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: X6

Islands at the forefront of sustainable and inclusive ecosystem services approaches

Hosts:

	Name	Organisation	E-mail
Host (s):	Roxanne Suzette Lorilla	Harokopio University of Athens	rslorilla@hua.gr
Co-host(s):	Evangelia (Valia) G. Drakou	Geography Department, Harokopio University of Athens	e.drakou@hua.gr
	Robert Fish	Faculty of Natural Sciences, Imperial College London	r.fish@imperial.ac.uk

Abstract:

Small and medium islands (SMIs) are social-ecological spaces known for their rich natural and cultural heritage, contributing in a multitude of ways to human well-being. Islands provide multiple ecosystem services (ES) from biodiversity support and marine resources to cultural heritage and recreation, all of which are essential to supporting island societies. Yet, they face distinct challenges such as biophysical vulnerability to climate extremes, coastal erosion, and resource limitations, as well as socio-economic vulnerabilities due to their dependency on external flows and shifting political and development priorities. In parallel, islands are often absent from global and national assessments, risking that their importance is overlooked and their specificities left out of policy agendas. This raises concerns about the horizontal implementation of policy agendas such as the European Green Deal and the Nature Restoration Regulation, which may fail to capture the realities of islands or may lead to outcomes different from those in mainland ecosystems. Furthermore, the plurality of values and knowledge systems within island spaces is often overlooked in ES assessments, potentially weakening efforts to strategically design and implement transformative changes.

These challenges underline the need for tailored ES approaches that acknowledge, among others, scale issues, isolation, resource constraints, and the diversity of cultural and ecological values. Tailored island ES assessments can help ensure that restoration targets, sustainability pathways, and policy instruments are both effective and equitable. These concerns resonate strongly with global island contexts, such as Small Island Developing States (SIDS) or overseas territories, where similar vulnerabilities and governance challenges highlight the need for adaptive and local-specific ES approaches. Therefore, lessons learned from SMIs can provide transferable insights to SIDS, and vice versa, enriching both scientific understanding and policy relevance.

In this session, we aim to advance the framing of ES in island contexts, emphasizing how plural values and multiple knowledge systems can support inclusive governance, sustainable livelihoods, and nature-positive

transformations. The session builds on the collaborative momentum of initiatives such as the SMILES COST Action, while also reaching out to broader networks and communities engaged with island ES in Europe and beyond.

We welcome contributions that:

- Present case studies of ES assessment and management in island contexts (marine, coastal, terrestrial, or mixed systems)
- Explore how ES on islands are conceptualized, framed, and communicated in decision-making
- Understanding and addressing the challenges of capturing the plural values of islands
- Examine trade-offs and synergies between biodiversity, ES, and sustainable development in islands
- Share methodological and data innovations for ES assessments tailored to islands
- Cultural ES assessments on islands,
- Investigate temporal dynamics, interregional ES flows, and tele-coupling effects that shape islands' resilience
- Uptake of Nature-based Solutions to improved biodiversity and ES,
- Highlight participatory and inclusive approaches that center island communities, local knowledge, and environmental justice
- Temporal evolution of island ES

Goals and objectives of the session:

The session aims to 1) exchange diverse knowledge, experiences, and approaches on ES in small and medium islands, 2) to advance the conceptual framing of ES for island contexts and discuss their role in policy and governance processes, 3) to explore how inclusive and participatory practices can strengthen the involvement of islanders in ES assessments and decision-making, and 4) to foster networking and collaboration among researchers, practitioners, and island stakeholders beyond existing networks.

Planned output / Deliverables:

To create a collection of island ES case studies for a Journal Special Issue, to explore the potential creation of a new ESP working group on island ES, and to produce actionable recommendations on tailored approaches for island ES to inform both European and global island policy dialogues.

Session format:

Ideally we would like to host a hybrid session with a first part of standard presentations (standard format) and a second part in which facilitated group discussions will take place.

