

2nd - 6th June. Pontevedra, Galicia, Spain







III SIBECOL & XVII AEET Meeting 2025

2nd - 6th June 2025 Pazo da Cultura, Pontevedra, Galicia (Spain)

Edited by: Asociación Española de Ecología Terrestre (AEET) C/ Tulipán s/n, 28399, Móstoles, Madrid, Spain © Asociación Española de Ecología Terrestre 20th May of 2025

Layout: Leyre Jiménez-Eguizábal

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# **WELCOME**

We welcome all participants to the III SIBECOL & XVII AEET Meeting, which will take place from June 2nd to 6th, 2025, at the Pazo da Cultura in Pontevedra, Galicia, Spain.

The III meeting of the Iberian Ecological Society (SIBECOL) is held jointly with the XVII National Conference of the Spanish Association of Terrestrial Ecology (AEET). This event is highly anticipated by both associations, expecting participation from over 850 people. Many of these attendees are early-career researchers who will have the opportunity to present their work, network with peers, and establish professional connections that will be valuable for their scientific careers.

The conference will take place in Pontevedra from June 2nd to 6th, 2025. Pontevedra is a city known for its commitment to urban pedestrianization and has received various awards for its sustainable mobility policies. Leveraging the unique location, the conference has adopted a theme that encourages reflection on our profession and the tasks ahead to improve our daily practices: "Another science is possible: diversity, degrowth, and sustainability in ecological research". This theme underscores the importance of fostering a diverse scientific community and adopting sustainable practices within ecological research. It invites participants to explore how ecological science can evolve by embracing principles of diversity and sustainability. The conference aims to inspire discussions and collaborations that will drive positive change in the field of ecology, promoting a more inclusive and sustainable future for scientific research.

# **Promoting societies**

The Iberian Society of Ecology groups together professionals who are dedicated to the study of all areas of the science of Ecology (theoretical, terrestrial, marine, continental waters and border ecosystems). Established in July 2018, SIBECOL also includes the members of the Iberian Association of Limnology (AIL), the Spanish Association of Terrestrial Ecology (AEET), the Portuguese Society of Ecology (SPECO) and the Spanish Society of Ethology and Evolutionary Ecology (SEEEE), as well as professionals in marine ecology.













The Spanish Association of Terrestrial Ecology (AEET) is a society founded in 1989, at the dawn of scientific production in ecology in Spain. Its field of work is ecology *sensu lato*. Although the association originally focused on terrestrial ecosystems, it currently brings together scientists from different areas of ecology and environmental study into a society with a significant critical mass that covers research of broad geographical scope and great thematic diversity. It counts with more than 1,000 members, including researchers, teachers, students, technicians, ecology professionals, and natural space managers. Our ranks include 4 *Alejandro Malaspina* National Research Awards, 7 *Rei Jaume I* Environmental Protection Awards, 3 Ramon Margalef Ecology Awards, and a BBVA Foundation Award for biodiversity conservation.





# **COMMITTEES**

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Co-chairs: Alexandra Rodríguez, Misión Biolóxica de Galicia (MBG-CSIC) & Sara Varela González, Universidade de Vigo (UVigo) / AEET board.

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- Luis Sampedro, Misión Biolóxica de Galicia (MBG-CSIC).
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#### **Technical Secretariat:**

- Leyre Jiménez-Eguizábal, Asociación Española de Ecología Terrestre (AEET) [info.sibecol-aeet-meeting2025@aeet.org]
- Maribel Reviriego, Asociación Española de Ecología Terrestre (AEET/ SIBECOL) [registration.sibecol-aeet-meeting2025@aeet.org]

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- Jordi Voltas, Universitat de Lleida (UDL)





# **III SIBECOL & XVII AEET Meeting at a glance**

MONDAY 2nd June 2025										
	Auditorio	Salón de actos	Balconada	Cova dos libros	Restaurante	Seminario 1	Seminario 2	Seminario 3	Seminario 7	Seminario 6
10:00-12:00		Workshop 4		Workshop 5	Workshop 9	Workshop 1	Workshop 6	Workshop 7	Workshop 8	
12:00-14:00	Workshop 10	Workshop 4		Workshop 5	Workshop 5	Workshop i	Workshop 6	Workshop /	WOLKSHOP 6	Workshop 3
14:00-15:00				ECRs S	Scientific Speed	Dating				
15:30-16:30	OPENING CEREMONY									
16:30-16:40	SURPRISE TALK 1*									
16:40-17:50	Plenary talks: Elena Ojea & Mario Pansera									
					BREAK					
18:00-19:30	TSD-4	TSB-6	TSC-3	TSB-8	TSB-5	TSA-2	TSE-12	TSB-1	TSE-1	TSC-4
	BREAK									
19:40-20:20	Plenary talk: Carlos M. Herrera									
20:20-22:00				WE	LCOME COCKTA	AIL				

	TUESDAY 3rd June 2025									
	Auditorio	Salón de actos	Balconada	Cova dos libros	Restaurante	Seminario 1	Seminario 2	Seminario 3	Seminario 7	Seminario 6
9:00-9:10	SURPRISE TALK 2*									
9:10-10:20	Plenary talks: Carlos Pérez Carmo	na & Andrea Sán	chez Messegue	r						
10:20-11:00					COFFE BREAK					
11:00-12:30	GSE	GSB	GSF	GSD	GSC	TSA-2	TSE-12	TSB-1	TSE-1	TSD-4
					BREAK					
12:45-14:15	GSE	GSB	TSE-1	GSA	TSF-2	TSB-11	TSB-10	TSB-1	TSD-2	TSC-5
14:15-15:30					LUNCH					
15:30-16:30	AEET GENERAL ASSEMBLY									
16:30-16:40	SURPRISE TALK3*									
16:40-17:50	Plenary talks: Silvia Matesanz & Sara Palacio									
18:00-19:30				DISCUS	SION POSTER C	ORNER				

	WEDNESDAY 4th June 2025										
	Auditorio	Salón de actos	Balconada	Cova dos libros	Restaurante	Seminario 1	Seminario 2	Seminario 3	Seminario 7	Seminario 6	
9:00-9:10	SURPRISE TALK 4*	SURPRISE TALK 4*									
9:10-10:20	Plenary talks: Beatriz Mouriño & R	afael Marcé									
10:20-11:00					COFFE BREAK						
11:00-12:30	GSE	GSB	GSF	GSD	GSC	TSB-4	TSF-1	TSB-9	TSE-8	TSE-2	
					BREAK						
12:45-14:15	GSE	GSB	TSB-2	GSA	TSB-3	TSB-4	TSD-1	TSB-9	TSB-15	TSE-9	
14:15-15:30					LUNCH						
15:30-16:30	SIBECOL GENERAL ASSEMBLY										
16:30-16:40	SURPRISE TALK5*										
16:40-17:50	Plenary talks: Silvia Castro & Bernardo Quintella										
18:00-19:30				DISCUS	SION POSTER C	ORNER					

	THURSDAY 5th June 2025									
	Auditorio	Salón de actos	Balconada	Cova dos libros	Restaurante	Seminario 1	Seminario 2	Seminario 3	Seminario 7	Seminario 6
9:00-9:10	SURPRISE TALK 6*									
9:10-10:20	Plenary talks: Cristina Richards &	Iván Gómez Mest	re							
10:20-11:00					COFFE BREAK					
11:00-12:30	GSE	GSB	TSE-4	GSA	GSC	TSD-3	TSE-7	TSF-3	TSB-12	TSE-10
					BREAK					
12:45-14:15	GSE	GSB	TSE-4	TSA-1	TSC-1	TSD-3	TSE-7	TSF-4	TSB-7	TSE-5
14:15-15:30					LUNCH					
15:30-17:00	TSE-11	TSB-13	TSE-3	TSA-1	TSC-2	TSB-7	TSE-6	TSB-16	TSB-14	TSC-1
17:00-18:30				DISCUS	SION POSTER C	ORNER				
		BREAK								
18:45-19:30	CLOSING CEREMONY									
19:30-21:00		FREE TIME								
21:00				GET T	OGETHER CLOS	SURE				

	FRIDAY 6th June 2025
9:00-18:00	TECHNICAL FIELD TRIPS

<sup>\*</sup>List of surprise talks, not in order, because they are SURPRISE. See page 13:)



Monday 2, 16:40-17:50, Room: Auditorio

#### Elena Ojea

Oportunius Research Professor at the Future Oceans Lab, CIM-University of Vigo (Spain).



Working on: Climate change adaptation, transformative responses, adaptive capacities, marine social-ecological systems

Her research is devoted to adaptive solutions for marine socio-ecological systems that enable sustainable resource management, social equity and care for marine livelihoods.

Advancing adaptation to climate change in marine social-ecological systems

Oceans are warming faster than terrestrial systems due to climate change, compromising marine life and dependent human livelihoods across the globe. We know that ecological impacts are closely intertwined with social ones due to the clomplex and interactive nature of social-ecological systems, such as fisheries or marine protected areas. However, little is know about how such systems can adapt to climate change impacts, confering resilience to the system and avoiding maladaptation outcomes. This presentation addresses how climate change is impacting key marine systems such as global fisheries, highlighting the equity and climate justice questions that arise when looking at the distribution of impact burden. Then it introduces a framework to test adaptation and transformation to climate change impacts that is tested in a series of case studies across regions. The aim is to illustrate the range of responses that individuals perform when confronting different impact levels, and what drives such responses. From coping responses that maintain the system status to adapting and transforming responses that change the structure and dynamics of the systems, we discuss the implications of response pathways. General patterns arise from the cross case study comparisons that allows to derive a general understanding of what drives adaptation and transformation changes in marine systems. Final remarks discuss how to better prepare marine systems to face climate change.

#### **Mario Pansera**

Oportunius Research Professor affiliated to the University of Vigo and affiliated Researcher at the Autonoma University of Barcelona (UAB).



Working on: Post-growth, Science and Technology Policy

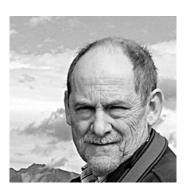
His work focuses on Responsible Research and Innovation (RRI) and Innovation for degrowth/postgrowth.

What stands between us and a postgrowth science and technology era?

In an era defined by ecological collapse, deepening inequalities, and persistent techno-optimism, the idea

of infinite economic growth has become increasingly untenable. In his keynote, What Stands Between Us and a Post-Growth Science and Technology Era?, Mario Pansera challenges the mainstream belief that science is neutral and technological innovation alone can solve our most pressing global problems. Drawing on his research in post-growth innovation and responsible research practices, Pansera argues that science is deeply embedded in political and economic structures that prioritize growth over sustainability and equity. He critiques the dominant narrative that positions technological fixes as panaceas for crises like climate change, insisting instead that these crises are rooted in social and political dynamics. Thus, any meaningful response must also be social and political. Pansera calls for a radical rethinking of how we do science and for whom, advocating for a post-growth approach that embraces democratic, inclusive, and context-sensitive forms of knowledge production. Only by questioning the values and power structures that shape science and technology can we begin to imagine—and build—a more just and sustainable future.

Monday 2, 19:40-20:20. Room: Auditorio



### Carlos M. Herrera

Emeritus Professor of Research at the Doñana Biological Station (EBD-CSIC).

Working on: Plant-animal interactions

Initially trained as an ornithologist, his scientific work has focused on most facets of the evolutionary ecology of plant-animal interactions, including plant-frugivore, plant-pollinator and plant-herbivore systems, as well as the tritrophic plant-pollinator-fungus system.

#### Subindividual variation, epigenetics and the melting of individuality in plants

Elucidating the causes and mechanisms involved in natural variation has historically provided a guiding thread in ecological science, and ecology has diversified into subdisciplines associated with the different, nested spatial scales at which variation occurs. The scale of variation least frequently investigated is the one which takes place within individual

plants (= "subindividual variation"). Plant construction is based on the reiteration of homologous structures (e.g., leaves, flowers) which are not identical. Organ trait variance within plants often exceeds variance among individuals and subindividual variation has manifold ecological implications in terms of use of limiting resources (water, light, nitrogen), tolerance to environmental fluctuations, interactions with animals (pollinators, herbivores), and breadth of individual niches. While considerable information has accumulated on the extent and correlates of subindividual variation, a sufficiently general conceptual and mechanistic framework has been not yet agreed upon. The recent epigenetic mosaicism hypothesis postulates that the concerted action of transient, metastable and stable epigenetic differences among modules of the same plant can ultimately account for all forms of subindividual variation in plants. Epigenetics offers a mechanistic framework for transforming information on subindividual variation (recognition, description, measurement) into knowledge (mechanisms, hypotheses, predictions). The three major epigenetic explanatory layers, along with the respective mechanisms involved, will be introduced and illustrated with empirical examples. Particular emphasis will be placed on the ecological significance of random epimutations arising from the regular 'epigenetic clock' operating in plants. Taken together, epigenetic mosaicism creates dynamic, transient epigenetic individualities nested within genetic individuals.

Tuesday 3, 9:10-10:20. Room: Auditorio

#### **Carlos Pérez Carmona**

Professor of Functional Ecology, University of Tartu.



Working on: Trait-based ecology, macroecology and biodiversity

His research aims to uncover how traits shape community assembly and ecosystem processes across different environments, scales, and organisms. He achieves this by linking traits to species performance and examining macroecological patterns of functional diversity and how they are affected by global change drivers. His work integrates experimental, analytical, and global approaches, combining

field studies with the development of new methods to measure and interpret biodiversity.

# Towards a unified trait space: integrating above- and belowground plant functional diversity

A multitude of traits interact to determine how plants grow, reproduce, and survive in a given environment. Different adaptive solutions in this struggle for existence have resulted in extraordinary trait diversity among vascular plants. Indeed, even standardized trait-measurement protocols, which are far from exhaustive, already encompass dozens of distinct traits. Consequently, understanding precisely which traits and trait interactions are crucial for ecological dynamics and ecosystem functioning—and under what circumstances—is challenging. A powerful approach to address this complexity is to exploit strong patterns of trait-trait coordination and trade-offs, reducing the dimensionality of trait variation into fewer independent functional dimensions.

In this talk, I will present our recent efforts to combine above- and belowground plant traits into a single unified plant functional space. These analyses have shown that, at a global scale, plants' aboveground traits provide little information about their fine-root economic strategies; notably, similar aboveground strategies can coincide with vastly different fine-root characteristics, and vice versa. Interestingly, these analyses also demonstrate a robust global coupling between plant size above- and belowground, indicating strong consistency in resource allocation patterns across plant organs.

Establishing this unified trait space provides a common framework for comparing species and communities, enabling a deeper exploration of how global environmental changes affect ecosystem functioning. Ongoing developments in methodological approaches to quantify functional structure—the way species occupy the functional space—and international initiatives expanding global trait coverage promise significant advances in ecological understanding.

#### Andrea Sánchez-Messeguer

Researcher at the Real Jardín Botánico (RJB-CSIC).



Working on: Phylogeny, Diversification, Biogeography

Her recent research combines genomic tools and macroevolutionary models to reconstruct the evolution of lineages and biomes, with particular emphasis on the patterns driving biotic assemblage over long temporal and broad spatial scales. To this end, she combine probabilistic approaches, fossils and molecular tools to reconstruct the evolutionary history of organisms at macroevolutionary scales. She is also interested in the

fossil record and its integration with current evidence to provide more realistic scenarios of the past.

# Deep-time paleoclimate legacies on biodiversity: from biomes to genetic-level patterns

I Over the past ~100 million years, the Earth has undergone a long-term global cooling trend, punctuated by episodes of warming and abrupt temperature declines, that transformed the planet from a greenhouse to an icehouse state.

These ancient environmental changes profoundly influenced the evolutionary trajectories of life. This presentation explores how ancient long-term environmental changes shaped current biodiversity patterns across genetic, species, and spatial scales. Using a cross-taxonomic perspective, I investigate the evolutionary responses of tetrapods and plants to Cenozoic climate fluctuations, integrating phylogenies of thousands of species, fossil records, and cutting-edge macroevolutionary models. I will present three case studies in which I explore the role of climate in shaping: (1) the origin of Neotropical diversity; (2) the emergence of the Latitudinal Diversity Gradient; and (3) the spatial and temporal distribution of ancient whole-genome duplications through angiosperm history. Together, these studies reveal how deep-time climate dynamics have structured global biodiversity through a combination of ecological filtering, neutral processes, and intrinsic evolutionary mechanisms. I finally highlight how integrating phylogenetic, paleontological, and genomic data provides a richer understanding of the forces that have shaped—and continue to shape—life on Earth.



Tuesday 3, 16:40-17:50. Room: Auditorio

#### Silvia Matesanz

University Professor and Academic Secretary of the Global Change Research Institute (IICG), Rey Juan Carlos University (URJC).



Working on: Microevolution, climate change, phenotypic plasticity

Her research mainly focuses on the evolutionary ecology of plants, particularly on the micro-evolutionary processes that occur within populations and how phenotypic variation is shaped by genetic and environmental factors. She investigates the role of phenotypic plasticity and adaptive evolution in the responses of Mediterranean plants to climate change.

# Phenotypic plasticity and adaptive evolution in Mediterranean gypsum endemics: insights into climate change response

Climate change is a major threat to plant populations, especially in the Mediterranean. For gypsophiles—species restricted to gypsum soils—migration is a limited response due to specific edaphic needs, low dispersal, and fragmented distributions. Consequently, in situ processes like adaptive evolution and phenotypic plasticity are essential for their persistence. Future adaptive responses to climate change depend not only on historical evolutionary dynamics but also on the strength of selection and the evolutionary potential of functional traits and their plasticity. Our research investigates: i) the evolutionary potential of key functional traits and their plasticity; ii) whether past selection has shaped population phenotypes and plasticity patterns; and iii) the ability of gypsophiles to express adaptive transgenerational plasticity to drought. Using a quantitative genetics approach, our research shows that gypsophiles exhibit adaptive phenotypic plasticity to drought, sometimes aligned with selection patterns. High genetic variation for plasticity within populations supports their capacity to further evolve adaptive plasticity in response to climate change. This plasticity may have contributed to maintaining high genetic variation, enabling adaptation to contrasting climatic conditions. Populations of several Iberian gypsophiles display similar drought responses, likely shaped by natural selection in heterogeneous environments, and suggesting independent evolution of functional traits and their plasticity. Furthermore, gypsophiles express adaptive transgenerational plasticity to drought, though its extent varies among species. Our findings emphasize that, together, phenotypic plasticity and adaptive evolution (both past and future) play a key role in shaping population responses to changing conditions, particularly in stressful and spatially constrained habitats like gypsum outcrops.

#### Sara Palacio

Tenured scientist at the Instituto Pirenaico de Ecología, Spanish Research Council (IPE-CSIC).



Working on: Extreme environments, functional plant ecology, ecophysiology, evolution

Her research analyzes the mechanisms used by plants to adjust their form and function to the abiotic and biotic limitations of the environment where they live, and how these processes have forged plant evolution. These questions are fundamental to understanding the response of plant species to global change and its possible consequences on the functioning of ecosystems. In

her research, she uses a combination of botanical, ecological, ecophysiological, molecular and physiological tools to study processes at the whole plant level. In recent years, she has specialized in the mechanisms that plants have to survive in extreme environments. Her research ranges from mountain peaks to the driest deserts of the planet, with a special emphasis on gypsum soils.

# Plant life in extreme environments: how extreme environments can help advance ecological theory

I Extreme environments pose a significant challenge to the survival of most organisms. While the majority of living biomass is concentrated in relatively benign habitats, extreme environments account for a substantial proportion of the Earth's surface. Arid regions cover approximately one-third of the land coverage, and polar regions comprise around 20% of the oceanic expanse. Even within seemingly benign environments, microenvironments can create extreme local conditions (e.g., salt marshes, geothermal vents, cliffs, urban heat islands). Thus, planetary conditions are more extreme than commonly assumed. This situation is exacerbated by global change, as climate shifts and habitat destruction intensify the harshness of many regions. Today, extreme environments are more severe than ever before.

In this context, identifying the diversity that colonizes these environments and the evolutionary mechanisms developed to survive under such conditions has become an urgent challenge. These environments host highly specialized organisms that constitute a unique and often narrowly distributed biodiversity, rendering them particularly vulnerable. This diversity encompasses not only singular taxa but also unique metabolic, physiological, anatomical, and ecological adaptations. Understanding these mechanisms is essential not only for conserving this invaluable biodiversity but also as a source of technological advances and solutions to some of the most pressing environmental challenges.

Despite their importance, extreme environments are often overlooked in ecological research, and the organisms adapted to them frequently defy established biological principles. This talk is an invitation to explore the challenges posed by extreme environments and to reflect on the need to incorporate them into ecological studies aiming for truly global insights.

Wednesday 4, 9:10-10:20. Room: Auditorio

#### **Beatriz Mouriño**

Researcher at the Biological Oceanography group of the CIM-UVigo and Professor at the University of Vigo.



# Working on: Physical-biological interactions, phytoplankton, ocean turbulence

Her research focuses on understanding physical-biological interactions in the ocean across a broad range of temporal and spatial scales. In particular, she examines the mechanisms that control marine primary production, such as intermittent nutrient supplies to plankton communities. To do this, she uses a combination of satellite images, time-series data analysis, physical

and biological observations from specific cruises, laboratory experiments, and ocean model simulations. Current topics under investigation include the role of microstructure turbulence in structuring ocean microbial communities and the role of biological nitrogen fixation in coastal upwelling systems.

# Tiny but mighty: The challenge of powering life in the ocean as microscopic algae

Photosynthetic organisms such as land plants, algae, and bacteria form the foundation of food webs by producing organic matter while regulating atmospheric CO2. This presentation explores the challenges phytoplankton — responsible for nearly half of global photosynthesis — face in the ocean to power life. Unlike terrestrial plants, phytoplankton live in water, where higher density and viscosity slow physical processes and tightly couple them with biological variability. Their rapid biomass doubling times (within days) make them sensitive to short-term hydrodynamic fluctuations. Moreover, while light is available near the surface, nutrients often lie below the pycnocline, a barrier that limits upward transport. Turbulence can enhance nutrient delivery but may also displace cells into deeper, darker waters. Ramón Margalefs 1978 mandala hypothesized that turbulence and nutrient availability control microphytoplankton succession: high turbulence and nutrient favor large diatoms, while stratified, nutrient-poor conditions support motile or efficient nutrient users like dinoflagellates and coccolithophores. However, the model originally excluded small-sized phytoplankton and relied on indirect estimates. A recent multidisciplinary dataset—from tropical, subtropical, Mediterranean, and Galician upwelling regions—has enabled the first empirical validation of Margalef's mandala. Findings confirm the central role of nutrient supply over static concentration, and show diatoms dominate across wider turbulence ranges thanks to nitrogen-fixing symbioses and thinlayer proliferation. Finally, organisms themselves can create turbulence. In 2018. bioturbulence generated by spawning fish in the Ría de Pontevedra was shown to enhance water-column mixing, with potential implications for nutrient supply and productivity—an insight that earned the 2023 lg Nobel Prize in Physics.

#### Rafael Marcé

Research Scientist at the Centre for Advanced Studies (CEAB-CSIC), Blanes, Spain.



# Working on: Biogeochemistry, inland waters, global change

His scientific career focuses on how water scarcity impacts continental aquatic ecosystems and their ability to provide essential services to society. He investigates how drying affects carbon storage and cycling in inland waters and its implications for anthropogenic carbon redistribution. He contributes to global modeling efforts through the ISIMIP and GLEON networks, studying

climate change impacts on lakes and reservoirs. Additionally, designs predictive tools for water quality in reservoirs, emphasizing the impacts of droughts and extreme weather events.

# A blind spot in terrestrial carbon inventories: when water matters more than land

Many lakes around the world, particularly those in endorheic basins in arid and semi-arid regions, are shrinking. This poses a significant risk to the sedimentary carbon sink, as organic matter that has accumulated over thousands of years could be exposed to atmospheric oxygen, making it susceptible to remobilization. However, the current IPCC Guidelines for National Greenhouse Gas Inventories primarily account for land-use and land-cover change (LULCC) transitions from land to flooded land, and from flooded land that remains flooded. As a result, the regional estimates of the impact of LULCC on net carbon fluxes overlook areas that have transitioned from flooded land to land, even though this shift has become one of the most significant LULCC processes in many basins over the past few decades. In this study, we use data from the Aral Sea, the world's largest disappearing lake, to assess the impact of incorporating this overlooked carbon flux into existing net carbon exchange models for the Aral Sea basin. Our findings highlight a critical gap in terrestrial carbon inventories, which, if addressed, could significantly refine our understanding of carbon dynamics in these regions.



Wednesday 4, 16:40-17:50. Room: Auditorio

#### Silvia Castro

Assistant Professor at the Department of Life Sciences and Centre for Functional Ecology, University of Coimbra (UC).



Working on: Plant ecology and evolution, pollination and plant-pollinator interactions

Her research is focused on plant ecology and evolution by studying the dynamics of diploid-polyploid plants namely the origin, maintenance and ecological consequences of polyploidy, and the role of plant-pollinator interactions in plant reproductive strategies and phenotypic selection. Also, she interested in threatened and invasive plants, exploring evolutionary

changes in plant reproductive strategies during the invasion process, evolution of invasiveness and impacts in native plant communities.

# PolinizAÇÃO: Advancing Pollinator Conservation through Science-Policy-Society Integration in Portugal

Sílvia Castro, Eva Monteiro, Andreia Miraldo, Carolina Caetano, Cândida Ramos, João Loureiro.

Pollinators are key components of biodiversity, essential to ecosystem functioning, agricultural productivity, and food security, yet they are experiencing widespread declines driven by habitat loss, pesticide use, invasive species, and climate change. The PolinizAÇÃO project, developed in Portugal, contributes to national and international efforts for pollinator conservation through the co-construction of a National Action Plan for the Conservation and Sustainability of Pollinators.

The project integrates ecological research with participatory processes to inform public policy and territorial management. Core activities include the collection of ecological data on pollinator diversity and abundance, and the development of a national pollinator monitoring programme—an essential step towards structured, long-term biodiversity observation. This programme is being collaboratively designed, incorporating input from both researchers and practitioners, and serves as a tool for tracking population trends and supporting adaptive management.

A central feature of PolinizAÇÃO is its multi-stakeholder engagement strategy, involving researchers, land managers, farmers, policymakers, NGOs, and citizens. The project fostered dialogue and co-creation through thematic and participatory workshops, gathering local knowledge, values, and perceptions, and aligning them with empirical evidence on pollinator ecology and threats. This approach enabled the identification of conservation priorities and the formulation of context-specific actions.

By linking ecological knowledge with societal needs and governance mechanisms, PolinizAÇÃO provides a model for effective science–policy–society interfaces. Its participatory governance framework strengthens stakeholder ownership and fosters long-term commitment to pollinator-friendly practices and biodiversity conservation.

#### **Bernardo Quintella**

Assistant Researcher at MARE – Marine and Environmental Sciences Centre, University of Lisbon, Faculty of Sciences.



Working on: Fish migrations, biotelemetry

His research focuses on fish migrations through an integrative approach combining distinct methodological tools (artificial tags and natural markers) to study movements at different spatial and temporal scales. One of the innovative natures of his research is that it covers migrations within freshwater (potamodromous), at sea (oceanodromous) or between realms (diadromous). He is particularly

interested in partial migrations, understanding why some individuals move while others don't is, in essence, understanding the migratory behaviour.

#### **Fish Migrations: An Integrated Approach**

Some fish migrate while others are resident, performing spatially restricted movements. This variability in behavior occurs among species, but also within the same population. The co-existence of distinct migratory phenotypes within populations, a phenomenon often referred to as 'partial migration', is an opportunity to examine the consequences of contrasting life history strategies among individuals and to understand the proximate and ultimate causes of migrations. Different life-history strategies associated with distinct migratory phenotypes occur in all types of migrations: for fish that migrate only in the same aquatic ecosystem, oceanodromous when movements are only performed at sea, potamodromous along rivers, and for diadromous fish that swim between the river and the sea for reproductive and feeding purposes. A truly integrative approach to studying fish migrations must be inclusive in terms of the characteristics of the fish that embrace (marine, freshwater, diadromous), and multidisciplinary in terms of the tools used -artificial tags combined with natural markers - to analyze movements at different spatial and temporal scales. A holistic approach would not be complete if it focused only on the scientific aspects of fish migrations, neglecting the importance of migratory fish as living resources, and the relevance of contributing solid information to the promotion of their sustainable exploitation. Several case studies will be presented to emphasize the importance of an integrated approach to study fish migrations: from the river to the sea, from natural to artificial markers, from fundamental to applied science.

Thursday 5, 9:10-10:20. Room: Auditorio

#### **Christina Richards**

Researcher at the University of South Florida & University of Tübingen.



# Working on: Plant plasticity, genomics and epigenetics

Christina is an associate professor at the University of South Florida, in Tampa, Florida, USA. She received her PhD at the University of Georgia and worked as a postdoctoral researcher at Stony Brook University and NYU. She uses genomics to understand how plants and animals respond to challenging environmental conditions. Recently as a Make Our Planet Great Again (MOPGA) laureate at the

University of Tübingen in Germany, she started a global collaboration to investigate mechanisms of plant invasions. Together her team has collected field data and run experiments in common gardens with plants from native and invasive populations of Japanese knotweed in the USA, European Union, and China. She is also interested in understanding how studies of invasive species in natural systems can help us understand the diversity of human cancers.

#### Shifts in ecological strategy of a global plant invader

Japanese knotweed is a robust plant invading many habitats across North America and Europe. Originally from East Asia, it was introduced and rapidly colonized many areas becoming one of the most invasive species in the world. Knotweeds provide a compelling example of the invasive species paradox : they have colonized new habitats and become dramatic invaders with very little genetic diversity. We present the results of a range of experimental approaches that have clarified the evolutionary history of this complex, revealing its introduction history from Japan to China and beyond. We also provide evidence of evolution of increased clonality and local adaptation in the introduced range. To do so, we integrate 15 years of data across common gardens and field surveys in the native and introduced ranges. This work is the product of an ongoing research collaborative comprised of experts across three continents that investigates how genetic, epigenetic, and phenotypic variation mediate variation in performance of this species across its global distribution. We aim to integrate plant genomics and microbiome studies with assessments of eco-evolutionary feedback along latitudinal gradients in the native and introduced ranges to answer questions about the functional importance of intra- and interspecific biodiversity in the process of invasion.

#### Iván Gómez-Mestre

Research Scientist at the Centre for Advanced Studies (CEAB-CSIC), Blanes, Spain.



# Working on: Plasticity and macroevolution

His research is focused on the evolution of phenotypic plasticity and the role of plasticity in evolution, specifically on how organisms alter their phenotypes in response to changing environments and the evolutionary role of environmentally induced changes in development. He use various species of amphibians and invertebrates (beetles, daphnia) as model studies, studying

their adaptations to abiotic factors, as well as their interactions with predators, competitors, pathogens and organisms from other trophic levels.

# Phenotypic responses of amphibian larvae to multiple environmental cues and their carry-over post-metamorphic effects

Many amphibians have complex life cycles and are consequently exposed to variation in multiple factors, both in aquatic and terrestrial environments. Amphibians have the ability to respond to such environmental fluctuations by adjusting their physiology, behaviour, morphology and life histories. For instance, risk of pond drying may trigger developmental acceleration in amphibian larvae, allowing them to reach metamorphosis precociously. Such plastic responses, however, often come at a cost like reduced size at metamorphosis and depletion of their fat reserves. Moreover, environmental heterogeneity usually comes from simultaneous variation in multiple factors simultaneously, both biotic and abiotic. We are studying the plastic responses of spadefoot toad tadpoles to risk of pond drying, which is a complex combination of reduced water level, increased temperature, increased larval density and reduced food availability, and the phenotypic responses to these factors can be additive or even antagonistic. In addition, the plastic responses produced during a life stage may have consequences that carry-over to subsequent life stages, and amphibians are no exception. Small metamorphs that have experienced developmental acceleration during their larval stage reduce their survival odds, especially if they metamorphose onto a harsh environment. Current climate change, especially in Mediterranean areas, is translating not only in shorter pond hydroperiods, but also in increased temperature and drought of the terrain to which amphibian metamorphs emerge. We are consequently also studying carry-over effects of juvenile spadefoot toads, especially when they face drier and warmer environments, monitoring juvenile survival, growth, activity pattern, hormonal levels and thermal tolerance.



## **FLASH TALKS**

List of surprise talks, not in order, because they are SURPRISE:)

#### **People**

#### A Needed Match Between Research and Policy-Makers

- · Andrea Cortegoso Galmán Land Resources & Environmental Sciences, Montana State University, USA.
- Graciela Gil-Romera Pyrenean Institute of Ecology CSIC, Spain.
   (on behalf of the Ecology and Policy Commission of the Spanish Terrestrial Ecology Association).

## Citizen Science: A Trojan Horse?

Brais Suárez Eiroa (Universidade de Vigo).

#### **Publishing**

#### Open, Reliable, and Transparent Science

- Verónica Cruz, Universidad Complutense de Madrid (UCM), Spain.
- Julen Astigarraga, Universidad de Alcalá (UAH), Spain.

