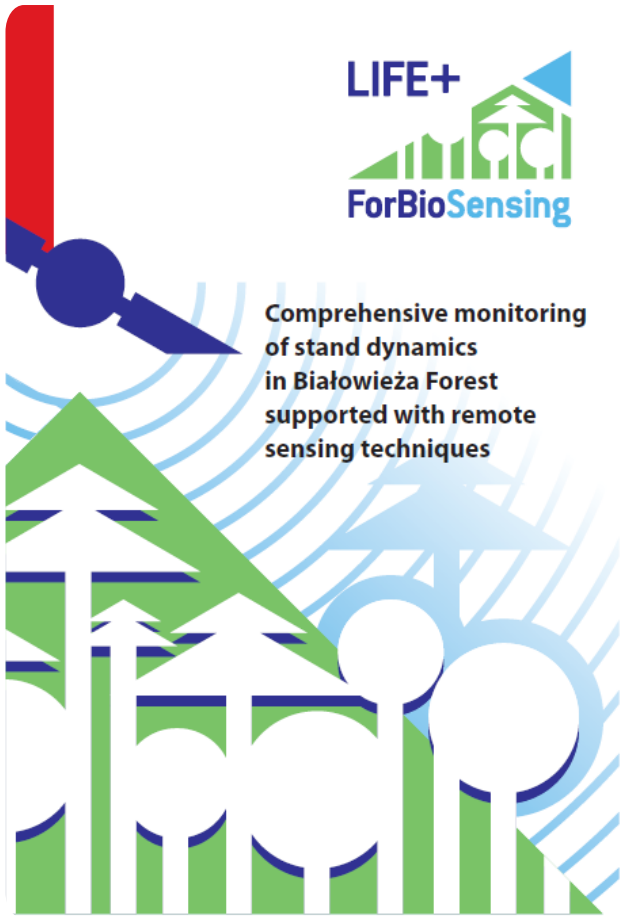
ForBioSensing | Comprehensive monitoring of stand dynamics in Białowieża Forest supported with remote sensing techniques



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.

DETALLES

ORIGEN DE LA MADERA

--

TIPO DE MADERA

--

TIPO DE MADERA AFECTADA

--

IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD

--

EFECTO SOBRE LOS INGRESOS

--

POTENCIAL DE EXPLOTACIóN

--

HUB

Eje Centro-Este

IMPACTO ECONóMICO

--

CONOCIMIENTOS ESPECíFICOS NECESARIOS

--

POTENCIAL DE MOVILIZACIóN

--

POTENCIAL DE SOSTENIBILIDAD - VALOR

--

FACILIDAD DE APLICACIóN

--

FACILIDAD DE IMPLEMENTACIóN - EVALUACIóN

--

PREREQUISITOS CLAVE

--

TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS

--

EFECTO SOBRE EL EMPLEO

--

COSTES DE IMPLEMENTACIóN (EURO - €)

--

MáS DETALLES

RETO ABORDADO

1. Mejorar la resistencia y la adaptación de los bosques al cambio climático

DOMINIO

Inventario, evaluación, seguimiento

TIPO DE SOLUCIóN

Plataformas de datos, centros de datos, datos abiertos

PALABRAS CLAVE

stand dynamics monitoring; forestry; remote sensing; biodiversity

SOLUCIóN DIGITAL

Sí

INNOVACIóN

Si

PAíS DE ORIGEN

Polonia

ESCALA DE APLICACIóN

Nacional

AñO DE INICIO Y FIN

2014 - 2022

DATOS DE CONTACTO

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REFERENCES AND RESOURCES

SITIO WEB PRINCIPAL

http://www.forbiosensing.pl/home

SITIO WEB DEL PROYECTO

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RECURSOS

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.

REFERENCIA DEL PROYECTO

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LOGO DE LA BUENA PRáCTICA

LOGOTIPO DE LA ORGANIZACIóN PRINCIPAL

PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood 4.0

FECHA DE MENSAJE

21 Dic 2021

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY