

6th ESP Europe Conference

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SESSION DESCRIPTION

ID: T18a

Transformative laws for a nature-positive Europe: from reactive conservation to proactive restoration of ecosystem services

Hosts:

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Abstract:

Biodiversity loss, whether resulting from imminent polluting activities, such as those listed in Annex III of the EU Directive on Environmental Liability 2004/35/CE, or from the cumulative, long-term effects of diffuse anthropogenic pressures, presents a critical challenge. To address this loss, legal frameworks are increasingly recognising the need not only for conservation but also for restoration measures. The ecosystem services (ES) framework provides a powerful tool for bridging science, policy, and law in support of these objectives.

According to the European Commission, the ES framework should be applied at two key stages:

- assessment of biodiversity loss: to evaluate which ecosystem services have been degraded or lost due to human activity and to what extent this impacts ecological integrity and human well-being.
- planning for biodiversity restoration and conservation: to determine which ecosystem services should be restored, where, and how, and to support the development of legal obligations and conservation strategies.

In the first stage, legal and scientific actors must ask: what services have been lost, how significant is the loss, and what are the implications for biodiversity and the communities that depend on it? In the second stage, they must address: which ecosystem services are critical for recovery and long-term resilience, and how can restoration and conservation be implemented within a legally enforceable and scientifically informed framework?

Examples of early application include post-accident studies such as those conducted after the Deepwater Horizon oil spill (2010), where ecosystem service assessments informed both restoration priorities and compensation measures. In many jurisdictions, laws are increasingly requiring biodiversity loss assessments through the lens of ecosystem services, reflecting a global shift toward more integrated and forward-looking legal frameworks.

However, implementing this approach involves several challenges:

- Establishing dynamic ecological baselines;
- Addressing data limitations and the complexity of ecological modelling;
- Balancing trade-offs between restoration and conservation goals;
- Designing long-term monitoring systems that are cost-effective and legally viable.

These challenges underscore the need for robust legal and methodological guidance. Public authorities, regulators, courts, companies, and practitioners need standardised tools and procedures to embed the ES framework into biodiversity-related legal processes. Aligning legal instruments with ecosystem service-based

assessments can ensure that decisions lead to measurable and lasting benefits for biodiversity, ecosystems, and society.

Goals and objectives of the session:

The goal of this session is to contribute to the ongoing debate on how the ecosystem services framework can support the legal implementation of biodiversity conservation and restoration policies. The ecosystem services approach offers a structured way to assess the causes and consequences of biodiversity loss and to identify effective responses. grounded in ecological, legal, and socio-economic realities.

More specifically, this session will gather case studies, practices and theoretical views on how ecosystem services are employed within legal frameworks in order to evaluate biodiversity losses, to implement conservation and restoration policies. It will also provide a platform to propose concrete tools, guidelines, and standards for integrating ecosystem services into legal and policy frameworks. To support mainstreaming of ecosystem services into legal decision-making for biodiversity conservation and restoration, this session will particularly encourage discussions around: the harmonisation of definitions and classifications; the standardisation of valuation and monitoring approaches; the development of accessible and authoritative data systems; the alignment of ES methodologies with national and international legal obligations.

Planned output / Deliverables:

Best practices, check-lists, recommendations for model laws, guidelines for the judicial interpretation of environmental laws embedding the ecosystem services framework.

A Special Issue collecting the best papers presented.

Session format:

Standard session (presentations)

Voluntary contributions accepted:

Yes, I allow any abstract to be submitted to my session for review

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