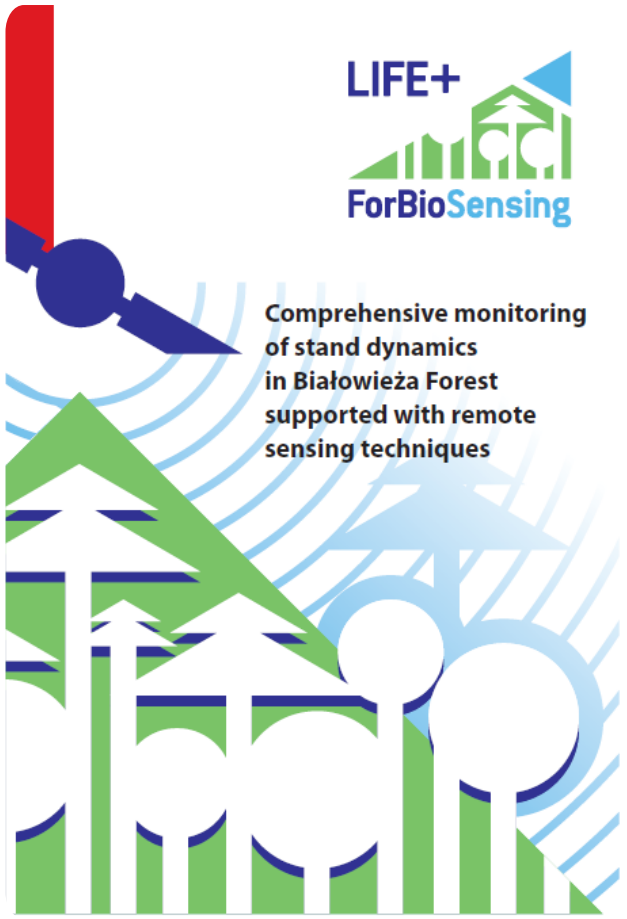
ForBioSensing | Comprehensive monitoring of stand dynamics in Białowieża Forest supported with remote sensing techniques



Comprehensive monitoring method of a large forest area with the use of innovative techniques and data.

Project activities were focused on a comprehensive representation of changes in forest stands and their dynamics (using different time series of remote sensing data) and the transition from spot monitoring (field measurements on sample plots) to large-scale monitoring. This will improve the efficiency of forest ecosystem protection and management measures. Project results have been presented in the form of publications and maps showing specific changes over the years. In addition, radio and television broadcasts, meetings, brochures and promotional films were used to inform the general public.

The main objectives of the project were:

- Monitoring of stand dynamics in Białowieża Forest (including analysis of tree species composition, monitoring of changes in the forest stand caused,

among others, by tree death)

- Analysis of natural forest regeneration and rejuvenation, including the role of gaps,
- Establishment/determination of the combination of different remote sensing techniques and data sets that are optimal for forest monitoring,
- Characteristics of the microclimate of the Białowieża Forest,
- Promotion of Białowieża Forest through the use of multimedia.

The main expected results of the project:

- Detailed analysis and maps showing in subsequent years, following information about the Białowieża Forest: Forest stand characteristics (growing stock and biomass, tree height, DBH, canopy cover and its diversity, forest diversity, tree species composition, vertical structure, biomass, etc.), location and size of dead trees, location and size of gaps, dynamics of natural forest regeneration and amount of lying dead wood.
- Map of plant communities with identification of different tree species;
- Development of monitoring methods for the dynamics of the Białowieża Forest using a small number of sample plots and additional remote sensing data covering the entire study area;
- Master tree ring chronology of the selected tree species in the Białowieża Forest;
- A unique geoportal containing created spatial data on the Białowieża Forest.

DETALJI

PODRIJETLO DRVA

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VRSTA DRVA

--

ODGOVARAJUĆA VRSTA DRVA

--

UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

--

UČINAK NA PRIHOD

--

POTENCIJAL ISKORISTIVOSTI

--

SREDIŠTE

Centralno-istočno čvorište

GOSPODARSKI UČINAK

--

POTREBNA POSEBNA ZNANJA

--

POTENCIJAL ZA POVEĆANJE UPORABE DRVA

--

POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

--

JEDNOSTAVNOST PROVEDBE

--

JEDNOSTAVNOST PROVEDBE - EVALUACIJA

--

KLJUČNI PREDUVJETI

--

VRSTA DOGAĐAJA NA KOJEM JE PRIKAZAN OVAJ BPI

--

UČINAK NA ZAPOŠLJIVOST

--

TROŠKOVI PROVEDBE (EURO - €)

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VIŠE DETALJA

IZAZOV

1. Poboljšanje otpornosti šuma i prilagodbe klimatskim promjenama

DOMENA

Popis, procjena, praćenje

VRSTA RJEŠENJA

Podatkovne platforme, centri podataka, javno dostupni podaci Podatkovne platforme, centri podataka, javno dostupni podaci Podatkovne platforme, centri podataka, javno dostupni podaci"

KLJUČNE RIJEČI

stand dynamics monitoring; forestry; remote sensing; biodiversity

DIGITALNO RJEŠENJE

Da

INOVACIJA

Da

ZEMLJA PODRIJETLA

Poljska

PODRUČJE PRIMJENE

Nacionalna

POČETAK I KRAJ GODINE

2014 - 2022

KONTAKT PODATCI

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REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

http://www.forbiosensing.pl/home

IZVORI

Stereńczak K., Mielcarek M., Modzelewska A., Kraszawski B., Fassnacht F.E., Hilszczański J. 2019. Intra-annual Ips typographus outbreak monitoring using a multi-temporal GIS analysis based on hyperspectral and ALS data in the Białowieża Forests. Forest Ecology and Management, 442: 105–116.

WEB STRANICA PROJEKTA

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REFERENCA PROJEKTA

ForBioSensing project is co-funded by the European Commission under European Union financial instrument LIFE+ and by the National Fund for Environmental Protection and Water Management

LOGO PRIMJERA DOBRE PRAKSE

LOGO GLAVNE ORGANIZACIJE

PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood 4.0

DATUM UNOSA

21 pro 2021

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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