6th ESP Europe Conference

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SESSION DESCRIPTION

ID: B10

Frontiers in urban ecosystem services knowledge and practice

Hosts:

	Name	Organisation	E-mail
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Abstract:

What contribution can ecosystem services science provide in addressing the challenges of the 21st-century urban ecosystem? Urban ecosystems are of a special kind, where human agency shapes patterns and processes more strongly than in any other type of ecosystem, therefore making the co-production of ecosystem services explicit. At least 3 axes of complexity intersect in the urban co-production of ecosystem services. 1) The interlink between natural, built and social capital determining the delivery of fundamental ecosystem services, which is both highly complex and non-linear; 2) The implicit complex spatiality where interactions of matter, energy and information take place at very short distances but at the same time belonging to a worldwide net of fluxes and teleconnections that transfer ecological asymmetries between world centres and peripheries. We are witnessing a double-sided urban inequality, where the benefits people receive from urban ecosystems are becoming increasingly uneven, within the same city (endogenous inequality) and among cities across the world (exogenous inequality) and 3) The fact that urban ecosystem services assessments must deal with the paradoxes imposed by the minimum area size necessary for ES to be co-produced and spatial distribution, where not only the size of the service-providing areas matters but also its spatial distribution arrangement within the urban fabric. 4) Knowledge and information generated by urban ecosystems science keep facing some resistance and inertia to be daily used to deliver decisions on the asset of ecosystems in contemporary urban contexts. Despite a vast development of ecosystem services science and applications, their actual added value in decision making process is limited in some political and social domains, i.e spatial planning and urban policies for instance.

Goals and objectives of the session:

This session aims to explore the following questions, drawing on the current state of the art in ecosystem services science, identifying emergent topics and methods, and outlining a way forward for research. Theoretical, methodological, and applied contributions on current frontiers of urban ecosystem services knowledge and practice are welcome, addressing the following research questions.

- How robust is our understanding of the non-linear relationships between natural, built, and social capital underpinning urban ecosystem services delivery?
- What kind of reconceptualisations are needed for a better understanding of this non-linearity?
- How can urban ecosystem services analysis be better placed within the capital's interactions paradigm, reconnecting this branch of research with systems ecology?
- How adequate are existing methods, models and indicators used in ecosystem services science at other landscape scales, while being applied to urban ecosystems?
- How relevant, well-informed or misleading is people's perception of urban ecosystem services?

- How can we better analyse the share of urban ecosystem services between those locally materialised and those that are exported or transferred elsewhere?
- How can we operationalise the minimum area size and the spatial distribution of ecosystem services in urban areas?
- How effective is urban ecosystem services science to deliver planning decision to improve the overall condition of current urban contexts?
- What are the bottlenecks hindering the application of ecosystem services knowledge in urban ecosystems?

Planned output / Deliverables:

The possibility of developing a joint paper among the session's presenters will be discussed.

Session format:

Open Session, primarily based on call for papers with the possibility of using a blended approach that combines chosen speaker profiles with selected papers.

The session will follow a structured format designed to facilitate a high-level discussion over 1.5 hours, incorporating up to four to five papers.

It will commence with a framing keynote of five minutes.

This will be followed by a moderated panel discussion featuring four to five speakers who will delve into high-level topics, possibly structured by subject (such as policy, finance, business, or innovation), with each speaker having approximately eight to ten minutes to share their insights.

The session will conclude with a five-minute summary, encapsulating the critical points of the discussion.

Voluntary contributions accepted:

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

Related to ESP Working Group:

BWG 10 - Urban systems