

SESSION DESCRIPTION

ID: T1

Harnessing Integrated Ecosystem Assessments and Transdisciplinary Tools for a nature- and people-positive Europe

Hosts:

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Abstract:

In today's complex world, it is essential to adopt comprehensive and integrative approaches to ecosystem assessment and management to ensure a sustainable future for humans and nature. This session focuses on the synergies between Integrated Ecosystem Assessments (IEAs) and transdisciplinary tools for the assessment and valuation of ecosystem services. This combination provides a robust methodology to understand, analyse and promote the complex interactions between society and natural environments, promoting the uptake for better decision-making.

IEAs offer a holistic perspective by integrating ecological, economic, and socio-cultural dimensions to create a coherent picture of ecosystem dynamics. Additionally, IEAs often focus on integrating data related to ecosystem types, conditions, and services, offering a structured framework to better understand and assess the health and functionality of ecosystems as well as the services and the benefits they provide. Beyond these typical forms, integration in IEAs can also take several transformative routes. These include harmonizing diverse methodologies, indicators, and data sources to produce robust and reliable assessments and incorporating a wide spectrum of values (such as monetary, non-monetary, social-cultural, biophysical, intrinsic, instrumental, and relational aspects).

Simultaneously, transdisciplinary tools play a crucial role in bridging scientific knowledge about biophysical, economic and social values with policy- and decision-making needs. Tools such as ecosystem accounting frameworks, decision-support systems (DSS), participatory GIS, multi-criteria analysis, scenario-building, dynamic or agent-based modeling, serious games, living labs, and digital platforms enable the integration of multiple perspectives and value dimensions into ecosystem service assessment and valuation. These tools can be particularly relevant considering emerging policy frameworks such as the EU Nature Restoration Law, the Roadmap for nature credits, and strategies for reducing the externalized impacts of Europe through interregional flows of goods, resources, and ecosystem services.

This session aims to showcase both innovative conceptual advances and practical case studies to promote the integration of ecosystem assessments through transdisciplinary methods and demonstrate how they can contribute to the development of innovative policy- and decision-making instruments. In addition, we will focus on exploring opportunities for embedding transdisciplinary tools into sustainable finance mechanisms that support ecosystem restoration and long-term sustainability. Together, we strive for a nature- and people-positive Europe, grounded in a solid understanding and comprehensive valuation of ecosystem services.

Goals and objectives of the session:

- Promote knowledge on integrated ecosystem assessments and the use of transdisciplinary tools for comprehensive ecosystem assessments in Europe
- Discuss practical and policy applications of IEAs and transdisciplinary methodologies, especially in light of emerging policy frameworks like the EU Nature Restoration Law.
- Exchange innovative methods and concepts that support the sustainable management and financing of ecosystem services.

This session calls for contributions that present cutting-edge conceptual advances, innovative methodologies, and illustrative applied cases of integrated ecosystem assessments. They may consider how ecological, economic, and social knowledge can be combined, how information on ecosystem type, condition, and services can be linked with diverse methods and data sources, and how diverse values of nature can be incorporated into assessments.

We aim to showcase exemplary practices, identify common challenges, and inspire new approaches that align with sustainability goals and enhance the policy relevance of ecosystem assessments notably for the private and finance sector. By exploring these dimensions, the session seeks to empower stakeholders and foster a nature- and people-positive Europe through effectively integrating diverse perspectives and knowledge bases.

Planned output / Deliverables:

The session will generate a short, written summary of one to two pages, highlighting the main insights, promising approaches and identified opportunities for integrated ecosystem assessments and transdisciplinary tools as well as common challenges. Slides and abstracts from the presentations will be compiled and shared with the participants as a reference resource, and a mailing list or contact sheet will be created to support continued exchange among presenters and attendees. If the presentations are found to be sufficiently relevant and complementary, the session outcomes may also be developed into a joint opinion paper or a policy brief for wider dissemination.

Session format:

A mix of concise presentations/case studies (10 min each) selected through an open call for abstracts, showcasing innovative applications from different European contexts.

An interactive panel discussion to stimulate exchange across academic, policy, and practice perspectives moderated by one of the hosts (30 min).

Conclusions (10 min): Wrap-up by the moderator, summarizing key insights and outlining the preparation of a joint synthesis or opinion paper as a session output

6th ESP Europe Conference 2026

18—22 May 2026

Prague, Czechia

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Voluntary contributions accepted:

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

Related to ESP Working Group:

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