

BOOK OF ABSTRACTS

This Book of Abstracts provides a comprehensive overview of the session content and is structured into three main sections:

- I. Session Description** – an introduction to each session, including its objectives and expected outputs
- II. Session Program** – a detailed schedule for each session, including speakers and timing
- III. List of Abstracts** – a complete compilation of all accepted abstracts

I. SESSION DESCRIPTION

ID: B1b

Rethinking marine governance through knowledge integration

Hosts:

	Name	Organisation	E-mail
Host (s):	Silvia De Juan Mohan	Mediterranean Institute for Advanced Studies	silvia.dejuan@csic.es
Co-host(s):	Ana Ruiz-Frau	Instituto Español de Oceanografía (CSIC)	anaruiz@csic.es

Abstract:

Marine and coastal ecosystems are critical to biodiversity, cultural heritage and human wellbeing, yet their governance often fails to reflect the diversity of knowledge systems that shape human-ocean relationships. While socio-ecological sciences offer frameworks to connect biodiversity conservation with social benefits, their effectiveness often depends on whose knowledge, values, and priorities are recognized in governance. Historically, marine conservation has been designed through a western-centric lens, overlooking Indigenous and traditional knowledge systems, and thereby reproducing environmental injustices.

This session will explore how integrating scientific, traditional, local and indigenous knowledge can strengthen equity, justice, and inclusivity in marine ecosystem services governance. We will examine case studies where local and cultural values have shaped conservation outcomes, highlighting the risks of ignoring cultural diversity and the opportunities of bridging knowledge systems. By focusing on the ecological and cultural dimensions of coastal and marine ecosystems, the session aims to identify leverage points for co-produced knowledge, assess socio-ecological trade-offs, and explore just transitions in the management of coasts and marine resources.

Goals and objectives of the session:

Participants will discuss how to:

- Recognize and integrate cultural and traditional ecological values in marine conservation.
- Ensure fair and equitable access to ecosystem benefits, particularly for marginalized and underrepresented communities.
- Build governance approaches that strengthen environmental justice and empower local actors.

Planned output / Deliverables:

Expected outcomes include practical guidance for integrating diverse knowledge systems into marine ecosystem services governance and identifying actionable pathways toward equitable and ecologically sound marine management.

Session format:

We propose a 90-minute session structured as follows:

- Short presentations (10 minutes) introducing key perspectives (science, Indigenous, policy, practice).
- A moderated panel discussion and audience engagement through guided Q&A and collaborative mapping of challenges and opportunities.

Related to ESP Working Group:

[BWG 1 – Marine systems](#)

II. SESSION PROGRAM

Room: C2

Date of session: Tuesday, 19 May 2026

Time of session: 17:45 – 19:15

Timetable speakers:

Time	First name	Surname	Organization	Title of presentation
17:50-18:00	Anastasia	Mirli	Democritus University of Thrace, Greece	Hinder of coastal Ecosystem Services provision, due to Illegal octopus traps in the Thracian Sea, Greece.
18:00-18:10	Juan José	Martín Estarellas	The Mediterranean Institute for Advanced Studies (IMEDEA, UIB-CSIC)	Multiple paths toward fisheries co-governance: integrating local knowledge, social networks, and discourses on priorities in the Colombian Caribbean.
18:10-18:20	Sílvia	Gómez-Mestre	Autonomous University of Barcelona	Sociocultural Values and Fishing Rights: Integrating Indigenous and Local Knowledge into Legal Frameworks
18:20-18:30	Jasmine	Law	Institute of Marine Science, University of Auckland	Understanding how perceptions of success can lead to different social outcomes in marine protection and restoration
18:30-18:40	Heike	Schwermer	Center for Ocean and Society (CeOS), Christian-Albrechts-University Kiel	"This is my living space": assessing the various salt marsh values to support marine governance and empower local communities"
18:40-18:50	Aleksandra	Koroza	Institute of Oceanology of Polish Academy of Sciences	Valuing All Voices: Stakeholder Narratives and Cultural Ecosystem Services in the Gulf of Gdańsk
18:50-19:00	Enrica	Garau	University of Almería	Mapping cultural values and emotions in urban coastal landscapes for inclusive marine governance.
19:00-19:15			Questions and general discussion	

