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	MOBILZAČNý POTENCIÁL
Les	Medium
DRUH DREVA	
Kmeňové drevo	POTENCIÁL UDRŽATEľNOSTI - HODNOTA
	-
UVAŽOVANý DRUH DREVA	UľAHČENIE IMPLMENTÁCIE
Stemwood, energy wood	Easy, requires IT skills
VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU	UľAHČENIE IMPLMENTÁCIE - HODNOTENIE
Positive	-
DOPAD NA PRÍJMY	KľúčOVé PREPOKLADY
Positive	IT skills needed, co-operation needed between IT companies and forest
	companies
POTENCIÁL VYUŽITIA	TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ
-	-
ROZBOčOVAč	DOPAD NA ZAMESTNANOSť
Severný uzol	Positive
EKONOMICKý VPLYV	NáKLADY NA IMPLEMENTáCIU (EURO - €)
Positive	-

POTREBA ŠPECIFICKÝCH ZNALOSTÍ

IT skills, knowledge of forest planning processes

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DOMAIN	TYP RIEŠENIA
Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolonosť	Poradenské a servisné nástroje pre vlastníkov leso
DIGITALNE RIEŠENIE	INOVáCIE
Nie	Áno
ROZSAH APLIKáCIE	ZAČIATOK A KONIEC ROKA
Národný	2017 -
REPORTÉR	
ZDROJE	
t/Pages/Tiedote.aspx	
	DOMAIN Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolonosť DIGITALNE RIEŠENIE Nie ROZSAH APLIKáCIE Národný REPORTÉR ZDROJE



PROJEKT, V RáMCI KTORÉHO BOL TENTO INFORMAČNÝ PREHľAD VYTVORENÝ

Rosewood

DáTUM ODOSLANIA

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY





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