#### Another Open and Fairer Publishing System is Possible (and Necessary)

Editorial Board of ECOSISTEMAS:

- Mar Sobral (Research articles), Universidad de Santiago de Compostela (USC), Spain.
- Laura Hernández Mateo (Data papers), Instituto de Ciencias Forestales (ICIFOR-INIA, CSIC), Spain.
- Ignasi Bartomeus (Executive Editor), Estación Biológica de Doñana (EBD-CSIC), Spain.

#### Wellbeing

#### Violence and Harassment Onboard Research Vessels

Lara Graña (Editor-in-chief of Faro de Vigo since 2021).

#### Early Career Well-Being in Ecology: The Importance of Building an ECR Network

- María Hurtado (IDENER).
- · Pedro Rebollo (Universidad Complutense de Madrid).

# **ECR Scientific Speed Dating**

This activity is organized by the AEET ECR Commission.

The activity consists of arranging consecutive 3-minute speed dating sessions between "pairs" of people (formed randomly). The idea is for young researchers to exchange experiences and opinions about their area of study or their work. This, in addition to fostering social interactions during the conference, could also lead to potential synergies in the scientific field.

Monday 2, 14:00-15:00. Room: Restaurante





# **WORKSHOPS**

Explore our hands-on workshops covering cutting-edge tools and methodologies in ecology and scientific research. Below, you'll find a brief description of each workshop, including objectives, requirements, and learning outcomes, to help you choose the most relevant one for your interests.

#### W1. Evidence Synthesis in Ecology

Monday, 2 (10:00-14:00) • Room: Seminario 1

- » **Objective**: Understand different types of evidence synthesis (e.g. systematic review, meta-analysis), the techniques needed to do them, and what tools can help you with this process.
- » Requirements: Bring a laptop with R and RStudio installed; basic R knowledge is preferable.
- » Learning Outcomes:
  - Learn the main methods of evidence synthesis used in ecology.
  - Understand the steps needed to conduct a systematic review.
  - Practice using tools for screening articles, extracting data, and visualizing results.
- » Duration: 4 hours | » Max. Attendees: 30 | » Facilitator: Philip Martin

## W3. Knowledge Transfer in Ecology: Barriers & Opportunities

Monday, 2 (12:00-14:00) • Room: Seminario 6

- » Objective: Explore challenges and strategies for transferring ecological research to public and private sectors.
- » Requirements: No computer needed; interactive discussion format.
- » Learning Outcomes:
  - Identify barriers to knowledge transfer.
  - Learn about practical tools like transfer offices, agreements, and funding strategies.
  - Share experiences and best practices.
- » Duration: 2 hours | » Max. Attendees: 20 | » Facilitator: Enrique Doblas Miranda

#### W4. Promoting Creativity in Scientific Research

Monday, 2 (10:00-14:00) • Room: Salón de actos

- » Objective: Develop creativity as a core scientific skill to foster innovation and problem-solving in research.
- » Requirements: None—open to all!
- » Learning Outcomes:
  - Learn creative thinking techniques (divergent, lateral, associative thinking).
  - Understand how team diversity fosters creativity.
  - Develop a growth mindset for scientific discovery.
- » Duration: 4 hours | » Max. Attendees: 20 | » Facilitators: Isabel Reche & Francisco Perfectti

#### W5. Building a DIY BtM Datalogger for Moss & Lichen Water Monitoring

Monday, 2 (10:00-14:00) • Room: Cova dos libros

- » Objective: Learn to assemble and use an open-source datalogger to measure water content in mosses, lichens, and soil.
- » Requirements: No prior electronics experience; materials provided. Bring a laptop if possible.
- » Learning Outcomes:
  - Assemble and test a BtM datalogger.
  - Gain confidence in working with electronic components.
  - Understand its applications in ecological research.
- » Duration: 4 hours | » Max. Attendees: 15 | » Facilitators: Ángel Lareo, María Leo & Nagore G. Medina



### W6. Introduction to Structural Stability in Ecology

Monday, 2 (12:00-14:00) • Room: Seminario 2

- » Objective: Explore how species interactions and environmental conditions shape biodiversity using structural stability theory.
- » Requirements: Bring a laptop with RStudio installed; basic R knowledge recommended.
- » Learning Outcomes:
  - Learn how structural stability explains species coexistence.
  - Apply the framework to ecological data using R.
  - Explore applications in climate change and ecosystem restoration.
- » Duration: 4 hours | » Max. Attendees: 20 | » Facilitators: Violeta Calleja-Solanas, Sergio Picó & Oscar Godoy

#### W7. Introduction to Bayesian Inference in Ecology (R & Nimble)

Monday, 2 (12:00-14:00) • Room: Seminario 3

- » Objective: Apply Bayesian Inference for species distribution and abundance modeling using R and Nimble.
- » Requirements: Laptop with R, RStudio, and Nimble installed; basic R and GLM knowledge recommended.
- » Learning Outcomes:
  - Understand Bayesian statistics and Markov Chain Monte Carlo (MCMC).
  - Build and run Bayesian models in Nimble.
  - Apply Bayesian approaches to ecological data.
- » Duration: 4 hours | » Max. Attendees: 30 | » Facilitators: Javier Fernández-López, Sonia Illanas

#### W8. Reproducible & Collaborative Research in R (GitHub & Quarto)

Monday, 2 (12:00-14:00) • Room: Seminario 7

- » Objective: Improve research efficiency with version control (GitHub) and dynamic document creation (Quarto).
- » Requirements: Laptop with R, RStudio, Git installed; GitHub account needed.
- » Learning Outcomes:
  - Learn version control (Git) for research projects.
  - Create and publish reproducible documents using Quarto.
  - Improve collaboration and workflow efficiency.
- » Duration: 4 hours | » Max. Attendees: 30 | » Facilitators: Elena Quintero, Guillermo Fandos & Verónica Cruz Alonso

#### W9. Big Data & Remote Sensing for Biodiversity Monitoring

Monday, 2 (12:00-14:00) • Room: Restaurante

- » Objective: Learn large-scale biodiversity monitoring techniques using GIS, remote sensing, and Google Earth Engine (GEE).
- » Requirements: Laptop with GIS software, RStudio installed, and GEE access (Gmail account needed).
- » Learning Outcomes:
  - Process and analyze biodiversity data with machine learning.
  - Use Google Earth Engine for mapping biodiversity.
  - Combine remote sensing and in-situ data for large-scale predictions.
- » Duration: 4 hours | » Max. Attendees: 40 | » Facilitators: Jose Manuel Álvarez-Martínez, Laura Hernández Mateo, Salvador Arenas-Castro & BigBioData AEET Team

#### W10. How to Land Competitive Projects (and Survive the Process)

Monday, 2 (12:00-14:00) • Room: Auditorio

There is no magic formula for obtaining funding, but knowing which calls for proposals exist, what requirements they have and how they are evaluated can make the difference between a successful application and one that falls by the wayside. In this 2-hour workshop we will speak with researchers with experience in the evaluation of projects from societies such as the AEET or SIBECOL (Cristina Armas), Marie Curie Actions (TBA), the National Plan projects and Juan de la Cierva and Ramón y Cajal Contracts (Sara Palacio), and international and European projects (Ignasi Bartomeus).

- » **Objective:** To establish a dialogue that allows us to learn from each other and obtain some keys to navigate the complex world of Competitive Projects. We especially encourage young female researchers to attend, since there is often a gender bias that becomes evident when applying to competitive calls for proposals.
- » Requirements: None—open to all!.
- » Duration: 2 hours | » Max. Attendees: 40 | » Facilitators: Ignasi Bartomeus, Cristina Armas & Sara Palacio.





# SCIENTIFIC SESSIONS

This conference aims to exchange the latest knowledge on ecology, leading to a paradigm shift in the interpretation and care of the planet amidst the current unstable and uncertain framework.

We are excited to present a diverse, inclusive, and cross-disciplinary scientific program that we hope you will find stimulating and thought-provoking. We would like to thank everyone who submitted proposals for Thematic Sessions. A total of 43 Thematic Sessions have been grouped and scheduled within 6 General Sessions, covering a wide range of topics relevant to ecological research.

## GSA. Enhancing Inclusivity, Ethics, and Societal Impact in Science

Tuesday, 3 (12:45-14:15) • Wednesday, 4 (12:45-14:15) • Thursday, 5 (11:00-12:30) • Room: Cova dos libros

Coordinators: Irene Pérez Ibarra, Universidad de Zaragoza (UNIZAR); Susana Bernal, Centre d'Estudis Avançats de Blanes (CEAB-CSIC)

This session will explore the imperative need for inclusivity and ethics in academia. Discussions will center around strategies to ensure diverse representation and participation (all genders, racialized people, etc.) in scientific endeavors, fostering an environment where multiple perspectives and backgrounds contribute to richer, more holistic ecological research. The session will also address ethical considerations in research practices, emphasizing transparency, a respectful work environment, and making science and knowledge accessible to everyone. Additionally, it will highlight ways in which ecological science can directly benefit society, focusing on community engagement, policy influence, and practical applications that solve real-world environmental problems.

#### Key Questions:

- How can we create a more inclusive and diverse scientific community?
- What ethical guidelines should be prioritized in ecological research?

#### TSA-1. Ecology in education: ecological literacy as a tool to face global change

Thursday, 5 (12:45-14:15); (15:30-17:00) • Room: Cova dos libros

Organizers: Cristina Fernández Aragón, Universidad a Distancia de Madrid, Facultad de Educación, Área de Didáctica de las Ciencias Naturales; Marcos Méndez Iglesias, Universidad Rey Juan Carlos, Área de Biodiversidad y Conservación; Daniela Barría Díaz, Universidad de Vigo, Área de Educación.

In the current scenario of global change and climate crisis, it is essential to have accurate information about the functioning of the ecosystems and to be able to integrate and apply this information to make rational decisions on relevant ecosocial issues. In addition, several studies reveal that students of different ages, as well as citizens and decision makers, present conceptual errors and difficulties in understanding the functioning of ecosystems and the causes of the ecological and social crisis. Furthermore, it is equally crucial to promote critical and systemic thinking, which are at the core of the Ecological Science. Given the magnitude and complexity of the challenge, it is key to build bridges of collaboration between academia and education at all levels, in order to lay common foundations on which to work towards the same goal: to recognize that human well-being is deeply linked to that of the rest of nature and, consequently, to commit to act to ensure a fair world on a safe planet. This symposium aims to promote a dialogue between the different agents involved in the ecological literacy of citizens, in a broad sense, to enable the co-creation of solutions from an integral vision.

#### TSA-2. Beyond the Lab: Citizen Science as a Catalyst for Ecological Research and Community Involvement

Monday, 2 (18:00-19:30) • Tuesday, 3 (11:00-12:30) • Room: Seminario 1

Organizers: Anabel Sánchez Plaza, CREAF; Laura Force Seguí, CREAF; María Soria, UVIC-BETA; Meritxel Abril Cuevas, UVIC-BETA.

Citizen science has become an increasingly valuable approach in ecological research, allowing for large-scale data collection, encouraging public involvement, and boosting scientific literacy. By shifting away from the traditional model where research was confined to universities and research institutions, it has opened up new ways of engaging with the scientific method without compromising its rigour. Today, citizen science plays a crucial role across various scientific disciplines, achieving particular success in areas like biodiversity monitoring, environmental assessment, and ecosystem management. In ecology, public involvement has become essential, spanning not only data collection and interpretation but also other stages of the research process, including the implementation of results. This thematic session, the first to specifically highlight citizen science within an Iberian scientific ecology conference, aims to present key projects, share practical strategies, and discuss both the opportunities and challenges that citizen science brings. The session will tackle common issues like the changing roles of researchers, ethical considerations, coordination across different scales, and ensuring data accuracy. Through case studies and practical insights, participants will gain useful tools to effectively integrate citizen science into their own research, making this session an important resource for those seeking to enrich their ecological studies with participatory methods.



### **GSB.** Ecology Across Scales

Tuesday, 3 (11:00-12:30); (12:45-14:15) • Wednesday, 4 (11:00-12:30); (12:45-14:15) • Thursday (11:00-12:30); (12:45-14:15) • Room: Salón de actos

Coordinators: Romina Álvarez Troncoso, Universidade de Vigo (UVigo); Eneko Arrondo, Universidad de Granada (UGR); Elena D. Concepción, Museo Nacional de Ciencias Naturales (MNCN-CSIC); Jorge Durán, Misión Biolóxica de Galicia (MBG-CSIC); Teresa Morán López, Instituto Mixto de Investigación en Biodiversidad (IMIB-CSIC-UniOvi); Beatriz Mouriño, Universidade de Vigo (UVigo); Isabel Muñoz, Universitat de Barcelona (UB).

Environmental and global change drivers influence the functioning of life at all levels, from molecular to ecosystemic or global processes. These factors affect both individual species and entire biomes. Conversely, the functioning of the biosphere also impacts the environment at different spatial and temporal scales. Understanding environment-life relationships is crucial to anticipate future changes and thus preserve life and ecosystems. A global understanding is essential to mitigate the negative impacts of human activities, enhance the resilience of ecosystems against disturbances, and develop more effective conservation and environmental management strategies.

#### Key Questions:

- How do ongoing climate change, chemical pollution, and landscape transformation impact life at all levels?
- How can a global understanding help mitigate the negative impacts of human activities?

#### TSB-1. The impact of Global Change on Plant-based species interaccions

Monday, 2 (18:00-19:30) • Tuesday, 3 (11:00-12:30); (12:45-14:15) • Room: Seminario 3

Organizers: Álvaro Gaytán, Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC); Blanca Gallego-Tévar, Universidad de Sevilla.

Plant-based interactions are fundamental to ecology because they determine community structure, nutrient cycling, biodiversity, ecosystem productivity, resilience to climate change and, ultimately, the provision of ecosystem services. Importantly, these interactions are being altered by various abiotic and biotic global change drivers. In this session, we are interested in studies on:

- Plant-plant interactions: Plants often interact with each other through competitive suppression, tolerance, avoidance or facilitation, which are key mechanisms
  for the assembly of plant communities. Global change drivers can modify such interactions by altering resource availability and climatic conditions.
- Plant-animal interactions: These interactions are vital for the survival and reproduction of many species. Animals often consume plants or act as pollinators or seed dispersers. However, global changes like climate change can alter plant phenology, affecting plant-animal interactions.
- Plant-microorganism interactions: Microorganisms, like bacteria and fungi, play a crucial role in plant health and ecosystem productivity. They can form
  symbiotic relationships with plants or cause diseases through pathogenic functions. However, global changes, like pollution or the appearance of exotic
  microorganisms, can alter these interactions by changing the composition of the microbiota.

# TSB-2. Coping with the Change: Exploring the impacts of global change on marine biodiversity across spatial-temporal scale

Wednesday, 4 (12:45-14:15) • Room: Balconada

Organizers: Daniel Gómez-Gras, Departament Evolutionary Biology, Ecology and Environmental Sciences, Universitat de Barcelona; Pol Capdevila, Departament Evolutionary Biology, Ecology and Environmental Sciences, Universitat de Barcelona; Cristina Linares, Departament Evolutionary Biology, Ecology and Environmental Sciences, Universitat de Barcelona.

Marine biodiversity is undergoing rapid changes due to widespread human impacts on the oceans. These changes pose serious threats to the integrity of marine ecosystems and the benefits they provide. In response, international political frameworks such as the Kunming-Montreal Global Biodiversity Framework and the Horizon Europe Mission "Restore our Ocean and Waters" have emphasized the urgent need to halt and reverse the degradation of marine ecosystems, guided by robust scientific evidence. However, our current capacity to assess biodiversity changes in the oceans and understand their implications remains limited. This session invites contributions that explore the ecological impacts of global change on marine biodiversity. We welcome studies estimating the magnitude and direction of biodiversity shifts—encompassing taxonomic, functional, and genetic diversity—on marine communities, as well as their consequences for ecosystem functioning and the services they provide to human societies. Contributions that employ long-term monitoring, ecological theory, synthesized data, and/or modeling tools to investigate conservation, adaptation, and management strategies across broad spatial and temporal scales are especially welcomed, as are studies that explore the effects of restoration actions (e.g., of habitat-forming species) on marine communities and ecosystems. Overall, this session aims to foster a cross-taxonomic perspective on one of the most pressing topics in marine conservation, while also offering a platform for discussing future research challenges related to marine biodiversity change in the Anthropocene.

#### TSB-3. Connecting scales through movement ecology

Wednesday, 4 (12:45-14:15) • Room: Restaurante

Organizers: María del Mar Delgado Sánchez, Instituto Mixto de Investigación en Biodiversidad (CSIC/UO/PA); Zaida Ortega Diago, Departamento de Biodiversidad y Gestión Ambiental, Universidad de León.

In nature, resources are never distributed homogeneously within a species' environment and suitable habitat patches are often embedded in heterogeneous landscapes. Thus, individuals must move optimally between these patches to feed, reproduce, and maximize their fitness, which impacts population dynamics, species persistence, and coexistence (including the coexistence between wildlife and human populations). Movement, therefore, plays a fundamental role



in ecological and evolutionary processes and is key to understanding the spatial dynamics and structure of populations and communities. Since ecological phenomena follow different spatial and temporal scales, our understanding of patterns and processes at various levels of biological organization depends on how we address these scales. Recent technological advancements have improved the tracking of animal movement across all spatial and temporal scales. This thematic session aims to share and discuss the latest developments in movement ecology, in a diverse and inclusive environment, bringing together the scientific community involved and fostering future collaboration.

#### TSB-4. Plant-soil interactions: biodiversity, functioning and sustainable practices under global change

Wednesday, 4 (11:00-12:30); (12:45-14:15) • Room: Seminario 1

Organizers: Jorge Prieto Rubio, Centro de Investigaciones sobre Desertificación (CIDE, CSIC-UV-GVA); Álvaro López García, Estación Experimental del Zaidín (EEZ, CSIC).

The increasing global demand for natural resources is driving transformations in ecosystem functioning, with unknown ultimate consequences, ranging from biodiversity loss to disruptions in biogeochemical processes. In this context, plant-soil systems emerge as fundamental pillars for the maintenance of terrestrial ecosystems, underpinning human well-being. However, studying these systems from the perspective of sustainable degrowth and ecological regeneration is becoming increasingly relevant, especially in ecosystems under anthropogenic pressure. This session aims to bring together contributions that explore the biodiversity and functioning of plant-soil interactions in anthropized systems (such as agricultural, livestock, or forestry systems), as well as ecosystems undergoing degradation processes caused by human action or natural hazards. We welcome submissions investigating the effects of various drivers of change on plant-soil relationships and studies focusing on land management practices aimed at sustainability, conservation, and restoration. We encourage observational, experimental, modeling, and/or meta-analytical studies that promote a transition towards more equitable and regenerative forms of ecological research.

### TSB-5. Advancing the understanding of plant ecophysiology to inform global vegetation models

Monday, 2 (18:00-19:30) • Room: Restaurante

Organizers: Laura Fernández de Uña, Universidade de Vigo; Víctor Flo Sierra, Universitat Autònoma de Barcelona; Raquel Lobo-do-Vale, Universidade de Lisboa.

Natural ecosystems are increasingly threatened by global environmental changes. Rising temperatures driven by climate change are causing higher atmospheric vapour pressure deficits, while drought episodes are expected to become more frequent and severe in many regions of the globe. These novel conditions are likely to affect the productivity and survival of terrestrial woody plants, disrupting water, carbon and biogeochemical cycles, and altering ecosystem dynamics. To better predict these changes, and thus inform adaptive ecosystem management, it is essential to gain a deeper understanding of how plants respond to environmental cues. This session aims to bring together recent research on plant and ecosystem functioning, using both empirical and modelling approaches, with a particular emphasis on studies bridging plant ecophysiology and vegetation models.

#### TSB-6. Emerging environmental pollutants: from molecular to ecosystemic impacts

Monday, 2 (18:00-19:30) • Room: Salón de actos

Organizers: Juan Manuel González Olalla, Instituto del Agua, Universidad de Granada; Isabel Forner Piquer, Institut de Ciències del Mar - CSIC.

Emerging pollutants, including endocrine-disrupting chemicals, persistent organic pollutants, antibiotics, or plastics, present significant environmental challenges associated to their biotoxicity, persistence, and bioaccumulation. Effects on different levels of biological organization (molecular, organism and population) have been recently described after the detection of pollutants in most of the environmental matrices and ecosystems. This session aims to present and elucidate the impact of man-made chemicals on micro and macroorganisms, from individual to ecosystemic level, in aquatic or terrestrial environments. We expect to discuss a range of topics that encompasses from ecotoxicology to bioremediation to allow a holistic understanding of the footprint of pollutants at all levels. We will aim to create a dynamic and stimulant session with early-career researchers along with renowned environmental scientists.

#### TSB-7. Drivers of temporal changes in biodiversity: from species demography to communities

Thursday, 5 (12:45-14:15) • Room: Seminario 7 / Thursday, 5 (15:30-17:00) • Room: Seminario 1

Organizers: Oscar Godoy, Doñana Biological Station (EBD-CSIC); Violeta Calleja Solanas, Doñana Biological Station (EBD-CSIC); Sergio Picó Jordá, Doñana Biological Station (EBD-CSIC).

Species are subject to continuous variation in environmental conditions that determine their population responses as well as their interactions with other species. Multiple studies have documented environmental effects on species'demography or biotic interactions. However, little is known about the feedbacks between demographic and ecological processes that structure the temporal dynamics of communities. Likewise little is known about how these feedbacks are related to the characteristics of environmental conditions such as the type of ambient noise and the physiological, morphological and evolutionary features of species. Understanding these processes is fundamental to integrate different fields of ecology as well as to predict the future of communities under global change. In this thematic session, we propose to gather an ample group of researchers working at the intersection between population and community ecology. This group, who is not taxonomically biased, uses a wide range of techniques from detailed studies to intense statistical modelling to understand temporal changes in the abundance, composition and richness of ecological systems.



# TSB-8. Transitional aquatic-terrestrial ecosystems: the ecological relevance of the dry phase of non-perennial inland waters

Monday, 2 (18:00-19:30) • Room: Cova dos libros

Organizers: María Mar Sánchez-Montoya, Universidad Complutense de Madrid; Pablo Rodríguez-Lozano, Universitat de les Illes Balears; Núria Catalán, CEAB-CSIC.

Non-perennial (temporary) inland waters, such as non-perennial rivers and temporary ponds, are coupled aquatic-terrestrial ecosystems that only sometimes present surface water. Despite being found worldwide and increasing in extent due to global change, these ecosystems are still overlooked in conceptual models, legislation, policy, and monitoring efforts. In these ecosystems, drying creates a shifting mosaic of aquatic (lotic and lentic) and terrestrial habitats (dry beds) across wet and dry phases, supporting aquatic, semi-aquatic, and terrestrial communities, as well as processes that occur during these contrasting phases. While knowledge of these ecosystems has grown exponentially in recent decades, most research has focused on the wet phase through the lens of limnologists. The aim of this special session is to bring together aquatic and terrestrial ecologists, as well as managers, to advance the assessment, conservation, and restoration of coupled aquatic-terrestrial ecosystems. We particularly welcome studies focused on: the ecological aspects of the dry phase (e.g., biogeochemical processes, terrestrial biological communities); comparative ecological studies of the wet and dry phases; the influence of the dry phase on the structure and functioning of the ecosystem during the wet phase; and on the human dimensions and socio-ecological perspectives on these coupled ecosystems.

# TSB-9. The flow of elements and the functioning of the biosphere

Wednesday, 4 (11:00-12:30); (12:45-14:15) • Room: Seminario 3

Organizers: Estela Romero, CREAF, UAB; Marcos Fernández-Martínez, CREAF, UAB; Albert Rivas-Ubach, Institute of Forest Sciences (ICIFOR-INIA, CSIC).

The biogeochemical cycles of several key elements have been significantly altered in the past decades, to the extent that two of them (nitrogen and phosphorus) have crossed the disturbance threshold that we consider safe for the functioning of the Earth. Understanding biogeochemical processes, including their cycles, the relative abundances of elements and the interactions with organisms and the environment, is essential to deciphering the structure and function of ecosystems. By understanding the flow of essential elements such as carbon, nitrogen or phosphorus, we can trace, quantify and predict processes such as photosynthesis, nitrogen fixation and water pollution, which can directly influence Earth's system responses to global change. The session aims to present cutting-edge studies in biogeochemistry and ecological stoichiometry to gain insights into the functioning of organisms, ecosystems, and our biosphere. We encourage research across different spatial scales, from local experimental studies to global data syntheses, to improve our understanding and prediction of global change impacts, as well as the biotic and abiotic interactions between terrestrial and aquatic ecosystem compartments. Studies that integrate spatial and temporal scales, combine different methods or provide novel conceptual and theoretical frameworks are particularly welcome.

#### TSB-10. Exploring environmental variability in aquatic and terrestrial ecosystems

Tuesday, 3 (12:45-14:15) • Room: Seminario 2

Organizers: Marco Jabalera Cabrerizo, Universidad de Granada; Juan Manuel González Olalla, Universidad de Granada.

Aquatic and terrestrial ecosystems are exposed to climatically- or naturally-driven short-term variability (deterministic or stochastic fluctuation) of multiple environmental drivers. Environmental variability can affect the performance of organisms and the interactions between species, ultimately impacting the functioning and structure of ecosystems under a global change context. Studies that include environmental variability may lead to responses that differ from those shown in studies focused on the mean alteration of one or several interacting drivers. However, such studies are still scarce, hence the pressing need for research on how environmental fluctuations can alter our understanding of the effects of global change on ecosystems and species' adaptive capacity. In this session, we encourage field, laboratory, modelling and predictive studies investigating the effects of environmental variability on the physiology, metabolism, composition of species and communities in their interaction with the environment. As a result, this session will provide a holistic understanding of the interaction between environmental variability and global-change drivers in aquatic and terrestrial ecosystems, and will enhance the communication among researchers working in different regions to establish new collaborations. Finally, this session will promote a topic that requires further research under current and future events of higher variability (precipitations, heatwaves, etc.).

#### TSB-11. Soil biodiversity: digging into one of the last biotic frontiers in ecological research

Tuesday, 3 (12:45-14:15) • Room: Seminario 1

Organizers: Albert Vilà Cabrera, Universitat Central de Catalunya (UVic – UCC) / CREAF; Paula Arribas Blázquez, IPNA-CSIC; Miguel de Celis Rodríguez, Departamento de Suelo, Planta y Calidad Ambiental, Instituto de Ciencias Agrarias, CSIC.

Soil organisms are one of Earth's major reservoirs of living biomass and biodiversity. Belowground biota is dominated by microorganisms (bacteria, fungi, and protists) and a wide variety of invertebrate fauna, and recent advances have improved our understanding of the critical role of these organisms to multiple ecological processes. However, soil biodiversity is still a black box in many critical areas of ecological and evolutionary research, and this situation is impacting our ability to preserve edaphic biodiversity and the key ecosystem functions it provides in the face of human-driven global change. This symposium welcomes observational and experimental studies on soil organisms addressing pending ecological questions on soil biodiversity from a wide range of fields, including community ecology, biogeography, functional and ecosystem ecology, biotic interactions, global change ecology, restoration ecology, in both natural and anthropogenic ecosystems.



### TSB-12. Spatial modelling of species niches and distributions

Thursday, 5 (11:00-12:30) • Room: Seminario 7

Organizers: Alejandra Zarzo Arias, Universidad Autónoma de Madrid; Rubén García Mateo, Universidad Autónoma de Madrid.

In a world facing significant biodiversity loss, urgent conservation measures and a transformation in our interactions with natural ecosystems are essential. These efforts are critical for several purposes, including assessing species threats, developing conservation guidelines, and anticipating impacts of global change and biological invasions. Achieving these objectives requires a deeper understanding of how socio-ecological systems respond to global changes. In this context, Species Distribution Models (SDMs) are increasingly recognized as valuable tools for understanding species' ecological niches and geographic distributions, as well as forecasting changes and estimating potential vulnerabilities. SDMs have already demonstrated their utility in supporting conservation strategies for threatened species, facilitating habitat restoration, designing protected areas, and assessing risks from invasive species. However, a key challenge is the need to better quantify uncertainty in spatial predictions. The magnitude, significance, and complexity of this uncertainty are influenced by several factors, including the quality of input data (both species and environmental), modeling techniques, model evaluation, and the predictions themselves. In this Thematic Session, we invite contributions that present frameworks and applications aimed at identifying, quantifying, and reducing uncertainty in spatial models and predictions. We also welcome contributions that enhance the spatial modeling of species niches and distributions more broadly.

#### TSB-13. Host-microbe interactions: understanding ecological processes from individuals to ecosystems

Thursday, 5 (15:30-17:00) • Room: Salón de actos

Organizers: Félix Picazo Mota, Departmento de Ecología, Universidad de Granada; Teresa Maria Morganti, Departamiento de Biología Marina y Oceanografía, Instituto de Ciencias del Mar de Barcelona (ICM).

Advancing our knowledge of macro-microorganism interactions, whether in loose relationships or intimate symbioses, is fundamental to understanding the mechanisms that govern these relationships, the evolutionary processes that shape them and ecological consequences. Since Lynn Margulis introduced the holobiont concept in the early 1990s, viewing hosts and their microbiomes as superorganisms, ecological studies have entered a new dimension. Moreover, recent advances on next-generation sequencing and growing accessibility to molecular tools have greatly expanded our understanding of this emerging and exciting field of research. This session aims to explore ecological processes at any level of biological organization (individual, population, community, and ecosystem) from a holobiont perspective, including symbiotic, parasitic, or opportunistic relationships, as well as their relevance to ecosystem functioning and services Any contribution focusing on macro-microorganism interactions, whether theoretical or empirical, is welcome, regardless of host taxon (plant or animal), ecosystem (aquatic or terrestrial), associated microbes, biome, or biogeographic area. Cross-disciplinary research to address the holobiont concept in applied areas, such as management and exploitation as practical solutions to mitigate the impact of human activities are also welcome.

#### TSB-14. Expanding the frontiers of trait-based ecology: novel applications across taxa and scales

Thursday, 5 (15:30-17:00) • Room: Seminario 7

Organizers: Carlos Perez Carmona, Department of Botany, University of Tartu; Eleonora Beccari, Department of Botany, University of Tartu; Enrico Tordoni, Department of Botany, University of Tartu.

Trait-based approaches have revolutionized our understanding of biodiversity by linking species' traits to their roles within ecosystems. This session will explore cutting-edge applications of trait-based frameworks, extending beyond plants to incorporate a wide range of taxa—such as animals, fungi, and microorganisms—across diverse ecosystems. By integrating above- and below-ground traits, as well as considering novel computational tools, this session will address the challenges of predicting community responses to global environmental changes.

The objective is to highlight innovative methods for measuring, analyzing, and interpreting functional traits and their applications in fields ranging from conservation to climate change mitigation. The session will be of interest to ecologists, modelers, and conservation practitioners who are keen to explore how functional traits can improve biodiversity forecasting and inform management strategies across different spatial and temporal scales.

#### TSB-15. Impact of human activities on the health of ecosystems: linking different biological organization levels

Wednesday, 4 (12:45-14:15) • Room: Seminario 7

Organizers: Luís André Lima da Gama Mendes, Universidad Politécnica de Madrid; Ana Belén Muñiz González, Universidad Politécnica de Madrid.

Human activities have caused major shifts in the biosphere, by altering and/or destroying habitats, leading to changes in species communities and dynamics within and across ecosystems. In recent years, due to anthropogenic activity, there has been an exponential rise in the presence of contaminants of emergent concern (CEC) such as microplastics (MPs), plant protection products (PPP), or personal care products (PCPs), across terrestrial and aquatic ecosystems, from diverse sources such as effluents and sewage sludge (SS) from wastewater treatment plants (WWTPs), agriculture, industry and households. Given the evidence of the hazardous potential of said CECs and the occurring and incoming extreme climatic events, there is the need to understand and link their effects at different levels of biological organization prior to affecting whole communities. Therefore, this session aims to present and discuss research on the effects of exposure to CECs, linking one or more levels of biological organization. These include sub-organismal (molecular responses), organismal (survival, reproduction, and growth) and population response (phenotype change, adaptation), up to mesocosms systems or across ecosystems (soil and freshwater). The obtained information will be essential for the global understanding of the current and long-term impact of CECs on the health and sustainability of ecosystems.



# TSB-16. Connecting Portuguese and Spanish Ecological Restoration experiences and future perspectives under the EU Nature Restoration Law

Thursday, 5 (15:30-17:00) • Room: Seminario 3

Organizers: Alice Nunes, cE3c - Centre for Ecology, Evolution and Environmental Changes, Universidade de Lisboa; Josu Alday, Universitat de Lleida, ETSEAFIV; Patricia Rodríguez-González, Forest Research Centre, Associate Laboratory TERRA, School of Agriculture, University of Lisbon.

Restoration challenges to halt and reverse ecosystem degradation and biodiversity loss are often transnational, requiring cooperation across borders to effectively address ecological degradation. The Nature Restoration Law recently adopted in the EU also reinforces the need for coordination between countries which, in the case of Portugal and Spain, can largely benefit from the potential for collaboration between the Portuguese and Spanish ecological restoration networks. This session aims to foster cooperation between Portuguese and Spanish restoration researchers and practitioners, benefiting from the potential of their respective Restoration Networks to address common environmental issues and share restoration experiences and approaches for varied contexts, e.g. terrestrial, inland water, and marine and coastal ecosystems. Contributions are expected on topics such as transnational restoration efforts, shared degraded ecosystems or environmental/social challenges, as well as comparative perspectives. The session also aims to explore the potential for collaborative projects and share and discuss perspectives on the preparation and implementation of the respective National Restoration Plans under the EU law. The political momentum regarding ecosystem restoration offers a unique opportunity to apply ecological knowledge in a transnational context, allowing attendees to learn from each other's experiences and explore future collaborative pathways for ecological restoration in both countries.

### GSC. The Interplay Between Species Coexistence and Abiotic Factors: Community Ecology

Tuesday, 3 (11:00-12:30) • Wednesday, 4 (11:00-12:30) • Thursday, 5 (11:00-12:30) • Room: Restaurante

Coordinators: Adrián Castro-Insua, Universidade de Vigo (UVigo); Isabel Ferrera, Instituto Español de Oceanografía (COM-IEO); Graciela Gil Romera, Instituto Pirenaico de Ecología (IPE-CSIC); Rubén Heleno, Universidade de Coimbra (UC); Lea del Nascimiento, Universidad de La Laguna (ULL); Rodrigo R. Granjel, Basque Center for Climate Change (BC3); Montse Vilá, Estación Biológica de Doñana (EBD-CSIC).

Coexistence is balance maintained through adaptive strategies and species interdependencies. Species employ various adaptive strategies, such as niche differentiation, resource partitioning, and temporal segregation, to enhance survival. These strategies allow multiple species to coexist, promoting biodiversity and ecosystem complexity. Understanding this balance requires moving beyond reductionist approaches, which often isolate components of the ecosystem for study, and instead embracing the complexity of ecological interactions. This perspective recognizes that abiotic factors and biotic communities are co-constitutive, each shaping the other in continuous mutual influence.

#### **Key Questions:**

- How do species interactions shape bottom-up biodiversity patterns?
- How do abiotic factors and biotic communities mutually influence each other?

#### TSC-1. Ecosystem functioning: from individual to food web levels

Thursday, 5 (12:45-14:15) • Room: Restaurante / Thursday, 5 (15:30-17:00) • Room: Seminario 6

Organizers: Ignasi Arranz Urgell, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos; Javier Sánchez-Hernández, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos; Guillermo García-Gómez, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos.

Identifying the mechanisms responsible for ecosystem functioning is a keystone in ecology, as it implies unravelling energy fluxes among organisms and with their environment. Understanding ecosystem functioning can be explored using different biological levels, i.e. from organismal energy use – how individuals allocate metabolic energy for production and survival – to the food web level – feeding links and energy trophic transfer. This thematic session aims to consider important aspects of trophic complexity and stability, including connectance, omnivorous role, intraguild predation, and metabolic scaling, which are responsible of ecosystem functioning across freshwater, marine and terrestrial habitats. The session encompasses a wide range of approaches, including stable isotope research, allometric scaling rules, and energy budget models, utilizing diverse experimental, field-based, and theoretical study designs. Ecosystem integrity is being threatened by current human-driven changes, bringing novel research questions to be formulated and tested, such as how ecological systems are shaped in terms of energy fluxes, and feeding links, and how they respond to new environmental conditions. This matter involves the entire scientific community and will be addressed in the proposed session.

#### TSC-2. Marine ecosystems: human impacts, adaptation and mitigation

Thursday, 5 (15:30-17:00) • Room: Restaurante

Organizers: Rosa María Chefaoui Díaz, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos; Rosa María Viejo García, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos.

Local and global anthropogenic impacts are deeply affecting marine ecosystems, from the behavior of individuals to the dynamics of populations and whole assemblages. Gradual warming, marine heat waves, herbivory pressure, marine pollution, and invasive species are some of the drivers of ecosystem changes and biodiversity loss. There is also an emerging interest in assessing the potential for adaptation of marine ecosystems to the environmental changes and in promoting their resilience through protection and restoration actions.



In this thematic session we aim to gather a better understanding of marine ecosystems in the present scenario of change through research focused on: the human impacts at local and global scales on populations and biotic interactions, and how we can promote habitats restoration and conservation to increase resilience of these populations. We, then, welcome submissions on topics including, but not limited to: climate change effects, the impacts of herbivory, loss and resilience of species and marine habitats restoration and conservation.

#### TSC-3. Plant-herbivore interactions in the face of global change

Monday, 2 (18:00-19:30) • Room: Balconada

Organizers: Andrea Galmán, Montana State University; Carla Vázquez-González, Misión Biológica de Galicia (MBG-CSIC).

Plant-insect herbivore interactions are important drivers of ecosystem functioning and shape the distribution and evolution of organisms. The stability of these interactions is currently being threatened by global change, with consequences for the preservation of ecosystem services and biodiversity. For example, climate change may alter plant-herbivore interactions through several processes, including effects on plant traits that mediate such interactions, and shifts in the distributions and relative abundances of plants, insects and their natural enemies, which decouples current interactions and creates novel ones. In this context, a key challenge in ecology is to unravel the mechanisms that drive plant-herbivore interactions and how global change drivers may alter these dynamics. Gaining this understanding is essential for mitigating the negative impacts on ecosystem functioning and biodiversity, while also generating the knowledge necessary to inform policy decisions.

This organized session will bring together speakers who study the effects of different drivers of global change on plant-herbivore interactions and how the effects cascade up to different trophic levels, including climate change, shifts in species distributions, plant invasions, or habitat disturbance and fragmentation. We aim to include studies conducted in both natural and urban ecosystems and in underrepresented regions, such as those in the global south.

## TSC-4. The ecosystem role of large herbivores. Impacts, challenges and lessons for conservation in a warming world

Monday, 2 (18:00-19:30) • Room: Seminario 6

Organizers: Luis Santamaría, Estación Biológica de Doñana, EBD-CSIC; Jaime Fagúndez, Universidade da Coruña; Laura Lagos Abarzuza, Universidade da Coruña.

Large herbivores are one of the most relevant components of many different ecosystems across the globe. However, the discussion on the factors modulating the balance between their environmental positive and negative impacts on ecosystems functions and services continues within the scientific community. This symposium aims to bring together researchers dealing with all aspects of the biology and ecology of ungulates and other large herbivores, including their role in shaping vegetation composition and productivity, as well as their impact on endangered flora, seed dispersal, interactions with top predators, or the prevention of wildfires. Particularly, we welcome studies on the importance of herbivores in protected areas, on differences between domestic vs wild or native vs invasive species, and on the potential interactions with global warming. We seek to create a discussion forum, eventually producing final conclusions to aid in the development of better management practices linked to the environmental and social particularities of each system.

#### TSC-5. The value of time: understanding the fate of ecosystems, communities and metacommunities over time

Tuesday, 3 (12:45-14:15) • Room: Seminario 6

Organizers: Xavier Benito Granell, Marine and Continental Waters Program, Institute of Agrifood Research and Technology (IRTA); Sergi Pla-Rabés, CREAF; María Cuenca-Cambronero, Universitat de Vic.

Community ecology has advanced the notion of how biotic and abiotic factors interact to structure ecological communities, yet with a strong focus on spatial scales. Understanding how accelerating environmental change will impact populations, communities and ecosystems requires also to explore temporal dynamics at different time scales. This session calls for recent perspectives in community ecology emphasizing the importance of long-term metacommunity dynamics studies, integrating local and regional processes such as dispersal, and historical contingencies such as priority effects and past disturbances, and considering a long-term view of past environmental variability. Incorporating evidence of repeated community assembly processes and dynamic equilibrium together with environmental filtering would benefit from temporal approaches at scales from years to millennia. This is timely as the increasing availability of long-term datasets has coincided with the development of new analytical tools (e.g., sedimentary ancient DNA) and theoretical advancements (e.g., resilience theory). These tools offer valuable insights into studying temporal dynamics in community ecology from a multidisciplinary perspective within community ecology such as paleoecology, disturbance ecology, conservation ecology, and evolutionary biology. This session welcomes contributions that specifically seek to bridge the local-regional and short-long term divide, using diverse sources of datasets and approaches to better understand the role of spatiotemporal environmental regimes in shaping community assembly factors.



#### **GSD. Ecology Meets Evolution**

Tuesday, 3 (11:00-12:30) • Wednesday, 4 (11:00-12:30) • Room: Cova dos libros

Coordinators: **Paola Laiolo**, Instituto Mixto de Investigación en Biodiversidad (IMIB-CSIC-UniOvi); **Carlos Lara**, Instituto de Investigación en Cambio Global (IICG), Universidad Rey Juan Carlos (URJC); **Daniel Montesinos**, James Cook University; **Guillermo Velo-Antón**, Universidade de Vigo (UVigo); **Jordi Voltas**, Universitat de Lleida (UDL).

Plasticity facilitates rapid and flexible responses to environmental changes, challenging the traditional, linear views of evolution that emphasize gradual genetic changes over long periods. Instead, plasticity introduces a dynamic interplay between organisms and their environments, suggesting that evolution is not merely a process of natural selection acting on fixed genetic traits, but a complex, ongoing dialogue where organisms actively respond to and shape their ecological contexts. Phenotypes are not just passively encoded by genomes but are co-constructed through interactions with the environment and mediated by epigenetic mechanisms.

#### Key Questions:

- How do holistic approaches, combining molecular biology, genetics, development, physiology, behavior, and ecology, improve our understanding of evolution?
- How does ecology challenge traditional views of evolution?

#### TSD-1. From Extinct to Extant: Integrating Palaeontological and Ecological Knowledge

Wednesday, 4 (12:45-14:15) • Room: Seminario 2

Organizers: Iván Rey-Rodríguez, Mapas Lab, UVigo; Sara Gamboa, Mapas Lab, UVigo; Adriana Oliver, Mapas Lab, UVigo.

Understanding the full scope of biodiversity and ecosystem dynamics requires bridging the temporal and methodological gaps between palaeontology and ecology. The integration of these two disciplines promises to illuminate patterns of life that transcend time, offering a more comprehensive view of biodiversity through both evolutionary and ecological lenses.

By examining ancient ecosystems and their evolution, we gain insights into how past environmental changes influenced evolutionary trajectories and how historical extinction events relate to current biodiversity crises. Utilizing the fossil record to inform ecological theories—and vice versa—enhances our ability to predict future ecological outcomes amidst contemporary global challenges.

Advances in methodologies and theoretical frameworks are facilitating this interdisciplinary integration, highlighting the importance of a combined approach in reconstructing Earth's biological history and tackling conservation challenges.

This session will explore how merging palaeontological and ecological knowledge can offer crucial insights for understanding and preserving biodiversity in a rapidly changing world.

#### TSD-2. Exploring Evolutionary Adaptation and Resilience Mechanisms to Environmental Change in the Ocean

Tuesday, 3 (12:45-14:15) • Room: Seminario 7

Organizers: Pedro Beca Carretero, Instituto de Investigaciones Marinas (IIM-CSIC); María López Acosta, Instituto de Investigaciones Marinas (IIM-CSIC); Lucía Pita Galán, Instituto de Investigaciones Marinas (IIM-CSIC).

Marine organisms have evolved along distinct pathways that define their function, niche, and overall contribution to ecosystems. In the current context of global change, these evolutionary adaptations shape their ability to acclimate to shifting environmental conditions. The plasticity of molecular and physiological responses in marine organisms, as well as the versatility of symbiotic interactions, will either limit or enhance their capacity to thrive across diverse habitats and scenarios. Building on this understanding, this session invites research that explores the plasticity of marine organisms at molecular, physiological, and phenotypic levels; symbiotic relationships as facilitators of adaptation to environmental shifts; and additional ways through which organisms, environmental factors, and biotic interactions collectively shape the evolution and acclimation of marine life. This includes, among others, studies on plastic changes in gene expression and biochemical composition, context-dependent interactions with and among microbes, and mechanisms that determine the success of organisms under changing environmental conditions. Understanding these processes provides insights into the status of marine organisms and ecosystems, fosters species adaptation, and offers tools for monitoring the resilience and sustainability of our oceans.

# TSD-3. Assessing the interplay between genetic and non-genetic mechanisms contributing to phenotypic variation and adaptation over time

Thursday, 5 (11:00-12:30); (12:45-14:15) • Room: Seminario 1

Organizers: Francesco de Bello, Centro de Investigaciones sobre Desertificación (CIDE-CSIC); Javier Puy, Estación Biológica de Doñana (EBD-CSIC).

To understand how ecosystems respond to global change, we must understand how biological diversity and ecosystem function are maintained over time. One of the most crucial and pressing pursuits in this direction is to determine what causes communities and populations to be resilient to environmental change. Ecologists have long argued about multiple mechanisms by which local biodiversity might achieve greater temporal stability and thus support the temporal stability of ecosystem properties. Among these mechanisms, heritable differences in phenotype and phenotypic plasticity are important contributors to adaptation. Genetic diversity is assumed to allow populations to adapt to changing environmental fluctuations by offering a greater variety of phenotypes among which the most fit can be selected. However, the ability of an organism to modulate trait expression in response to the environment (i.e., phenotypic plasticity) is also heritable. Such induced responses can be of highly variable duration, from short-term transient modifications operating within the lifetime of individuals (within-generation plasticity) to inherited differences across generations (transgenerational plasticity). The relative effect of genetic vs. non-genetic mechanisms, including their



temporal extent and to which extent they are triggered by different environmental drivers, largely remain to be assessed. It is unclear to which extent non-genetic effects are cumulative when environmental conditions are maintained across generations. We also do not know how reversible induced differences are when environmental conditions change. These questions require researchers to assess how the role of genetic diversity and/or diversity in non-genetic inheritance interacts with population stability over time. Another important task is to describe how such questions can be addressed experimentally. This symposium will gather diverse researchers who are working to understand the link between genetic and non-genetic effects on short- and long-term phenotypic variation within species and how genetic and non-genetic effects can be disentangled in natural populations.

The proposed symposium aims to synthesize the recent developments across different fields of research, connecting studies on genetic diversity, phenotypic diversity and non-genetic effects such as transgenerational plasticity. As such, we will assess topics like phylogenetics and phylogenomics, trait-based ecology and plant communities, epigenetics and transgenerational plasticity, functional genetics, and global change ecology in combination, with the aim of outlining unexplored areas of research that bridge these fields.

#### TSD-4. Intra-specific and intra-individual variation in a climate change contex

Monday, 2 (18:00-19:30) • Room: Auditorio / Tuesday, 3 (11:00-12:30) • Room: Seminario 6

Organizers: Martí March Salas, Instituto de Investigación en Cambio Global (IICG-URJC), Universidad Rey Juan Carlos; Charlotte Møller, Botany and Mycology Unit, Finnish Museum of Natural History, University of Helsinki.

Trait variation allows plant populations to adapt to diverse conditions and respond to increasing environmental pressures. The extent of this variation, known as intra-specific trait variation (ITV), is both a cause and a consequence of evolution, enhances ecological resilience to stressors, and influences the community structure as well as interactions with other organisms. While ITV research mostly focus on variation among individuals, recent studies have shown that intra-individual variation—an ITV research branch that studies the phenotypic variation occurring among repeated organs within individual plant genotypes—can affect evolutionary trajectories, contribute to functional diversity, and influence the dynamics of ecological communities. Despite being largely overlooked, intra-individual variation (also known as subindividual variation or diversity) can be the most important source of variation within plant populations, and provide crucial insights into plastic responses, epigenetics, resource allocation, adaptability, and population dynamics, especially in the climate change context. Understanding variation in important functional traits both among and within individuals is critical for advancing in fields such as evolutionary ecology, physiology, ecosystem functioning, and agriculture.

The objective of this session is to emphasize the need for greater attention to intra-specific, and specifically intra-individual, variation, presenting novel approaches and research themes that uncover their ecological, functional, and evolutionary significance. By focusing on inter- and intra-plant differences, we aim to encourage new perspectives on how plants and associated biotic interactions respond to dynamic and changing environments. Attendees interested in the evolutionary and functional implications of intra-specific and intra-individual variation, and in new fields associated with biotic interactions, epigenetic modifications, phenotypic plasticity, or crop science, will find this session particularly valuable.

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Tuesday, 3 (11:00-12:30); (12:45-14:15) • Wednesday, 4 (11:00-12:30); (12:45-14:15) • Thursday, 5 (11:00-12:30); (12:45-14:15) • Room: Auditorio

Coordinators: David Álvarez Fernández, Universidad de Oviedo (UniOvi); Rafael Barrientos, Universidad Complutense de Madrid (UCM); Raquel Benavides, Universidad Politécnica de Madrid (UPM); Verónica Ferreira, Universidade de Coimbra (UC); Teresa Gimeno, Centre de Recerca Ecològica i Aplicacions Forestals (CREAF-UAB); María Gómez Brandón, Universidade de Vigo (UVigo); Margarita Lema, Misión Biolóxica de Galicia (MBG-CSIC); Alejandra Morán-Ordóñez, University of Bern (UNIBE).

Framing our current ecological crisis as a "global tipping point" acknowledges the profound and potentially irreversible changes facing our planet. We must deepen our understanding of the complex, interdependent processes that contribute to biodiversity loss and ecosystem degradation. There is a critical need to foster a sense of ecological responsibility and care, recognizing that sustainable solutions require fundamental changes in how we relate to the natural world and to each other. This necessitates questioning the underlying socio-economic systems that drive environmental degradation. We need a multifaceted, interdisciplinary, and deeply ethical response to ensure the sustainability of biodiversity and ecosystem services for generations to come.

#### Key Questions:

- How do we include socio-economic factors in addressing biodiversity conservation and ecosystem sustainability?
- What fundamental changes are required in our relationship with the natural world?

#### TSE-1. Anthropogenic Disturbances and Global Change: Impacts on Biodiversity and Ecosystem Services

Monday, 2 (18:00-19:30) • Tuesday, 3 (11:00-12:30) • Room: Seminario 7 / Tuesday, 3 (12:45-14:15) • Room: Balconada

Organizers: Inmaculada (Ada) Álvarez-Manzaneda, Department of Ecology, University of Granada; Nuria Pistón, Department of Ecology, University of Granada; Silke Martínez-Moreno, Department of Ecology, University of Granada.

The accelerating pace of anthropogenic disturbances, coupled with global climate change, poses a significant threat to biodiversity and ecosystem services across terrestrial, marine, and freshwater ecosystems. This session will explore the direct and indirect effects of major disturbances, including drought, wildfires, urbanization, and resource overexploitation. These disturbances disrupt ecological balance, leading to habitat loss, species extinction, and diminished ecosystem services such as pollination, water purification, and carbon sequestration. The session will also highlight cutting-edge monitoring techniques which are crucial for assessing the impacts of these disturbances. Focusing on innovative tools enable more precise tracking of changes in biodiversity and ecosystem health, aiding in the development of adaptive management strategies. By understanding these dynamics, we aim to foster dialogue on mitigating the adverse effects of human activities and climate change, ultimately promoting sustainable practices that preserve biodiversity and ecosystem functionality for future generations.



# TSE-2. Understanding the potential of managed ecosystems to mitigate climate change from an ecological perspective

Wednesday, 4 (11:00-12:30) • Room: Seminario 6

Organizers: María Almagro Bonmatí, IFAPA Camino de Purchil, Área de Ingeniería y Tecnología Agroalimentaria; Pablo Manzano, Basque Centre for Climate Change (BC3); Daniel Ortiz Gonzalo, Department of Geosciences and Natural Resource Management, Terrestrial ecosystems, University of Copenhagen.

Land use change and the degradation of agroecosystems due to industrial agricultural practices is a major driver of biodiversity loss and greenhouse gas emissions. Impact attribution, however, often lacks an ecological context to make such attributions more accurate. There is great potential to mitigate these problems by adopting ecological principles in agriculture, but only if impacts are attributed fairly to prevent counterproductive measures and trade-offs are also considered.

The objective of this session is to present case studies on mitigation in agroecosystems, studies that integrate Ecology in Agricultural Sciences to improve our understanding of ecosystem processes and interactions that contribute to mitigation, integrated assessments that consider the trade-offs of mitigation measures, as well as the application of ecological approaches for fair impact attribution. This session is aimed at anyone interested in exploring the usefulness of ecological science approaches for climate change mitigation research.

## TSE-3. Ensuring the ecological effectiveness of the EU Common Agricultural Policy 2023-2027

Thursday, 5 (15:30-17:00) • Room: Balconada

Organizers: **Mario Díaz**, Department of Biogeography and Global Change (BGC-MNCN), Museo Nacional de Ciencias Naturales, CSIC; **Elena Velado Alonso**, Functional Agrobiodiversity & Agroecology Group, Georg-August University Göttingen; **Sonia Roig-Gómez**, Departamento de Sistemas y Recursos Naturales, Universidad Politécnica de Madrid.

Agriculture in Europe has been largely driven by the Common Agricultural Policy (CAP). Its last reform will be enforced from 2023 to 2027, and it seeks to be socially fairer, greener and more performance-based than previous periods. Adaptive management, including compulsory direct evaluation of environmental effectiveness, is a key new feature of the current CAP. This session will present current state of research aimed at developing evaluation and monitoring tools to ensure CAP effectiveness to improve biodiversity and its associated ecosystem services. Spanish and Portuguese case studies are especially relevant due to its disproportionate share of agrosystem biodiversity within Europe, as well as recent basic and applied research on it.

## TSE-4. Forest mortality and die-off responses to global change

Thursday, 5 (11:00-12:30); (12:45-14:15) • Room: Balconada

Organizers: Paloma Ruiz Benito, Universidad de Alcalá; Antonio J. Pérez Luque, Institute of Forest Sciences (ICIFOR), INIA-CSIC; José M. Torres-Ruiz, Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS) - CSIC.

Forests are critical ecosystems for human well-being acting as net carbon sinks worldwide. However, increased tree mortality and die-off events are being observed worldwide and it could not only compromise the role of forests as carbon sinks but also alter the distribution patterns of many species, especially as these events are expected to increase in the future. In many cases, decaying and mortality events are underlined by extreme climatic conditions, such as more intense and frequent hotter droughts, but they are usually triggered and exacerbated by other factors such as pests and pathogens. Currently, our ability to understand and predict these events and their ecological consequences is still limited. In this session we aim to discuss advances in the study of the responses of forests to climate change, particularly about the patterns and processes associated with climate-induced tree mortality and die-off, from both an ecophysiological and ecological perspective, to further apply this knowledge to improve forest management.

#### TSE-5. The long-term recovery of post-agricultural land

Thursday, 5 (12:45-14:15) • Room: Seminario 6

Organizers: David Moreno Mateos, University of Oxford; Asun Rodriguez Uña, University of Cambridge; Daniel Montoya, Basque Centre for Climate Change (BC3).

Agriculture is the largest transformation of the Earth's surface. At this point in history, post-agricultural land has been dramatically increasing over the last decades and will only grow. However, the recovery of these lands is uncertain and will take centuries in optimistic scenarios. In this session, we will explore patterns and mechanisms of ecosystem recovery in post-agricultural lands over long periods of time (>100 years). For this, we will compare traditional functional and structural attributes (e. g. species diversity, carbon stocks) with emerging metrics integrating interactions and functions (e. g. the stability of interaction networks, abundance of meta-community hub species). These will allow us to propose potential future scenarios and tools to promote more diverse and functional recovering ecosystems. Attendees interested in succession, disturbance, long-term studies, species interactions, conservation or restoration might be interested.

#### TSE-6. Greenhouse gas fluxes across natural and anthropized ecosystems

Thursday, 5 (15:30-17:00) • Room: Seminario 2

Organizers: Isabel Reche, Departamento de Ecología, Universidad de Granada; Iris Hendriks, Instituto Mediterráneo de Estudios Avanzados (CSIC-UIB); Penélope Serrano-Ortiz, Departamento de Ecología, Universidad de Granada.

During the last century, the concentration of the main greenhouse gases (GHGs) like CO2, CH4, and N2O has increased substantially in the atmosphere, driving global climatic change. However, the knowledge about the sources and sinks of these GHGs in different types of ecosystems is still very limited, constraining global predictions and models. In this session, we want to explore the different processes involved in the GHG budgets (emissions and uptakes) in diverse natural (e.g., lakes, rivers, coastal wetlands, forests, grasslands, coastal vegetation) and anthropized (e.g., crops, aquaculture, reservoirs) ecosystems. This session invites



scientists working on greenhouse gas fluxes at the ecosystem scale to present their results, enabling a comparison among different ecosystem types and produce a more holistic, global vision.

#### TSE-7. What works in forest management and restoration

Thursday, 5 (11:00-12:30); (12:45-14:15) • Room: Seminario 2

Organizers: Philip Martin, Basque Centre for climate change - Bc3; Isabel Donoso, Basque Centre for climate change - Bc3.

The increasing threats posed by forest destruction and extreme climate change mean that sustainable forest management and restoration are more urgent than ever. This importance is reflected in the ambitious commitments made by governments worldwide, such as restoring 3.6 million square kilometres of forests—around six times the size of the Iberian Peninsula. Despite the high political priority of forest management and restoration, many knowledge gaps remain. For example, we still know relatively little about the impacts of management and restoration practices on key aspects like soil health, water quality, and complex biodiversity outcomes, such as species interactions. In addition, the trade-offs between environmental and social priorities, the contexts in which different management and restoration strategies are most effective, and the social factors that determine success remain unclear. This session will explore these crucial themes, aiming to provide a comprehensive overview of what works—and what doesn't—when attempting to sustainably manage and restore forest ecosystems.

## TSE-8. Biological invasions, knowledge to manage in a context of global change

Wednesday, 4 (11:00-12:30) • Room: Seminario 7

Organizers: Luís González Rodríguez, Universidade de Vigo; Jonatan Rodríguez Parra, Unversidade de Santiago; Ana Novoa Pérez, EEZA-CSIC.

Scientific and public interest in invasive species is driven by their ecological, economic and social impacts. Invasive species are responsible for many of the extinctions of species for which the cause is known, and are considered to be one of the main drivers of biodiversity loss. They are considered an important part of global change, as they can significantly alter ecosystem processes and functions, leading to significant environmental damage that can sometimes be irreversible. Factors such as climate change, habitat degradation or overexploitation pose an additional challenge for the effective management of invasive species, as they allow their appearance in other areas, favour the increase of their distribution area, hinder their management and magnify the problem. This problem has caused great general interest, with special emphasis on the role of Spain and Portugal, including different points of view and scientific fields. This thematic session may constitute a necessary forum for the presentation of systematic reviews, methodological studies and experiences that provide answers to scientific research questions that would otherwise appear scattered in the 'corpus' of the congress. On the other hand, it is intended to be a backbone session of the new AEET working group, ecology of invasions.

#### TSE-9. Brown Urban Ecology: The interlink between nature and humanity

Wednesday, 4 (12:45-14:15) • Room: Seminario 6

Organizers: Juan Antonio Hernández Agüero, Departament of Environmental Studies, Vrije Universiteit Amsterdam; Jéssica Jiménez-Peñuela, IREC-CSIC-UCLM; Joan Casanelles-Abella, Technische Universität München (TUM).

General background: Urbanization produces some of the most significant impacts on biodiversity and ecosystem functioning. As cities rapidly expand, they exert pressure on natural habitats, leading to biodiversity loss, ecosystem degradation, and disruptions in essential ecosystem services such as air and water purification, temperature regulation, and disease control. Abiotic and biotic conditions are highly modified in cities including higher levels of pollution, small-sized, fragmented habitat and modified ecological interactions. Thus, urban areas represent a thrilling environment for ecological studies, and ecological knowledge should be integrated in urban planning to maximize the ecosystem services provided by the urban biota.

- Scope: Animal ecology, biotic interactions, ecology and evolution, ecosystem services, human health, socio-ecology, pest regulation.
- Objective: Bring together researchers from different urban disciplines to discuss methodologies and approaches to understand the drivers of biodiversity and ecological and evolutionary processes happening in urban habitats, highlight the benefits provided to people (ecosystem services), and discuss their contribution to mitigating the biodiversity crisis.
- Relevance: Currently, most of the human population lives in cities and this percentage will continue to increase. Understanding the social-ecological processes
  driving urban biodiversity, ecology and evolution is critical for finding solutions to reconcile people and nature while tackling any socio-ecological challenges
  arising from this interaction.

#### TSE-10. Green Urban Ecology: nature and the city

Thursday, 5 (11:00-12:30) • Room: Seminario 6

Organizers: Jaime Fagúndez, Universidade da Coruña; María José Servia García, Universidade da Coruña; Yaiza Rodríguez Lueje, Universidade da Coruña.

General background: Urbanization produces some of the most significant impacts on biodiversity and ecosystem functioning. As cities rapidly expand, they exert pressure on natural habitats, leading to biodiversity loss, ecosystem degradation, and disruptions in essential ecosystem services such as air and water purification, temperature regulation, and disease control. Abiotic and biotic conditions are highly modified in cities including higher levels of pollution, small-sized, fragmented habitat and modified ecological interactions. Thus, urban areas represent a thrilling environment for ecological studies, and ecological knowledge should be integrated in urban planning to maximize the ecosystem services provided by the urban biota.

- Scope: Green infrastructure in urban design, the ecological role of green spaces, habitats and ecological niches in cities.
- Objective: Ecologists working on urban environments are invited to present their research at this symposium, considering the application of their outcomes
  to urban design to promote better ecosystem functioning. We seek to share knowledge and integrate ecological studies with the design of sustainable urban
  planning, developing practical ideas considering the challenges of more resilient and diverse urban ecosystems.



 Relevance: The concept of green infrastructure, that incorporates ecological connectivity into urban design, provides a tool for improving the city's green spaces and human well being. Green infrastructure in urban planning seeks an integrative approach linking environmental, social and architectural views, representing a challenge for interdisciplinary approaches to global issues such as climate change.

#### TSE-11. Blue Urban Ecology: Aquatic ecosystems for Healthy and Sustainable Cities

Thursday, 5 (15:30-17:00) • Room: Auditorio

Organizers: Maria João Feio, Department of Life Sciences, University of Coimbra, Coimbra, MARE - Marine and Environmental Sciences Centre, ARNET - Aquatic Research Network; Ana Raquel Calapez, Department of Life Sciences, University of Coimbra, Coimbra, MARE - Marine and Environmental Sciences Centre, ARNET - Aquatic Research Network; João M. Neto, Department of Life Sciences, University of Coimbra, Coimbra, MARE - Marine and Environmental Sciences Centre, ARNET - Aquatic Research Network.

General background: Urbanization produces some of the most significant impacts on biodiversity and ecosystem functioning. As cities rapidly expand, they exert pressure on natural habitats, leading to biodiversity loss, ecosystem degradation, and disruptions in essential ecosystem services such as air and water purification, temperature regulation, and disease control. Abiotic and biotic conditions are highly modified in cities including higher levels of pollution, small-sized, fragmented habitat and modified ecological interactions. Thus, urban areas represent a thrilling environment for ecological studies, and ecological knowledge should be integrated in urban planning to maximize the ecosystem services provided by the urban biota.

- Scope: This session explores the intersection of urban aquatic ecology and human health, focusing on how urbanization impacts freshwater and coastal
  ecosystems, living organisms, and ultimately, human well-being.
- Objective: Gather studies that: i) investigate the effects of urbanization in the health of freshwater and coastal ecosystems (including rivers, streams, lakes, estuaries and coastal areas) and their associated organisms, ii) link aquatic ecosystems' degradation to human health risks; and iii) demonstrate/relate the critical value of services of aquatic ecosystems in urban settings for human health.
- Relevance: By bridging aquatic ecology, public health, and ecosystem services, this session offers valuable insights for researchers interested in fostering healthy, resilient, and sustainable cities.

#### TSE-12. Effectiveness of anthropogenic actions in reducing biodiversity loss

Monday, 2 (18:00-19:30) • Tuesday, 3 (11:00-12:30) • Room: Seminario 2

Organizers: Sara Carona, CE3C - Center for Ecology, Evolution and Environmental Change, Universidade de Lisboa; Alfredo García Fernández, Universidad Rey Juan Carlos, Instituto de Investigación en Cambio Global; Carmen Bessa-Gomes, Université Paris-Saclay, CNRS, AgroParisTech, Ecologie Systématique et Evolution.

Anthropogenic actions are one of the main causes of the current biodiversity crisis and pose a significant threat to ecosystems. Measures to conserve species, maintain evolutionary potential and adaptation to in situ conditions, together with improving habitat restoration are becoming increasingly urgent. In response, several conservation actions are being developed to protect threatened species, improve ecosystem services, and reduce human impacts on biodiversity. This session aims to explore the effectiveness of conservation measures, such as species translocations, ecosystem restoration, and mitigation efforts in endangered habitats or species, including meta-analysis and database compilations. By sharing up-to-date knowledge, this session will contribute to assessing how well these actions have succeeded in reversing biodiversity loss and promoting ecological integrity. Attendees will gain insights into the efforts and challenges being faced in this field, with discussions relevant to scientists, policymakers and conservation practitioners. Engaging in this debate is crucial for shaping future conservation strategies and enhancing the global response to biodiversity decline.