Related to ESP Working Group:

Other

II. SESSION PROGRAM

Room: B2
Date of session: Wednesday 20, May 2026
Time of session: 15:00 – 16:30

Timetable speakers:

Time	First name	Surname	Organization	Title of presentation
15:00-15:05	Session hosts			Introduction to the session
15:05-15:15	Roxanne Suzette	Lorilla	Luxembourg Centre for Socio-Environmental Systems, University of Luxembourg	Putting island ecosystem services on the map: A knowledge co-production framework

15:15-15:30	Ioannis	Vogiatzakis	University of Bari Aldo Moro, Italy	Island Natural Capital: at the interface of land and sea
15:30-15:45	Aristides	Moustakas	University of Crete, Greece	The land use-climate change-biodiversity nexus in the perceptions of European islands stakeholders
15:45-16:00	Senka	Ždero	Faculty of Agriculture, Department of Water Management, University of Novi Sad, Serbia	Structuring stakeholder engagement for improved nature-positive transformations on small and medium-sized islands
16:00-16:15	Anastasia	Mirli	Democritus University of Thrace, Greece	Small-sized Island Wetlands in Greece: First Systematic Mapping and Climate-Related Ecosystem Services Impacts
16:15-16:30	Salwa	Aabid	UMR Espace-Dev, University of La Réunion	Four centuries of ecosystem cover change in the (post-)colonial island of La Réunion

Coffee break: **16:30 – 16:45**

Time of session: **16:45 – 18:15**

Timetable speakers:

Time	First name	Surname	Organization	Title of presentation
16:45-17:00	Ina M.	Sieber	Kassel Institute for Sustainability, University of Kassel, Germany	Understanding the multifunctionality of landscapes and ecosystem services in the Indian Ocean – The case study of Réunion Island
17:00-17:15	Sertac	Kaya	Duzce University, Türkiye	Assessing the impacts of marble quarrying on carbon storage and habitat quality in a small island ecosystem: An InVEST-based case study from Marmara Island (Türkiye)
17:15-17:30	Konstantina	Apostolopoulou	Department of Geography, Harokopio University of Athens, Greece	Integrating Seascape–Landscape Configuration Metrics into Coastal Protection modelling on Greek Islandscapes
17:30-17:45	Mario	Balzan	Malta College of Arts, Science and Technology, Malta	Addressing knowledge and implementation gaps in pollinator ecosystem services on small islands: insights from Malta
17:45-18:00	Georgios	Lampropoulos	Institute for Mediterranean Studies, Foundation for Research and Technology Hellas, Greece; Department of Geography, Harokopio University of Athens, Greece;	Assessing cultural ecosystem services in islandscapes through local landscape features and human–landscape interactions: a spatially explicit framework from Western Crete, Greece
18:00-18:15	All			Discussion session

III. LIST OF ABSTRACTS

The first author is the presenting author unless indicated otherwise

1. Putting island ecosystem services on the map: A knowledge co-production framework

***First author*:** Roxanne Suzette Lorilla
***Other author(s)*:** Evangelia Drakou, Robert Fish
***Affiliation*:** Harokopio University of Athens
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Islands are unique social-ecological systems that face distinct challenges in the provision, management, and assessment of ecosystem services (ES). Their geographic isolation, limited land area, high endemism, and seasonal socio-economic dynamics often go unaddressed in mainstream ES frameworks. This work develops a knowledge co-production framework tailored to island contexts, with a focus on European small and medium-sized islands. We conduct a comparative SWOT analysis of four global and European ES frameworks - MEA, TEEB, CICES, and IPBES - to evaluate their capacity to capture island-specific characteristics such as boundedness, smallness, isolation, littorality, resource constraints, and seasonal population fluxes. This is complemented by a gap analysis drawing on national ES assessments and case studies from several European islands. Based on this process, we identify key thematic areas where existing frameworks fall short, particularly in addressing temporal dynamics, socio-cultural values, and governance complexity. We propose an island-specific conceptual framework that integrates islandness features, socio-ecological interactions, and external drivers of change, while positioning institutions as mediators between ecosystems and human well-being. The framework offers a foundation for more inclusive, place-based ES assessments and supports the development of indicators and policies that reflect the realities of insular environments. This approach aims to inform both academic research and decision-making processes, contributing to the long-term sustainability and resilience of island communities.