III. LIST OF ABSTRACTS

The first author is the presenting author unless indicated otherwise

1. Hinder of coastal Ecosystem Services provision, due to Illegal octopus traps in the Thracian Sea, Greece

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Other author(s): Dimitris Tsianis

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Mediterranean coastal ecosystems sustain human well-being by delivering ecosystem services (ES) that support food provision, biodiversity, environmental quality, and recreation. Illegal, unreported, and unregulated (IUU) fishing has considerable, but scarcely documented impacts on coastal ES. This study presents a preliminary ES-focused assessment in the Thracian Sea (NE Aegean), an important fishing ground, where illegal traps targeting common octopus (*Octopus vulgaris*) were recorded during field campaigns. In an area of approximately 1.385 km², 30.047 traps were removed and 1.183 octopuses were released, 119 of which along with their eggs. The preliminary findings from the analysis of IUU octopus fishing (fixed traps), indicate that a single illegal practice can affect all ES categories – provisioning, supporting, regulating and cultural. Provisioning services are affected through unreported catch of octopus biomass, with likely implications in recruitment and long-term resilience, particularly where reproductive individuals are removed. Furthermore, non-target catches, such as cuttlefish (*Sepia* spp.) and holothurians (*Holothuria* spp.) provide direct evidence of biodiversity disruption and combined to the selective removal of a key mesopredator alter trophic dynamics, affecting supporting services related to ecological balance. Additionally, the dense installation of illegal fixed traps creates a spatial displacement for legal activities of professional and recreational fishing, hindering provisioning and associated cultural ES. Lastly, illegal traps constitute marine litter, contributing to marine pollution and plastic fragmentation (microplastics), affecting directly regulatory services related to environmental quality and indirectly provisioning and cultural benefits. The results suggest that IUU octopus fishing acts as a multi-pressure driver of ES, affecting them in several ways. This underscores the need to incorporate the ES Framework into coastal governance to achieve sustainability. Future research will aim to map fishing gear pressure and access restrictions, standardise the recording of bycatch/litter, and develop ecosystem services accounting approaches for the assessment of the impacts and the future management interventions.

Keywords: Mediterranean, coastal, fisheries, marine governance

2. Multiple paths toward fisheries co-governance: integrating local knowledge, social networks, and discourses on priorities in the Colombian Caribbean

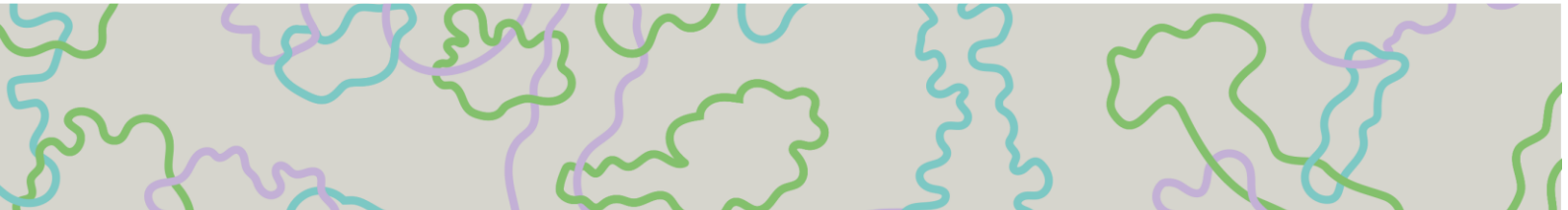
First author: Juan José Martín Estarellas

Other author(s): Andrés Ospina-Álvarez, Fernando Ríos-Archila, Vamburen Ward, Jimena Bohórquez-Herrera, Silvia de Juan

