BOOK OF
ABSTRACTS

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MoniFun - Co-creating a blueprint of a harmonised European Forest Multifunctionality Monitoring System

T5.34 The new age of forest monitoring: A common European forest monitoring system in a global perspective

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Abstract: The Horizon Europe project MoniFun will co-create—via an interdisciplinary, multi-actor approach—a blueprint for a harmonised European Forest Multifunctionality Monitoring System (EFMMS) that consolidates fragmented qualitative and quantitative information on forest multifunctionality into a comprehensive, interoperable system integrating existing platforms and data sources with innovative tools, to fulfil the needs of diverse stakeholders, policies, certification schemes and society. After mapping information needs, experts from different fields of forest multifunctionality will co-create harmonised indicators on thematic areas (forest resources in Europe; forests & climate change; forests & biodiversity; forests & society). Routines using partners' data will be developed and validated to: a) combine field plot (national forest inventories) and remote sensing (Copernicus) data to map forest multifunctionality; b) use artificial intelligence to monitor rapid changes in forests in real time; c) produce harmonised statistical estimates with accuracy and granularity meeting information needs; d) nowcast and forecast ecosystem services related to resilience needs under climate and halting biodiversity loss over various timespans; and e) feed the Forest Information System for Europe.

The main output of MoniFun will be a technical description of EFMMS, including recommendations for governance and funding. Financial support to third parties will be used to validate developed methods and analyse the possible of use of blockchain to augment information from existing public databases. MoniFun will share data, knowledge and tools with relevant related Horizon-projects. EFMMS will support the successful planning, implementation and evaluation of forest-related EU

policy objectives, including those of the New Forest Strategy, European Green Deal, Biodiversity Strategy, Bioeconomy Strategy, Fit for 55 Package, and Renewable Energy Directive.