Keywords: Island ecosystem services, social-ecological systems, conceptual frameworks, Island sustainability

2. Island Natural Capital: at the interface of land and sea

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Over the past two decades, the concept of natural capital (NC) has become central to environmental and sustainability science, reflecting growing recognition of nature's role in supporting human well-being. Natural capital assessments on islands remain significantly underrepresented. In addition, existing island-focused studies concentrate on terrestrial aspects, often neglecting vital marine systems that support island ecosystems and communities. This study presents a proof-of-concept framework for integrated natural capital (NC) accounting on islands, explicitly incorporating both terrestrial and marine realms. The analysis focuses on natural capital stocks rather than ecosystem service flows and uses harmonised, pan-European datasets to ensure comparability across islands and regions. Natural capital was represented by a parsimonious set of biophysical variables capturing habitat heterogeneity, biodiversity richness, and secured (protected) natural assets. Only harmonised European datasets were used; national or local datasets were deliberately excluded to minimise geographic bias. The analysed dataset comprises 70 islands, spanning more than four orders of magnitude in terrestrial area and approximately three orders of magnitude in isolation, defined as distance to the nearest mainland or large landmass.
A terrestrial and a marine natural capital index was calculated for every island in addition to two complementary metrics to explore the relative contribution of terrestrial and marine natural capital at the island scale. Terrestrial natural capital increases systematically with island size. In contrast, marine natural capital shows a much weaker dependence on the size of the marine assessment area. While isolation influences the absolute magnitude of both terrestrial and marine natural capital, it does not systematically

determine whether an island is dominated by land-based or sea-based natural capital. Marine natural capital is often as important as, and frequently more important than, terrestrial natural capital.

Keywords: biodiversity, Europe, habitats, indices, protected areas

3. The land use-climate change-biodiversity nexus in the perceptions of European islands stakeholders

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To promote climate adaptation and mitigation strategies, it is crucial to understand the perspectives and knowledge gaps of stakeholders involved in functions affected by or addressing land use and climate changes. A large number of stakeholders across 21 European islands were consulted regarding their views on climate change and land use change issues affecting ecosystem services on their island. Climate change characteristics perceptions included variables such as temperature, precipitation, humidity, extremes, and wind. Land use change characteristics perceptions included deforestation, coastal degradation, habitat protection, renewable energy facilities, wetlands and other variables. Other environmental and societal problem perceptions such as invasive species, water or energy scarcity, problems in infrastructures or austerity were also included. Climate and land use change impact perceptions were analysed with machine learning to quantify their importance on the perception outcome. For example if a stakeholder perceives that pollution, coastal degradation, deforestation, precipitation decrease, and increase of humidity are occurring on the island, and austerity is the biggest problem how likely is that the impact of climate change or land use change will be quantified by the stakeholder as negative, unclear, neutral, or positive? The predominant climatic change characteristic is related with temperature, and the predominant land use change characteristic with deforestation. Water-related problems are top priorities for stakeholders. Energy-related problems, such as energy deficiency but also wind and solar energy facilities problems, rank high as combined climate change and land use change risks. Stakeholders generally perceive climate change impacts on ecosystem services as negative, with natural habitat destruction and biodiversity loss identified as the top variables. Land use change impacts are also negative but also more complex to explain, with a higher number of explanatory variables associated with the impact outcome. Stakeholders have common perceptions regarding climate change and land use change impacts on the benefits of biodiversity despite the geographic disparity. Stakeholders differentiate between factors related to climate change impacts and land use change impacts. Water, energy, and renewable energy related issues pose serious concerns to island stakeholders and management measures are needed to address them.

Keywords: Impact assessmentClimate changeLand use changeIslandsEcosystem servicesMachine learning

4. Structuring stakeholder engagement for improved nature-positive transformations on small and medium-sized islands

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Small and medium-sized islands (SMIs) are often characterized by largely pristine natural environments and function as tightly coupled social-ecological systems. In these contexts, concepts such as ecosystem services (ES) and Nature-based Solutions (NbS) highlight the critical role of biodiversity in sustaining local livelihoods, human well-being, and long-term resilience.
However, the distinctiveness of SMIs, including context-specific governance arrangements, strong socio-economic reliance on natural capital, and heightened environmental vulnerability, poses challenges for conventional assessment frameworks. This framework often fails to capture SMI dynamics, in part due to the unequal distribution of financial, institutional, and technical resources within broader state systems,

which limits the practical evaluation and implementation of ES- and NbS-based approaches.
This study responds to this gap by adapting stakeholder engagement frameworks to SMI contexts, with a strong emphasis on participatory approaches that recognize diverse interests, power relations, and knowledge hierarchies, thereby enabling nature-positive transformations. A comprehensive review of potential stakeholders was conducted, building on insights from the SMILES COST Action (21158). On this basis, an existing stakeholder typology was refined to reflect better SMI governance structures, socio-economic features, and environmental conditions, thereby strengthening participatory assessments of ES and NbS. The study also critically examines the benefits and limitations of integrating scientific expertise with local and practitioner knowledge in island contexts.
The main results of this research are the development of a stakeholder typology matrix, grounded in best practices for managing stakeholder interests, influence, and levels of concern. The refined framework distinguishes four core stakeholder groups: academia and research institutions; public authorities and policymakers; non-governmental and civil society organizations; and practitioners and technical experts. The proposed matrix provides clear, practical guidance for systematically selecting and balancing stakeholders in participatory processes. Overall, the study offers a robust, transferable stakeholder framework that strengthens participatory evaluations, including Delphi-based approaches, for SMI communities worldwide.

