

## Dr. FOREST - Diversity of forests affecting human health and well-being

### Context

Forest ecosystems are an important reservoir for biodiversity in human-dominated landscapes within Europe, and deliver many ecosystem services. They are also a popular location for recreational activities, especially near urban areas. However, forests can also harbour threats and diseases, e.g. ticks that transmit pathogens to humans. Thus, there is a need to quantify the impacts of forest biodiversity on multiple human health risks and benefits to combine biodiversity conservation with ecosystem management that supports human health and well-being.

### Main objectives

Dr. FOREST aims to:

- Study the effects and underlying mechanisms of tree diversity in temperate forests on human health and well-being;
- Understand and predict the integrated effects of global change factors (climate change, air pollution) on biodiversity-related health issues;
- Value/qualify tree diversity benefits to human health and well-being, and communicate these findings to local and high-level international stakeholders.

### Main activities

Empirical research in existing tree diversity research sites will be performed across five main study topics: psychological restoration; microclimate, medicinal and edible plants and fungi; disease vectors; clean air; and health impact modelling and assessment. The work will be done in contrasting climatic regions of Central Europe (Austria, Belgium, France, Germany, Poland). Three case studies in urban forests will be developed and paired with three stakeholder workshops, in Belgium, France and Germany.

Dr. FOREST will work with stakeholders from local to national to European scales, and will seek to co-develop useful decision tools, such as policy briefs and guidelines for “Evidence-based Health Assessments of Forest Interventions”. A touring video and photo exhibition on “Forest Diversity and Human Health” will support the promotion of these outputs. At local level, the project will organise site-specific workshops with local forest managers, city council planners, NGOs, public health officials and representatives of the private health sector, to refine research questions, promote the human health impacts of biodiversity in forests and support the formulation of management guidelines. At national scale, networks of practitioners will in addition help to disseminate the projects’ outputs. At European level, a concluding seminar will focus on opportunities and limitations of integrating forest diversity-related risks and benefits into health and biodiversity policies; high-level international stakeholders from E.U. institutions and international organisations will be invited to participate, for which several have already expressed an interest.



*People hiking in a diverse forest*

### Partners of the project:

**Coordinator: Geobotany – University of Freiburg – Freiburg – Germany**  
 Institute of Forest Ecology – University of Natural Resources and Life Sciences – Vienna – Austria  
 Department of Environmental Health – Medical University of Vienna – Vienna – Austria  
 Environmental Sciences – Université Catholique de Louvain – Louvain-la-Neuve – Belgium  
 BOS+ Vlaanderen – Gontrode – Belgium  
 Forest & Nature – Ghent University – Melle–Gontrode – Belgium  
 Forest, Nature & Landscape – KU Leuven – Leuven – Belgium  
 Biodiversity, Genes and Communities (BIOGECO) – INRAE – Cestas – France  
 Institute of Psychology – Universität Leipzig – Leipzig – Germany  
 German Centre for Integrative Biodiversity Research: iDiv – Ecosystem Services – Leipzig – Germany  
 Forest Research Institute Baden–Wuerttemberg – Freiburg – Germany  
 Białowieża Geobotanical Station – University of Warsaw – Białowieża – Poland

### Duration:

01/02/2020 – 31/01/2023

### Total grant:

€ 1,357,732

### Further information:

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