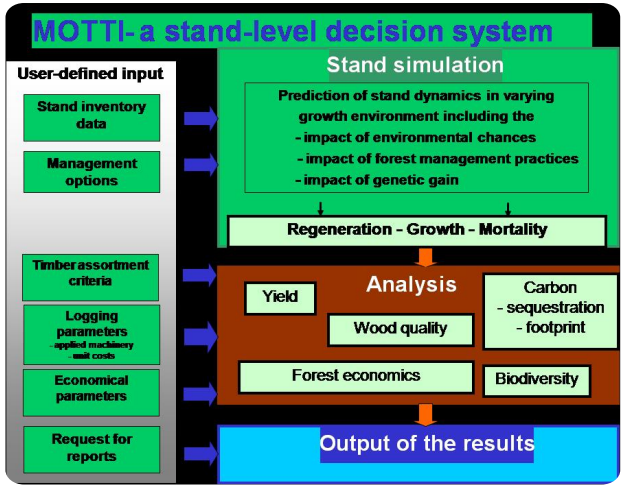
MOTTI software



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.

Λεπτομέρειες

Προέλευση ξυλείας

Δάσος

Τύπος ξυλείας

Κορμοξυλεία

Τύπος εμπλεκόμενης ξυλείας

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

Επιπτώσεις στο περιβάλλον και τη βιοποικιλότητα

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

Δυνατότητες ειδοδήματος

Not possible to assess.

Δυνατότητες για εκμετάλλευση

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Κόμβος

Βόρειος κόμβος

Οικονομικός αντίκτυπος

Δυνατότητες διακίνησης

Not possible to assess.

Δυναμικό βιωσιμότητας - Αξία

--

Ευκολία υλοποίησης

Easy

Ευκολία εφαρμογής - Αξιολόγηση

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Βασικά προαπαιτούμενα

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).

Τύπος εκδήλωσης στην οποία έχει παρουσιαστεί αυτός ο BPI

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Δυνατότητες εργασίας

Positive, helps in planning of forest operations

Κόστος υλοποίησης (ευρώ - €)

Positive, helps in planning of forest operations --

Ειδικές προαπαιτούμενες γνώσεις

Normal IT skills

Περισσότερες λεπτομέρειες

Πρόκληση η οποία αντιμετωπίζεται

5. Βελτίωση των οικονομικών και περιβαλλοντικών επιδόσεων των δασικών αλυσίδων εφοδιασμού

Όνομα χώρου

Διαχείριση δασών, δασοκομία, υπηρεσίες οικοσυστήματος, ανθεκτικότητα

Τύπος λύσης

Λογισμικό σχεδιασμού

Λέξεις κλειδιά

--

Ψηφιακή λύση

ναι

Καινοτομία

Όχι

Χώρα προέλευσης

Φινλανδία

Κλίμακα της εφαρμογής

Δια-συνοριακό / πολυμερές

Έτος έναρξης και λήξης

2005 -

Στοιχεία επικοινωνίας

Ιδιοκτήτης ή συγγραφέας

Natural Resources Institute Finland (Luke)

hannu.salminen@luke.fi

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

Αναφορεάς

REFERENCES AND RESOURCES

Κύριος ιστότοπος

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

Πηγές

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Ιστότοπος έργου

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Αναφορά έργου

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λογότυπο καλής πρακτικής

λογότυπο επικΕφαλής οργανισμού

Έργο για το οποίο έχει δημιουργηθεί το παρόν φύλλο πληροφοριών

Rosewood

Ημερομηνία δημοσίευσης

17 Σεπ 2019

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