of forest operations

COûTS D'IMPLéMENTATION (EURO - €)

Positive, helps in planning of forest operations	--

CONNAISSANCES SPéCIFIQUES REQUISES

Normal IT skills

PLUS DE DéTAILS

DéFI CONCERNé

5. Accroître les performances économiques et environnementales de la chaîne logistique forestière

DOMAINE

Getsion forestière, sylviculture, services écosystémiques, résilience

TYPE DE SOLUTION

Logiciels de design

MOTS-CLéS

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SOLUTION DIGITALE

Oui

INNOVATION

Non

PAYS D'ORIGINE

Finlande

ECHELLE D'APPLICATION

Transfrontalière/Multilatérale

DéBUT ET FIN D'ANNéE

2005 -

INFORMATIONS DE CONTACT

PROPRIéTAIRE OU AUTEUR

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RAPPORTEUR

REFERENCES AND RESOURCES

SITE WEB PRINCIPAL

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

SITE WEB DU PROJET

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RéFéRENCE DU PROJET

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RESSOURCES

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LOGO DE LA BONNE PRATIQUE

LOGO DE L'ORGANISATION PRINCIPALE

Luke
NATURAL RESOURCES INSTITUTE FINLAND

PROJET SOUS LEQUEL CETTE FICHE D'INFORMATION A éTé CRééE

Rosewood

DATE DE PUBLICATION

17 sep 2019

ROSEWOOD 4.0 Sustainable Wood for Europe

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Link to Rosewood 4.0

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

EFI