#### GSF. New Technologies, New Discoveries: Big Data, Remote Sensing, and Al

GSF. New Technologies, New Discoveries: Big Data, Remote Sensing, and Al

Tuesday, 3 (11:00-12:30) • Wednesday, 4 (11:00-12:30) • Room: Balconada

Coordinators: Laura Hernández Mateo, ICIFOR-INIA, CSIC; Jose Manuel Álvarez-Martínez, Univ. Oviedo-CSIC-Princ. Asturias; Salvador Arenas-Castro, Universidad de Córdoba.; Adrián Regos, Misión Biolóxica de Galicia (MBG-CSIC); David S. Pescador, Universidad Complutense de Madrid (UCM).

The advent of new technologies has revolutionized the field of biodiversity research. Specifically, the integration of big data analytics, remote sensing, and artificial intelligence (AI) has markedly enhanced our ability to monitor, analyze, and understand biological diversity on a global scale. The exponential growth of open-access databases on biodiversity has facilitated unprecedented data availability. These extensive datasets enable researchers to perform large-scale analyses, uncover patterns, and make informed predictions about biodiversity trends. Remote sensing technology has become an invaluable asset in biodiversity research, allowing for the monitoring of habitat changes, assessment of ecosystem health, and detection of environmental disturbances with high temporal and spatial resolution. Al-driven tools, such as automated image recognition algorithms, facilitate the rapid processing of large datasets, enabling more efficient and accurate biodiversity assessments.

#### Key Questions:

- How will new technologies allow us to explore novel and more detailed aspects of how life interacts with our planet?
- What are the benefits and challenges of integrating big data, remote sensing, and AI in biodiversity research?



## TSF-1. Ecoacoustic monitoring of biodiversity: challenges and applications

Wednesday, 4 (11:00-12:30) • Room: Seminario 2

Organizers: Irene Mendoza Sagrera, Estación Biológica de Doñana (CSIC); Esther Sebastián González, Department of Ecology. University of Alicante; Cristian Pérez Granados, Forest Science and Technology Centre of Catalonia.

There is a current need to develop biodiversity monitoring schemes that are automatic, fast, reliable, and scalable over broad spatial and temporal scales. Sounds from nature are one of the best proxies of the health status of ecosystems and they serve as indicators of global-change impacts. Traditional techniques of acoustic survey are labour-intensive, expensive, and logistically impracticable in remote areas. Passive Acoustic Monitoring (PAM) is an alternative to monitor biodiversity that can cover broad and spatial temporal scales, including simultaneous and long-term monitoring, while reducing biases among observers. However, vast amounts of data is often generated, which requires the use of machine learning algorithms to automatize the identification of animal species. Nonetheless, the development of machine learning algorithms is not friendly for many researchers and practitioners, so multidisciplinary approaches are required. In this session, we aim at presenting the most advanced research on terrestrial ecoacoustic monitoring, focusing on challenges including methods, applications, and standardisation of acoustic data. We will favour the diversity of speakers, including different backgrounds, genders and career stages. As ecoacoustics is getting increased interest, we believe that this session will be informative for attendees already working on the topic and others that could start doing so promptly.

#### TSF-2. Perspectives and Challenges in Biodiversity Forecasting

Tuesday, 3 (12:45-14:15) • Room: Restaurante

Organizers: **Guillermo Fandos**, Department of Biodiversity, Ecology, and Evolution\; Faculty of Biological Sciences, Universidad Complutense de Madrid; **Maria Paniw**, Department of Conservation Biology and Global Change, Estación Biológica de Doñana (EBD-CSIC).

The global decline in biodiversity over recent decades, primarily due to key anthropogenic stressors, is a pressing issue. Predicting near-term changes in biodiversity is essential for adaptive management, that is, anticipating and mitigating biodiversity loss instead of just reacting to loss. However, many challenges persist in developing such forecasts, and our predictive capacity needs improvement.

This session will address data constraints, information gaps, and modeling challenges – but also opportunities – in biodiversity forecasting. We will discuss theoretical and conceptual tools that synthesize incoming data, create and validate predictive models, estimate uncertainties, improve data collection, detect trends, and ensure scalability across various spatial and temporal levels.

The aim is to outline current incentives and recommendations for the broader use of biodiversity models for decision support. Additionally, we hope to generate synergies and debate among researchers interested in predicting biodiversity, discussing limitations, and addressing new challenges in biodiversity forecasting and conservation. Attendees will benefit from expert perspectives on innovative solutions and the latest advancements, fostering a collaborative approach to biodiversity forecasting and its practical implementation.

# TSF-3. Quantitative ecology: modelling of populations and species distributions

Thursday, 5 (11:00-12:30) • Room: Seminario 3

Organizers: **María Victoria Jiménez Franco**, Departamento de Biología Aplicada. Centro de Investigación e Innovación Agroalimentaria y Agroambiental (CIAGRO-UMH). Universidad Miguel Hernández de Elche; **Gurutzeta Guillera Arroita**, Instituto Pirenaico de Ecología (CSIC), Jaca.

In the era of global change and big data, there is a growing demand among practicing ecologists and managers to interpret ever larger and more complex data sets to study and predict responses of wildlife populations and species distributions. The development, testing and application of advanced statistical tools for analysing ecological data is an active area of work and a wide range of ecological models are currently available. Modern developments include, among other things, methods to account for the observation process, the inclusion of different ecological mechanisms and the integration of disparate types of data. The objective of this session is to share advances in population and species distribution modelling. The session aims to cover interesting applications of modern modelling tools, as well as possible methodological developments. Contributions for this session may cover a variety of methodologies (such as hierarchical occupancy models, capture-recapture models, individual-based models, etc.). Both junior and senior researchers are encouraged to contribute with studies where ecological modelling is applied to infer and/or predict effects of environmental (climate change, habitat changes, anthropogenic disturbances, etc.) or intrinsic factors (species interactions, functional traits, etc.) on populations or distributions.

#### TSF-4. Do-it-yourself (DIY) open source tools and projects in ecology

Thursday, 5 (12:45-14:15) • Room: Seminario 3

Organizers: **María Leo**, Instituto de Ciencias Agrarias (ICA-CSIC); **Ángel Lareo**, Universidad Autónoma de Madrid (UAM); **Lluis Gómez Gener**, Centre de Recerca Ecològica i Aplicacions Forestals (CREAF).

Developing novel technologies and custom-made equipment, often referred to as "do-it-yourself," (DIY) has a long history in science. However, inadequate communication among researchers leads to fragmented efforts hindering the widespread adoption of these valuable innovations. Our goal is to present successful open-source DIY projects and tools developed by the Iberian Ecology community, as they contribute to democratize science and enable research that might otherwise be limited by trade secret and budget constraints.

Our objectives include i) demonstrating the benefits of DIY and open-source tools in terms of adaptability, creativity, and cost saving, ii) assessing the needs of lberian ecologists to advance these technologies and ideally create a network dedicated to this field, and iii) challenging the misconception that using these tools requires advanced technological expertise, promoting accessibility and inclusivity. To do so, we propose a combination of a poster session and a workshop.

- The theoretical session will consist on a poster session of relevant open-source or DIY tools (hardware and software) developed by Iberian ecologists, followed by a roundtable with specialized researchers on this topic.
- The workshop-like session will be a hands-on tests of several of these tools, enabling researchers to test potential useful tools for their projects.



# **TECHNICAL FIELD TRIPS**

Friday, 6 (9:00-18:00 / 18:00) • Departure from Parking Pazo da Cuttura

#### TFT-2. Carreirón Natural Park and Illa de Arousa – Coastal Ecosystems and Birdlife in a Protected Marine Landscape

We will spend the day exploring the Carreirón Natural Park, located on the southern tip of Illa de Arousa, an island in the heart of the Ría de Arousa estuary, known for its rich biodiversity, marine culture, and scenic coastal landscapes.

Our main activity will be hiking the Carreirón Trail—a flat and easy 7 km loop that traces the coastline of this protected area, offering close contact with salt marshes, coastal forests, small coves, and granite headlands. Along the way, we will explore sandy beaches, observe native plant species adapted to saline environments, and learn about the park's ecological role as a bird sanctuary.

This visit takes place during the breeding season of several seabird species, including large colonies of yellow-legged gulls and a few pairs of Eurasian oystercatchers, a protected nesting species in Spain. Participants will be encouraged to walk quietly, stay on marked trails, and avoid disturbing nesting areas, helping to preserve this delicate coastal ecosystem.

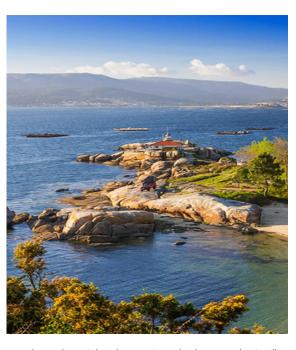
In the afternoon, you'll have several eco-friendly leisure options:

Rent a canoe and paddle among the bateas, the iconic mussel cultivation rafts that define the local maritime landscape, while learning about traditional and sustainable aquaculture practices.

Take a swim in the calm, clear waters of the estuary—an ideal spot for low-impact recreational activities.

Or enjoy a relaxed visit to Illa de Arousa village, with its local markets, seafood heritage, and charming seaside atmosphere.

Environmental focus: The excursion promotes respect for wildlife, awareness of human impact on marine and coastal environments, and a deeper understanding of protected natural areas. Please use reusable containers, leave no trace, and follow the guidance of local environmental recommendations.



Friday, 6 (9:00-18:00 / 18:30) • Departure from Parking Pazo da Cuttura

#### TFT-4. Illa de Sálvora – Exploring a Wild Jewel of the Galician Atlantic Islands National Park

This special field trip offers a unique opportunity to explore Sálvora Island, one of the least visited and most pristine parts of the Galician Atlantic Islands National Park—a protected area of exceptional ecological and cultural value.

We will depart from Aguiño ( GMAPS: GX9J+RG Ribeira ), on the northern shore of the Ría de Arousa, and travel by boat to Illa de Sálvora. The journey itself provides stunning views of the estuary's diverse marine landscape, including mussel rafts, coastal inlets, and migratory seabirds.

Once on the island, we will be immersed in a coastal ecosystem of high ecological sensitivity, known for its gull colonies, rocky shores, Atlantic scrub, and granite formations shaped by centuries of wind and salt. Our visit coincides with the seabird breeding season, when thousands of yellow-legged gulls nest across the island. Participants will be guided by scientists working in the park, along with an official guide authorized to lead visits to the island, who will explain the island's fragile habitats, the efforts to remove invasive species from the island, the importance of seabird conservation, and the strict visitor regulations designed to minimize human impact.

We'll also explore elements of Sálvora's cultural heritage, including its abandoned village, the old lighthouse, and stories of past inhabitants, fishermen, and shipwrecks, all of which are part of the island's unique identity and connection to the Galician coast.

Responsible visitation: As part of a National Park, access to Sálvora is highly regulated, and visitor numbers are limited to ensure ecosystem preservation. Our group will be capped at 50 participants, in accordance with park conservation policies. Please respect all environmental guidelines, stay on paths, and avoid disturbing wildlife.

This is a rare chance to experience a nearly untouched natural space, while learning about island ecology, marine biodiversity, and the challenges of managing and protecting fragile Atlantic environments.





# **TECHNICAL FIELD TRIPS**

Friday, 6 (9:00-18:00 / 18:00) • Departure from Parking Pazo da Cuttura

#### TFT-5. Hiking in Serra do Cando-Suído - Atlantic Mountains, Highland Biodiversity, and Sacred Landscapes

This 12 km circular hike takes us deep into the Serra do Cando–Suído, one of Galicia's most rugged and lesser-known mountain ranges. Known for its granite plateaus, broom-covered hills, and breathtaking panoramic views, this area forms a natural frontier between the inland highlands and the Atlantic coast.

We will follow a moderately challenging route that passes by two remarkable viewpoints:

The Three-Rías Sight Point ( GMAPS: CHXV+2Q Ventoselo, A Lama ) offers a sweeping view of the Ría de Pontevedra, Ría de Vigo, and Ría de Arousa, framed by forested valleys and distant peaks.

The Porta do Alén ( GMAPS: FJF8+48 A Lama ) is a mystical pass that, according to local tradition, marks a threshold between the known world and the beyond—Alén meaning "the other side" in Galician. This spiritual dimension adds cultural depth to the hike, connecting nature with memory and myth.

Ecologically, the Serra do Cando—Suído hosts high-altitude Atlantic habitats, including heaths, wet meadows, and remnants of oak and chestnut woodlands. The region supports a variety of raptors, wild horses, and endemic flora. Along the way, we'll discuss the importance of preserving these mountain ecosystems in the face of climate change, land abandonment, and wildfires.

Sustainable hiking: Participants are encouraged to minimize their environmental footprint—stick to trails, avoid disturbing wildlife, and bring zero-waste snacks and reusable containers. This is an opportunity to appreciate not just the beauty of the landscape, but the ecological balance that sustains it.



# **SOCIAL**

#### Welcome cocktail

Monday 2 (20:20-22:00) • Recinto Feiral

To welcome the participants of the Conference and "break the ice", we have prepared a cocktail reception featuring a selection of local tapas, soft drinks, beers, and wines. There will be options available for vegans, vegetarians, and individuals with intolerances or special dietary needs.

#### **Morning Coffee Breaks**

Tuesday 3, Wednesday 4 & Thursday 5 (10:20-11:00) • Recinto Feiral

We have arranged a mid-morning coffee break to gather strength to continue with the intense conference program.

#### **Daily Lunches**

Tuesday 3, Wednesday 4 & Thursday 5 (14:15-15:30) • Recinto Feiral

Daily lunches will consist in a luch box. There will be seating areas, but participants will be able to leave the venue to have lunch in the recreation areas on the banks of the Lerez River. There will be options available for vegans and a specific corner for intolerances dietaries.

#### **Discussion Poster Corner refreshment**

Tuesday 3, Wednesday 4 (18:00-19:30) & Thursday 5 (17:00 -18:30) • Recinto Feiral

We are giving posters a central role, with dedicated sessions that provide maximum visibility and encourage informal, in-depth conversations, offering a valuable platform to share your research, spark collaboration, and connect with a broader audience in a dynamic and friendly setting. The poster sessions will be accompanied by refreshments and snacks to help everyone recharge.

#### Get together closure party

Thursday, 5 (21:00) • Recinto Feiral

The traditional Conference closure dinner offers a space for relaxation and socializing after an intense scientific program. To facilitate interaction among groups and participants, we have chosen a cocktail-style format. Vegan, vegetarian, and special dietary options will be available. The evening will be accompanied by a local music-group performance.

#### Free tours for Pontevedra

Free guided tours for Pontevedra provide by the council are available. If you are interested, please tell us when arriving to the conference at the information Desk.

# **OPEN DEBATES**

#### **Ecology and Policy**

Tuesday, 3 (19:00-20:00) • Café Museo da Historia, Praza Valentín García Escudero s/n

Should Ecology take a position on specific issues which are part of the public debate and that concern it as a Science? How should it do so? Organized by Ecology and Policy Commission of the AEET.

#### Colloquium on Harassment in Academia

Tuesday, 3 (17:50) • Auditorio

Organized by The AEET Equality Commission.



## **CEREMONIES**

#### Opening ceremony

Monday 2, 14:00-15:00, Room: Auditorio

The opening ceremony of the III SIBECOL & XVII AEET Meeting will kick off this exciting event. The ceremony will be presided over by representatives of the Concello de Pontevedra, University of Vigo (UVigo), University of Santiago de Compostela (USC) the Biological Mission of Galicia (MBG-CSIC) and presidents of the promoter institutions SIBECOL & AEET.

The AEET Awards for the 2024–2025 biennium will be presented in this ceremony.

### **Closing ceremony**

Thursday 5, 18:45-19:30, Room: Auditorio

The closing ceremony will be an informal event to thank all participants for their attendance and collaboration, and to invite them to participate in future editions. It will be preceded by the Get together closure party.



# aeet AEET institutional AWARDS

Monday 2, 14:00-15:00. Room: Auditorio

#### **ECOSISTEMAS Distinction – LUIS BALAGUER**

This award, promoted by the AEET, is intended to honor a researcher/educator, member of our association, who has stood out for a scientific-academic career dedicated to terrestrial ecology, marked by scientific rigor, commitment, integrity, motivation, and solidarity. The aim is to recognize the work of members who have contributed to the development of terrestrial ecology in our environment through the novelty and significance of their ideas and research, their contribution to scientific training in the field of ecology, and the dissemination and application of ecological science to society, without disregarding their bibliometric achievements.

Awarded: ADRIAN ESCUDERO ALCÁNTARA, Professor of Ecology at the *Universidad Rey Juan Carlos* (URJC) and Director of the Institute for Global Change Research (IICG-URJC).

This distinction is honorary and therefore does not include a monetary prize. The awardee receives the status of Honorary Member of the AEET.

## "Contribution to Diversity and Inclusion in Academia" Award

This award recognizes individuals or groups who have made significant contributions to improving and supporting equality, diversity, and inclusion in academia. These contributions may include raising awareness about the importance of diversity or mentoring other researchers, among others.

Awarded: MAR SOBRAL BERNAL, Associate Professor at Geography Department of the *Universidade de Santiago de Compostela* USC, Spain.



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This award is sponsored by Transmitting Science, which offers a subscription to one of its courses.

#### "Open Science" Award

This award recognizes the efforts of individuals or groups who have demonstrated a commitment to the development and promotion of transparent and reproducible scientific practices. These may include, for example: the creation of open-source code or software, open databases, or contributions to building an open scientific community in terms of data, code, etc.

Awarded: XIMENA HERRERA ÁLVAREZ, Researcher at the Universidad Pública de Navarra (UPNA), Spain.

This award is sponsored by AEET, which provides either access to one of its courses or a financial grant aimed at supporting the group's activities.

#### "Science Communication" Award

This award recognizes the efforts of individuals or groups who have excelled in communicating Ecology as a science to the general public. The work of these individuals or groups in raising awareness about the importance of science and its key role in society is highly valued.

Awarded: Centro de Investigación de Colecciones Científicas de la Universidad de Almería (CECO-UAL).

This award is sponsored by Quercus magazine, which offers a free annual subscription to its publication.





# **General Assemblies of Societies**

AEET General Assembly	Tuesday 3, 15:30-16:30. Room: Auditorio
SIBECOL General Assembly	Wednesday 4, 15:30-16:30. Room: Auditorio

# **Working Group Meetings**

AEET Working Group on Invasion Ecology	Tuesday 3, 18:00. Room: Cova dos libros
AEET Working Group on Ecology and Education	Wednesday 4, 15:30. Room: Cova dos libros
AEET Working Group on Forest Decline (ReDec)	Thursday 5, 17:00. Room: Cova dos libros
Collaborators of the URBANFUN Project	Thursday 5, 17:00. Room: Seminario 1

# **GENERAL INFORMATION**

#### Internet

Wireless internet access will be available during the conference. The Wi-Fi network name and password will be provided to attendees upon arrival at the information desk.

#### **Family Support**

Aware of the importance of balancing family life with scientific activity—and the particular challenges faced by women scientists with young children in attending conferences—the Organizers has made every effort to ensure that this event includes effective family-friendly measures and is welcoming to families. These measures include:

- The possibility of registering minors in care as accompanying persons, as well as another adult to assist with caregiving tasks, at no additional cost (except if
  they wish to use the conference catering service, in which case the meal cost must be covered).
- A nursing room will be available on-site for mothers to breastfeed in comfort.
- There will also be a family room where attendees can rest with their families, warm food for non-breastfed children, use a changing table, and enjoy a play
  and relaxation space for young children.
- A childcare provider has also been hired so that parents can attend sessions and other activities without having to constantly care for their children.
- Breastfeeding is expressly permitted at any time and place during the conference. Children are also welcome in common areas and may participate in social
  events if their accompanying adults wish.

#### Sustainability

We encourage attendees to reduce waste production. Accessory items such as the congress bag, notebook, pen, and mug will not be provided to participants on this occasion. We recommend participants bring a cup or bottle from home to use the water fountains installed at the venue.

We strongly recommend using the designated waste sorting bins.

#### **Certificates**

To minimize paper use, all certificates (attendance, presentation of contributions, or any other required documents) will be issued in digital format and sent to participants via email after the event.



# **COMMERCIAL EXHIBITION - Stands**

#### TRANSMITTING SCIENCE

**Transmitting Science** organise courses and peer-to-peer events that support the exchange of scientific skills, methods, and advances in the fields of life and earth sciences.

Transmitting Science partner with organisations and researchers to establish networks that promote life-long scientific learning in a cooperative environment. Apart from the courses and outreach activities they usually organize, we offer different services as Coaching; Consulting; Conferences; Customized trainings and others.



#### **ACOM LAB**

**ACOM LAB** was founded 20 years ago with the mission of being a trusted partner in technological development and innovation for universities, institutions, and companies.

From research greenhouses for plant cultivation to animal facilities, insectaries, or aviaries, ACOM LAB can help you to carry out your studies under fully controlled conditions.

Its facilities offer exceptional levels of biosafety, allowing you to conduct your research following the most rigorous protocols. Its team works daily to develop cutting-edge solutions, combining efficiency, sustainability, technological excellence, and total control.



#### **ALLGENETICS**

**AllGenetics** take pride in being a highly regarded genomic solutions partner since they understand the research needs to deliver high-quality results in an easy, personalised format, being capable of tailoring our pipelines to the specifics of your project.

AllGenetics services include: DNA metabarcoding; RNA metabarcoding; Metagenomics; Metatranscriptomics; RNA-seq; SNP genotyping; Phage genome sequencing; Bacterial genome sequencing; Eukaryotic genome sequencing; Bisulphite sequencing; MeRIP-seq; Targeted capture sequencing; Amplicon sequencing; Microsatellite development; Microsatellite genotyping; DNA barcoding and qPCR.



#### **NOVOGENE**

**Novogene** aims at providing optimal solutions to meet their customers' diverse research goals. With the aid of large-scale sequencing platforms (Illumina, PacBio, Nanopore and 10x Genomics) and a professional bioinformatics team, Novogene is capable of delivering high-quality Next Generation Sequencing (NGS) services including: Genome Sequencing; Transcriptome Sequencing; Epigenome Sequencing; Metagenome Sequencing and Pre-made Library Sequencing.



#### **DILUS**

**DILUS** has positioned itself as the Spanish company of reference for the distribution of instrumentation and integration of meteorological and environmental systems.

In a changing world where extreme phenomena related to climate change are occurring more and more frequently, society and the environment are facing increasingly complex and extreme situations. For this reason, DILUS specialises in offering tailor-made solutions for a wide range of applications and sectors, with a team of highly qualified professionals that enables it to respond to the needs of researchers and other clients.

DILUS provide a wide range of products and systems to provide measurement solutions for a wide variety of applications



#### **DAVEIGA**

**Daveiga** is a biscuit-producing company. Under the Mariñeiras® brand, Daveiga offer bread toasts inspired by the solution sailors found in the 15th century to naturally preserve bread during long ocean voyages.

Recognized for its responsible production, Daveiga aims to contribute to the sustainable rural development of its local environment through social economy, responsible production, and innovation.

Daveiga produces and offers unique, healthy, tasty, safe, and socially beneficial food products.



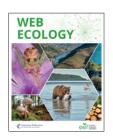


# **EXHIBITION - Ecological Societies & journals**

European Ecological Federation (EEF)

• Web Ecology





### Sociedad Ibérica de Ecología (SIBECOL)



## Asociación Española de Ecología Terrestre (AEET)

Ecosistemas











## **British Ecological Society (BES)**





- Journal of Animal Ecology
- Functional Ecology
- Journal of Ecology
- Journal of Applied Ecology
- Ecological Solutions and Evidence
- Methods in Ecology and Evolution
- People and Nature

# **EXHIBITION - Other Societies**

#### Altri-Non



Social movement opposing the project of a mega cellulose factory that the Portuguese company Altri plans to build in the region of Ulloa, Lugo, Galicia





# **Exhibitions - Art & science**

#### Galicia ilustra (con) ciencia

Permanent • Recinto Feiral

It will showcase the work of 11 illustrators who are members of AGPI (Galician Association of Professional illustrators). There will also be a QR code linking to a PDF catalog with more information and illustrations from each artist.

#### **Augmented Ecofeminisms**

Permanent • Recinto Feiral

The exhibition Augmented Ecofeminisms: Climate, Water, Women (#MUAC), funded by the Spanish Ministry of Equality, invites a reflection of the interactions between climate change, freshwaters and ecofeminism. Through a journey that combines augmented reality with scientific, artistic and audiovisual material, the authors question the current management of environmental problems related to water, and explore potential futures based on alternative views to contemporary politics.

#### **Antarctica**

Permanent • Recinto Feiral

Antartic Women Science, Leathership and Women showcases the Ushuaia 2023 expedition, in whic 68 female scientist from around the world -including seven from Spain- sailed for three weeks through Antarctica to promote female leaderships as a tool to address environmental and socio-ecological crises.

#### Micro-stories

Permanent • Recinto Feiral

Exhibition of the 20 stories that took part in the 1st Women Scientists Who Tell Stories, Micro-stories Contest, organized by the AEET Equality Committee.

# Awards for the best presentations

All those who selected the option "I want to apply for the ECR Best Contribution Awards" when submitting their contribution to the conference are eligible for the Awards for the Best Presentations of the III SIBECOL & XVII AEET Meeting. The awards will be presented during the closing ceremony of the conference.

#### » Awards for Best Oral Presentations

SIBECOL and AEET will grant four awards for the best Oral presentations:

- Two awards for the best oral presentation by a PhD student. This awards will carry a prize of 200 euros.
- Two awards for the best oral presentation by a junior postdoctoral researcher (less than 8 years since the completion of their PhD). These awards will carry
  a prize of 200 euros.

Each talk will be evaluated by at least two members of a jury composed by members of the Scientific Committee attending the conference.

Some of the criteria that will be considered for all oral presentations include:

- · The originality of the work presented
- · The methodology used
- · The appropriateness of the conclusions
- · The quality of the presentation, including clarity, communication effectiveness, and use of audiovisual materials
- · The ability to respond effectively to audience questions
- The awards sponsored by SIBECOL will take into account the multidisciplinary nature of the works presented.

#### » Award for Best Poster

SIBECOL and AEET will grant four awards for the best posters presented by a PhD student. These awards will carry a prize of 200 euros.

- Two awards for the best poster by a PhD student. This awards will carry a prize of 200 euros.
- Two awards for the best poster by a junior postdoctoral researcher (less than 8 years since the completion of their PhD). These awards will carry a prize of 200 euros.

Each poster will be evaluated by at least two members of the jury.



# **Guidelines for Oral & Poster presentations**

## **ORAL PRESENTATIONS**

The time allotted for Oral presentations is 10 minutes.

Digital presentations must be written in English. Talks will be given in English. The total time allotted for each talk includes 10 minutes for the oral presentation plus a 3 minutes for questions. Your presentation time is limited. Please keep in mind the importance of sticking strictly to the time available and make sure that your talk does not exceed the time allotted to you. The session chair will let you know when the speaker has 1 minute left, before question time.

You may not use your own laptops to play digital presentations. All presentations will be uploaded and played through the computers in the respective rooms. All presentation files will be deleted from any of our computers after the end of the conference.

Presentations may not be sent by e-mail. They may not be uploaded directly to the session rooms. Presenters must bring a copy of their presentation on a USB pen-drive and deliver it to the "presentation collection point" the day before the date assigned for the talk, except for talks scheduled for Monday afternoon, which must be delivered upon the arrival of the author/presenter. Please, be sure to deliver your final and definitive version on time.

To facilitate the management of the files for each of the sessions, you should name your presentation file according to a specific format. The format will include a location code, followed by a trailing slash ( ) and your last name, e.g. (GSA-O-1 Perez). The identification codes for the respective presentations are available, sorted by presentation date and session number, on the conference website.

We strongly request that you be present in your room at least 10-15 minutes before the start time of the first talk of your block and introduce yourself to the moderator of your session. We recommend that speakers attend the entire block of the session in which they will be participating to avoid disruptions and interruptions in the rooms.

#### Audiovisual guidelines

All session rooms are expected to be equipped with computers running Windows 10 and Microsoft Office 2016, and projectors with resolution (1028 x 768: 4:3 ratio and/or 1920×1080: 16:9 ratio). All computers are equipped with VLC software for video display, but it is advisable to test such presentations in advance to ensure correct display.

We recommend using presentations in PDF format. PowerPoint and Prezi presentations may also be used, but in this case, we recommend bringing a pdf file as a backup.

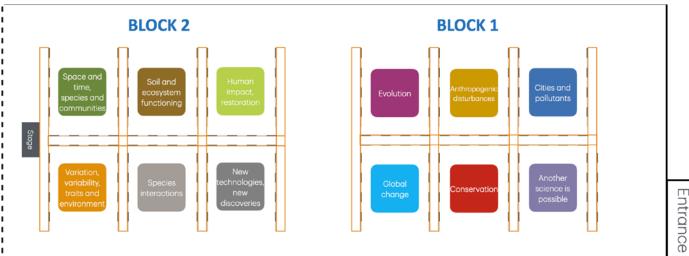
## **POSTER PRESENTATIONS**

Poster sessions (Discussion poster corner)

In order to encourage participation and discussion, poster sessions will take place in the afternoons, accompanied by refreshments and snacks to help everyone recharge, and will provide an opportunity for discussion in a relaxed atmosphere. Posters will be on display for the duration of the conference and can be viewed by interested persons, even if the authors are not present. However, authors are requested to remain next to their posters during the poster sessions "Discussion poster corner", to which it has been assigned. Information about the day of presentation is available on the conference website.

Posters are grouped in 12 thematic areas, as it is shown below.

#### POSTER ROOM MAP



#### Guidelines for formatting and for the placement and collection of posters

Poster presentations must be written in standard English, always in vertical format. Authors must include in their poster the code and title of the session they have applied for (eq. TSB-3. Connecting scales through movement ecology).

The maximum recommended printing format is A0 (841 mm wide x 1189 mm high).

The poster holder or author will be in charge of placing his/her poster in the corresponding place. Posters must be posted immediately after registering at the registration desk, where you will be informed of their location. The exhibitor boards will be labeled with the identification code of each poster, to facilitate its location identification codes of poster presentations will include the session code, followed by (-P-) and a number, and are available at Oral and Poster Presentations - III SIBECOL & XVII AEET meeting. Means for fixing the posters on the exhibitors will be provided at the registration desk, not being suitable other means.

Posters can be collected from Thursday 5 June, from 18:30 onwards, after the Discussion corner. Please note that posters not collected after 20:00 will be discarded by the cleaning service.

#### **NOTICE ON PUBLISHED CONTENT**

The abstracts of the contributions accepted by the Scientific Committee will be compiled and published in the book of abstracts of the Conference, which will be edited in digital format. The authors, by sending the abstract of their contribution, have assumed full responsibility for the accuracy, originality and ownership of the content of such abstracts. In this sense, the Organization understands that the first authors have received the express consent of each of the co-authors involved in the work, for its public exhibition and have authorized the publication of their abstract in any media owned by the organizers of the Conference.

#### **DISSEMINATION IN SOCIAL NETWORKS**

Social media is a great way to communicate and share in real time what is happening, share ideas, create collaborations and connect the congress with the rest of the world. We encourage everyone to share on bluesky, during the event, with @sibecol-aeet-25.bsky.social and to follow the conference on Instagram with @sibecol\_aeet\_2025. However, we understand that some people may not want to disseminate their research. This is an important consideration that should be respected. For those people who do not want their presentations to be tweeted, we have created a "do not share" image to add to their poster or at the beginning of their digital presentations. If the image is not submitted, we will understand that you consent to the dissemination of your research. Please respect the request not to disseminate in case the image is present.



## **ORAL PRESENTATIONS**

## TALKS - MONDAY 2nd June, evening: 18:00-19:30

## TSD-4. Intra-specific and intra-individual variation in a climate change contex

Monday, 2 June, evening • Room: Auditorio

- 18:00: Alicia Gómez Fernández [TSD.4-O-1] "Genome size shapes trait variation and responses to environmental change in Arabidopsis thaliana"
- 18:15: Ignacio Morales-Castilla [TSD.4-O-2] "Syndromes in responses to warming: linking phenology and physiology at the intraspecific level"
- 18:30: Marina Ramos-Muñoz [TSD.4-O-3] "Evolutionary potential in multivariate environments: How warming and competition interact with drought to shape the potential response to selection in a Mediterranean shrub"
- 18:45: FLORENCE VOLAIRE [TSD.4-O-4] "Phenotypic plasticity of water-related traits reveals boundaries to the adaptive capacity of a dominant European grass species under increased drought"
- 19:00: CARLOS CELDRÁN FERNÁNDEZ [TSD.4-O-5] "When it Gets Drought: How Lupinus angustifolius Adapts to Dry Times"
- 19:15: Mario Blanco Sanchez [TSD.4-O-6] "Assessing genetic differentiation and plasticity patterns to temperature throughout the worldwide distribution of Lemna minor: insights into climate change responses"

## TSB-6. Emerging environmental pollutants: from molecular to ecosystemic impacts

Monday, 2 June, evening • Room: Salón de actos

- 18:00: Maria Bouso [TSB.6-O-1] "Environmental pollution and bird conservation: white storks as indicators of ecosystem health"
- 18:15: Luís André Mendes [TSB.6-0-2] "Looking at the protective role of Eisenia andrei in the activity of soils contaminated with plastic"
- 18:30: Ana Belén Muñiz Gonzalez [TSB.6-O-3] "Evaluation of environmentally relevant mixtures of plant protection products on Dario rerio embryos"
- 18:45: RAQUEL ABAD PÉREZ / RICARDO BEIRAS [TSB.6-O-4] "Evaluation of the Effects of Contaminants of Emerging Concern with Androgen Endocrine Disrupting Effect on Cyprinodon variegatus Larvae"
- 19:00: SARA Costa [TSB.6-O-5] "Hazard assessment of carbon and wood fibers for its incorporation in greener composites"
- 19:15: Juan Manuel González Olalla [TSB.6-O-6] "Could temperature alter the toxicity of an emerging contaminant on phytoplankton?"

