Mapping, Monitoring and protecting Primary and Old-Growth forest

5 March 2024 - webinar

Event Overview

The webinar on Mapping, Monitoring and Protecting Primary and Old-Growth Forests was introduced by Marta Ballesteros (Milieu Consulting SRL), moderated by Thomas A. Nagel (Professor at the University of Ljubljana) and led by Adrian Tistan (DG ENV, European Commission). It focused on the EU Forest Strategy 2030 objective of protecting, restoring and expanding forests in the EU to reverse biodiversity loss, combat climate change and ensure resilient forests.

The webinar included presentations by Adrian Tistan from the European Commission on its **Guidelines for Defining, Mapping, Monitoring and Protecting Primary and Old Forests** and by key actors presenting experiences on national mapping methodologies, namely from Finland by *Kimmo Syrjänen (SYKE, Finnish Environment Institute) and Jan Saijets (Natural forests of Sápmi working group)*, from Latvia by Addis Jansons and *Daiga Zute (State Forest Research Institute Silava, Latvia)* from Romania by *Radu Sbîrnea (counsellor at Ministry of Environment)* and from Bulgaria by P*rof. Tzvetan Zlatanov, PhD (Institute of Biodiversity and Ecosystem Research)*. The presentations reflected the diversity of criteria and indicators used for defining them.

Discussions highlighted the need for collaboration between different stakeholders, including government agencies, research institutions and NGOs, in identifying and protecting these critical forests. Challenges such as defining primary and old-growth forests, establishing scientifically sound criteria, and the role of remote sensing and on-the-ground verification in mapping were addressed. The discussion underlined the EU's commitment to strong protection measures, the integration of forest management and biodiversity conservation, and the collaborative efforts needed to achieve the objectives of the EU Forest Strategy 2030.

Detailed Event Overview

European Commission's Guidelines for Defining, Mapping, Monitoring and Protecting Primary and Old-Growth Forests

Adrian Tistan from the European Commission outlined the process of developing *the Guidelines for defining, mapping, monitoring and protecting EU primary and old-growth forests*. The process was collaborative, experts from Member States, research institutions, forest stakeholders and environmental NGOs, and aimed to establish scientifically sound definitions and methodologies that complement EU and national legal frameworks. Although voluntary, the guidelines are intended to support the EU Biodiversity Strategy's objective of strictly protecting the EU's remaining primary and old-growth forests.

Finland's Approach to Identifying and Mapping Primary and Old-Growth Forests:

Kimmo Syrjänen presented Finland's report on the interpretation of primary and old growth definitions and criteria on the national level, which included a comprehensive literature review and discussed the establishment of thresholds based on deadwood and tree age as critical indicators, and the use of national forest inventories. Jan Saijets presented a methodology developed by *Natural forests of Sápmi* Working Group for identifying primary and old-growth forests, which used remote sensing data for pre-identification of potentially valuable forests in Sami region and then extensive field visits to count number of stumps and estimate dead wood amount. Based on the degree of naturalness, four categories of forests have been designated – primary forest, old-growth forest, less valuable old-growth forest and continuous forest. Some 450 000 ha of mapped forests, which have been found to qualify as either primary or old-growth, remain unprotected in the region. More than half of this area covers forest with low productivity (as per the definition in Finland, which is different from the one by FAO or CBD).

Latvia's Approach to Identifying and Mapping Primary and Old-Growth Forests:

Aris Jansons shared insights into Latvia's ongoing work to define and map old-growth forests. The approach is still being finalised and is based on lack of signs of management and age of the trees, although the latter is by far not the only important indicator. Silava has adapted EU indicators and added the consideration of patch size, whereby only patches reaching a certain size, which allows for internal natural disturbance dynamics, meet the national definition. Lack of forest drainage systems as well as natural regeneration and forest continuity have been considered as other relevant indicators. The ongoing assessment includes the establishment of over 1000 sample plots, covering variety of tree species and forest types, to study the relevant indicators.

Bulgaria's Approach to Identifying and Mapping Primary and Old-Growth Forests:

Led by Tzvetan Zlatanov, this presentation focused on the identification of old-growth forests using a detailed methodology, which set threshold values for presence of large trees, diameter distribution and presence of deadwood, together with an 'Index of old-growthness' for forests falling below these thresholds. Prof. Zlatanov showed how this work led to the identification of some 13,000 hectares of high conservation value forests outside national parks, which represent a small fraction of the total forest area but are of significant ecological importance. Despite the identification of these areas, 4,553 hectares of the best-preserved forests are not yet protected, highlighting the gap between identification and legal protection.

Romania's Approach to Identifying and Mapping Primary and Old-Growth Forests:

The presentation by Radu Sbirnea outlined Romania's comprehensive approach to the protection of virgin and quasi-virgin forests, including the development of a national catalogue and collaboration with WWF Romania. Since 2012, significant progress has been made in legally defining and protecting these forests, culminating in over 72,000 hectares of forests being catalogued and protected by 2023. The discussion highlighted the challenges of remote sensing, described stakeholder engagement and the need for field research undertaken by qualified specialists, to accurately identify primary and old-growth forests. The need to set-up an adequate compensation for all identified and protected forests was also underlined.

Panel Discussion: Challenges and Methodological Insights

Overall, the discussion underscored the importance of involving multiple stakeholders, including government agencies, NGOs and the private sector, in the process of mapping and protecting forests. The webinar highlighted challenges such as defining old-growth forests, integrating remote sensing with on-the-ground verification, ensuring the scientific robustness of criteria, the identification and mapping of primary and old-growth forests in privately owned land and the need for compensatory payments.

Closing Remarks and Future Directions:

Discussions underscored the EU's commitment to strong protection measures, the integration of forest management and biodiversity conservation, and the need for joint efforts to achieve the objectives of the EU Forest Strategy 2030. The webinar concluded with insights into the political and technical challenges, the importance of EU-wide definitions and guidelines, and the crucial role of national governments in implementing the mapping and the protection measures.