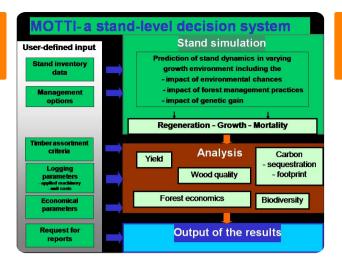
## **MOTTI software**



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

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files exportable to Excel.

## Λεπτομέρειες

Προέλευση ξυλείας

Δυνατότητες διακίνησης

Δάσος

Not possible to assess.

Τύπος ξυλείας Κορμοξυλεία

Δυναμικό βιωσιμότητας - Αξία

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Τύπος εμπλεκόμενης ξυλείας

Ευκολία υλοποίησης

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

Easv

fibres, wood for energy)

Επιπτώσεις στο περιβάλλον και τη βιοποικιλότητα

Ευκολία εφαρμογής - Αξιολόγηση

Positive, versions of software for carbon sequestrion and economical

impacts of protected forests are available

Δυνατότητες ειδοδήματος Βασικά προαπαιτούμενα

Not possible to assess. 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).

Δυνατότητες για εκμετάλλευση Τύπος εκδήλωσης στην οποία έχει παρουσιαστεί αυτός ο ΒΡΙ

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Κόμβος Δυνατότητες εργασίας

Βόρειος κόμβος Positive, helps in planning of forest operations

Οικονομικός αντίκτυπος Κόστος υλοποίησης ( ευρώ - € )

Positive, helps in planning of forest operations

Ειδικές προαπαιτούμενες γνώσεις Normal IT skills

Περισσότερες λεπτομέρειες		
Πρόκληση η οποία αντιμετωπίζεται	Όνομα χώρου	Τύπος λύσης
5. Βελτίωση των οικονομικών και περιβαλλοντικών επιδόσεων των δασικών αλυσίδων εφοδιασμού	Διαχείριση δασών, δασοκομία, υπηρεσίες οικοσυστήματος, ανθεκτικότητα	Λογισμικό σχεδιασμού
Λέξεις κλειδιά	Ψηφιακή λύση	Καινοτομία
	ναι	Όχι
Χώρα προέλευσης	Κλίμακα της εφαρμογής	Έτος έναρξης και λήξης
Φινλανδία	Δια-συνοριακό / πολυμερές	2005 -
Στοιχεία επικοινωνίας		

Ιδιοκτήτης ή συγγραφέας

Αναφορεάς

Natural Resources Institute Finland (Luke)

hannu.salminen@luke.fi https://www.luke.fi/en/

## REFERENCES AND RESOURCES \_

Κύριος ιστότοπος Πηγές

https://www.luke.fi/en/natural-resources/forest/silviculture/motti-software-

enables-the-comparison-of-different-techniques/

Ιστότοπος έργου

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Αναφορά έργου

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Έργο για το οποίο έχει δημιουργηθεί το παρόν φύλλο πληροφοριών Rosewood Ημερομηνία δημοσίευσης 17 Σεπ 2019







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## A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY





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