Keywords: stakeholder engagement, island governance, participatory assessment, ecosystem services, nature-based solutions

5. Small-sized Island Wetlands in Greece: First Systematic Mapping and Climate-Related Ecosystem Services Impacts

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Small-sized wetlands on Mediterranean islands remain widely undocumented, despite their critical importance in delivering ecosystem services under climate and anthropogenic pressures. This study aims to provide the first systematic mapping and categorization of Aegean (Greece) small-sized islands' wetlands (<8 ha), addressing a knowledge gap in their spatial documentation and to evaluate the implications of their lack of protection for climate-related ecosystem services. Using remote sensing techniques 359 wetlands were identified and classified into seven types. Notably, 188 wetlands were recorded for the first time, highlighting the need for further research in Greek. The study's results revealed noticeable spatial shifts of wetlands and their buffer zones over a 15-year period: 6.5% decrease in area extent of coastal marshes, 19.8% increase of reservoirs, and <2% changes in other types. Mining ponds have emerged as a newly recognized wetland type. These underline the diverse and often opposing outcomes of human intervention and land-use change, requiring tailored conservation measures. The loss of coastal marshes had the most significant impacts on climate-related ecosystem services. Specifically, the reduction in marsh area is linked to an estimated loss of carbon sequestration capacity between 4.2 and 7 tons CO_2 per year, depending on the wetland's trophic status. Moreover, this loss has increased flood risk by 4.7%, further enhancing vulnerability in islands. Given the established relation between wetland loss, trophic degradation, and carbon dynamics, there is an urgent need for future research on the trophic and ecological status of the recorded wetlands. In conclusion, our findings provide a new knowledge base to support the prioritization of small-sized wetlands for restoration and preservation and to tailor management in vulnerable areas such as the Mediterranean islands. Their documentation is not only a conservation imperative but also a strategic action for sustaining climate resilience and ecosystem service provision under environmental change.

Keywords: coastal marshes, carbon sequestration, flood, habitat loss, trophic status

6. Four centuries of ecosystem cover change in the (post-)colonial island of La Réunion

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Réunion Island is an illustrative insular case for documenting the long-term coupling between ecosystems and societies. Its socio-environmental history, shaped by plantation agriculture, slavery and indenture, has structured land use and territorial organisation while maintaining persistent inequalities in access to land, resources and benefits. To examine how the value of selected ecosystem services has evolved over time, we reconstructed four centuries of ecosystem cover changes using georeferenced historical maps, mid-twentieth-century aerial photographs and satellite imagery. These trajectories reveal shifts in ecosystem service value associated with major commodity cycles such as coffee, geranium and sugarcane, as well as with critical moments of disruption, including the two world wars. They also reflect the structurally shallow nature of Réunion's economy, long dependent on external material inflows and on successive forms of global transport connectivity. Since its integration into the European Union as an outermost region, Réunion has been embedded in European policy frameworks that reshape the ways ecosystems are valued, recognised and managed. Interpreted through Evolutionary Governance Theory (EGT), the evolution of value reflects evolving actor coalitions, discourses, legal arrangements and material infrastructures, situated within historical path-dependencies. Overall, our results show that ecosystem services are not merely neutral economic attributes of ecosystems, but also social and political constructs that become visible through land-use changes. They further suggest that the ecosystem services concept, rooted in liberal economic thinking, captures only part of these complex histories and should therefore be applied critically in decision-making, particularly where post-colonial trajectories continue to influence distributive outcomes.