## TSC-3. Plant-herbivore interactions in the face of global change

Monday, 2 June, evening • Room: Balconada

- 18:00: IRENE Martinez Virseda [TSC.3-O-1] "Insularity effects on seed damage by insect herbivores and associated traits across oak species"
- 18:15: Lucille T.S. Chrétien / Ana Burón-Ugarte [TSC.3-O-2] "Alteration and recovery of trophic interactions after multifactorial disturbance: drivers and processes"
- 18:30: VIOLETA QUIROGA-ÁLVAREZ [TSC.3-O-3] "How do herbivores modulate floral phenotypic plasticity to abiotic conditions?"
- 18:45: Helena Romero [TSC.3-O-4] "Analysis of arthropod diversity in subtropical crops of Mediterranean agroecosystems using DNA Metabarcoding"
- 19:00: Lucia Martin-Cacheda [TSC.3-O-5] "Enhancing crop pest resistance through plant-derived volatile organic compounds: a sustainable alternative to chemical pesticides"
- 19:15: Lena VILà-VILARDELL [TSC.3-O-6] "No evidence of prescribed burning effects on needle terpene content of Pinus nigra spp. salzmannii and larvae survival of pine processionary moth (Thaumetopoea pityocampa)"

## TSB-8. Transitional aquatic-terrestrial ecosystems: the ecological relevance of the dry phase of non-perennial inland waters

Monday, 2 June, evening • Room: Cova dos libros

- 18:00: Susana Bernal [TSB.8-O-1] "Expanding towards contraction: the alternation of floods and droughts as a fundamental component in river ecology"
- 18:15: Rebeca Arias del Real [TSB.8-O-2] "(Dis)connecting the Globe Through Water-Driven Ecological and Biogeochemical Corridors in the Polar-Alpine Biome"
- 18:30: PILAR HURTADO [TSB.8-O-3] "Unfolding the dynamics of ecosystems undergoing alternating wet-dry transitional states"
- 18:45: Judit Sánchez Nogueras [TSB.8-O-4] "Physico-chemical indicators of disconnected pools and dry riverbeds for the assessment of the ecological status of non-perennial rivers"
- 19:00: Josep Ramoneda [TSB.8-O-5] "Taxonomic distribution and genomic underpinnings of drought tolerance in bacteria"
- 19:15: Néstor Pérez-Méndez [TSB.8-O-6] "Climate change mitigation strategies in rice farming entail cascading effects across ecosystem boundaries"

## TSB-5. Advancing the understanding of plant ecophysiology to inform global vegetation models

Monday, 2 June, evening • Room: Restaurante

- 18:00: Maria Dolores Hidalgo-Galvez [TSB.5-O-1] "Contrasting drought adaptive strategies in Mediterranean perennial grasses"
- 18:15: Julia Chacon Labella [TSB.5-O-2] "Climate and plant traits drive variation in ecosystem productivity in southern Rocky Mountains"
- 18:30: Francisco San Miguel Oti [TSB.5-O-3] "Simulation of the effects of climate change by rainfall exclusion in Quercus faginea and Pinus pinea"
- 18:45: Alberto Vilagrosa Carmona [TSB.5-O-4] "Inter-annual water fluxes in Mediterranean pine forests: linkages among precipitation, pine transpiration, and aquifer recharge"
- 19:00: Miquel De Cáceres Ainsa [TSB.5-O-5] "A modular framework for process-based simulations of forest function and dynamics at stand to regional scales"
- 19:15: Herminia Alonso-Zaldivar [TSB.5-O-6] "Plant strategies of two oak species (Quercus petraea and Quercus pyrenaica) in response to stress conditions in post-mining lands"



## TSA-2. Beyond the Lab: Citizen Science as a Catalyst for Ecological Research and Community Involvement

Monday, 2 June, evening • Room: Seminario 1

- 18:00: Paula Lopez-Sendino [TSA.2-O-1] "Observadores del mar, the Marine Citizen Science Platform enhacing science-bases decisions for ocean conservation"
- 18:15: Marina Codina / Maria Soria [TSA.2-O-2] "Twenty years of studying catalan river ecosystems through citizen science"
- 18:30: Mónica Pinto [TSA.2-O-3] "Using citizen science platforms for biodiversity conservation efforts and co-management in Côa Valley Archaeological Park"
- 18:45: Pau Guzmán Martín [TSA.2-O-4] "Contextualized urban green space management enhances butterfly functional diversity"
- 19:00: Irene Otamendi Urroz [TSA.2-O-5] "Biocultural Diversity in rural Spain: an inventory and perspectives from two contrasting regions"
- 19:15: Discussion time

## TSE-12. Effectiveness of anthropogenic actions in reducing biodiversity loss

Monday, 2 June, evening • Room: Seminario 2

- 18:00: Mario Santos [TSE.12-O-1] "Conservation of the Pyrenean Desman (Galemys pyrenaicus): recommendations for practitioners from a systematic review"
- 18:15: Francisco M. Azcárate [TSE.12-O-2] "Ecological restoration of transhumance drove roads: Insights from the LIFE CAÑADAS project"
- 18:30: Miguel Clavero [TSE.12-O-3] "The eel market extinction vortex"
- 18:45: KAREN Mustin [TSE.12-O-4] "De-coupling of the social and ecological subsystems in Spanish Protected Areas"
- 19:00: Sara Carona [TSE.12-O-5] "Are conservation translocation efforts biased in the Iberian Peninsula? A functional analysis of translocated species across taxa"
- 19:15: ALICE Nunes [TSE.12-O-6] "Ecological restoration of the coastal dune system in S. João da Caparica: scientific assistance and lessons learned in the REDUNA project"

## TSB-1. The impact of Global Change on Plant-based species interaccions

Monday, 2 June, evening • Room: Seminario 3

- 18:00: Pedro Valle-Romero [TSB.1-O-1] "Effect of priming and PGP-bacterial inoculation on salt stress tolerance in halophytes"
- 18:15: Maria Rocio Martin-Pelaez [TSB.1-O-2] "Unveiling the impact of a complex environmental matrix predicted by climate models, implementing plant-endophyte interaction on the halophyte Sarcocornia perennis"
- 18:30: Jorge Prieto-Rubio [TSB.1-O-3] "Plant-mycorrhizal fungi association outcomes across climatic disequilibrium scenarios"
- 18:45: Susana Rodríguez Echeverría [TSB.1-O-4] "Root-associated fungal communities in small islands around the world"
- 19:00: Elena Dolores Díaz Santiago [TSB.1-0-5] "Assembly of Soil Microbial Communities Under Maytenus senegalensis Shrubs Across Contrasting Habitats in Its Native Range"
- 19:15: Ginés Rodriguez [TSB.1-O-6] "Leaf damage by insects and pathogens change with aridity in Mediterranean forests"

#### TSE-1. Anthropogenic Disturbances and Global Change: Impacts on Biodiversity and Ecosystem Services

Monday, 2 June, evening • Room: Seminario 7

- 18:00: Youssra EL GHAFRAOUI [TSE.1-O-1] "Unraveling biodiversity and cultural values: a case study in rural Spain"
- 18:15: CLAUDIA MASSÓ ESTAJE [TSE.1-O-2] "Enhancing Structural Beta Complexity to Promote Biodiversity in Managed Forests"
- 18:30: Marta Arenas [TSE.1-O-3] "A novel approach measuring long-term social and environmental benefits through ecosystem services supply driven by new aeration turbine technology development in hydropower plants"
- 18:45: Roger Puig-Girones [TSE.1-O-4] "Long-Term Integrative Monitoring Tool for Assessing Drought Impacts on Biodiversity"
- 19:00: Nuria Pistón [TSE.1-O-5] "A trait-based approach to optimize urban green infrastructure for air pollution mitigation"
- 19:15: Miguel Ángel Blanco-Rodriguez [TSE.1-O-6] "The role of structural heterogeneity and fire severity in Mediterranean post-fire landscape dynamics"

## TSC-4. The ecosystem role of large herbivores. Impacts, challenges and lessons for conservation in a warming world

Monday, 2 June, evening • Room: Seminario 6

- 18:00: Blanca Gallego-Tevar [TSC.4-O-1] "Ungulate herbivory and plant dynamics: Direct and maternal effects on herbaceous plants in Mediterranean dehesas"
- 18:15: Andres Delgado-Galán [TSC.4-O-2] "Ungulate guilds shaping the functional structure of herbaceous plants: the role of epigenetics in short-term coevolution"
- 18:30: Rubén Serrano Zulueta [TSC.4-O-3] "Increasing knowledge on ungulate carrying capacity through European scale empirical abundances"
- 18:45: Pere Casals [TSC.4-O-4] "Wild Ungulates Shaping Plant Landscapes: Impacts on Vegetation Structure and Composition in the Catalan Pre-Pyrenees"
- 19:00: Esteban Pascual Parra [TSC.4-O-5] "Arthropod diversity shaped by traditional pastoralism"
- 19:15: Rocio Fernández Fuerte [TSC.4-O-6] "Assessing the potential reproductive collapse of Halimium halimifolium: cervids density drives the outcome of a common but overlooked interaction" GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability



## TALKS - TUESDAY 3rd June, morning (first): 11:00-12:30

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Tuesday, 3 June, morning (first) • Room: Auditorio

- 11:00: Javier Porras Gómez [GSE-O-1] "The effect of increasing temperature on ecosystem recovery dynamics: an experiment with plant communities"
- 11:15: Ana Lucía Méndez-Cartín [GSE-O-2] "Fire refugia and microsite conditions determine post-fire recovery of black pine forests"
- 11:30: Mariona Ferrandiz Rovira [GSE-O-3] "Advancing research, innovation and entrepreneurship on urban forestry: the UFOREST project"
- 11:45: JONATAN RODRIGUEZ [GSE-O-4] "Hidden impacts of the invasive plant Tradescantia fluminensis on soils: implications for restoration of invaded areas"
- 12:00: Almudena Dueñas-Rojas [GSE-O-5] "Do global warming and biotic interactions affect the ecosystem functions provided by dung beetles? A temperature controlled experiment"
- 12:15: RAFAEL MOLINA VENEGAS [GSE-O-6] "Plant evolutionary history is largely underrepresented in European seed banks"

## **GSB.** Ecology Across Scales

Tuesday, 3 June, morning (first) • Room: Salón de actos

- 11:00: Celia González López [GSB-O-1] "Identifying areas vulnerable to climate change for benthic fauna across the Southern Ocean through niche marginality and species distribution modeling"
- 11:15: Антоню Vargas-Ordóñez [GSB-O-2] "Native biocrust bacteria enhances germination of Mediterranean plants under climate change conditions"
- 11:30: Laura Morales-Salmerón / Marta Goberna [GSB-O-3] "Soil biota responses to simulated drought in Mediterranean ecosystems"
- 11:45: Estefanía Muñoz Hoyos [GSB-O-4] "Effect of drought on new carbon incorporation in the soils of a Mediterranean forest"
- 12:00: Luis R. Pertierra [GSB-O-5] "Ecological perspectives of global change in polar regions: trends and knowledge"
- 12:15: Carmen Ureña Lara [GSB-O-6] "Carbon and oxygen isotopes in tree rings unveil species-specific response to drought in monospecific and mixed forests"

#### GSF. New Technologies, New Discoveries: Big Data, Remote Sensing, and Al

Tuesday, 3 June, morning (first) • Room: Balconada

- 11:00: Irene Mendoza Sagrera [GSF-O-1] "Passive Acoustic Monitoring combined with deep learning for assessing the health status of Doñana: challenges and perspectives"
- 11:15: CLARA GRACIA MAS [GSF-O-2] "Not So Intelligent: Evaluating Traditional Methods Against Al-Based Approaches for Estimating Dark Diversity"
- 11:30: Cristina Grajera-AntoLin [GSF-O-3] "Identifying limiting factors of tree species performance across Northern Hemisphere forests: An approach through the Law of the Minimum"
- 11:45: Maria I González-Pérez [GSF-O-4] "Unravelling the daily activity rhythms of urban mosquitoes through the use of smart-traps"
- 12:00: Andres Baselga [GSF-O-5] "The spatial scaling of evolutionary uniqueness to inform biodiversity conservation priorities"
- 12:15: Nicolas Merino Robert [GSF-O-6] "From Empirical Data to Ecological Dynamics: Modelling Tetrapod Communities Across the Iberian Peninsula"

## **GSD. Ecology Meets Evolution**

Tuesday, 3 June, morning (first) • Room: Cova dos libros

- 11:00: Clara Espinosa del Alba [GSD-O-1] "Functional intraspecific variation in the base water potential for seed germination along soil microclimatic gradients"
- 11:15: David Salesa Duro [GSD-O-2] "A postfire drought during the main establishment phase of Cistus albidus populations select individuals of higher height, fruit production and water-use efficiency"
- 11:30: Ignacio Ramos-Gutiérrez [GSD-O-3] "Global evolution of animal-mediated seed dispersal"
- 11:45: Cristina Arenas-Sanchez [GSD-O-4] "What is necessary to take up a population? Insights from an invasibility experiment with rotifers"
- 12:00: Celia Vaca Benito [GSD-O-5] "Growht form and phylogeny affect the scaling between nutrient and size-based traits of leaves along climatic and harshness gradients"
- 12:15: Natalia Vizcaíno Palomar [GSD-O-6] "Simulated facilitation shapes intraspecific trait variation in Quercus ilex seedlings"

#### GSC. The Interplay Between Species Coexistence and Abiotic Factors: Community Ecology

Tuesday, 3 June, morning (first) • Room: Restaurante

- 11:00: Adrián Colino Barea [GSC-O-1] "Scavenger communities and soil enrichment: Insights from carcass sites"
- 11:15: Elena Velado Alonso [GSC-O-2] "Livestock trends in Spain: insights for wildlife conservation"
- 11:30: ALICE Casiraghi [GSC-O-3] "Unraveling the diet of a potential biocontrol agent, the whirling mite (Anystidae), in citrus cover crops"
- 11:45: Pedro Raposeiro [GSC-O-4] "Millennial-Scale Community Dynamics and Ecosystem Transitions in Lake Prata, Azores"
- 12:00: Jordi Martínez Artero [GSC-O-5] "Diatoms radiation across continental pH-alkalinity gradients"
- 12:15: Laura PasaLodos Barceló [GSC-O-6] "Temperature effect on the macroalgae consumption and respiration rate of the invasive crab Percnon gibbesi in the Mediterranean Sea"



## TSA-2. Beyond the Lab: Citizen Science as a Catalyst for Ecological Research and Community Involvement

Tuesday, 3 June, morning (first) • Room: Seminario 1

- 11:00: Mireia Banqué Casanovas [TSA.2-O-6] "Collaborative initiatives in the study of the health status of Catalan forest ecosystems"
- 11:15: Maria Isabel Hermoso Beltran [TSA.2-O-7] "OdM Climate: Citizen Science Monitoring Climate Impacts on Mediterranean Marine Ecosystems"
- 11:30: Brais Suárez Eiroa [TSA.2-O-8] "The role of public engagement in science in sustainability transitions"
- 11:45: Julio C. López-Doval [TSA.2-O-9] "Beyond cleanup campaigns: "Plastic Pirates Go Europe!" a Citizen Science project for monitoring and raising awareness of plastic residues in fluvial ecosystems"
- 12:00: Maria Borrego Ramos [TSA.2-O-10] "Bridging education and research to investigate biodegradable packaging materials' impact on aquatic health: A citizen science approach"
- 12:15: Ester Prat [TSA.2-O-11] "Citizen contributions to phenology monitoring: the RitmeNatura and FenoCat networks"

## TSE-12. Effectiveness of anthropogenic actions in reducing biodiversity loss

Tuesday, 3 June, morning (first) • Room: Seminario 2

- 11:00: Jose Salgado [TSE.12-O-7] "Multi-Action Conservation Planning across realms: A Mixed Integer Programming Model approach"
- 11:15: Manuel Pinilla Rosa [TSE.12-O-8] "The role of two constructed wetlands for wastewater treatment in Odonata conservation in the agricultural landscape of the Ebro Delta"
- 11:30: Andrés Ramos Benito [TSE.12-O-9] "Does the Natura 2000 Network ensure the conservation of threatened species? A demographic study of spur-thighed tortoises (Testudo graeca) in southeastern Spain"
- 11:45: Marias Moreno-Faguett [TSE.12-O-10] "Spatial prioritization for the restoration of terrestrial ecosystems in Chile"
- 12:00: Patricia Mateo Tomás [TSE.12-O-11] "Animal GPS-tracking as a tool to assess compliance with regulations that affect biodiversity conservation"
- 12:15: Maria Fernández-García [TSE.12-0-12] "Integrating detection and motivation to enhance mapping predictions of wildlife poisoning risk and inform onground actions"

## TSB-1. The impact of Global Change on Plant-based species interaccions

Tuesday, 3 June, morning (first) • Room: Seminario 3

- 11:00: Samuel Prieto Benitez [TSB.1-O-7] "Effects of global warming and atmospheric pollution on Mediterranean high mountain pastures: searching for new risk indicators to help their conservation"
- 11:15: Raquel Diaz Borrego [TSB.1-O-8] "Recruits climatic disequilibrium is determined by adult resilience after drought-induced dieback in Mediterranean shrublands"
- 11:30: Elansurya Elangovan Vennila [TSB.1-O-9] "Trait dissimilarities and hierarchies in crop-weed competition: Effects on crop productivity under experimental drought"
- 11:45: Alba Rodríguez Parra [TSB.1-O-10] "Soil water availability shape competitive interactions in a diploid-polyploid complex"
- 12:00: Antonio Jesús Perea Martos [TSB.1-O-11] "Using directed multilayer networks to unravel keystone species in perturbation gradients"
- 12:15: Elena Quintero [TSB.1-O-13] "How many plants are dispersed by animals worldwide?"

## TSE-1. Anthropogenic Disturbances and Global Change: Impacts on Biodiversity and Ecosystem Services

Tuesday, 3 June, morning (first) • Room: Seminario 7

- 11:00: VITOR GONÇALVES [TSE.1-O-7] "Climate-Driven Regime Shifts and Biodiversity Loss in Island Lake Ecosystems: Evidence from the Azores Archipelago"
- 11:15: Sofia Miguel Romero [TSE.1-O-8] "Unravelling the spatial and temporal variability of natural disturbances in European forests"
- 11:30: Ana Solórzano [TSE.1-O-9] "Assessing Nature's Contributions to People in the River Gambia: the impacts of seawater intrusion"
- 11:45: ELENA ROCAFULL PÉREZ [TSE.1-O-10] "Current and potential carbon storage of shrublands in Tenerife, Canary Islands"
- 12:00: Maria Espírito Santo [TSE.1-O-11] "Pasture resilience: phenological patterns, ecosystem services and critical thresholds in the face of climate change"
- 12:15: Marina Pachón [TSE.1-O-12] "Recent decline of little bustard population in Spain is linked to agricultural intensification"

## TSD-4. Intra-specific and intra-individual variation in a climate change contex

Tuesday, 3 June, morning (first) • Room: Seminario 6

- 11:00: Pablo Castro Sánchez-Bermejo [TSD.4-O-7] "Patterns of intraspecific and intraindividual trait variation in trees along experimental diversity gradients"
- 11:15: Alba Anadon-Rosell [TSD.4-O-8] "Intraindividual trait coordination in tundra clonal shrubs along a latitude gradient"
- 11:30: Charlotte Møller [TSD.4-O-9] "Evolutionary and temporal patterns of intra-individual variation and trait means in Hypericum perforatum: a resurrection approach"
- 11:45: Alicia Valdés Rapado [TSD.4-O-10] "Intra-individual variation in phenology and selection on individual flowering schedules"
- 12:00: Roque Lazcano Vázquez [TSD.4-O-11] "On vegetal individuality and intra-plant diversification. Historical synthesis of an ontological problem"
- 12:15: MARA PANEGHEL / LLuís Coll [TSD.4-O-12] "Plant-size modulates the morpho-physiological adjustments of Pinus halepensis saplings under field-simulated climate change"



## TALKS - TUESDAY 3rd June, morning (second): 12:45-14:15

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Tuesday, 3 June, morning (second) • Room: Auditorio

- 12:45: Virgilio Hermoso [GSE-0-7] "Integrated spatial planning for photovoltaic expansion: balancing renewable energy, agriculture, and biodiversity"
- 13:00: Andrés Giménez Casalduero [GSE-O-8] "Evaluating landscape connectivity in terrestrial vertebrate populations: linear infrastructures, wildlife crossings and ecological corridors"
- 13:15: Belén Acuña-Miguez [GSE-O-9] "Exploiting hydraulic trait variability in circum-Mediterranean firs for increased adaptation of Abies alba forests to drought"
- 13:30: CAYETANO GUTIÉRREZ CÁNOVAS [GSE-O-10] "Combined effects of land-use- and climate-driven stressors on stream fungi and organic matter decomposition"
- 13:45: RAQUEL ESTEBAN [GSE-O-11] "Linking physiological mechanisms with soil properties to unravel tree vulnerability in radiata pine plantations"
- 14:00: Amara Santiesteban [GSE-0-12] "Impacts of high-severity wildfires on soil fungal communities and soil functioning"

## **GSB.** Ecology Across Scales

Tuesday, 3 June, morning (second) • Room: Salón de actos

- 12:45: ALEX RICHTER-BOIX [GSB-O-7] "A global perspective on West Nile Virus host range and reservoir competence"
- 13:00: Francisco Javier Muñoz Gálvez [GSB-O-8] "Functional trait variability along an aridity gradient in Mediterranean woody plant communities at intraspecific and community levels"
- 13:15: Victor Lecegui [GSB-O-9] "Linking Microhabitats and Biogeography: A Look at Soil Biodiversity of Mountain Wetlands"
- 13:30: Patricia Moreno-Colom [GSB-O-10] "Seedling establishment as an ecosystem function composed of multiple ecological networks"
- 13:45: ELYSA SILVA MORALES [GSB-O-11] "Body mass biogeographical patterns in forests: what drives the distribution structure in different taxa in the Mediterranean Basin?"
- 14:00: Laura Matas Granados [GSB-O-12] "Species functional traits affect regional and local dominance across western Amazonian forests"

## TSE-1. Anthropogenic Disturbances and Global Change: Impacts on Biodiversity and Ecosystem Services

Tuesday, 3 June, morning (second) • Room: Balconada

- 12:45: Rocio Tarjuelo [TSE.1-O-13] "Assessing vulnerability of relevant sites for amphibian conservation through spatiotemporal analyses of global change factors in Europe"
- 13:00: Rocio R. Daza [TSE.1-O-14] "Farmland abandonment and season drive scavenging dynamics in livestock-rewilded landscapes"
- 13:15: Jose Antonio Navarro Cano [TSE.1-O-15] "Comparative assessment of restored mine sites based on an integrative ecological quality index"
- 13:30: Daniel Bruno [TSE.1-O-16] "Road crossing structures can play a significant role for the connectivity of vertebrate populations in semi-arid protected areas"
- 13:45: Tamara Burgos [TSE.1-0-17] "Dependency and behaviour of wintering Ring Ouzels on water points in an arid ecosystem in the Canary Islands"
- 14:00: Fernando Morales de Rueda [TSE.1-O-18] "Scaling forest recovery: the governance of Al-powered precision restoration"

#### GSA. Enhancing Inclusivity, Ethics, and Societal Impact in Science

Tuesday, 3 June, morning (second) • Room: Cova dos libros

- 12:45: SARA GAMBOA [GSA-O-1] "Blood Work: Exploring Menstruation's Impact on Natural Science Fieldwork"
- 13:00: Paula Bruna Pérez [GSA-O-2] "Embolism "por soleá". A dialog between humans and trees about climate change through flamenco"
- 13:15: ECOTONS collective / Jordi Martínez-Vilalta [GSA-O-3] "Art-science residencies at CREAF: lessons learned and prospects"
- 13:30: Maria Amélia Martins-Loução [GSA-O-4] "How Ecology Is Defining Today and Building Tomorrow"
- 13:45: Altor Alonso Rodríguez [GSA-O-5] "Exploring power in Sustainability Transition Research: an overview"
- 14:00: Discussion time

## TSF-2. Perspectives and Challenges in Biodiversity Forecasting

Tuesday, 3 June, morning (second) • Room: Restaurante

- 12:45: Juan Vicente Gallego Rubalcaba [TSF.2-O-1] "Predicting organismal responses to climate change through biophysical modeling"
- 13:00: Teresa Sánchez-Mejia [TSF.2-O-2] "Modeling population dynamics of mediterranean shrubs: Integrating climatic complexity"
- 13:15: Nerea Montes-Pérez [TSF.2-O-3] "A comprehensive probabilistic metaweb of plant-pollinator interactions across EU"
- 13:30: Juan Gallego Zamorano [TSF.2-O-4] "Modelling birds' annual cycle using Euro Bird Portal data"
- 13:45: Rubén García Mateo [TSF.2-O-5] "geoSABINA: A unified ecological geoportal for Spain to support biodiversity research and conservation planning"
- 14:00: Andrea Corral Lou [TSF.2-O-6] "Comparative assessment of freshwater biodiversity in the Los Morales reservoir (Madrid) using eDNA collected from sponges and water filtration"



## TSB-11. Soil biodiversity: digging into one of the last biotic frontiers in ecological research

Tuesday, 3 June, morning (second) • Room: Seminario 1

- 12:45: RAQUEL JUAN-OVEJERO [TSB.11-O-1] "Long-term effects of experimental fire and post-fire soil stabilization treatments on soil microarthropod communities in gorse shrublands"
- 13:00: Santiago Soliveres Codina [TSB.11-O-2] "Optimizing soil biodiversity, multifunctionality and yield when transitioning to organic farming"
- 13:15: Cristina Aponte [TSB.11-O-3] "Soil Fungal Communities Along Elevation Gradients: Insights for Predicting Responses to Future Climate Scenarios"
- 13:30: Jorge Curiel Yuste [TSB.11-O-4] "Impacts of canopy disturbances in an oak forest on soil biodiversity increase with organism size"
- 13:45: Stefania Mattana [TSB.11-O-5] "Impact of Long-Term Drought on Soil Microbial Communities and Ecosystem Functionality in a Mediterranean Forest"
- 14:00: Sara Sánchez-Moreno [TSB.11-O-6] "Bottom-up effects of plant communities on soil food webs in metal-polluted arid areas"

#### TSB-10. Exploring environmental variability in aquatic and terrestrial ecosystems

Tuesday, 3 June, morning (second) • Room: Seminario 2

- 12:45: Osvaldo Tascón Peña [TSB.10-O-1] "Marine Phytoplankton and Warming: How Fluctuations and Nutritional States Shape Community Responses"
- 13:00: Maria Botella Cruz [TSB.10-O-2] "Adaptations to Extreme Environments: Desiccation Tolerance mechanisms in Ochthebius Species from Supralittoral Rockpools"
- 13:15: PABLO CESAR SALAZAR ZARZOSA [TSB.10-O-3] "Environmental gradients drive diversity patterns across the Marañon Valley: Linking coastal drylands to Amazonian rainforests in Peru"
- 13:30: Albert Rivas-Ubach [TSB.10-O-4] "Decoding the phenotype flexibility of forest species from a metabolomics perspective"
- 13:45: CAMILLE MINAUDO / XABIER BENITO [TSB.10-O-5] "OLIGOTREND, a global database of multi-decadal chlorophyll-a and water quality timeseries for rivers, lakes and estuaries"
- 14:00: Aide Lasa González [TSB.10-O-6] "Defining microbial nitrogen guilds in an coastal upwelling system exposed to different nitrogen sources"

## TSB-1. The impact of Global Change on Plant-based species interaccions

Tuesday, 3 June, morning (second) • Room: Seminario 3

- 12:45: Julia Gegunde [TSB.1-O-14] "Long-term changes in pollinator visitation and pollination success in Mediterranean montane plants"
- 13:00: Jorge Isla Escudero [TSB.1-O-15] "Mutualistic interactions and taxonomic diversity under variable herbivore abundance: A manipulative experiment"
- 13:15: Pedro J Garrote [TSB.1-O-16] "The circadian phenology of cork oak in ungulate-dominated landscapes: when do acorns drop? and who interacts with them?"
- 13:30: RAQUEL MUÑOZ-GALLEGO [TSB.1-O-17] "Spatial ecology of acom dispersal by a diverse frugivores' community in a Californian oak savanna"
- 13:45: PAu Enric Serra Marin [TSB.1-O-18] "The role of Apis mellifera on plant-pollinator networks in the Seychelles Archipelago"
- 14:00: ÁLVARO PÉREZ-GÓMEZ [TSB.1-O-19] "Pine afforestation disrupts ground-dwelling arthropod communities in Mediterranean Heathlands"

## TSD-2. Exploring Evolutionary Adaptation and Resilience Mechanisms to Environmental Change in the Ocean

Tuesday, 3 June, morning (second) • Room: Seminario 7

- 12:45: Rocio Blanca-Sújar [TSD.2-O-1] "Prokaryotic and eukaryotic microbiomes associated with blooms of the toxin-producing dinoflagellate Alexandrium minutum"
- 13:00: Daniel Gómez-Gras [TSD.2-O-2] "Using a trait-based approach to guide conservation actions: a case study of black coral and gorgonian assemblages in Cabo Verde"
- 13:15: Cristina Diez Vives [TSD.2-O-3] "Depth and Microbial Abundance Shape Evolutionary Dynamics of Sponge-Microbiome Symbiosis"
- 13:30: Alba YAAMuza Magdaleno [TSD.2-O-4] "Temperature and Metabolism-Driven Variations in Refractory Dissolved Organic Carbon from marine macrophytes as a Potential Carbon Sink"
- 13:45: Vanessa Arranz [TSD.2-O-5] "Resilience in a changing ocean: Arbacia lixula's responses to natural pH gradients"
- 14:00: Elena Andrés Gómez [TSD.2-O-6] "Dietary preference as a driver for venom composition in ribbon worms"

## TSC-5. The value of time: understanding the fate of ecosystems, communities and metacommunities over time

Tuesday, 3 June, morning (second) • Room: Seminario 6

- 12:45: Estefanía Tobajas [TSC.5-O-1] "Drivers affecting the temporal stability of plant-pollinator communities"
- 13:00: Daniel Martin Lorenzo [TSC.5-O-2] "A millennial increasing trend in diatom diversity in naturally acidic alpine lakes disrupted by enhanced nitrogen availability"
- 13:15: Duarte Viana [TSC.5-O-3] "Stable assembly processes despite signs of non-equilibrium species distributions over four decades of environmental change in bird communities across North America"
- 13:30: Cristina Ramos Capon [TSC.5-O-4] "Long-term resilience of Pyrenean subalpine ecosystems: a high resolution sedaDNA approach to reconstruct ecological communities using Holocene paleoenvironmental records"
- 13:45: Miguel Matias [TSC.5-O-5] "Humans, then Climate, Simplified Lake Trophic Structures Across the Azorean Archipelago"
- 14:00: ÁLVARO CASTILLA BELTRÁN [TSC.5-O-6] "Five centuries of Human Impacts on Coastal Ecological Communities of Santiago Island, Cabo Verde"



#### TALKS - WEDNESDAY 4th June, morning (first): 11:00-12:30

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Wednesday, 4 June, morning (first) • Room: Auditorio

- 11:00: Mercedes Valerio [GSE-O-13] "Twenty-year effect of sewage-sludge fertilization in a Mediterranean grassland: impact on species composition, functional groups and interrelation with climate"
- 11:15: Ікума Litovska [GSE-O-14] "Arthropod abundance is most strongly driven by crop and semi-natural habitat type rather than management in an intensive agricultural landscape in the Netherlands"
- 11:30: Антоно I. Arroyo [GSE-O-15] "Effects of climate and land-use change on satellite-derived primary production in temperate mountain grasslands: insights from the Spanish Pyrenees"
- 11:45: Aurea Luiza Lemes da Silva [GSE-O-16] "Assessing the impacts of urbanization on stream ecosystem services through a temporal perspective: historical versus recent cities"
- 12:00: DAVID MORENO MATEOS [GSE-O-17] "2,000 years of genomic recovery from pre-Columbian agriculture in the Amazon"
- 12:15: RAFAEL BARRIENTOS [GSE-O-18] "Planning wildlife crossing structures using mountain lion road crossing events vs. roadkills"

## **GSB.** Ecology Across Scales

Wednesday, 4 June, morning (first) • Room: Salón de actos

- 11:00: Rubén Del Campo González [GSB-O-13] "From shredders to microbes: drying shifts biotic controls of leaf litter decomposition in river networks"
- 11:15: Carles Alcaraz [GSB-0-14] "River hydrology impacts on coastal fisheries: commercial and ecological benefits of Ebro River"
- 11:30: Marta M Varela [GSB-O-15] "Upwelling-induced hydrological perturbation shape seasonal transitions of small eukaryotic plankton"
- 11:45: Aurora M Ricart [GSB-O-16] "Quantifying the CO2 system in a seagrass-dominated coastal shallow embayment"
- 12:00: Anna Traveset [GSB-O-17] "Determinants of island complexity in the context of global change"
- 12:15: Sónika Leconte [GSB-O-18] "Niche modelling of Iberian ants: Where to look for them when we hardly know them?"

