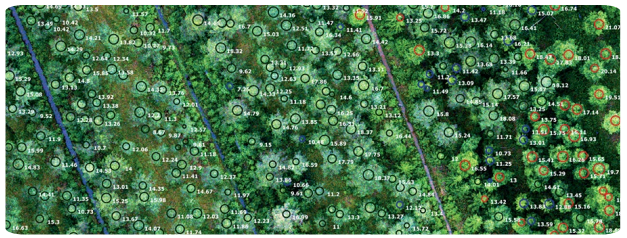
Drones in Forestry Planning



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.

PODROBNOSTI

PôVOD DREVA

Les

DRUH DREVA

Kmeňové drevo

UVAžOVANý DRUH DREVA

Stemwood, energy wood

VPLYV NA žIVOTNé PROSTREDIE A BIODIVERZITU

Positive

DOPAD NA PRíJMY

Positive

POTENCIáL VYUžITIA

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ROZBOčOVAč

Severný uzol

EKONOMICKý VPLYV

Positive

POTREBA šPECIFICKýCH ZNALOSTí

IT skills, knowledge of forest planning processes

MOBILZAčNý POTENCIáL

Medium

POTENCIáL UDRžATEľNOSTI - HODNOTA

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UľAHčENIE IMPLMENTáCIE

Easy, requires IT skills

UľAHčENIE IMPLMENTáCIE - HODNOTENIE

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KľúčOVé PREPOKLADY

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

TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANý

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DOPAD NA ZAMESTNANOSť

Positive

NáKLADY NA IMPLEMENTáCIU (EURO - €)

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VIAC INFORMáCIí

RIEšENá VýZVA

5. Zlepšenie hospodárskej a environmentálnej výkonnosti dodávateľských reťazcov v lesníctve

DOMAIN

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

TYP RIEšENIA

Poradenské a servisné nástroje pre vlastníkov lesov

KľúčOVé SLOVá

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DIGITALNE RIEšENIE

Nie

INOVáCIE

Áno

KRAJINA PôVODU

Fínsko

ROZSAH APLIKáCIE

Národný

ZAČIATOK A KONIEC ROKA

2017 -

KONTAKTNé úDAJE

VLASTNíK ALEBO AUTOR

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REPORTéR

REFERENCES AND RESOURCES

HLAVNá WEBSTRáNKA

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

PROJEKTOVá WEBSTRáNKA

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REFERENCIA PROJEKTU

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ZDROJE

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LOGO NAJLPEŠEJ PRAXE

LOGO HLAVNEJ ORGANIZáCIE

PROJEKT, V RáMCI KTORéHO BOL TENTO INFORMAčNý PREHľAD VYTVORENý

Rosewood

DáTUM ODOSLANIA

17 sep 2019

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