***Keywords*:** environmental history; evolutionary governance theory; social inequity; land use change; island

7. Understanding the multifunctionality of landscapes and ecosystem services in the Indian Ocean – The case study of Réunion Island

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The multifunctionality of landscapes and the ecosystem services (ES) they provide are central to sustainable land-use planning and biodiversity conservation, yet remain under-assessed in many overseas regions of the European Union. This study presents the first comprehensive mapping and assessment of habitat-level ecosystem service capacities on Réunion Island, a French Outermost Region in the Indian Ocean, addressing critical knowledge gaps in the application of the Mapping and Assessment of Ecosystems and their Services (MAES) framework in remote insular contexts.
Using an expert-based capacity matrix approach adapted to the regional context, fifteen habitat types and twenty ecosystem services spanning provisioning, regulating, and cultural categories were evaluated. Thirty local experts participated in workshops in Saint-Denis in 2023 to assign capacity scores (0–5) for each habitat–service combination, supplemented by confidence indices. Habitat types included natural forests, savannas, littoral and aquatic systems, agroforestry, cultivated lands, and urban-related classes derived from high-resolution land cover data.
Results reveal that natural and semi-natural habitats, particularly indigenous and mixed forests as well as savannas, exhibit the highest capacities to supply a broad suite of ES, including carbon sequestration, habitat provision, and cultural services such as aesthetics and recreation. Agroforestry and agricultural habitats also contribute significantly to provisioning services. In contrast, urban and peri-urban areas demonstrate overall low and fragile ES capacities. Spatial maps and ecosystem services bundles illustrate clear contrasts in multifunctionality across the landscape, highlighting synergies and trade-offs among services.

This participatory mapping effort not only fills a critical assessment gap for Réunion Island, but also reinforces the utility of expert-based methods for ES assessment in data-limited settings. The outputs provide actionable insights for regional land-use planning, biodiversity conservation, and policy integration, supporting a balanced approach to ecological preservation and sustainable development.

Keywords: islandscapes, participatory assessment, human-environment interactions

8. Assessing the impacts of marble quarrying on carbon storage and habitat quality in a small island ecosystem: An InVEST-based case study from Marmara Island (Türkiye)

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Small and medium islands (SMIs) are particularly vulnerable to land-use pressures due to their limited space, ecological isolation, and high dependency on local natural capital. Marmara Island (Türkiye), one of the most prominent marble production areas in the Mediterranean, has experienced intensive quarrying activities for decades, leading to significant loss and fragmentation of natural vegetation. Despite these pressures, island ecosystems such as Marmara Island remain largely underrepresented in ecosystem service (ES) assessments and policy-oriented evaluations.
This study applies the InVEST modelling framework to assess spatial and temporal changes in carbon storage and habitat quality on Marmara Island under increasing quarrying pressure. Land use/land cover data derived from multi-temporal satellite imagery were combined with quarry distribution, infrastructure, and anthropogenic threat layers to quantify ES dynamics from the 1990s to the present. In addition, nature-based restoration scenarios were developed to explore potential pathways for recovering ES in post-mining landscapes.
Results indicate a substantial decline in both carbon storage capacity and habitat quality, particularly in areas surrounding active and abandoned quarries, revealing clear trade-offs between extractive economic activities and ecosystem service provision. Scenario analyses suggest that targeted restoration and revegetation strategies could partially recover ES while supporting island-specific sustainability goals.
By highlighting the ES consequences of extractive land use in a small island context, this study contributes to the growing need for tailored ES assessments for islands and provides actionable insights for nature-positive transformation and policy implementation, including the European Green Deal and Nature Restoration Regulation.

Keywords: Ecosystem Services, Carbon Storage, Habitat Quality, Marmara Island

9. Integrating Seascape–Landscape Configuration Metrics into Coastal Protection modelling on Greek Islandscapes

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Greek islands face high coastal exposure while supporting dense coastal settlements, tourism infrastructure, and cultural assets. Coastal habitats such as dunes, wetlands and seagrass meadows act as a natural defense against coastal flooding and erosion through wave attenuation, storm surge reduction and sediment stabilization. Yet the spatial configuration of these habitats is rarely taken into account, with most coastal protection models focusing only on their presence in the seascape–landscape. Here we present a workflow that embeds habitat connectivity and fragmentation metrics into an established coastal protection model to better capture where coastal habitats provide effective protection. Habitat distribution data are combined with biophysical and socio-economic variables describing (i) protection capacity (e.g., geomorphology, slope, sediment accretion, seabed and emerged habitats), (ii) exposure (e.g., wave climate, storm surge, sea-level change, winds and currents), and (iii) societal demand (e.g., population density, infrastructure and cultural assets). Configuration is quantified using spatial pattern metrics

derived from FRAGSTATS to capture patch density, shape, aggregation, and fragmentation of the habitats. Configuration effects are most apparent for seagrass habitats dominated by Posidonia oceanica and Cymodocea nodosa; island coastlines characterized by dense, aggregated, and well-connected seagrass seascapes are associated with higher modelled capacity, whereas fragmented or sparse patterns correspond to reduced capacity even where habitat presence is recorded. Terrestrial coastal habitats further modulate capacity locally, particularly where dunes and wetlands occur adjacent to high-exposure shorelines. The approach supports island-focused marine spatial planning and nature-based solutions by accounting for both habitat extent and seascape–landscape structure.