#### GSF. New Technologies, New Discoveries: Big Data, Remote Sensing, and Al

Wednesday, 4 June, morning (first) • Room: Balconada

- 11:00: Salvador Arenas-Castro [GSF-O-7] "Dynamic habitat-based conservation indicators of flagship species for priority areas in southern Europe"
- 11:15: Jose Manuel Álvarez-Martínez [GSF-O-8] "AI-Enhanced LULC and Biodiversity Mapping for Protected Areas Monitoring"
- 11:30: Ana Genua Olmedo [GSF-O-9] "Mapping coastal habitats at state-level: integrating GIS, remote sensing, and fieldwork"
- 11:45: Raul Garcia-Valdes [GSF-O-10] "Diversity in drought-tolerance traits promotes temporal stability in forest productivity"
- 12:00: Borja Jiménez-Alfaro [GSF-O-11] "Hierarchical ecosystem mapping for large-scale biodiversity assessment"
- 12:15: LORÉNA BOISSEAU [GSF-O-12] "Parakeet invasion: Novel noise creates a shift in urban soundscapes"

## **GSD. Ecology Meets Evolution**

Wednesday, 4 June, morning (first) • Room: Cova dos libros

- 11:00: Pol Soler Ruiz [GSD-O-7] "Stress tolerance traits across a water availability gradient in Mediterranean shrublands"
- 11:15: Sara Gamboa [GSD-O-8] "Vrba was right: Implications of Pliopleistocene climate fragmentation on the biogeography of current mammals"
- 11:30: João Jacinto [GSD-O-9] "Linking Soil Parameters and Bioclimatic Variables to Corema album's Functional Traits across species distribution range"
- 11:45: Stela Vlajos Gómez [GSD-O-10] "Exploring specialization as a driver for evolutionary processes on cliff ecosystems"
- 12:00: RAQUEL DIVIESO [GSD-O-11] "Phylogenetic patterns of species rarity and the relationship between rarity traits and speciation rates in terrestrial mammals"
- 12:15: RAFAEL RICO-MILLAN [GSD-O-12] "Should I stay or should I go? Triggers of developmental acceleration in tadpoles"

#### GSC. The Interplay Between Species Coexistence and Abiotic Factors: Community Ecology

Wednesday, 4 June, morning (first) • Room: Restaurante

- 11:00: Inmaculada (Ada) Álvarez-Manzaneda [GSC-O-7] "Frozen Archives: Exploring Avian Population Histories and other Environmental Changes Using Arctic Eider Nests"
- 11:15: Andry Castro [GSC-O-8] "The extraordinary contribution of social media and media to map rare and endangered species: the Mediterranean Monk Seal in Madeira and Porto Santo Islands"
- 11:30: Hermine Houdas [GSC-0-9] "Compensatory changes in photosynthetic tissue, wood production and water use in trees defoliated by pine processionary moth"
- 11:45: François Duchenne [GSC-O-10] "Coevolution of phenological traits shape plant-pollinator coexistence"
- 12:00: Oscar Godoy [GSC-O-11] "Cooperation maximizes biodiversity"
- 12:15: Ferran Pauné [GSC-O-12] "The critical deficit of herbivores in Mediterranean woody systems turns them into fire dominated ecosystems"



## TSB-4. Plant-soil interactions: biodiversity, functioning and sustainable practices under global change

Wednesday, 4 June, morning (first) • Room: Seminario 1

- 11:00: Ana Rey Simo [TSB.4-O-1] "Contrasting response of plant and soil microbial diversity to lithology and climate in Mediterranean maritime pine forests"
- 11:15: Guillermo Bueno [TSB.4-O-2] "How mycorrhizal symbiosis influence plant strategies?"
- 11:30: Lorena Gómez-Aparicio [TSB.4-O-3] "Disentangling the role of the shrub community in the decline of Mediterranean oaks through indirect mechanisms of microbial sharing"
- 11:45: Ezequiel Antorán Pilar [TSB.4-O-4] "Indirect interactions, plant-soil feedback and the coexistence of competitors"
- 12:00: José Costa [TSB.4-O-5] "Post-fire fungal diversity in maritime pine woodlands in Serra da Estrela (Portugal)"
- 12:15: Luis Merino Martín [TSB.4-O-6] "Impact of soil degradation due to overgrazing on soil microbial communities and soil carbon storage of seasonal dry tropical forests in Ecuador"

#### TSF-1. Ecoacoustic monitoring of biodiversity: challenges and applications

Wednesday, 4 June, morning (first) • Room: Seminario 2

- 11:00: Diego Llusia Genique [TSF.1-O-1] "Monitoring biodiversity and ecosystems with sounds: review and perspectives"
- 11:15: Jose Joaquin Lahoz Monfort [TSF.1-O-2] "Listening to the mountains: towards a large-scale passive acoustic observatory for Ordesa & Monte Perdido National Park"
- 11:30: Catuxa Cerecepo-Iglesias [TSF.1-O-3] "Evaluating acoustic and distance sampling for monitoring bird communities in a One Health context"
- 11:45: Delia Velasco-Montero [TSF.1-0-4] "Ecoacoustic Camera Trap: A Unified, Al-Driven Solution for Multimodal Biodiversity Monitoring"
- 12:00: Cristian Pérez-Granados [TSF.1-O-5] "Low-cost recorders and ready-to-use machine learning tools: An effective combination for monitoring nocturnal and cryptic aquatic birds"
- 12:15: ALBA MÁRQUEZ-RODRÍGUEZ [TSF.1-O-6] "Optimizing BirdNET for local ecosystems, fine-tuning for ecoacoustic monitoring"

## TSB-9. The flow of elements and the functioning of the biosphere

Wednesday, 4 June, morning (first) • Room: Seminario 3

- 11:00: Helena Vallicrosa [TSB.9-O-1] "The burden of big genome sizes in plant distribution"
- 11:15: Xin Song [TSB.9-O-2] "Leaf nutrients, but not genome size, modulate plant photosynthesis"
- 11:30: Elabio Rodriguez Penedo [TSB.9-O-3] "The bioelemental blueprint of bryophytes: Linking composition with function"
- 11:45: JAVIER DE LA CASA [TSB.9-O-4] "Shifting elementomes: addressing long-term changes in the biogeochemical composition of ecosystems from paleoenviromental records"
- 12:00: ALVARO GAYTAN [TSB.9-O-5] "Linking root elemental composition and stoichiometry with tree health in forests invaded by soil-borne pathogens"
- 12:15: Ecio Diniz [TSB.9-O-6] "Effects of Leaf and Whole Aboveground Element Stocks on Forest Biomass Production"

#### TSE-8. Biological invasions, knowledge to manage in a context of global change

Wednesday, 4 June, morning (first) • Room: Seminario 7

- 11:00: Pablo González-Moreno [TSE.8-O-1] "Incorporating local insights through interviews and a participatory workshop for invesive plant species management in southeastern iberian arid ecosystems"
- 11:15: Adrián Lázaro-Lobo [TSE.8-O-2] "Evaluating invasion risk through hierarchical species distribution models and greenhouse experiments"
- 11:30: Jorge Ángel Martin Ávila [TSE.8-0-3] "European Honey Buzzards as Natural Predators of the Invasive Yellow-Legged Hornet in Agroforestry Landscapes"
- 11:45: Daniel Echeandia [TSE.8-O-4] "Evaluating the invader complex between the giant resin bee (Megachile sculpturalis) and the Japanese pagoda tree (Styphnolobium japonicum) in a non-native range"
- 12:00: Daniel Puentes [TSE.8-O-5] "Review of the invasion of exotic crab Percnon gibbesi in the Mediterranean Sea"
- 12:15: Joana Guedes de Jesus [TSE.8-O-6] "From waste to resource: advantages of using Acacia longifolia biomass"

## TSE-2. Understanding the potential of managed ecosystems to mitigate climate change from an ecological perspective

Wednesday, 4 June, morning (first) • Room: Seminario 6

- 11:00: Maria Almagro Bonmati [TSE.2-O-1] "Global warming will speed up carbon and nitrogen losses from decomposing plant residues by photodegradation in semiarid Mediterranean agroecosystems"
- 11:15: Marte Martinez-Eixarch [TSE.2-O-2] "Greenhouse gas emissions from wetland and paddy rice: a contextualization under an ecological lens"
- 11:30: Sebastián Echeverría-Progularis [TSE.2-O-3] "Impact of climate change mitigation strategies in rice farming on biodiversity and agroecosystem multifunctionality"
- 11:45: Alejandro Carrascosa Becerril [TSE.2-O-4] "Opportunities to enhance long-term soil carbon storage in dehesas: an analysis of management change effects on carbon fluxes and fractions"
- 12:00: Judit Torres Fernández del Campo [TSE.2-O-5] "Key drivers of soil organic carbon dynamics in Quercus ilex L. dehesas of Extremadura"
- 12:15: Pablo Manzano [TSE.2-O-6] "Alternative views of climate metrics in livestock rangelands under herbivore ecology perspectives"



## TALKS - WEDNESDAY 4th June, morning (second): 12:45-14:15

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Wednesday, 4 June, morning (second) • Room: Auditorio

- 12:45: MARC RIERA [GSE-O-19] "Under pressure: a plant's introduction pathway is associated with the invasion of environmentally stressful conditions"
- 13:00: Juan Antonio Hernández Agüero [GSE-O-20] "Vegetation and water as nature-based solutions for the restoration of urban ecosystem functions"
- 13:15: Eva Cuesta [GSE-O-21] "Evaluating the effects of global warming on dung beetle diversity and ecosystem functions through field experiments"
- 13:30: Felipe Rodriguez Arvelo [GSE-0-22] "Particulate and Mineral-Associated Organic Carbon as Indicators of Soil Carbon Stock Vulnerability in mature and secondary ecosystems in Tenerife (Canary Islands)"
- 13:45: Christian Arnanz [GSE-0-23] "Temporary ponds under pressure: agricultural intensification and climate change impacts"
- 14:00: ANA AGUIRRE [GSE-O-24] "Using National Forest Inventory data to enhance mortality estimations"

## **GSB.** Ecology Across Scales

Wednesday, 4 June, morning (second) • Room: Salón de actos

- 12:45: Laura Figuerola-Ferrando [GSB-O-19] "Fine-scale ensemble Species Distribution Modelling of the endangered octocoral Corallium rubrum using combined approaches to reduce uncertainty"
- 13:00: Robert Cassidy / Laura de la Cruz [GSB-O-20] "Genomic connectivity and adaptation signals of the freshwater sponge Ephydatia muelleri across its distribution"
- 13:15: Maria Victoria Jiménez Franco [GSB-O-21] "Movements of yellow-legged gulls (Larus michaellis) during the breeding season: between marine and terrestrial environments and between natural and anthropogenic areas"
- 13:30: Rebeca García Roldán / Laura E. Gangoso de la Colina [GSB-O-22] "Early-life conditions affect natal dispersal decisions in a highly specialized colonial breeding falcon"
- 13:45: Andy J. Green [GSB-O-23] "The importance of greylag geese as seed dispersers of dry-fruited plants, and the impacts of global change"
- 14:00: Mariana Estorninho [GSB-O-24] "Modeling Ecological Succession and Time of Surface Exposure in Extreme Environments: First Findings in the Pyrenees"

## TSB-2. Coping with the Change: Exploring the impacts of global change on marine biodiversity across spatial-temporal scale

Wednesday, 4 June, morning (second) • Room: Balconada

- 12:45: Jaime Otero Villar [TSB.2-O-1] "Functional diversity dynamics of a copepod assemblage in a coastal upwelling system along three decades of continuous monitoring"
- 13:00: C. Pamela Orta-Ponce [TSB.2-O-2] "Temporal prokaryotic ecotypes shift with dissolved organic matter composition in a coastal upwelling system"
- 13:15: Rosa M. Chefaou [TSB.2-O-3] "The PERSIST and InterMaRest projects: understanding and restoring declining habitat-forming macroalgal populations at the rear edge of their distribution"
- 13:30: Tristan da Silva e Ornelas [TSB.2-O-4] "Benthic and Ichthyofaunal Diversity in Black Coral Forests in Santo Antão, Cabo Verde: Establishing a Baseline for Monitoring Global Change"
- 13:45: Shahar Chaikin [TSB.2-O-5] "Elucidating scale-dependent effects of marine heatwaves on fish abundance"
- 14:00: Nuria Garrigós Alcalá [TSB.2-O-6] "The role of Marine Sponges in Organic Pollutant Cycling"

## GSA. Enhancing Inclusivity, Ethics, and Societal Impact in Science

Wednesday, 4 June, morning (second) • Room: Cova dos libros

- 12:45: Celia de Llanos [GSA-O-6] "A network analysis of ecological restoration communities to facilitate knowledge exchange"
- 13:00: Rafael Hernández Maqueda [GSA-O-7] "Fostering Collective Action: Social perceptions and participatory strategies to combat soil degradation in Abla (Almería)"
- 13:15: Annelies Broekman / Maria Vives-Ingla [GSA-O-8] "Contributions from the Interreg Euro-MED Natural Heritage Mission towards ecological research impact on society"
- 13:30: JAVIER BENAYAS [GSA-O-9] "Lessons learned from 40 years of educational experiences and social change on environmental and ecological challenges"
- 13:45: Marcos Dias [GSA-O-10] "Non-native and invasive plant species in urban streams of Coimbra: effects of urbanization and potential impacts for One Health"
- 14:00: Berta Jofre Rodriguez / Olivia Barrantes [GSA-O-11] "Learning activities for Vet students: livestock grazing for wildfire prevention"

#### TSB-3. Connecting scales through movement ecology

Wednesday, 4 June, morning (second) • Room: Restaurante

- 12:45: UNAI ORMAZABAL SANTA CRUZ [TSB.3-O-1] "Prioritizing dispersal settlements of a flagship raptor in the Iberian Peninsula: from intensity of use to spatial connectivity"
- 13:00: Victor Martín Vélez [TSB.3-O-2] "Dirty connections: spatiotemporal connectivity between landfills at intra- and inter-population levels in an opportunistic gull"
- 13:15: Beatriz Rumeu [TSB.3-O-3] "Keep the water close: Space use of a key frugivorous bird in a high mountain ecosystem"
- 13:30: Nina Bogdanovic [TSB.3-O-4] "Towards Unraveling the Role of Daily Bird Movements in West Nile Virus Transmission"
- 13:45: Pol Fernández-López [TSB.3-O-5] "Foraging Ants as Liquid Brains: Movement Heterogeneity Shapes Collective Efficiency"
- 14:00: David Ramón Martínez [TSB.3-O-6] "Habitat selection during winter season of a partial migrant falcon revealed through GPS and satellite imagery data"



## TSB-4. Plant-soil interactions: biodiversity, functioning and sustainable practices under global change

Wednesday, 4 June, morning (second) • Room: Seminario 1

- 12:45: Ana-Maria Heres [TSB.4-O-7] "The abandonment of non-native radiata pine plantations from the Basque Country a key process to stimulate soil C sequestration and native forests' ecological restoration"
- 13:00: Miguel De Celis [TSB.4-O-8] "Conserved Patterns of Microbial Recruitment and Rhizosphere Assembly in Crop Wild Progenitors"
- 13:15: Pablo Homet Gutierrez [TSB.4-O-9] "Microbial Strategies for Soil Restoration: Insights from Cover Crop Seed Inoculation"
- 13:30: PILAR ANDRÉS [TSB.4-O-10] "Regenerative agriculture as a tool for carbon farming: a Mediterranean metanalysis"
- 13:45: Rosana Salazar García [TSB.4-O-11] "Towards sustainable plant-disease management: understanding the influence of global change and local environment on nematode communities in Mediterranean olive groves"
- 14:00: Asier Herrero [TSB.4-O-12] "Impact of post-disturbance forest management in soil fertility six year after an extreme wind event in an Iberian beech forest"

## TSD-1. From Extinct to Extant: Integrating Palaeontological and Ecological Knowledge

Wednesday, 4 June, morning (second) • Room: Seminario 2

- 12:45: Marta Matamala-Pagès [TSD.1-O-1] "Information loss in the fossil record"
- 13:00: Soria Galván [TSD.1-O-2] "Distribution of climate specialization in mammals: Resource-Use hypothesis or Mid-Domain effect?"
- 13:15: DANAE SANZ PÉREZ [TSD.1-O-3] "Body mass as a driver of isotopic niche overlap asymmetry in South American Oligocene mammals"
- 13:30: Adriana Linares Martín [TSD.1-O-4] "Volcanic lakes, a biodiversity crisis in the fossil record"
- 13:45: Ferran Sayol [TSD.1-O-5] "Past and future global diversity loss from anthropogenic bird extinctions"
- 14:00: Guillermo Rodriguez-Gómez [TSD.1-O-6] "Ecological sustainability in human exploitation of bison during the Late Pleistocene at Gran Dolina TD10.2 (Sierra de Atapuerca, Spain)"

## TSB-9. The flow of elements and the functioning of the biosphere

Wednesday, 4 June, morning (second) • Room: Seminario 3

- 12:45: Anna Lupon [TSB.9-O-7] "The power of joining: Confluences influence water chemistry and biogeochemical processes along Mediterranean fluvial networks"
- 13:00: José L. J. Ledesma [TSB.9-O-8] "Transport and biogeochemical processing of carbon and nitrogen in terrestrial-aquatic interfaces across European ecoregions"
- 13:15: Nuria Perujo [TSB.9-O-9] "Bioavailable dissolved organic carbon serves as a key regulator of phosphorus dynamics in stream biofilms"
- 13:30: Ana Leticia Zevenhuizen Martínez [TSB.9-O-10] "Nitrogen dynamics and Microbial Adaptations in High-Latitude soils under Decadal Warming"
- 13:45: Tania Carrasco-Molina [TSB.9-O-11] "Nitrogen deposition risk assessment in spanish ecosystems using empirical critical loads"
- 14:00: Julia Jimeno-Alda [TSB.9-O-12] "Differences in nutrient content between heterospecific plant neighbours affect respiration rates of rhizosphere microbiota"

## TSB-15. Impact of human activities on the health of ecosystems: linking different biological organization levels

Wednesday, 4 June, morning (second) • Room: Seminario 7

- 12:45: Gema Cambero Conejero [TSB.15-O-1] "Effects of landscape complexity on biodiversity across the freshwater-terrestrial interface in rice agroecosystem"
- 13:00: GIULIA GIONCHETTA / MARTA TURÓN [TSB.15-O-2] "MARTRANSFER: mapping antimicrobial resistance transfer from fresh-to-marine ecosystems"
- 13:15: Amaia Martínez Gaviria [TSB.15-O-3] "Metal transfer factor from soil to plant decays with species growth"
- 13:30: Alberto García-Rodríguez [TSB.15-O-4] "Outdoor recreation in protected areas affects animal-mediated seed dispersal"
- 13:45: André F. Mira [TSB.15-O-5] "Fire shifts the structure and dynamics of woody plant communities in a mediterranean coastal dune ecosystem"
- 14:00: PILAR PINEDA-BALBUENA [TSB.15-O-6] "Ecophysiological and Phenolic Production Responses of Corema album to Drought Stress: A Shrub with Potential for Sustainable Cultivation"

## TSE-9. Brown Urban Ecology: The interlink between nature and humanity

Wednesday, 4 June, morning (second) • Room: Seminario 6

- 12:45: Gabriela Quiroga [TSE.9-O-1] "Bottom-up and top-down drivers of urbanization effects on insect herbivory on oaks"
- 13:00: Ashley Tejeda Meneses [TSE.9-O-2] "Morphological adaptations of butterfly populations in response to urbanization"
- 13:15: CARLOS HERNÁNDEZ-CASTELLANO [TSE.9-O-3] "Bee diversity patterns in urban vs adjacent natural ecosystems: species turnover makes urban parks biodiversity refuges"
- 13:30: Emilio Pagani-Núñez [TSE.9-O-4] "Complementing urban agriculture and green spaces is important for ecosystem functions and biodiversity in cities: A systematic review and meta-analysis"
- 13:45: Andrea del Carmen Sala Navarro [TSE.9-O-5] "Contrasting levels of contaminants in different urban land uses depending on the identity"
- 14:00: Lucia Alarcón-Rios [TSE.9-O-6] "The role of reproductive mode on the phenotypic divergence between urban and forest populations: salamanders as a study case"



## TALKS - THURSDAY 5th June, morning (first): 11:00-12:30

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Thursday, 5 June, morning (first) • Room: Auditorio

- 11:00: Félix Picazo [GSE-O-25] "Freshwater mussel holobionts constitute prokaryotic diversity reservoirs mediating crucial ecosystem functions"
- 11:15: Noelia Fernández-Prado [GSE-O-26] "Influence of Macrolichens on Invertebrate Richness and Diversity in restored and mature Mediterranean Forests"
- 11:30: Marta Pérez Diz [GSE-O-27] "Unearthing challenges: effects of Carpobrotus species on soil properties and microbial communities in coastal ecosystems globally"
- 11:45: Antonio Camacho [GSE-O-28] "Assessing the role of management and restoration actions on the Iberian wetlands' capacity for GHG emissions abatement"
- 12:00: Sergio de Frutos [GSE-O-29] "Growth and survival analysis of Pinus sylvestris and Pinus nigra seedlings from different provenances planted in two different stands of P. sylvestris after regeneration cuttings: evaluation of facilitative effects"
- 12:15: Maria Cruz Díaz Antunes-Barradas / Mario Fernandez Martínez [GSE-O-30] "Ecophysiological keys to the success of a range-expanding species in threatened coastal habitats of Doñana National Park"

## **GSB.** Ecology Across Scales

Thursday, 5 June, morning (first) • Room: Salón de actos

- 11:00: Estela Romero [GSB-O-25] "Can natural systems curb human impacts? The case of N in a small Mediterranean river basin"
- 11:15: Sara Pineda Zapata [GSB-O-26] "The role of short rotation plantations in landscape connectivity across Natura 2000 networks"
- 11:30: Daniel Bragg [GSB-O-27] "The importance of initial soil organic carbon values in designing farming practices to ameliorate soils in the Mediterranean arable fields"
- 11:45: Jorge Aldea Mallo [GSB-O-28] "Influence of mixed stands on the defensive investment of adult Pinus sylvestris L."
- 12:00: Miguel Hurtado Martínez [GSB-O-29] "Effect of Soil Extracts of Maytenus senegalensis Shrubs on Seed Germination Under Contrasting Climatic Conditions"
- 12:15: Pablo Rodriguez Lozano [GSB-O-30] "Contrasting the ecological value of non-perennial streams for terrestrial vertebrate fauna across different hydrological phases"

## TSE-4. Forest mortality and die-off responses to global change

Thursday, 5 June, morning (first) • Room: Balconada

- 11:00: Francisco Lloret [TSE.4-O-1] "Forest die-off and species climatic niche"
- 11:15: FAQRUL ISLAM CHOWDHURY [TSE.4-O-2] "Drought-induced die-off alters vegetation diversity across climatic gradients in Catalan Pinus sylvestris forests"
- 11:30: Daniel Nadal-Sala [TSE.4-O-3] "Enhanced resilience to drought and pest infestation through forest management in a Pinus pinaster plantation in Prades (NE Spain)"
- 11:45: Marina Robes Blanco [TSE.4-0-4] "Identifying and monitoring drought induced forest decline in Scots Pine forest through Satellite Remote Sensing"
- 12:00: Alberto Hornero / Rocio Hernández-Clemente [TSE.4-O-5] "Advancing oak forest health monitoring: application of thermal imaging and CWSI in heterogeneous canopies"
- 12:15: CLARA BELLOSTES GARCIA [TSE.4-O-6] "Individual tree characteristics and plasticity to climate conditions modulate resistance to bark beetle attack in Pinus uncinata"

#### GSA. Enhancing Inclusivity, Ethics, and Societal Impact in Science

Thursday, 5 June, morning (first) • Room: Cova dos libros

- 11:00: Susana Bernal [GSA-O-12] "Make visible the invisible obstacles: 10 steps to raise awareness and promote actions towards gender equity through scientific societies.and droughts as a fundamental component in river ecology"
- 11:15: María Hurtado / Pedro Rebollo [GSA-O-13] "Well-being of Early- career researchers in ecology"
- 11:30: Miguel González Ximénez de Embún [GSA-O-14] "LGTBIQA+ inclusivity in science: The role of PRISMA association and the situation in SIBECOL"
- 11:45: Andreu Ibáñez Rodríguez [GSA-O-15] "Application of living labs in restoration ecology: a systematic map"
- 12:00: Maria Torres-Sanchez [GSA-O-16] "Promoting open and equitable research for one of the most imperiled animal groups through the Amphibian Genomics Consortium"
- 12:15: Discussion time

## GSC. The Interplay Between Species Coexistence and Abiotic Factors: Community Ecology

Thursday, 5 June, morning (first) • Room: Restaurante

- 11:00: Laura Lagos Abarzuza [GSC-O-13] "The ecological benefits of traditionally-managed wild pony populations for heathlands in Galicia"
- 11:15: Joana Freitas [GSC-0-14] "Exploring Ecosystem Services and Disservices of Free-ranging Garrano Ponies"
- 11:30: KILIAN JUNGKEIT-MILLA [GSC-O-15] "From pollen to landscape: quantitative reconstruction of past vegetation dynamics in Iberia through novel relative pollen productivity estimates"
- 11:45: Marina Rincon-Madroñero [GSC-O-16] "Long term trends in greening of a mountain grassland: integrating fine scale herbivore foraging with vegetation and climate"
- 12:00: Elena Valdés Correctier [GSC-O-17] "When seasons change, so does defense: plant sex-driven herbivory in Pistacia lentiscus"
- 12:15: Beatriz Castaño-Rodríguez [GSC-O-18] "A conceptual model of coastal dune ecology in arid climate zones"



# TSD-3. Assessing the interplay between genetic and non-genetic mechanisms contributing to phenotypic variation and adaptation over time

Thursday, 5 June, morning (first) • Room: Seminario 1

- 11:00: Vit Latzel [TSD.3-O-1] "Sex matters: Transgenerational plasticity due to mycorrhiza gets hotter in sexual than clonal offspring of Fragaria vesca"
- 11:15: Javier Puy [TSD.3-O-2] "Epigenetically mediated phenotypic plasticity is predicted from plant life history and traits of the economics spectrum"
- 11:30: Iván Rodríguez Buján [TSD.3-O-3] "Genetic variability and phenotypic assessment of the Erica tetralix group (Ericaceae)"
- 11:45: Francisco Balao [TSD.3-O-4] "Drought-responsive eco-physiological and transcriptomic plasticity in a polyploid carnation"
- 12:00: Iris Sammarco [TSD.3-O-5] "Epigenetic and transcriptomic insights into transgenerational effects of wild strawberry (Fragaria vesca) under biotic interactions"
- 12:15: José Alberto Ramírez-Valiente [TSD.3-0-6] "Evolution of functional syndromes and phenotypic plasticity in a forest tree species"

## TSE-7. What works in forest management and restoration

Thursday, 5 June, morning (first) • Room: Seminario 2

- 11:00: Paula Feldmann [TSE.7-O-1] "The forest within the forest: restoration of host plant-epiphyte networks following invasive plant control"
- 11:15: Jesús Lopez-Angulo [TSE.7-O-2] "Key structural attributes of reforestations for the conservation of avian biodiversity: a comparison with natural forests"
- 11:30: María Noelia Morato Sánchez [TSE.7-O-3] "Why does Portuguese oak regenerate less successfully than holm oak? Is it a matter of taste?"
- 11:45: Maria Medina [TSE.7-O-4] "Resprouting response of two oak species to repeated biomass loss: effects of warming and revegetation method"
- 12:00: Estrella Conde-Raposo [TSE.7-O-5] "Evaluating reforestation success: plant diversity and structural characteristics in central Iberian forests"
- 12:15: Beatriz Duguy Pedra [TSE.7-O-6] "Promoting adaptive post-fire forest restoration practices and socio-ecological resilience through a participatory process (Maials, Lleida, Northeastern Spain)"

## TSF-3. Quantitative ecology: modelling of populations and species distributions

Thursday, 5 June, morning (first) • Room: Seminario 3

- 11:00: Julia G. de Aledo [TSF.3-O-1] "Is biodiversity declining? Or fluctuations reflect natural variability? A decade of monitoring pollinator dynamics."
- 11:15: Júlia Rodriguez Grabalosa [TSF.3-O-2] "Ecological Drivers of Mosquito-Borne Disease Risk in Human-Impacted Wetlands"
- 11:30: Sara VILLÉN-PÉREZ [TSF.3-O-3] "Polygonal-shaped patterns in ecological data are common and significant"
- 11:45: Javier Fernández-López [TSF.3-O-4] "Rethinking the role of spatially structured random effects in species distribution models"
- 12:00: Francisco Cervantes Peralta [TSF.3-O-5] "Comparison of occupancy predictions from dynamic vs static multi-season occupancy models"
- 12:15: Sonia Illanas [TSF.3-O-6] "Occupancy modeling for wild ungulates from camera traps at National scale."

#### TSB-12. Spatial modelling of species niches and distributions

Thursday, 5 June, morning (first) • Room: Seminario 7

- 11:00: Alejandra Zarzo-Arias [TSB.12-O-1] "sabinaNSDM, an R package for building nested hierarchical Species Distribution Models (SDMs)"
- 11:15: Armand Rausell-Moreno [TSB.12-O-2] "Optimising background points in species distribution models: Effects on present and future projections"
- 11:30: Daniel Romera Romera [TSB.12-O-3] "JSDMs paleoclimatic projections enhance SDMs, offering improved predictions for rare species"
- 11:45: Georgios Vagenas [TSB.12-O-4] "Enhancing aquatic Species Distribution Models (aSDMs) by utilizing the Ichthyofauna of the Iberian Peninsula as a proxy"
- 12:00: Mónica Gómez Vadillo [TSB.12-O-5] "Niche similarity and spatial co-occurrence in lentic and lotic European dragonflies and"
- 12:15: Marta Pardo-Araujo [TSB.12-O-6] "Human mobility and habitat suitability drive the invasion dynamics of the arbovirus vector Aedes albopictus in Spain"

#### TSE-10. Green Urban Ecology: nature and the city

Thursday, 5 June, morning (first) • Room: Seminario 6

- 11:00: Shichun Ma [TSE.10-O-1] "Mapping Barcelona's Urban Smellscape: A Multi-layered Analysis of Scented Vegetation Distribution and Accessibility"
- 11:15: Elena Daniela Concepción Cuevas [TSE.10-O-2] "Strengthening urban green infrastructure networks through multi-scale and interdisciplinary frameworks"
- 11:30: Nerea Pérez Andrés [TSE.10-O-3] "Growth variability and drought resilience in urban trees"
- 11:45: Cristina C. Bastias [TSE.10-O-4] "Exploring structural and functional attributes in urban parks to optimize ecosystem services in the climate-vulnerable city of Cordoba, Spain"
- 12:00: Pedro Pinho [TSE.10-O-5] "Quantifying the factors influencing ecosystems services provision by urban green & blue infrastructure"
- 12:15: Departs Muriel [TSE.10-O-6] "How biodiversity of private gardens is shaped by management practices and garden composition? A review and meta-analysis."