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Small-scale fisheries in Old Providence (Colombian Caribbean) operate within a complex socio-ecological context. Rooted in island culture, they sustain local livelihoods; however, their governance framework, traditionally top-down, is currently undergoing transformation. In an environmental change scenario, local knowledge on the traditionally fished species and their habitats is essential to foster governance approaches that strengthen fishers' adaptive capacity and the long-term sustainability of sea-based livelihoods. This study proposes an integrated approach to examine the key elements shaping the future



of this fishery and to inform co-governance frameworks, by combining three complementary participatory methods. First, a detailed socio-ecological matrix is developed through a participatory workshop with fishers, identifying current links between marine habitats, fish species, fishing practices, and marketing channels. Second, a social network analysis maps the relationships between fishers and other relevant actors within the local fisheries system, enabling the identification of interaction patterns, dependencies, and potential governance nodes. Finally, Q methodology is applied to explore fishers' discourses and priorities regarding the ecological, social, and political factors required to ensure long-term sustainability of their fisheries system. The combined outputs allow the identification of vulnerable links within the system, as well as those more resilient to changes in the environment, markets, or governance, and fishers' priorities on challenges and opportunities for a co-governance transformation. Overall, the findings demonstrate how local knowledge, and perceptions can inform more equitable, inclusive, adaptive, and contextually grounded fisheries co-governance strategies in isolated territories.

Keywords: Small-scale fisheries, Marine co-governance, Local ecological knowledge, Participatory methods, Socio-ecological systems

3. Sociocultural Values and Fishing Rights: Integrating Indigenous and Local Knowledge into Legal Frameworks

First author: Sílvia Gómez Mestres

Other author(s): Jamie Donatuto,

Affiliation: Autonomous University of Barcelona

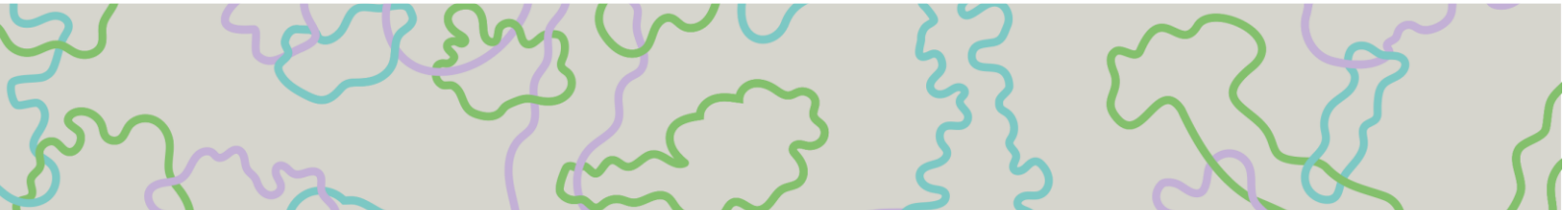
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This paper explores how embedded socio-cultural values shape moral claims to access marine resources, emphasizing historically rooted relationships between people and nature. It reflects on the challenges and opportunities of integrating local and Indigenous knowledge into legal frameworks governing fisheries in order to achieve conservation and sustainability goals. The analysis is based on long-term ethnographic fieldwork (2003–2021) conducted in fishing communities of the Cap de Creus Marine Protected Area (MPA) in northeastern Catalonia, Spain, and is complemented by a comparative case involving Indigenous peoples in Washington State, USA, drawing on work developed by the Swinomish Indian Tribal Community.

In Cap de Creus, fishing rights are grounded in enduring interactions between local communities and marine ecosystems. These relationships, developed over generations, form the basis of local fishers' claims to continued access to resources, particularly amid environmental degradation and competing extractive activities. Fishers identify their work as artisanal small-scale fishing, a concept that differs significantly from legal definitions based on technical criteria such as vessel size, gear type, and fishing zones. Instead, artisanal fishing is understood as a culturally embedded practice encompassing social relations of production, material culture, place-based ecological knowledge, and intangible cultural heritage.

The paper highlights a disconnect between standardized national and European fisheries regulations and locally adapted fishing practices. This gap reflects a situation of legal pluralism, where formal legal systems coexist with customary practices that often lack formal recognition. The authors argue for a broader conception of fisheries governance that includes not only formal rules but also moral values, knowledge systems, and worldviews guiding human–environment relations.

The FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries are presented as a promising framework, as they recognize tenure rights as a foundation for stewardship. The comparison with Washington State illustrates how sociocultural values can be legally protected, notably through the Boldt Decision (1974), which safeguarded Indigenous fishing rights. Indigenous communities have since developed non-economic indicators—such as cultural practice, community connection, self-determination, and resilience—to demonstrate the central role of fishing in community well-being.



