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.

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DETALJI

PODRIJETLO DRVA POTENCIJAL ZA POVEĆANJE UPORABE DRVA

Šuma Medium

VRSTA DRVA

Deblo POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

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ODGOVARAJUĆA VRSTA DRVA JEDNOSTAVNOST PROVEDBE

Stemwood, energy wood Easy, requires IT skills

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

Positive

UČINAK NA PRIHOD KLJUČNI PREDUVJETI

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

companies

POTENCIJAL ISKORISTIVOSTI VRSTA DOGAđAJA NA KOJEM JE PRIKAZAN OVAJ BPI

SREDIŠTE UČINAK NA ZAPOŠLJIVOST

Sjeverno središte Positive

GOSPODARSKI UČINAK TROŠKOVI PROVEDBE (EURO - €)

Positive --

POTREBNA POSEBNA ZNANJA

IT skills, knowledge of forest planning processes

VIŠE DETALJA IZAZOV **DOMENA** VRSTA RJEŠENJA 5. Unaprjeđenje učinkovitosti lanca opskrbe šumom Upravljanje šumama, uzgoj šuma, usluge Savjetodavni i uslužni alati za vlasnike šuma na gospodarstvo i okoliš ekosustava, otpornost **KLJUČNE RIJEČI DIGITALNO RJEŠENJE INOVACIJA** Ne Da PODRUČJE PRIMJENE ZEMLJA PODRIJETLA **POČETAK I KRAJ GODINE** Finska Nacionalna 2017 -**KONTAKT PODATCI** IZVJESTITELJ **VLASNIK ILI AUTOR Metsä Forest** Jani Riissanen jani.riissanen@metsagroup.com https://www.metsaforest.com **REFERENCES** AND RESOURCES _____ **GLAVNA WEB STRANICA** IZVORI https://www.metsaforest.com/fi/Yritys/Tiedotteet/Pages/Tiedote.aspx **WEB STRANICA PROJEKTA** REFERENCA PROJEKTA



PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood

DATUM UNOSA

17 ruj 2019







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

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY





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