## TALKS - THURSDAY 5th June, morning (second): 12:45-14:15

## GSE. Are We at a Global Tipping Point? Biodiversity Conservation and Ecosystem Services Sustainability

Thursday, 5 June, morning (second) • Room: Auditorio

- 12:45: Sónia R. Q. Serra [GSE-O-31] "Citizeen: A Digital Path to Healthier Ageing and Nature Preservation"
- 13:00: Jaume Tormo Blanes [GSE-O-32] "Rehabilitation and monitoring of novel ecosystems in a solar power plant in semi-arid Spain"
- 13:15: Inmaculada Criado Navarro [GSE-O-33] "Assessment of biological soil crust (biocrust) through an integrative analysis of the metabolites, nematodes, and soil biological and physicochemical properties"
- 13:30: Peru Agueda Aramburu [GSE-O-34] "Greenhouse gas emissions from Posidonia oceanica beach wrack"
- 13:45: VICENTE J. ONTIVEROS [GSE-O-35] "Temporal dynamics of richness, composition and phylogenetic change across ecosystems"
- 14:00: Olga Barreiro Verea [GSE-O-36] "Growth responses to drought of primary producers in Pinus pinaster ecosystems"

#### **GSB.** Ecology Across Scales

Thursday, 5 June, morning (second) • Room: Salón de actos

- 12:45: Jaime Madrigal González [GSB-O-31] "The vagrant lichen Cladonia rangiformis as a key driver of herbaceous plant assemblages in central Iberian Peninsula"
- 13:00: Blanca Arroyo-Correa [GSB-O-32] "Plant spatial configuration and pollinator behavior, alongside neutral processes, are key to predicting plant–pollinator network structure"
- 13:15: Jordi Margalef-Marrase [GSB-O-33] "Climatic Disequilibrium and Canopy-Recruit Plants Interaction"
- 13:30: María Torres-Sánchez [GSB-0-34] "The amphibian holobiont after the impact of Batrachochytrium fungi"
- 13:45: Nerea Piñeiro Juncal [GSB-0-35] "Evidence that seagrass presence increases benthic organic carbon, pollutant retention and biodiversity: A metanalysis of studies that presented paired control data"
- 14:00: Markel Gómez Letona [GSB-O-36] "A global atlas of respiration rates in the mesopelagic ocean"

## TSE-4. Forest mortality and die-off responses to global change

Thursday, 5 June, morning (second) • Room: Balconada

- 12:45: Pablo Sanchez Martinez [TSE.4-O-7] "The fate of Amazon rain forests under drought: collapse or stabilisation?"
- 13:00: Pablo Tomás Paredes Berrios [TSE.4-O-8] "Evidencing drought-induced tree mortality and forest die-off in Mediterranean Chile after the 2019 extreme event"
- 13:15: Guillermo Gea Izquierdo [TSE.4-O-9] "Towards understanding the physiological and metabolic expressions in the sequence of pine decline under hotter-drought"
- 13:30: Andreu Cera Rull [TSE.4-O-10] "Can diversity improve forage production in the face of heatwaves?"
- 13:45: RAQUEL TERA MARTINEZ [TSE.4-O-11] "Biodiversity impact on productivity in crop systems with different cultivation histories"
- 14:00: CARMEN ORTS [TSE.4-O-12] "The role of green covers in soil health for irrigated persimmon orchards in Valencia (Spain)"

## TSA-1. Ecology in education: ecological literacy as a tool to face global change

Thursday, 5 June, morning (second) • Room: Cova dos libros

- 12:45: Anna Lupon [TSA.1-O-1] "Learning about Climate Change impacts on inland waters and women's roles through art"
- 13:00: Nuria Pistón [TSA.1-O-2] "Women, Ecology, and Justice: Bridging Academia and Social Movements"
- 13:15: Pol Fernández-López [TSA.1-O-3] "Synergistic Approaches to Reduce School Segregation: Integrating Research and Education for Greater Inclusivity"
- 13:30: LAURA FORCE [TSA.1-O-4] "Empowering Teachers to Bring Students Closer to Nature a Collaborative Approach to Ecology Education"
- 13:45: SARA VILLÉN-PÉREZ [TSA.1-0-5] "Education for a changing world: integrating sustainability into teacher training"
- 14:00: Discussion time

## TSC-1. Ecosystem functioning: from individual to food web levels

Thursday, 5 June, morning (second) • Room: Restaurante

- 12:45: Charlotte Evangelista [TSC.1-O-1] "Anthropogenic and environmental drivers of size spectra across marine and freshwater ecosystems"
- 13:00: Daniel García [TSC.1-O-2] "Disentangling complexity in ecosystem services: a multilayer approach for understanding pest control by birds and spiders in apple orchards"
- 13:15: Ignasi Arranz [TSC.1-O-3] "Warming-driven shifts in size spectra alter predator-prey mass ratios in stream fish communities"
- 13:30: Marta Monfort Calatayud [TSC.1-O-4] "What drives synergies and trade-offs between ecosystem functions?"
- 13:45: Javier Sánchez Hernández [TSC.1-O-5] "Energy mobilisation in food webs of mountain lakes"
- 14:00: Adrián Monreal Rodríguez [TSC.1-O-6] "The role of tadpoles in temporary ponds"



# TSD-3. Assessing the interplay between genetic and non-genetic mechanisms contributing to phenotypic variation and adaptation over time

Thursday, 5 June, morning (second) • Room: Seminario 1

- 12:45: Francesco de Bello [TSD.3-O-7] "Non-genetic effects of consistent across-generational stress on functional diversity"
- 13:00: Rafael Zas [TSD.3-O-8] "Transgenerational plastic effects of resin tapping on seedlings of Maritime pine (Pinus pinaster)"
- 13:15: Jorge Garrido-Bautista [TSD.3-O-9] "Extraordinary high prevalence and genetic diversity of Leucocytozoon (Haemosporida: Apicomplexa) parasites: the case of blue tits from Sierra Nevada, Spain"
- 13:30: Carlos Olmedo-Castellanos [TSD.3-O-10] "Is phenotypic integration a constraint? Effects of heterozygosity and ploidy in phenotypic covariations in plant selfing populations"
- 13:45: David Gutierrez Larruscain [TSD.3-O-11] "Fire-driven phenotypic plasticity and genetic adaptation in Pinus halepensis Mill.: insights from genomic and phenotypic analyses"
- 14:00: Anupoma Niloya Troyee [TSD.3-O-12] "Drought stress modulates subindividual trait variation and its underlying epigenetic mosaic in Mediterranean holm oak"

## TSE-7. What works in forest management and restoration

Thursday, 5 June, morning (second) • Room: Seminario 2

- 12:45: Pedro Rebollo [TSE.7-O-7] "Effects of harvesting regimes on forest biodiversity indicators across Iberian forests"
- 13:00: Margarita Lema [TSE.7-O-8] "Disentangling the effects of resin-tapping to ensure the resilience and sustainable provision of ecosystem services by maritime pine forests"
- 13:15: Libe Albeniz Arana [TSE.7-0-9] "Post-disturbance management shapes regeneration dynamics in an Iberian beech forest: Insights from six years after a tornado"
- 13:30: IGNACIO BARBEITO [TSE.7-O-10] CANCELLED "Biomass and isotopes as indicators of post-fire management impact on natural regeneration in British Columbia"
- 13:45: Alejandro Antelo Barral [TSE.7-O-11] "Applying the ecosystem service co-production concept to assess the sustainability of forest management"
- 14:00: SILVIA ROY CURRÁS [TSE.7-O-12] "Human Ecosystems Rewilding Experimental System (HERES): a research network to understand natural rewilding of abandoned agricultural areas in Mediterrranean Basin"

## TSF-4. Do-it-yourself (DIY) open source tools and projects in ecology

Thursday, 5 June, morning (second) • Room: Seminario 3

- 12:45: Томás Golomb Durán [TSF.4-O-1] "Specifind: Extracting Occurrences from Scientific Literature Using NLP Techniques."
- 13:00: Alejandro Roldán Pérez [TSF.4-O-2] "A new Comprehensive Platform for Biodiversity Data Integration and Research"
- 13:15: Tommaso Cancellario [TSF.4-O-3] "biodumpy: A new Python package to download comprehensive biological data."
- 13:30: Daniel Ferández Román [TSF.4-O-4] "Unravelling the temporal variability of diazotrophy in dynamic upwelling bays"
- 13:45: Itziar Burgues Martinez [TSF.4-O-5] "Low-cost time-lapse camera system combined with automated image analysis to study the shallow-water Mediterranean sponge Aplysina aerophoba."
- 14:00: Maria Leo [TSF.4-O-6] "Applications of the BtM, a Customizable Open-Source Datalogger, for Monitoring Long-Term water dynamics in Cryptogam Dynamics"

## TSB-7. Drivers of temporal changes in biodiversity: from species demography to communities

Thursday, 5 June, morning (second) • Room: Seminario 7

- 12:45: VIRGINIA DOMINGUEZ GARCIA [TSB.7-O-1] "Plant-pollinator interaction rewiring boosts year to year community survival"
- 13:00: Alessio Cardillo / Graciela Gil-Romera [TSB.7-O-2] "Decoding 10,000 years of ecological persistence: non-linear behaviors in community assembly"
- 13:15: Pol Cappevila Lanzaco [TSB.7-O-3] "Are our study systems already extinct? Revealing the impacts of climate change on Mediterranean octocorals' slow regime shifts"
- 13:30: Sergio Picó Jordá [TSB.7-O-4] "Constraints on the variability of species interactions"
- 13:45: MIRIAM BRAVO-HERNÁNDEZ [TSB.7-O-5] "Contrasting tree species basal area gains and losses patterns under recent climate change across their climatic distribution"
- 14:00: Lucía Acevedo Limón [TSB.7-O-6] "Frugivore-mediated seed dispersal and diversity dynamics in Mediterranean forest communities: from fruits to saplings"

## TSE-5. The long-term recovery of post-agricultural land

Thursday, 5 June, morning (second) • Room: Seminario 6

- 12:45: Asun Rodriguez-Uña [TSE.5-O-1] "Improving the long-term recovery of forest complexity after agriculture"
- 13:00: Verónica Cruz-Alonso [TSE.5-O-2] "Land transformation and climate change additively affect forest composition recovery worldwide"
- 13:15: Mario Gaspar [TSE.5-O-3] "Reconfiguration of biodiversity and ecological processes along crop and livestock abandonment gradients"
- 13:30: ALVARO MORENO MARTIN [TSE.5-O-4] "Vikings in Greenland, how the ecosystem has evolved over the past 600 years after suffering agricultural impacts."
- 13:45: EDUARDO VELÁZQUEZ [TSE.5-O-5] "Carbon accumulation over 70 years of old-field succession driven by live biomass in a Mediterranean continental environment"
- 14:00: José Maria Rey Benayas [TSE.5-O-6] "Planted hedgerows and fenced perches speed up the slow recovery of woody vegetation in continental Mediterranean farmland"



## TALKS - THURSDAY 5th June, afternoon (third): 15:30-17:00

## TSE-11. Blue Urban Ecology: Aquatic ecosystems for Healthy and Sustainable Cities

Thursday, 5 June, after lunch (third) • Room: Auditorio

- 15:30: JORDI BOU [TSE.11-O-1] "Blue connectivity in urban ecosystems: simulating future scenarios as a management tool"
- 15:45: Ana Raquel Calapez [TSE.11-O-2] "Urban Streams as Biodiversity Hotspots within cities: assessing ecological communities and environmental influences"
- 16:00: Janine Pereira da Silva [TSE.11-O-3] "Satellite remote sensing for assessing urban stream health"
- 16:15: Fernanda Rodrigues [TSE.11-O-4] "Pharmaceuticals in urban streams: an evaluation in European cities across urbanisation and climatic gradients"
- 16:30: Maria Carolina Chaves de Sousa [TSE.11-O-5] "Risks for human health from the loss urban stream ecosystems services"
- 16:45: RAFAEL SCHMITT [TSE.11-O-6] "Seasonal patterns of diatom communities and water quality of urban streams"

## TSB-13. Host-microbe interactions: understanding ecological processes from individuals to ecosystems

Thursday, 5 June, after lunch (third) • Room: Salón de actos

- 15:30: Cecilia Siliansky de Andreazzi [TSB.13-O-1] "Eco-evolutionary impacts of deforestation and habitat fragmentation on host-parasite networks"
- 15:45: Mariona Pajares-Murgó [TSB.13-O-2] "Root-associated fungal pathogens influence to plant recruitment in Mediterranean forests"
- 16:00: ELISABET ALACID FERNANDEZ [TSB.13-O-3] "Macroalgal biofilm harbours a wide diversity of parasitic protists with distinct temporal dynamics"
- 16:15: Silke Martinez-Moreno [TSB.13-O-4] "Biogeography and phylosymbiosis as drivers of echinoderm microbiomes"
- 16:30: Векта Рімто [TSB.13-O-5] "Light, wounds, action: The contribution of photosymbionts to the sponge metabolism and tissue regeneration"
- 16:45: Marta Turon Rodrigo [TSB.13-O-6] "The archaeal class Nitrososphaeria is a key component of the reproductive microbiome in sponges during gametogenesis"

## TSE-3. Ensuring the ecological effectiveness of the EU Common Agricultural Policy 2023-2027

Thursday, 5 June, after lunch (third) • Room: Balconada

- 15:30: Mario Diaz [TSE.3-O-1] "The new funding structure of the Common Agricultural Policy (CAP) 2023-2027: implications for biodiversity conservation"
- 15:45: Gemma Maria Clemente Orta [TSE.3-O-2] "Biodiversity conservation under the Common Agricultural Policy (CAP) 2023-2027: the AGRIAMBIO proposal for monitoring its effectiveness"
- 16:00: Laura Hernández Mateo [TSE.3-O-3] "Enablers and barriers for the uptake of carbon farming in Dehesa agroforestry and Mediterranean rainfed cereal cropping systems in Spain"
- 16:15: Ignasi Bartomeus [TSE.3-O-4] "How many European bees can benefit if we boost pollinator conservation in farmlands?"
- 16:30: Remoo Ploeg [TSE.3-O-5] "Successful green cover establishment for beneficial arthropods in orchards is influenced by farm management intensity"
- 16:45: Teresa Morán López [TSE.3-O-6] "Predicting biodiversity-driven ecosystem services in agricultural landscapes"

## TSA-1. Ecology in education: ecological literacy as a tool to face global change

Thursday, 5 June, after lunch (third) • Room: Cova dos libros

- 15:30: Daniela Barría-Díaz [TSA.1-O-6] "Representations of the Fungi Kingdom in Primary School Children: Implications for the Natural Sciences Curriculum"
- 15:45: Rocio de Torre Ceijas [TSA.1-O-7] "Biodiversity Between the Tale's Pages: Children's Literature as a Tool for Ecological Literacy"
- 16:00: Cristina Fernández Aragón [TSA.1-O-8] "From talk to thought: The power of dialogic interactions in science education"
- 16:15: Zulema Varela [TSA.1-O-9] "Nestled in plastic: public perceptions and the conservation of white storks"
- 16:30: Jaime Fagundez [TSA.1-O-10] "Using science to understand the environment: an experiment on vegetation recovery after fire"
- 16:45: Discussion time

#### TSC-2. Marine ecosystems: human impacts, adaptation and mitigation

Thursday, 5 June, after lunch (third) • Room: Restaurante

- 15:30: Yanis Zentner [TSC.2-O-1] "Tittle: 20 years of decline in Mediterranean octocoral populations: Do current protection strategies help?"
- 15:45: Ignacio Peralta-Maraver [TSC.2-O-2] "Unifying thermal stress predictions of coral bleaching"
- 16:00: Rosa M Viejo [TSC.2-O-3] "Fish herbivory reaches the intertidal zone: an increasing threat in the conservation of algal forests"
- 16:15: Jessica Afonso Ferreira [TSC.2-O-4] "Characterising the fish diversity of Santo Antão, Cabo Verde"
- 16:30: Mar Clerencia Izquierdo [TSC.2-O-5] "Phytoplankton structure and production during two different coastal acidification events in the Ría de Vigo"
- 16:45: Inte Viana [TSC.2-O-6] "Multi-decadal changes in zooplankton trophic dynamics in a highly dynamic upwelling ecosystem: a climate change refugia?"



## TSB-7. Drivers of temporal changes in biodiversity: from species demography to communities

Thursday, 5 June, after lunch (third) • Room: Seminario 1

- 15:30: ALEX GIMÉNEZ ROMERO [TSB.7-O-7] "Population structure plays a key role in community stability"
- 15:45: VIOLETA CALLEJA SOLANAS [TSB.7-O-8] "Extreme changes in precipitation drive biodiversity loss"
- 16:00: Juan B. Gallego Fernández [TSB.7-O-9] "From 0 to 100 in 30 years, expansion of Retama monosperma in Doñana National Park"
- 16:15: Marina Tomás-Martín [TSB.7-O-10] "Fine-scale spatial connectivity interacts with seasonality to shape macroinvertebrate assemblages in a restored pondscape"
- 16:30: PAu Colom [TSB.7-O-11] "Urbanization impacts on population trends and phenology of European butterflies"
- 16:45: Adrià Cos del Cacho [TSB.7-O-12] "Factors shaping the distribution of old-growthness attributes in the forests of Spain"

#### TSE-6. Greenhouse gas fluxes across natural and anthropized ecosystems

Thursday, 5 June, after lunch (third) • Room: Seminario 2

- 15:30: Sofia Rodriguez Gómez [TSE.6-O-1] "Seasonal and diurnal CO2 patterns in desiccated wetland sediments"
- 15:45: Elena Villa-Sanabria [TSE.6-O-2] "The role of climate change in soil greenhouse gas fluxes from Mediterranean forests: A potential positive feedback with global warming"
- 16:00: Maria Cinta Sabaté Gil [TSE.6-O-3] "Temporal Dynamics of Nitrous Oxide Hot Moments Across Ecosystems in Europe"
- 16:15: Marcos Fernández Martínez [TSE.6-O-4] "Chaotic or periodic carbon fluxes? Estimating temporal complexity to understand ecosystem functioning"
- 16:30: Julia Máñez Crespo [TSE.6-O-5] "Evaluating the Recovery of Ecosystem Services in a Restored Seagrass Meadow: Greenhouse Gas Fluxes and Climate Mitigation Potential"
- 16:45: MIRIAM GARCÍA ALGUACIL [TSE.6-O-6] "Production profiles of methane and nitrous oxide in the sediments of a Mediterranean reservoir during mixing and stratification periods"

# TSB-16. Connecting Portuguese and Spanish Ecological Restoration experiences and future perspectives under the EU Nature Restoration Law

Thursday, 5 June, after lunch (third) • Room: Seminario 3

- 15:30: Mario Mingarro [TSB.16-O-1] "Evaluating Climate Change Impacts on Protected Areas: A Climate Representativeness Approach for the Natura 2000 Network"
- 15:45: Sergio Chozas [TSB.16-O-2] "Establishing Live Fences: Evaluating the Benefits of Wood Chip Mulching and Co-Plantation"
- 16:00: Pedro Villar Salvador [TSB.16-O-3] "Effectiveness of seed bank transfer as a method for herb community restoration in Mediterranean mining areas"
- 16:15: Josu Alday [TSB.16-0-4] "Red de Restauración Minas y Canteras: An opportunity to share technical and scientific knowledge contributing to the development of effective ecological restoration strategies"
- 16:30: Adrián Regos [TSB.16-O-5] "Harnessing IUCN nature-based solutions framework to mitigate extreme wildfire impacts"
- 16:45: Discussion time

#### TSB-14. Expanding the frontiers of trait-based ecology: novel applications across taxa and scales

Thursday, 5 June, after lunch (third) • Room: Seminario 7

- 15:30: ELEONORA BECCARI [TSB.14-O-1] "Maps of species strategies: addressing dimensions in global trait spaces"
- 15:45: Mengjiao Huang [TSB.14-O-2] "The role of trait variability in mediating the effects of global change on ecosystem stability"
- 16:00: Antar Benet Valls [TSB.14-O-3] "On the role of phosphorus availability in tropical rainforest community assembly: functional traits, demographic trade-offs and phylogenetic patterns"
- 16:15: ABIEL TEIXIDÓ BONFILL [TSB.14-O-4] "Integrating plant metabolome in a functional trait-based ecology at the global scale"
- 16:30: Guillermo Fandos [TSB.14-O-5] "Complex trait syndromes allow understanding but not predicting dispersal distance in European birds"
- 16:45: Diego P.F. Trindade [TSB.14-0-6] "Species pool functional redundancy enhances local stability in plant communities"

#### TSC-1. Ecosystem functioning: from individual to food web levels

Thursday, 5 June, after lunch (third) • Room: Seminario 6

- 15:30: Guillermo Garcia Gomez [TSC.1-O-7] "Sexual differences in energy use among ectotherms: does resource availability matters?"
- 15:45: Zeynep Ersoy [TSC.1-O-8] "Global patterns in freshwater microcrustacean zooplankton body-size distributions across environmental gradients"
- 16:00: Маниеца Авецно [TSC.1-O-9] "Stoichiometric mismatch of Armadillidium vulgare drives compensatory feeding, stoichiometric shifting, and differential assimilation"
- 16:15: SANDRA PAREJO [TSC.1-O-10] "Shifts in species roles and interaction patterns between a nearly pristine and a disturbed island"
- 16:30: Francisco I. Pugnaire [TSC.1-O-11] "Soil microbial communities control plant-plant competition"
- 16:45: SARA NAVARRO LÓPEZ [TSC.1-O-12] "Contrasting effects of plant invasion and climate on plant diversity across a large elevation and aridity gradient in Southern Europe"



## **POSTER PRESENTATIONS**

## TUESDAY 3rd June, 18:00-19:30

Another science is possible, Discussion Corner: Room 1

Eva Gloria Martos Núñez [TSA.1-P-1] "The plant kingdom and its diversity in education. A systematic review"

Lourdes Morillas [TSA.1-P-4] "Exploring high school students' understanding and epistemic reasoning in organic matter decomposition: Insights from the OrgWASTE citizen science project"

OTILIA REYES [GSA-P-1] "Women's empowerment through science"

PABLO RODRIGUEZ LOZANO [GSA-P-7] "Diversity and inclusion on scientific societies: the case of the Iberian Society of Ecology"

Francisco Javier Rodriguez-Rigueiro [TSA.1-P-10] "GREENCOOP: Driving the Green Transition through Cooperative Models"

SARA VARELA [GSA-P-4] "IIISIBECOL-XVIIAEET conference in numbers"

FRIEDERIKE VOGEL [TSA.1-P-7] "Enhancing public perceptions of urban rivers through immersive citizen science"

Anthropogenic disturbances, Discussion Corner: Room 2

Miguel Cánibe Iglesias [TSE.1-P-4] "Integrating multiple landscape management strategies to optimize conservation under climate and planning scenarios"

Marcello D'Amico [TSE.1-P-16] "Roadsides as pollinator refuges in agricultural landscapes"

Anna Equisuany [TSE.1-P-13] "From Connectivity to Fragmentation: Understanding Biodiversity Patterns in Aquatic Networks"

Minerva García Carmona [TSE.1-P-10] "Recurrent wildfires disrupt soil microbial communities and increase soil carbon emissions in Atlantic shrublands"

TATIANA PESSANO SERRAT [TSE.1-P-1] "The role of terrestrial vertebrate scavengers in the utilization of waterfowl hunting carcasses in a Mediterranean wetland"

Otilia Reyes [TSE.1-P-7] "Do population characteristics influence the germination response to fire? The case of Cistus salvifolius L. and Cistus psiloseplus Sweet. from two separate localities"

Pablo Soto García [TSE.1-P-22] "Protocols and advice for an integrated managemente of temporary ponds in peninsular Spain"

Luz Valbuena [TSE.1-P-19] "Seed germination responses in abandoned semi-natural montane heathlands under laboratory-simulated conditions"

More Human impact and restoration, Discussion Corner: Room 3

Jose Daniel Anadon [TSE.5-P-2] "The paradox of macrorewilding and microdefaunation in a post-agrarian world"

ENRIQUE And TSE.7-P-8] "Diversification of monospecific stands can enhance the multifunctionality and resilience of forest ecosystems in the Mediterranean mountains"

XAVIER BENITO [TSC.5-P-7] CANCELLED "A Holocene perspective of deltaic pulse events combining paleoecology and Earth System modeling"

ADRIÁN CASTRO-OLIVARES [TSC.2-P-3] "Understanding CO2, DIC and pH gradients in the Galician Rías Baixas: Insights from the ACID Project"

Guadalupe Cortés [TSB.15-P-3] "Long term soil organic carbon changes in Mediterranean organic and conventional dryland arable fields"

ELENA GRANDA [TSE.7-P-5] "Evaluation of the structure, functions, and ecosystem services of abandoned Eucalyptus plantations for their ecological restoration"

LUNA MORCILLO [TSE.7-P-2] "Beyond LIFE TECMINE Project: Innovative techniques for mine restoration in Mediterranean environments. Results, impact and lessons learned"

ALEJANDRO Muñoz Escribano [TSE.2-P-1] "Landscape and water management interaction effect on aquatic biodiversity and pest control in rice"

Cities and Pollutants, Discussion Corner: Room 4

ALBA BENITO KAESBACH [TSB.2-P-1] "The impact of microbial diversity loss on the degradation of polymers in marine sediments"

Enrica Garau [TSE.10-P-3] "Exploring urban nature perceptions in urban semi-arid spaces to inform sustainable urban planning"

Rodrigo J. Gonçalves [TSB.6-P-8] "Microplastics entering the food web – a preliminary, more realistic test with zooplankton from Patagonia Argentina"

Luis Martín [TSE.11-P-1] "The blue city: multicriteria ecological evaluation of freshwater ecosystems"

ALBA Lucía Martos Maestre [TSB.6-P-2] "Emerging contaminats on freshwater: A systematic review"

Ondina Ribeiro [TSB.6-P-5] "Exposure of zebrafish embryos to amphetamine and its enantiomers resulted in developmental alterations and neurotoxicity"

Marta Suárez [GSB-P-11] "Community assembly patterns across butterfly species in urban populations"

Conservation, Discussion Corner: Room 5

Inés M. Alonso-Crespo [GSE-P-4] "LivingSoiLL: Healthy Soil to Permanent Crops Living Labs"

Jose A Blanco-Aguiar [GSE-P-10] "Spotting the big predator: exploring the spatial and temporal trends of hunters in Spain"

ALBERT CARNÉ CONSTANS [GSE-P-1] "A race against extinction: the challenge to overcome the Linnean amphibian shortfall in tropical biodiversity hotspots"

IGNACIO LEÓN PINHEIRO [TSE.8-P-3] "Evaluation of water hyacinth biomass use as a potential agricultural enhancer under two water regimes"

Francisco de Paula Molina Fuentes [TSE.12-P-3] "Advances in the Knowledge of Apifauna in the Doñana Natural Area"

Noa Núñez-González [TSE.8-P-6] "How does Carpobrotus taxa removal affect vegetation and soil recovery?"

Susana Pallarés [GSE-P-7] "The hidden Natura 2000 network: protected subterranean species and habitats across Europe"

ISABEL SUAREZ [TSE.12-P-6] "Assessment of the effect on environmental quality of a Natural Reserve expansion in coastal scrub"



Global Change, Discussion Corner: Room 6,

Daniel Agea Plaza [TSE.6-P-1] "Effects of Forest Management on Soil CO2 Fluxes"

Laura Fernández de Uña [TSE.4-P-5] "Drought and girdling effects on carbon dynamics and tree mortality in a tropical dipterocarp forest"

ROGER FIGULS CALVELO [TSE.6-P-7] "Cork Oak, a super-CH4 emitter tree species"

José Herrera Russert [TSB.7-P-1] "Temporal changes in grasshopper community along altitudinal gradient in the central Pyrenees"

Judit Lecina-Diaz [TSE.4-P-2] "Post-disturbance forest reorganization: a synthesis"

Andrés Martínez García [TSE.6-P-4] "Labile lipids fuels methane ebullition"

Francisco Javier Silva-Pando [TSB.7-P-7] "Evaluation of the area and special and temporal variability of edapho-endemism Centaurea ultreiae Silva-Pando (Compositae) and its communities"

ELENA VEGAS LÁZARO [TSB.7-P-4] "The Use of Remote Sensing in Predicting Mushroom Production in Forests of the Iberian Peninsula"

Soil and ecosystem functioning, Discussion Corner: Room 7

ALEX CAMPILLO DE LA MAZA [TSB.9-P-2] "Groundwater and stream discharge of dissolved organic matter to the Mar Menor coastal lagoon"

Antonio Gallardo [TSB.4-P-12] "Regenerative agriculture impact on soil carbon and microbial function"

HÉCTOR HERNÁNDEZ ALONSO [TSB.4-P-6] "Woody litterfall of mixed beech forests overyield pure stands in a temperature gradient"

Álvaro López Garcia [TSB.4-P-9] "Size-dissected rhizospheric soil microbial communities show functional and compositional shifts through pore-size filtration"

CARME LÓPEZ SÁNCHEZ [TSB.11-P-4] "Changes in the functional composition of microbial communities after long-term N addition in a beech temperate forest"

Maria Losada [TSB.9-P-4] "Does predation risk-induced stress shape winter deer diet in Bialowieza Forest?"

ELVA PALACIOS Mc CUBBIN [TSB.4-P-3] "Effects of forest thinning practices on fine root traits in non-natural stands of Pinus pinaster"

Celestino Quintela Sabaris [TSB.11-P-1] "Same or different? A comparison of the fungal communities on Casuarinaceae and broadleaf litter"

Species interactions, Discussion Corner: Room 8

JORDI BARTOLOMÉ [TSC.4-P-1] "First demographic data on the European bison in Spain"

ALEXANDRA DÍAZ-ALONSO [TSB.1-P-10] "Seasonal and spatial variability of the negative effect of Zostera marina exudates on the toxic dinoflagellate Alexandrium minutum"

Rodrigo Granjel [TSB.1-P-7] "How does warming affect the coexistence mechanisms of recovering communities?"

MIGUEL MANSO ARRIBAS [TSB.1-P-1] "Shrubs induce floristic composition changes in post-mining pastures"

Eva Teira [TSB.13-P-3] "Contrasting diversity and succession patterns in leaf and root microbiome of two nearby temperate Zostera marina meadows"

AINHOA URKIJO LETONA [TSC.4-P-4] "Livestock behaviour in different Management Units from the Gorbeia Special Area of Conservation"

JULIAN WINSTON ZELLER [TSB.1-P-4] "Microplastics modulate the effects of facilitation of nurse species on annual plant communities in semiarid regions"

Evolution, Discussion Corner: Room 9

Vanessa ALVAREZ LOPEZ [GSD-P-1] "Implementation of (aided)phytoextraction in Pb/Zn mine tailings using hyperaccumulators intercropped with leguminous"

Antonio Archidona Yuste [TSD.1-P-6] "Soil chronosequence helps you to understand the multidimensional variation and evolution of soil nematodes. An opening with the genus Xenocriconemella in the Iberian Peninsula"

JERÓNIMO CID [GSD-P-7] "Adaptation to drought following anthropogenic selection release: the case of Phoenix atlantica, a wild relative/feral derivative of the date palm crop (Phoenix dactylifera)"

Wendy Fernández Pujó [TSD.3-P-2] "Does temperature affect reproductive behaviour in male three-spined sticklebacks?"

Francisco Perfectti [GSD-P-4] "Unveiling the genetic basis of floral seasonal phenotypic plasticity in the Moricandia genus"

IVÁN REY-RODRÍGUEZ [TSD.1-P-3] "Small mammals as palaeoecological proxies: ecological specialization and evolutionary trends"

Graciela Sotelo [TSD.1-P-9] "The impact of fossil biases on phylogenetic inferences: a simulation approach using mammals"

JESUS VILLELLAS [TSD.3-P-5] "Genetic and plastic responses to water stress in native and introduced populations of Plantago lanceolata"

Variation and variability, traits and environment, Discussion Corner: Room 10

Marco J. Cabrerizo [TSB.10-P-2] "Fluctuating temperature regime and cell size modulates the phagotrophy-phototrophy trade-off in mixoplanktonic protists"

Ana Carvalho [TSD.4-P-3] "Morphological and physiological responses of three pine species to drought and resin yield"

David García-Callejas [TSB.14-P-1] "Beyond community weighted mean: quantifying trait distributions for detecting community assembly patterns"

Juan García-Duro [GSC-P-1] "Regenerative traits dynamics and interplay in post-fire-shrublands of NW Spain"

Angela Illuninati [TSB.14-P-4] "New perspectives on plant community assembly through the lens of Vis-NIR Spectroscopy: from between- to within-species interactions"

ERICA LOMBARDI [TSD.4-P-6] "Predicting pine resin investment through aerial multispectral imaging"

Natalia Sierra Cornejo [TSB.14-P-7] "Fine root biomass and functional traits of woody plants at ecosystem level in forest and shrublands in Tenerife, Canary Islands"

Martin Souto [TSB.10-P-5] "Desmid Diversity and Community Structure Across Azorean Archipelago Lakes"

Space and time, species and communities, Discussion Corner: Room 11,

Pedro Abellan [GSB-P-10] "Understanding the uniqueness of macroinvertebrate communities in alpine lakes from a multidimensional niche perspective: the ALPINEPONDS project"

PILAR DE PABLO TOBAJAS [GSB-P-7] "Light-dependence of seagrass performance and upper thermal limits"



Daniel Irimia Yáñez [GSB-P-1] "A Late Winter's Tale: Environmental effects on dormant carbon reserves and earlywood formation in Quercus robur"

Mara Machado [GSC-P-4] "Modelling the patterns of use of space and dominant behaviours of a Geomalacus maculosus population core: influence of habitat and climate"

ELIOT Mompeán Asis [GSB-P-4] "Desiccation risk in recalcitrant seeds of Quercus species in the fall: does dispersal timing matter?"

