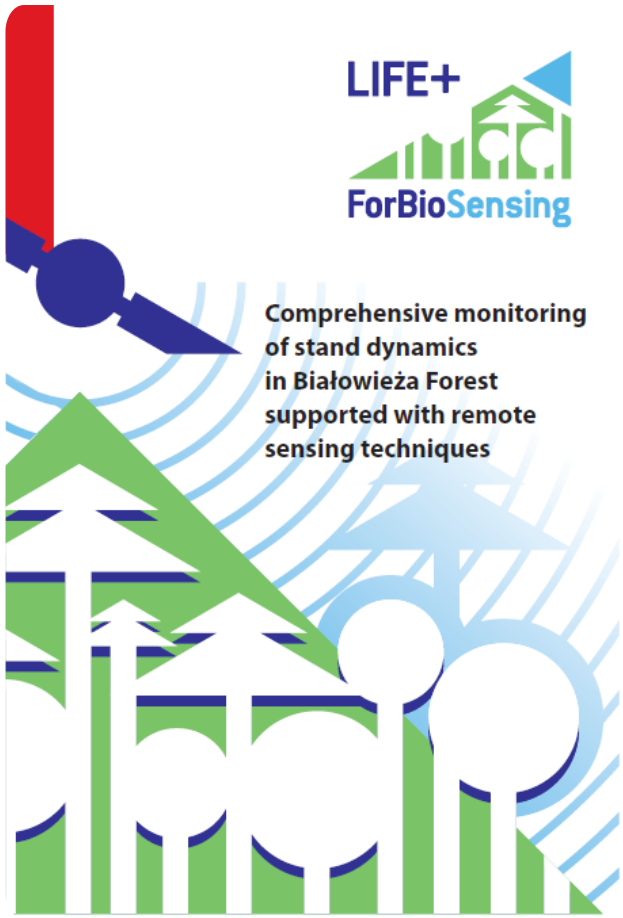
ForBioSensing | Comprehensive monitoring of stand dynamics in Białowieża Forest supported with remote sensing techniques



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.

DETAILS

HERKUNFT DES HOLZES

--

ART DES HOLZES

--

ART DES BETROFFENEN HOLZES

--

AUSWIRKUNGEN AUF UMWELT UND BIODIVERSITäT

--

EINKOMMENSEFFEKT

--

VERWERTUNGSPOTENZIAL

--

NABE

Drehscheibe Mitte-Ost

WIRTSCHAFTLICHE AUSWIRKUNGEN

--

SPEZIFISCHES WISSEN ERFORDERLICH

--

MOBILISIERUNGSPOTENZIAL

--

POTENZIAL FüR NACHHALTIGKEIT - WERT

--

LEICHTE IMPLEMENTIERUNG

--

LEICHTE IMPLEMENTIERUNG - BEWERTUNG

--

WICHTIGE VORAUSSETZUNGEN

--

ART DER VERANSTALTUNG, AUF DER DIESE BPI VORGESTELLT WURDE

--

ARBEITSPLATZEFFEKT

--

KOSTEN DER IMPLEMENTIERUNG (EURO - €)

--

MEHR DETAILS

ANGESPROCHENE HERAUSFORDERUNG

1. Verbesserung der Widerstandsfähigkeit der Wälder und ihrer Anpassung an den Klimawandel

DOMäNE

Bestandsaufnahme, Bewertung, Überwachung

ART DER LöSUNG

Datenplattformen, Datendrehscheiben, offene Daten

SCHLüSSELWöRTER

stand dynamics monitoring; forestry; remote sensing; biodiversity

DIGITALE LöSUNG

Ja

INNOVATION

Ja

HERKUNFTSLAND

Polen

UMFANG DER ANWENDUNG

National

ANFANGS- UND ENDJAHR

2014 - 2022

KONTAKTDATEN

EIGENTüMER ODER AUTOR

Instytut Badawczy Leśnictwa

Krzysztof Stereńczak

K.Sterenczak@ibles.waw.pl

https://www.ibles.pl/en/web/guest/home

REPORTER

Łukasiewicz Research Network - Wood Technology Institute

Dobrochna Augustyniak-Wysocka

dobrochna.augustyniak@itd.lukasiewicz.gov.pl

REFERENCES AND RESOURCES

HAUPT-WEBSITE

http://www.forbiosensing.pl/home

PROJEKT-WEBSITE

--

RESSOURCEN

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.

PROJEKT-REFERENZ

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 DER BEST PRACTICE



LOGO DER HAUPTORGANISATION



PROJEKT, IN DESSEN RAHMEN DIESES FACTSHEET ERSTELLT WURDE

Rosewood 4.0

BEITRAGSDATUM

21 Dez. 2021





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