Keywords: islands, coastal protection, Posidonia oceanica, connectivity, fragmentation

10. Addressing knowledge and implementation gaps in pollinator ecosystem services on small islands: insights from Malta

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In the European Union, policy frameworks, such as the EU Pollinators Initiative and associated national pollinator strategies, and the EU Nature Restoration Regulation place growing expectations on Member States to develop baselines, monitoring systems, and coordinated measures to halt pollinator declines. However, these frameworks give limited explicit consideration to the structural constraints faced by small islands, where high spatial fragmentation within limited geographical extents, constrained institutional capacity, and reliance on a small number of actors, often operating through external projects, amplify the effects of fragmented evidence bases and coordination challenges.
This presentation examines research, knowledge, and governance gaps in pollinator-related ecosystem services, and assesses how these can be addressed through a national strategy that i) improves knowledge of pollinator decline, ii) promotes collective action through a whole-of-government and whole-of-society approach, and iii) supports an increasing trend for pollinator populations. The analysis is guided by two research questions:
a) To what extent does the existing grey and published literature on pollinators in Malta provide an adequate evidence base to support ecosystem service baselines, monitoring, and policy objectives that are aligned with the EU Pollinators Initiative? Using thematic analyses and modelling, pronounced taxonomic and thematic biases are identified, including a strong focus on selected pollinator groups but limited attention to ecosystem service delivery, monitoring frameworks, and policy-relevant indicators.
b) How can participatory stakeholder engagement help identify governance and coordination gaps and inform actionable pathways for implementing pollinator-related ecosystem service objectives? A participatory stakeholder engagement process was conducted, involving representatives from public authorities, research institutions, non-governmental organisations, and practitioners. Key governance and coordination gaps, including fragmented monitoring efforts, limited cross-sectoral integration, and unclear responsibilities for implementation, are identified.
The effective implementation of regional nature policies on small islands requires both acknowledging constraints and actively leveraging island-specific social and institutional strengths.

Keywords: Co-Creation, Evidence-Policy Interface, Pollinator Conservation, Systematic Literature Review, Topic Modelling

11. Assessing cultural ecosystem services in islandscapes through local landscape features and human–landscape interactions: a spatially explicit framework from Western Crete, Greece

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Cultural ecosystem services (CES) are fundamental to human well-being, yet their assessment remains challenging due to their intangible, place-based, and perceptual nature, especially in islands, geographies with unique landscape character. This study presents a spatially explicit framework for CES assessment that operationalizes cultural values through structured expert evaluation of human–landscape interactions within an island context. The approach is based on the identification of Local Landscape Features (LLFs) and their assessment according to Contact Types (CTs), representing distinct ways in which people engage with landscapes and derive cultural, social, and psychological benefits in islands.
An expert-based assessment is being implemented in the Falasarna land-seascape of Western Crete, Greece. LLFs are systematically identified and evaluated using a structured scoring matrix, in which experts assign numerical relevance scores (on a five-point scale) to each LLF–CT combination. CTs are grouped into three CES-related categories: restorative, socio-economic, and cognitive, capturing psychological restoration, social interactions and livelihood-related activities, and learning or reflection. Assessment scores are aggregated to derive CES indicators, which are subsequently mapped to produce spatial representations of CES and to examine their association with land-seascape character types.
The proposed framework enables the exploration of spatial differentiation in CES provision across coastal, agricultural, natural, and cultural landscape units. Preliminary results indicate emerging patterns of differentiation between land–seascape character areas, with coastal and nearshore features showing stronger associations with restorative and socio-economic CES, while inland agricultural and cultural features tend to be more strongly linked to cognitive dimensions. By linking structured expert knowledge with spatial analysis, the approach facilitates the integration of cultural values into landscape assessment processes and land-use planning contexts.

***Keywords*:** cultural ecosystem services, human–landscape interactions, landscape character assessment, expert-based assessment, GIS