Keywords: Local Communities, Indigenous Peoples, Small-scale Fishing, Northwestern Mediterranean, Northeastern Pacific

4. Understanding how perceptions of success can lead to different social outcomes in marine protection and restoration

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Context-related dependencies, including key social-ecological processes found in marine conservation and restoration, can shape outcomes of restoration and conservation efforts. Understanding how key social processes, including governance, collaboration, goal setting, and cultural and spiritual re-connection, influence the outcomes of restoration can help build human-nature relationships and gain future interest and investment in restoration actions—particularly, understanding how perceived success can result in higher levels of benefits for local community groups and users of the marine protected area. Using a social-ecological approach, we constructed a Bayesian network to map the key social, ecological, and economic factors to identify bottlenecks constraining outcomes. We then further explored the key social processes across four different marine protected areas in New Zealand. The Bayesian network demonstrates that while place-based context dependencies are important, ecological gains were not directly tied to social and economic benefits, highlighting that even when ecological progress is slow, social and economic benefits can still be obtained. Further analysis of key social processes and benefits revealed that non-economic benefits are more likely to be perceived than economic ones. Understanding the perceptions of success and how social processes influence the determination of success can help communities and organisations maximise the outcomes of conservation and restoration activities across different spatial and temporal scales.

Keywords: Social success, Restoration outcomes, Social-ecological systems

5. This is my living space“: assessing the various salt marsh values to support marine governance and empower local communities

First author: Heike Schwermer

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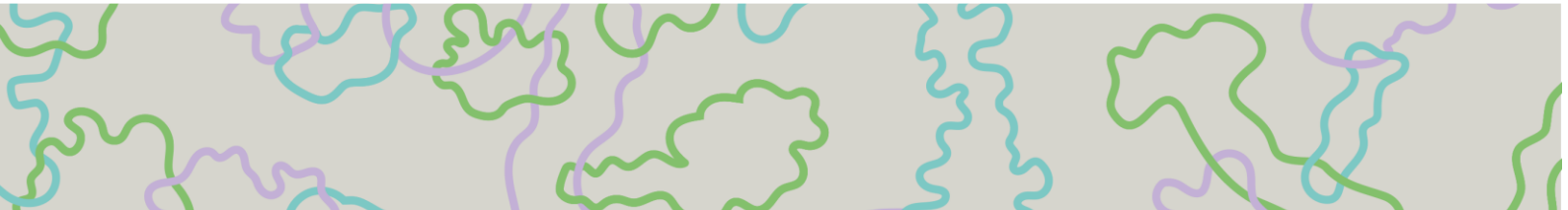
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Along the Wadden Sea region, salt marshes differ from purely cultivated (with a strong focus on coastal protection and agriculture) and more natural landscapes. However, anthropogenic pressures, such as climate change and biodiversity loss, are threatening the human-ocean relationships of local communities living in these areas.

To understand the various values attached to salt marsh ecosystems and whose knowledge, values, and priorities are recognized in salt marsh governance, we conducted 50 walking interviews with local communities at five locations in the Netherlands, Germany, and Denmark. We combining qualitative interview analysis and governance analysis to investigate the contribution of nature to the well-being of Wadden Sea local communities. By intertwining the generalizing and context-specific perspective on the research object, we provide a suitable approach to create a comprehensive and epistemological basis for the various values of salt marshes (historic, recent, past), supporting the implementation of marine policies / directives and strengthening local communities.

With our case study example, we contribute to the pluralistic assessment of salt marshes providing a valuable contribution to the marine ecosystem services governance in the Wadden Sea area and beyond.



To create a nature- and people-friendly future for the Wadden Sea—a national park and UNESCO World Heritage site—we will develop strategies using a transdisciplinary approach to convey a deep understanding of salt marsh ecosystems and their impact on socio-ecological systems, including knowledges and perspectives of local communities.

