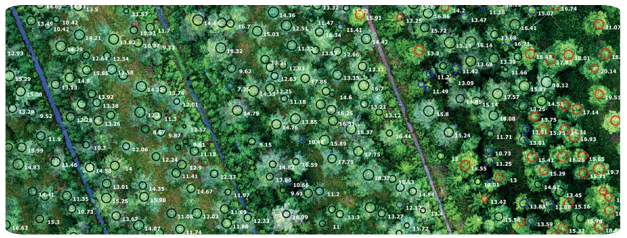
Drones in Forestry Planning



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.

DETAILS

HERKUNFT DES HOLZES

Wald

ART DES HOLZES

Stammholz

ART DES BETROFFENEN HOLZES

Stemwood, energy wood

AUSWIRKUNGEN AUF UMWELT UND BIODIVERSITäT

Positive

EINKOMMENSEFFEKT

Positive

VERWERTUNGSPOTENZIAL

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NABE

Nördliches Drehkreuz

WIRTSCHAFTLICHE AUSWIRKUNGEN

Positive

SPEZIFISCHES WISSEN ERFORDERLICH

IT skills, knowledge of forest planning processes

MOBILISIERUNGSPOTENZIAL

Medium

POTENZIAL FüR NACHHALTIGKEIT - WERT

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LEICHTE IMPLEMENTIERUNG

Easy, requires IT skills

LEICHTE IMPLEMENTIERUNG - BEWERTUNG

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WICHTIGE VORAUSSETZUNGEN

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

ART DER VERANSTALTUNG, AUF DER DIESE BPI VORGESTELLT WURDE

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ARBEITSPLATZEFFEKT

Positive

KOSTEN DER IMPLEMENTIERUNG (EURO - €)

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MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

5. Verbesserung der wirtschaftlichen und ökologischen Leistung der forstwirtschaftlichen Forstlieferketten

DOMäNE

Waldmanagement, Waldbau, Ökosystemleistungen, Resilienz

ART DER LöSUNG

Beratungs- und Servicetools für Waldbesitzer

SCHLüSSELWöRTER

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DIGITALE LöSUNG

Nein

INNOVATION

Ja

HERKUNFTSLAND

Finnland

UMFANG DER ANWENDUNG

National

ANFANGS- UND ENDJAHR

2017 -

KONTAKTDATEN

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REPORTER

REFERENCES AND RESOURCES

HAUPT-WEBSITE

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

PROJEKT-WEBSITE

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PROJEKT-REFERENZ

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RESSOURCEN

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LOGO DER BEST PRACTICE

LOGO DER HAUPTORGANISATION

PROJEKT, IN DESSEN RAHMEN DIESES FACTSHEET ERSTELLT WURDE

Rosewood

BEITRAGSDATUM

17 Sep 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

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