CÉSAR MORALES DEL MOLINO [TSC.5-P-3] "Palaeoecological evidence reveals the 'unexpected' history of the iconic Montejo beechwood"

JUAN PASCUAL [TSC.5-P-6] "When You Lose in Hake, but Gain in Herring"

María Mar Sánchez Montoya [TSB.8-P-1] "The terrestrial invertebrates of non-perennial rivers and their key role as dry-phase indicators of ecological quality"

New technologies, new discoveries, Discussion Corner: Room 12,

Marcos Fontela [TSF.4-P-4] "BOGAR: An Integrated DIY oceanographic solution observing Galicia surface waters"

DIEGO E. JIMÉNEZ-LALANA [GSF-P-4] "A.I. for Biodiversity: Bringing Biodiversity Collections to the Digital Age"

HERLANDER LIMA [TSF.4-P-1] "sabinaHSBM: An R package for link prediction and network reconstruction using Hierarchical Stochastic Block Models"

CLARA MALUENDA GARÍN [TSB.5-P-3] "Functional strategies and water use in plant communities in sub-Mediterranean zones"

Marta Roman Geada [GSF-P-1] "Discrimination of intertidal goose barnacle from in situ hyperspectral signatures"

Antonio Velasco Rodriguez [TSF.2-P-2] "Analysis of the Mediterranean oak forests resilience to extreme climate change events in Andalucía (Spain)"

Maria Vives-Ingla [TSF.3-P-3] "Novel regimes of extreme climatic events trigger negative population rates in a common insect"

## WEDNESDAY 3rd June, 18:00-19:30

Another science is possible, Discussion Corner: Room 1

Decolonial Protocol Comittee Independent CREAF workers [GSA-P-5] "A worker's protocol to align research activities with decolonial practices"

Karen Mustin [GSA-P-2] "Inequitable participation of local researchers in English-language research on protected areas in the Amazon"

Carmen Orts [TSA.1-P-2] "Tools in ecological education from the education section of the Spanish Socity of Soil Science. Soil Vermicomposting Practical Booklet"

Sara Sánchez Sáez [TSA.2-P-1] "Testing the use of eBird data to describe seasonal patterns of abundance of waterbirds: the case of the greater flamingo"

Maria J. Servia [TSA.1-P-5] "It is a community work: using Service-Learning projects in the detection of relevant ecosocial issues and citizen literacy needs"

Marina Tomás-Martín [TSA.1-P-8] "Small is beautiful: Educating on the biodiversity value of temporary ponds in a changing world"

Anthropogenic disturbances, Discussion Corner: Room 2

Pelayo Acevedo [TSE.1-P-23] "Land use transformations as drivers of wildlife population trends in mainland Spain"

Dani Boix [TSE.1-P-14] "The role of spatial modularity determining metacommunity composition at local scale"

Óscar CRuz [TSE.1-P-5] "Short- and long-term changes after fire in the structure of Erica australis L. shrubland in Os Ancares (Lugo)"

Sergio Gilabert Cerdà [TSE.1-P-20] "How does forest management affect terrestrial vertebrates? A global review"

María Gómez-Brandón [TSE.1-P-2] "Insect frass as a potential organic fertilizer to preserve soil health"

Ana González-Robles [TSE.1-P-17] "Aridity and habitat type shape aboveground cavity-nesting solitary bee communities in olive agricultural landscapes"

ROBERTO MOURENTE [TSE.1-P-8] "Two sides of the same coin: Germinative response to fire in two Ericaceae species"

Francisco Rocha [TSE.1-P-11] "Bushfire effects on soil biodiversity and functions across contrasting ecosystems: arid grasslands, peatlands and mediterranean woodlands"

More Human impact and restoration, Discussion Corner: Room 3

Samuel Allasia-Grau [TSE.7-P-6] "Evaluating tree planting in Mediterranean drylands: insights from three initiatives in a Europe-wide project"

José Daniel Cerdeira Arias [TSC.2-P-1] "Harvesting and climate impacts on natural bivalves production in intertidal shellfish grounds: A modelling approach"

Ana Couso-Viana [TSE.7-P-9] "Innovative Agroforestry with AF4EU: Weaving Networks for a Sustainable Future"

CARME ESTRUCH [TSE.2-P-2] "Predicting and Quantifying Methane Ebullition in Rice Fields Using Machine Learning"

Patricia Fernández-Soleto [TSE.3-P-1] "Methodological approach to assess efectiveness of manual and cattle-driven clearing in extensive livestock grazing in the Madrid region (Spain)"

Luis Alberto Martínez Vaquero [TSB.15-P-1] "Landscape and biodiversity drivers of Trypanosoma cruzi infection in wild hosts"

Unal Ortega Barrueta [TSE.7-P-3] "Forest management practices shape ecosystem service provision and multifunctionality in a protected area"

Carlos Sanz-Lazaro [TSC.2-P-4] "Extreme storms could limit the expansion of the invasive species Caulerpa cylindracea on rocky shores"

Cities and Pollutants, Discussion Corner: Room 4

Jaime Fagundez [TSE.10-P-4] "Urban gradient effects on the invasive hornet Vespa velutina in the coastal city of A Coruña"

ALEJANDRO FIGUEROA-RODRIGUEZ [TSB.6-P-3] "Evaluating the potential toxicity of weathered agricultural plastics to earthworms and plants"

VIOLETA HEVIA [TSB.3-P-1] "Green Infrastructure for Bees: The Role of Spanish Drove Roads"

AARÓN LAGOA [TSB.6-P-6] "Bioplastics ingestion and effects on Sericostoma vittatum Rambur, 1842 (Trichoptera: Seticostomatidae)"

RAFAELA REIS [TSB.6-P-9] "Ecotoxicity assessment of bio-based polymers targeting its use as greener alternatives in composites"

Montserrat VILà [TSE.10-P-1] "Pollinator visits to ornamental plants in urban parks"





Conservation, Discussion Corner: Room 5

Antonio J. García-Meseguer [TSE.12-P-4] "Biodiversity patterns and conservation gaps for continental molluscs in southeastern Iberia'

Luís González Rodríguez [TSE.8-P-4] "Physiological integration in Carpobrotus spp.: key to invasive success?"

ESTER HERNÁNDEZ CORREAS [GSE-P-8] "Formal education shaping the perception of ecological systems among environmental technicians and managers in Spain" EVA MARTÍNEZ VEIGA [GSB-P-12] "Floristic composition and diversity of Galician lowland hay meadows (EU Habitat 6510) in relation to management and conservation" IGNACIO MANUEL PÉREZ RAMOS [GSE-P-2] "Unravelling the short- and mid-term effects of climate change on plant community dynamics in Mediterranean dehesas: a functional trait perspective"

YAIZA R. LUEJE [GSE-P-5] "The potential impact of non-selective Vespa velutina trapping devices in agricultural settings: the case of vineyards"

Lena Saiz Campomar [TSE.12-P-1] "Insights for restoration of rupicolous endemic plants: evaluating reinforcement techniques for Petrocoptis sp. in fragile rocky habitats in northwestern Iberia"

Dario San-Segundo Molina [TSE.8-P-1] "Warming-induced spread of emerging crop pests in the Mediterranean Basin and Europe"

Global Change, Discussion Corner: Room 6

RICARDO DÍAZ-DELGADO [TSE.4-P-6] "Venus satellite images to detect tree decline in Doñana Biological Reserve: patterns and effects"

Marta Goberna Estelles [TSB.7-P-5] "Phylogenetic turnover across community assembly of soil bacterial communities in mining areas"

AITANA IZQUIERDO [TSE.6-P-2] "The role of riparian soils as green nitrogen filters along a Mediterranean river network"

Sergio López Padilla [TSE.6-P-5] "A mechanistic description of methane emission fluxes during lake-overturn in a Mediterranean reservoir"

IVÁN PRIETO AGUILAR [GSE-P-11] "Functional Changes in Plant Communities During Post-Wildfire Regeneration"

ARTURO RODRÍGUEZ PASCUAL [TSB.7-P-2] "Functional structure affects community stability: insights from a removal experiment"

PALOMA Ruiz Benito [TSE.4-P-3] "Drought-induced responses of Scots pine along continental Spain: a review of challenges and opportunities for building forest die-off monitoring networks"

Henna Tyyskä [TSB.7-P-8] "Density dependence and mycorrhizal strategies: Implications for tropical and subtropical forest dynamics"

Soil and ecosystem functioning, Discussion Corner: Room 7

ISABEL CABEZAS DUEÑAS [TSB.9-P-1] "Carbon and nitrogen fluxes from litterfall to the soil in forest ecosystems in Tenerife"

JOÃO CANEDO [TSB.4-P-13] "Soil Conservation for Climate Change Mitigation: Effects of Mulch and Biochar on Erosion Control and Organic Matter Losses"

José Antonio Carreira de la Fuente [TSB.4-P-10] "N:P stoichiometric shifts induced by N deposition in forests: coupled or uncoupled across organization levels?"

Nuria Ferreiro-Domínguez [TSE.3-P-2] "SUS-SOIL: Promoting Sustainable Soil and Subsoil Health through Agroecology for a Thriving Future"

LAUREN GREENE [TSB.4-P-4] "Fungi and Fires: Fungal diversity of post wildfire high mountain beech forests at the southern distribution limit (Serra da Estrela, Portugal)"

SILVIA MACIS [TSB.4-P-1] "Mitigating salinity stress in mediterranean wetland plants: the role of native cyanobacteria and bacteria as bioinoculants"

Maria João Pedrosa [TSB.4-P-7] "Distinctive fungal communities in neighbor plantations of beech and pine forests in Serra da Estrela, Portugal"

Enrique Valencia [TSB.11-P-2] "Plant diversity shapes soil microbial networks under climate change"

Species interactions, Discussion Corner: Room 8

Jesús M. Bastida [TSB.1-P-8] "Altitudinal decoupling between recruitment optima and plant abundance suggests contrasting responses of woody species in the Mediterranean to the impacts of global warming"

Francisco Carro [TSC.4-P-5] "Introduced red deer in the National Park of As Illas Atlánticas and their impact on ecosystem management and conservation"

VITOR MIGUEL COSTA-SILVA [TSC.3-P-1] "The complex dynamics of ant-plant mutualisms: exploring the role of plant resource availability for ants and intraguild predation by birds on plant fitness"

Gabriella Lima Tabet Cruz [TSB.13-P-1] "Predictive modelling of zoonotic microparasites for potential host species and geographical areas through joint species distribution analysis"

José Carlos Muñoz-Reinoso [TSC.4-P-2] "Retama monosperma seed dispersal by four natives herbivorous in Doñana National Park"

Sergio Núñez Castillo [TSB.1-P-5] "Unraveling the influence of climate and competition on forest structure in mixed pinus stands"

Francisco Rodriguez-Sánchez [TSB.1-P-2] "FRUSEED: a global, open, dynamic, reproducible database of fruit and seed traits and plant dispersal modes"

Evolution, Discussion Corner: Room 9

Maria Aranguren-Gassis [TSD.2-P-1] "Evolution of thermal tolerance in marine diatoms: Metabolic strategies under heat stress"

MARCO MIGUEL ARONES ABAD [TSD.1-P-7] "Evaluating the Middle to Upper Paleolithic transition at the Cova Eirós site (Lugo, Galicia, Spain) through estimates of carrying capacity and meat availability"

Lucas Buffan [GSD-P-5] "Continent-scale macroevolutionary insights from the last 23 million years of South American mammalian diversity"

Eva Castells [GSD-P-2] "Chemical convergence of specialized metabolites in native and invasive populations supports rapid evolution driven by aridity"

HERNAN CAMILO INSUASTI ASTUDILLO [TSD.3-P-3] "When the wilderness calls: evolution by feralization in almond (Prunus dulcis)"

ALEJANDRO LLANOS GARRIDO [GSD-P-8] "The influence of thermal resource aggregation on the genetic dynamics in a fragmented lizard population"

MARIO MARQUETA [TSD.1-P-1] "White-tailed Eagles (Haliaeetus albicilla) across ecosystems and time: Taphonomic and ecological insights from the Finnish archipelago to the Early Pleistocene Sima del Elefante site (Atapuerca)"

Beatriz Trejo [TSD.1-P-4] "Spatial distribution of large mammals during the Late Pleistocene in the upper valley of the Lozoya River (Madrid, Spain)"



Variation and variability, traits and environment, Discussion Corner: Room 10

Romina Alvarez-Troncoso [TSB.10-P-6] "Study of Habitats and Aquatic Macroinvertebrate Communities in the Lagares River: Assessment of Ecological Status and Habitat Survey"

Gerard Codina Martínez [TSB.12-P-1] "Wildfire effect on climatic disequilibrium of understory community of Pinus halepensis forests"

IRENE ESPINOSA-MANJÓN [TSD.4-P-7] "Basal metabolic rate constraint home range size in a wild rodent"

Carlos M. Herrera Maliani [TSD.4-P-1] "Intraplant variation in floral temperature of the summer-blooming thistle Centaurea calcitrapa (Asteraceae)"

José A. Hódar [TSB.10-P-3] "Home is not enough: nest boxes do not increase bird density for pine processionary moth control in pine plantations"

Vanesa Palma-Valencia [TSB.14-P-5] "Exploring the functional traits and landscape configuration that promote species colonization in temperate forests"

Julia Sanchez VILAs [TSD.4-P-4] "Intraspecific variability in seed weight and viability, and seedling growth in the narrow endemic Iberodes littoralis subsp. gallaecica"

ENRICO TORDONI [TSB.14-P-2] "Filling the gaps: evaluating the accuracy and impacts of trait imputation across taxonomic groups"

Space and time, species and communities, Discussion Corner: Room 11,

Nerea Cazás Fraga [TSC.5-P-1] "Coastal wetlands dynamics in Ría de Vigo during the Holocene transgression: is the onshore and subtidal palaeoevidence able to capture the main stages of change?"

Adrián Escudero [GSC-P-2] "A longstanding coexistence between pine and oaks: Phylogenetic congruence or not?"

OLIVIA GARCÍA [GSB-P-2] "Acorn desiccation differences in European oaks: relation to species ecology and acorn structure"

Cristina García Fernández [TSB.12-P-2] "Revealing spatio-temporal Spawning Patterns of European Hake in Atlantic Iberian waters"

Oriol Lluch Oms [TSC.5-P-4] "Sharp decrease of snowbed specialists in the catalan Pyrenees in 20 years"

Gonzalo Pérez de Lis Castro [GSB-P-5] "Effects of winter conditions on the functional lifespan of xylem conduits in evergreen and deciduous oaks"

Maria Angeles Perez Navarro [GSB-P-8] "Lost in space: When spatial scale terms blur actual study size in plant ecology"

Guillermo Velo-Antón [GSC-P-5] "Bird and mammal communities across a gradient of forest integrity: native oak forests, intensive eucalypt plantations, and mixed habitats in between"

New technologies, new discoveries, Discussion Corner: Room 12

Cristina Antunes [TSB.5-P-4] "How do hydrological conditions influence plant water source partitioning in coastal dunes?"

Paula Cara Abad [TSB.5-P-1] "Spatiotemporal dynamics of water uptake sources in a Scots pine forest at the southerneastern Pyrenees"

Victor Gómez-Del Campo [TSF.3-P-4] "Catch dynamics and hyperstability in an exploited stalked barnacle stock with the use of depletion models"

CAROLA GÓMEZ-RODRÍGUEZ [TSF.3-P-1] "Congruence between species abundance and genetic diversity across epiphytic coleoptera families in the NW of the Iberian Peninsula"

Zeltia López Gallego [TSF.1-P-1] "Mapping Ecoacoustics Projects in Spain: Progress, Biases, and Challenges"

Ariadna Martinez-Dios [TSB.2-P-2] "Statistical tools and machine learning algorithms to uncover the ecological organization of Mediterranean Cold-Water Coral Reefs"

CRISTINA RONQUILLO FERRERO [GSF-P-2] "OCCUR app: an interactive guide for curating species occurrence records"

Paula Warren Jiménez [TSF.4-P-2] "How to measure Co2 fluxes in very shallow water sheets?"

## THURSDAY 5th June: 17:00-18:30

Another science is possible, Discussion Corner: Room 1

VIRGINIA DOMINGUEZ GARCIA [GSA-P-3] "Equality in Action: Get to know the AEET Equality Commission"

Laura Lagos Abarzuza [TSA.1-P-9] "The educational dimension in the conservation of habitats in common land communities: the case of the RURALtXA! project"

Lourdes Morillas [TSA.2-P-2] "Making the invisible visible: participatory methods to study soil biodiversity"

ROBERTO MOURENTE [TSA.1-P-3] "Educating on Wildfire at the USC Faculty of Biology"

ELISA PIZARRO CARBONELL [TSA.1-P-6] "Beyond outreach: how collaboration between agroecology researchers and teachers can contribute to the transformation needed for sustainable rural development"

María Mar Sánchez Montoya [GSA-P-6] "Caring for elderly people generates a major gender gap in academic teaching and research staff in Spain"

Anthropogenic disturbances, Discussion Corner: Room 2

LEONOR CALVO [TSE.1-P-15] "The Multifunctionality Index as an Integrated Measure to Evaluate the Impact of Disturbances on Ecosystem Services"

Maria Carmona Cruz [TSE.1-P-3] ""What else?" Pinus pinea: survivors under extreme conditions. The case of the Llobregat Delta."

MELANI CORTIJOS LÓPEZ [TSE.1-P-9] "Modelling the effects of post-abandonment strategies on water resources and soil carbon stocks in Mediterranean mountains: application of RHESSys and CarboSOIL"

Francisco Gomez-Prieto [TSE.1-P-12] "Footprints or treads: an experimental assessment of the environmental impacts of trail running and mountain biking in a Mediterranean mountain"

Sergio Mellado [TSE.1-P-18] "Preliminary results of the monitoring of the insect community in a periurban section of the Manzanares River (Madrid, Spain)"
Rubén Tarifa [TSE.1-P-21] "Landscape simplification impact in spiders taxonomic diversity within olive groves"

Quel Vilalta-Clapés [TSE.1-P-6] "Ground-dwelling spiders respond to post-fire logging strategies: A trait-based analysis in Mediterranean forests"



More Human impact and restoration, Discussion Corner: Room 3

ANTONIO BODE [TSC.2-P-2] "Decadal upwelling variability and changes in new nitrogen sources for coastal ecosystems in NW Spain"

PHILIP MARTIN [TSE.7-P-1] "Identifying and quantifying biases in forest restoration"

RICARDO OLIVEIRA [TSB.15-P-2] "Importance of the leaf conditioning status on litter decomposition in salinized streams"

ALBA ROMERO DEL MORAL [TSE.5-P-1] "Drivers of multitrophic biodiversity change in abandoned rural landscapes in Aragón"

David Sanchez Pescador [TSE.7-P-7] "Spatio-temporal comparative of plant diversity and forest structure of reforestations and reference pine forests in the central liberian Peninsula"

Gabriela Santos Gomes [TSB.16-P-1] "Beyond borders: Riparian restoration as a key to climate resilience in southern iberian agroecosystems"

UNAI SERTUTXA [TSE.7-P-4] "The impact of forest plantations on soil microbial communities in Biscay (Basque Country)"

Cities and Pollutants, Discussion Corner: Room 4

Marina Briones Rizo [TSB.6-P-4] "Plastic Degradation in the Ocean: A Previously Overlooked Source of Volatile Organic Compounds"

FIGNA COROMINAS GODORI [TSE.10-P-2] "Unveiling the conservation importance of natural habitats in a renaturing city context"

MARIA Costa [TSB.6-P-10] "Comparative Toxicity Assessment of Bisphenol A and Its Analogues (BPAF and BPZ) Using Zebrafish (Danio rerio) Embryos and Larvae as Model Organisms"

ISABEL FORNER-PIQUER [TSB.6-P-1] "Searching for new candidate biomarkers of environmental pollution: the potential of carboxylesterases"

LORENA PEÑA [TSE.10-P-5] "Assessment of the urban tree at municipal scale in the Basque Country (Spain)"

CATIA VENANCIO [TSB.6-P-7] "Are biobased thermoplastic organosheets an eco-friendly option for manufacturing industries?"

Conservation, Discussion Corner: Room 5

Ana Margarida Coelho dos Santos [GSE-P-3] "Dung beetle diversity and ecosystem functions in Azorean pastures amid climate change"

Francisco Miguel Cortés Sanchez [TSE.12-P-5] "Integrated assessment framework to estimate the effectiveness of coastal restoration actions in Spain"

Anna Fontova Musté [TSE.8-P-5] "Dendroecological and genetic evaluation of Pinus pinaster plantations affected by Matsucoccus feytaudi in eastern Catalonia"

Saray Mañas-Jordá [TSE.12-P-2] "IberArthro: A free online database compiling taxonomic and distributional data on Ibero-Balearic arthropods"

Antonio Manuel Montoya Ruiz [GSE-P-9] "Epiphytic lichens as early-warning indicators: Functional trait responses to environmental stressors"

CARMEN RODRIGUEZ-CORONADO [TSE.8-P-2] "Effects of soil silica availability and adaptation to silica uptake in the invasive grass Cortaderia selloana"

María J. Servia [GSE-P-6] "Big ecological challenges in small wine producing areas"

Global Change, Discussion Corner: Room 6

NIL ALVAREZ [TSE.6-P-3] "Carbon fluxes in temperate rice fields; comparing organic and conventional farming under different management schemes"

EMMA GÓMEZ PERAL [TSB.7-P-6] "Temporal succession of vegetation after clearing actions in the Gorbeia SAC"

Sebastian Enrique López Pérez [TSB.7-P-3] "The journey of ants: Temporal and spatial dynamics of grassland ant communities along a Mediterranean elevational gradient"

MIGUEL ORTEGA [TSE.6-P-6] "Leaf trait variation within and among species modulates the contribution of plant species richness to ecosystem production"

Antonio J. Pérez-Luque [TSE.4-P-4] "The Spanish Forest decline monitoring database: decaimiento.es"

Ángela Sánchez-Miranda Moreno [TSE.4-P-1] "Anatomical response of cork oak (Quercus suber L.) to cork stripping"

Francisco Tomás Riera [TSE.4-P-7] "Application of thermal and hyperspectral imaging to anticipate forest decay in Quercus ilex"

Soil and ecosystem functioning, Discussion Corner: Room 7

Ana García Velázquez [TSB.4-P-5] "Effects of sustainable agricultural practices upon extensive environmental variability on nematode communities across diverse production systems in Spain"

Paula Lillo [TSB.11-P-3] "Nematodes under fire: how wildfires reshape soil faunal communities"

Maria Lopez-Acosta [TSB.9-P-3] "Tracing silicon in seagrasses: implications for elemental cycles in the land-ocean continuum"

RAQUEL MARTINS NOGUEROL [TSB.4-P-2] "The role of halophytes in sustainable land management: effects of abiotic stress on yield and bioactive profiles"

EFRÉN ROMERO CABALLERO [TSB.4-P-11] "Effect of chickpea (Cicer arietinum L.) cultivar diversity on soil microbiota in rainfed cereal-legume rotation"

Inés Mª Sánchez [TSB.4-P-8] "Reduced rainfall increases the impact of grazing pressure on plant production and soil carbon storage in Doñana seasonal grasslands"

Julián Tijerín-Triviño [TSB.9-P-5] "Hydraulic strategies modulate forest productivity responses to hotter droughts"

Species interactions, Discussion Corner; Room 8

Miguel Bugalho [TSC.4-P-6] "Effects of deer on the functioning of Mediterranean oak woodlands: carbon, water and fire

Luis J. Chueca [TSB.13-P-2] "Temporal trends in gut microbiota composition of Bombus pascuorum wild bee at Gorbea Natural Park (Northern Iberian Peninsula)" Lydia Cruz-Amo [TSC.4-P-3] "Destocking of extensive livestock impacts regional primary production"

And de Torre Sáez [TSB.1-P-6] "Influence of shrub vegetation patches on the Family's abundance of post-mining pastures"

Luciana Jaime [TSB.1-P-9] "Pathogenic interaction between canopy and regeneration in Pinus nigra forests"

ICIAR JIMÉNEZ-MARTÍN [TSB.1-P-3] "Impact of foraging in landfills on the community of plants dispersed by white storks"

ASIER RODRÍGUEZ LARRINAGA [TSC.3-P-2] "Diterpene chemotypes in Pinus pinaster: detection and quantification by airborne hyperspectral imagery"



Evolution, Discussion Corner: Room 9

Hugo Bal-García [TSD.1-P-8] "Terrestrial Mammals as a Climatic and Environmental Indicator: Insights from the Archaeopaleontological Site of Cova Eirós (Triacastela, Lugo, NW Iberia)"

Adrián Castro-Insua [TSD.1-P-2] "Some, but not all processes biasing the fossil record decrease functional and taxonomic space"

Alberto Cirera Sancho [GSD-P-3] "How much area do rock cliffs occupy? From 2D maps to 3D surfaces"

David Diaz-Mulero [TSD.3-P-1] "Exploring the role of selection for yield and seed size on the evolution of leaf traits in Brassica rapa."

Andrea Mira Jover [GSD-P-6] "Taking advantage of the evolutionary slowness of chelonians: scanning the first genome of the Testudo genus"

María Pérez-Serrano Serrano [TSD.1-P-5] "PHYLOPYR: Reconstructing the phylogeny of Pyrenean angiosperms."

Melissa Viveiros Moniz [TSD.3-P-4] "Genomic Insights into Local Adaptations and Drought Resilience in Quercus suber across its Latitudinal Range"

Variation and variability, traits and environment, Discussion Corner: Room 10

Tania Aguilar Valladares [TSB.10-P-7] "Macroinvertebrates of Aysén: Diversity, distribution, and New Species in Unique Aquatic Ecosystems of Southern Chile"

Margaux Didion-Gency [TSD.4-P-5] "Living on the Edge: Exploring the patterns and mechanisms of thermal acclimation in Mediterranean shrublands"

Arantzazu L. Luzuriaga [TSB.14-P-6] "Phylogenetic and functional diversities offer complementary information to disentangle species assembly processes in experimental gypsophilous annual plant communities"

Judit Rodrigo Navarro [TSB.10-P-1] "The resilience of the Canarian Laurel Forest: 12,000 years of fire history in Garajonay National Park (La Gomera)" Hugo Saiz [TSB.14-P-3] "Using seed biodiversity and traits for ecosystem restoration"

Karim Senhadji Navarro [TSB.10-P-4] "Pursuing a pest uphill: how do pine processionary moth parasitoids behave in a global warming scenario?"

JORDI VOLTAS VELASCO [TSD.4-P-2] "How do neutral and adaptive processes affect the genetic and plastic components of intraspecific variability in a widespread conifer?"

Space and time, species and communities, Discussion Corner; Room 11.

LEA DE NASCIMENTO [TSC.5-P-5] "The value of time: understanding the long-term fate of island summit ecosystems"

Pablo Ferrandis Gotor [GSC-P-3] "Assessing the contribution of deterministic vs. stochastic processes to local plant species assembly: a field experiment in a gypsum system"

Castor Muñoz Sobrino [TSC.5-P-2] "Estimation of the biodiversity changes in Ría de Vigo during the Holocene using terrestrial and marine remains from fluviomarine sediments"

CLARA SÁEZ [GSB-P-6] "Evaluation of temporal trends in the ecological status of Iberian rivers"

Jesús Sánchez Dávila [GSB-P-9] "Recent water cycle changes in Spanish forests are driven by stand structure more than climatic changes"

MARÍA JOSÉ TENOR ORTIZ [GSB-P-3] "Comparative Analysis of Airborne Phytopathogenic Spores in Olive Groves Across the North and South of the Iberian Peninsula"

CINTHIA SAYURI YOSHIZAWA TAKEDA [TSB.3-P-2] "Which perspective is taken when studying the matrix effects on landscapes functional connectivity for plant species?"

New technologies, new discoveries, Discussion Corner: Room 12

Núria Aquillué Junyent [GSF-P-3] "Co-designing agroforest resilient landscapes: participatory processes and multi-objective planning"

Julen Astigarraga [TSF.4-P-3] "Estimating and mapping stand age distributions across 10 European countries"

Teresa Gimeno [TSB.5-P-2] "Reconciling water-use efficiency estimates across scales under future climate change scenarios using phloem carbon isotopic composition"

JORGE GONZÁLEZ LE BARBIER [TSF.3-P-5] "Modelling the area of occupancy of habitat types at different successional stages"

Gurutzeta Guillera Arroita [TSF.3-P-2] "Identifying practical model selection strategies for dynamic occupancy models"

CLAUDIA MARTINEZ-Megias [TSF.2-P-1] "Terrestrial habitats mapping: improvement of lotic habitat cartography at the state level"



## Code of conduct

Ecologist are a group of researchers who are particularly aware of the value of diversity. Therefore, we know that only by fostering diversity within our collective can we generate an environment that is sufficiently enriching and inclusive for groundbreaking ideas and innovative projects to emerge that will advance our knowledge of terrestrial ecology and provide answers to the current ecological crisis.

We are highly involved in the democratisation of knowledge and in the promotion of diversity within the academic world, because the knowledge society needs a diverse and tolerant academic space, in accordance with the social reality. Our motivation is to help ecologists to develop professionally in the field and in the position they want, be it teaching, research or management. Furthermore, they can carry out any facet of their work, laboratory, sampling expeditions, palaeontological excavations, oceanographic campaigns, presentations and networking at conferences, attending training courses, etc., regardless of their gender identity, sexual orientation, functional diversity, origin, religion, etc., without being subject to discrimination or abuse.

Some abusive behaviour and discriminatory treatment have been tolerated in academia, wrongly assumed to be personality traits that do not invalidate a researcher's professional worth. However, abusive behaviour negatively affects the careers of those who have suffered from it. We are aware that, unfortunately, academia has a hierarchical structure, and that this conceals and perpetuates abuses of power. Moreover, these abuses are often suffered by the most vulnerable or minority groups.

#### By harassment we mean:

- Negative comments in relation to a person's gender, identity, sexual orientation, origin, functional diversity, religion, age or physical appearance.
- Negative comments about a person's lifestyle, diet or health.
- Negative or disparaging comments in relation to another person's career or work.
- · Continuous interruptions in talks or conversations with colleagues.
- Deliberate bullying
- Online harassment on any platform or social network (twitter, facebook, instagram, etc.).
- · Offensive or discriminatory jokes, teasing.
- · Repeatedly seeking intimate relationships after having been rejected.
- Threats
- Use of any aspect of a person's identity to humiliate or discredit them.
- · Misgender a person's name and gender.

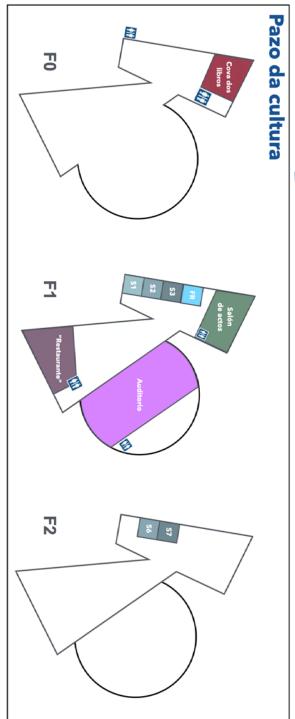
We want to ensure as far as possible that all participants can make the most of the our activities (disseminate their research, meet other colleagues, learn from other researchers, etc.), and do so in freedom, regardless of their gender, sexual orientation, functional diversity, origin, religion, academic status and employment stability.

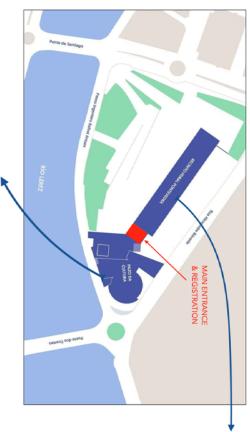
Therefore, researchers who do not respect their colleagues in a work environment and violate this code of conduct will be reprimanded depending on the seriousness of the facts. The procedure will be gradual, ranging from a personal warning to expulsion without reimbursement from the event. In order to take these measures, the seriousness, the repetition and, especially, the abuse of power will be assessed. In addition, depending on the seriousness of the facts, the infraction may be reported to the police and the permanent revocation of the offender's membership to our scientific societies will be considered, as well as the revocation of any award or mention that may have been granted, and the veto to register for any activity organized by the promoters of this meeting.

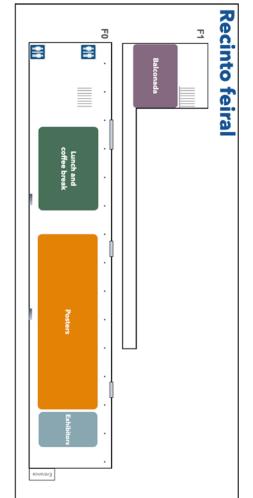
To report abusive behaviour during an event or for any related questions, please write to confidencial@aeet.org\*. We know that it is not easy to publicly report a colleague, especially when you have a precarious working situation or are just starting to work in a field, so we are committed to helping the reporter and keeping them anonymous.

\*Only two delegates of the equality committees and one member of the Boards of both promoters societies will have access to this information and the written or verbal information will never be shared with anyone else without prior consensus with the complainant.









## Floor 1 (F1): - Auditorio - Salon de actos Floor 0 (F0): - Cova dos libros Recinto feiral: Pazo da cultura: Floor 2 (F2): Seminarios 1-3 (S1-S3)Family room (FR) - "Restaurante" - Balconada (F1) family rooms

Conference and





Seminarios 6-7 (S6 and S7)

## **PARTNERS**

We would like to thank all our scientific partners, the University of Vigo (UVigo), the University of Santiago de Compostela (USC) and the Biological Mission of Galicia (MBG-CSIC) for supporting this project formulated with the aim to provide a platform for the exchange of the latest knowledge on ecology and to inspire debates and collaborations that will drive positive change in the field of ecology, promoting a more inclusive and sustainable future for scientific research.

# Universida<sub>de</sub>Vigo





We are especially grateful for their support to the Council of Pontevedra, which has lent us the "Pazo de Cultura de Pontevedra", whose facilities are hosting the III SIBECOL & XVII AEET congress.





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