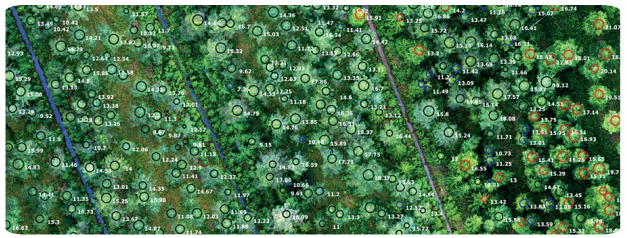
Drones in Forestry Planning



Metsä Group photographed in 2018 with drone about 3 500 hectares of forest in southern and western Finland and utilized the data as basis for forest plans for forest owners. According to experience, the method has been developed and now the drone forest plans are being sold as an alternative to traditional forest plans. The forest plan based on information described by Drone or copter with camera challenges the traditional forest planning. The method is used in particular to get more accurate tree information.

The drone plan will be of interest to the forest owners who want to be in the front and develop new developments with forest industry. For example, in a virtual forest, the data measured in the drone will create a precise tree map, where the trees are in the right places and the tree species are correct. In virtual reality, it will better reflect the fluctuations of the wood inside the forest compartment than the traditional forest plan information. The drone design and virtual forests form an interesting pair in the future by producing new experiences for forest owners.

The measurements will provide both the amount of trees in cubic meters and the value of the wood in euros more accurately than before. With drone surveys we also get information about the amount of dead wood – it helps to preserve the important structure of forest for diversity.
The method is capable of identifying tree three species: pine, spruce and birch. The remaining deciduous tree species are logged into the category of other deciduous trees. Based on the measurement data, treatment recommendations are calculated. This drone-made plan differs from the traditional, where human being makes the treatment recommendations.
The forest plan produced by drone is particularly suitable for updating the forest plan that is about to expire. It is also suitable for
forest owners, who are particularly interested in the amount and value of the timber.
The forest plan of the drone also benefits from a faster delivery of traditional forest plan. Delivery time is few months, which is only half of the delivery times of traditional forest plan.

DETALII

SURSA DE LEMN

Pădure

TIPUL DE LEMN

Lemn masiv

TIPUL DE LEMN îN CAUZă

Stemwood, energy wood

IMPACTUL ASUPRA MEDIULUI șI BIODIVERSITățII

Positive

EFECT ASUPRA VENITURILOR

Positive

POTENțIAL DE EXPLOATARE

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HUB

Hub-ul de Nord

IMPACT ECONOMIC

Positive

CUNOșTINțE SPECIFICE NECESARE

IT skills, knowledge of forest planning processes

POTENțIALUL DE MOBILIZARE

Medium

POTENțIAL DE SUSTENABILITATE - VALOARE

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FACILITATEA DE IMPLEMENTARE

Easy, requires IT skills

FACILITATEA DE IMPLEMENTARE - EVALUARE

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CONDIțII CHEIE PREALABILE

IT skills needed, co-operation needed between IT companies and forest companies

TIPUL DE EVENIMENT LA CARE A FOST PREZENTAT ACEST IPB

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EFECT ASUPRA LOCURILOR DE MUNCă

Positive

COSTURI PENTRU IMPLEMENTARE (EURO - €)

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MAI MULTE DETALII

PROVOCARE ABORDATă

5. Îmbunătățirea performanțelor economice și de mediu ale lanțurilor de aprovizionare cu păduri

DOMAIN

Managementul pădurilor, silvicultura, servicii ecosistemice, reziliență

TIP DE SOLUțIE

Instrumente de consiliere și servicii pentru proprietarii de păduri

CUVINTE CHEIE

--

SOLUțIE DIGITALă

Nu

INOVAțIE

Da

ȚARA DE ORIGINE

Finlanda

SCARA DE APLICARE

Național

ANUL DE îNCEPUT șI DE SFâRșIT

2017 -

DATE DE CONTACT

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REPORTER

REFERENCES AND RESOURCES

PAGINă WEB

https://www.metsaforest.com/fi/Yritys/Tiedotteet/Pages/Tiedote.aspx

RESURSE

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WEBSITE PROJECT

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REFERINță PROIECT

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DESPRE EXEMPLUL DE BUNă PRACTICă

A PRINCIPALEI ORGANIZAțII

Metsä

PROIECTUL îN CADRUL CăRUIA A FOST CREATă ACEASTă FIșă INFORMATIVă

Rosewood

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