Keywords: Wadden Sea, salt marshes, local communities, Nature's Contributions to People, governance

6. Valuing All Voices: Stakeholder Narratives and Cultural Ecosystem Services in the Gulf of Gdańsk

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The ecosystem services concept was introduced to expand nature conservation narratives by linking ecological processes to human well-being. To better understand how these narratives operate in practice in a marine context, this study examines how ecosystem services are understood and valued in the Gulf of Gdańsk area in Poland.

The research draws on semi-structured interviews with a broad range of stakeholder groups. While multiple perspectives were collected, this presentation focuses on insights from ocean literacy and heritage actors, including museums, aquariums, educational institutions, and science-society mediators. The findings reveal a strong emphasis on (intangible) culture, emotions, and cognitive ecosystem services. Interviewees consistently describe the sea and coast as sources of mental well-being, everyday attachment, learning, and source of local identity, particularly outside the peak tourist season. Rather than framing the Gulf primarily as a recreational or economic resource, our respondents highlight naturalness, authenticity, and long-term relationships with coastal landscapes. Institutions engaged in ocean literacy play a crucial mediating role by translating ecological change into socially and culturally meaningful narratives. However, the values that stakeholders articulate are often difficult to accommodate within dominant ecosystem services frameworks and conventional cost-benefit approaches.

This study contributes to ongoing debates by examining how different actors interpret and mobilize ecosystem services narratives in the Gulf of Gdańsk. The results highlight the importance of recognizing narrative and cultural valuations alongside economic ones, particularly in the context of marine governance (including Maritime spatial planning) and ocean observing systems.

Keywords: cultural ecosystem services, plural narratives, heritage, conservation

7. Mapping cultural values and emotions in urban coastal landscapes for inclusive marine governance

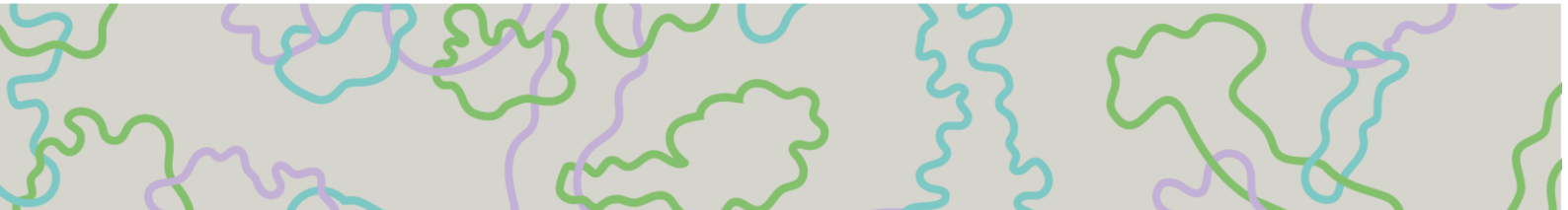
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Urban coastal ecosystems constitute vital interfaces between people and the sea, delivering ecological, recreational, and cultural benefits. Yet, prevailing governance often overlooks the emotional, symbolic, and cultural values that communities attach to these spaces, instead privileging economic and ecological metrics over relational dimensions.



To address this gap, this study explores the perceptions and emotional connections of citizens toward the urban coastline of Almería city, Spain, with the aim of informing more inclusive marine governance and coastal management.

Drawing on participatory methods, the research employs an online survey with narrative exercises, images, and interactive mapping. This methodological approach captures diverse forms of knowledge, including personal stories, photographs, and spatially explicit symbolic locations. The findings reveal a plurality of values toward urban marine landscapes, perceived direct and indirect nature contributions to people, a wide range of emotional bonds through which citizens relate to the urban coastline, understood as a living ecological and a cultural heritage.

By integrating local and experiential knowledge, this study demonstrates how co-produced, culturally grounded insights can contribute to more just and inclusive approaches to marine governance in urban settings.

Our findings further suggest that recognizing emotional and symbolic connections strengthens human–sea relationships in urban contexts, enhances community engagement and environmental stewardship, and challenges governance approaches that neglect relational values in urban areas. Collectively, this approach offers practical leverage points for rethinking participatory planning and policy-making in urban marine governance.

Keywords: cultural values, plural knowledge, human-sea connectedness, urban marine ecosystem, coastal governance