BOOK OF
ABSTRACTS

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Enhancing forest monitoring by biodiversity indicators - a case study in Britz, Germany

T3.7 Forest biodiversity indicators: supporting our response to the biodiversity and climate emergencies

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Abstract: The loss of biodiversity - especially due to climate change and intensive land use - calls for effective solutions and targeted recommendations. For this purpose, comprehensive data-sets from existing monitoring networks like ICP Forests or the NFIs deliver information to describe state and change of biodiversity. Unfortunately, important character-species requiring specialist knowledge cost intensive equipment are not considered there. To gain a deeper insight it is therefore important to complement the existing monitoring systems with in-depth studies to understand links and feedback-systems and determine thresholds which later allow up-scaling.

To develop methods bridging the gap between widely available data and in-depth studies we use our intensive forest monitoring site “Britz” in Germany, a highly equipped site stocked with five different tree species. We encourage and facilitate research from colleagues collecting high-resolution biodiversity data like e.g. insect abundance, bird diversity, or pollen occurrence. This data can be combined with detailed ecological data following the internationally harmonised manuals of ICP Forests. Furthermore, we assess forest structure and vitality by UAV and remote sensing, measure light regimes, and provide meteorological and increment data.

Through this we create a data base for understanding the drivers on species and biodiversity and to define the linkages to parameters available at larger-scale. Here we present our approach of linking the long-standing ground-based monitoring to provide structural information as a basis for up-scaling high-resolution data to specialists working on our site. This poster is an invitation for using existing infrastructures and increase their value by adding further studies.