

# Remote sensing based assessment of woody biomass and carbon storage in forests



## RemBioFor

*R&D project, which aim is to work out the complex method of defining selected forest stand descriptions as well as aboveground biomass and carbon sequestration, based on the use of remote sensing for the purposes of forest management planning.*

The aim of the project was to work out the complex method of defining selected forest stand descriptions as well as aboveground biomass and carbon sequestration, based on the use of remote sensing for the purposes of forest management planning.

Among main goals were:

- acquisition and processing of remote sensing, laboratory and field data,
- determining the amount of biomass and carbon in the forest based on radar data,
- development of methods for the inventory of selected stand descriptions, growing stock and biomass with the use of active remote sensing techniques,
- local correction of dendrometric volume equations based on terrestrial laser scanning data (TLS),
- development of the merchantable volume conversion factors into biomass and carbon.

Results of the project allow to: reduce time needed to carry out the work of the forest management, especially inventory of growing stock; obtain higher accuracy of the CO<sub>2</sub> balance, biomass and annual allowable cut calculations; determine growing stock for any forest area; reduce cost of field work in forest management.

## PODROBNOSTI

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PÔVOD DREVA

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DRUH DREVA

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UVAŽOVANÝ DRUH DREVA

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VPLYV NA ŽIVOTNÉ PROSTREDIE A BIODIVERZITU

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DOPAD NA PRÍJMY

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POTENCIÁL VYUŽITIA

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ROZBOČOVAČ

Stredovýchodný uzol

EKONOMICKÝ VPLYV

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POTREBA ŠPECIFICKÝCH ZNALOSTÍ

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MOBILZAČNÝ POTENCIÁL

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POTENCIÁL UDRŽATEĽNOSTI - HODNOTA

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UIŤAHČENIE IMPLEMENTÁCIE

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UIŤAHČENIE IMPLEMENTÁCIE - HODNOTENIE

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KľúčOVé PREPOKLADY

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TYP PODUJATIA, NA KTOROM BOL TENTO BPI PREZENTOVANÝ

Návšteva v rámci štúdie (T2.3)

DOPAD NA ZAMESTNANOSŤ

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NÁKLADY NA IMPLEMENTÁCIU (EURO - €)

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RIEŠENá VÝZVA

1. Zlepšenie odolnosti lesov a adaptácie na zmenu klímy	DOMAIN	TYP RIEŠENIA
	Inventarizácia, posudzovanie, monitoring/monitorovanie	Modelovanie, simulácia, optimalizácia
	Lesné hospodárstvo/hospodárska úprava lesa, pestovanie lesa, ekosystémové služby, odolnosť	
	Výskum a vývoj	

KľúčOVé SLOVá

remote sensing techniques; carbon sequestration; forestry

DIGITALNE RIEŠENIE

áno

INOVÁCIE

Áno

KRAJINA PÔVODU

Poľsko

ROZSAH APLIKáCIE

Národný

ZAČIATOK A KONIEC ROKA

2015 - 2018

KONTAKTNé  
úDAJE

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VLASTNÍK ALEBO AUTOR

Instytut Badawczy Leśnictwa  
Krzysztof Stereńczak  
K.Stereńczak@ibles.waw.pl  
<https://www.ibles.pl/>

REPORTéR

Łukasiewicz Research Network - Wood Technology Institute (ITD)  
Dobrochna Augustyniak-Wysocka  
[dobrochna.augustyniak@itd.lukasiewicz.gov.pl](mailto:dobrochna.augustyniak@itd.lukasiewicz.gov.pl)

REFERENCES  
AND RESOURCES

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HLAVNá WEBSTRáNKA

<http://rembiofor.pl/en/>

ZDROJE

Parkitna K., Krok G., Lisańczuk M., Mitelsztedt K., Ukalski K., Magnussen S., Markiewicz A., Miścicki S., Stereńczak K. 2021. Modelling growing stock volume of forest stands with the use of selected LiDAR Area Based Approaches in various predictive models. *Forestry: An International Journal*

**PROJEKTOVÁ WEBSTRÁNKA**

<http://rembiofor.pl/en/>

**REFERENCIA PROJEKTU**

Remote sensing based assessment of woody biomass and carbon storage in forests (REMBIOFOR), National Centre for Research and Development within the program „Natural environment, agriculture and forestry” BIOSTRATEG, agreement no. BIOSTRATEG1/267755/4/NCBR/2015

LOGO NAJLPEŠEJ PRAXE

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LOGO HLAVNEJ ORGANIZÁCIE

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PROJEKT, V RÁMCI KTÓRÉHO BOL TENTO INFORMAČNÝ PREHĽAD VYTVORENÝ

Rosewood 4.0

DÁTUM ODOSENIA

12 aug 2021



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[Link to Rosewood 4.0](#)



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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY



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