EUROPEAN CONFERENCE OF

TROPICAL ECOLOGY

LISBON FEBRUARY 12-16, 2024

TROPICAL ECOSYSTEMS IN A FAST-CHANGING PLANET

PROMOTED BY

ce3c centre for ecology, evolution and environmental changes

CHANGE Global Change and Sustainability Institute

HOSTED BY

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SPECO SOCIEDADE PORTUGUESA DE ECOLOGIA

Turismo de Lisboa

ON BEHALF OF

Society for Tropical Ecology

EUROPEAN CONFERENCE OF

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WELCOME TO LISBON!

We are delighted to extend our warm invitation for you to join us at the European Conference of Tropical Ecology 2024 in the enchanting city of Lisbon. The conference will take place from the 12th to the 16th of February 2024.

This conference, set against the backdrop of Lisbon's rich architectural, historical, and cultural heritage promises to be a gathering of researchers and enthusiasts from around the world. It will be an excellent opportunity to learn, exchange experiences and ideas, establish partnerships, and contribute to the advancement of tropical ecological science, ultimately fostering a sustainable future for the incredible ecosystems of tropical regions.

In addition to the scientific program, we have also organized exciting field trips and social programs to enhance your experience during your stay, providing opportunities to connect with old friends and make new ones.

We look forward to the opportunity to meet you in Lisbon!

With warm regards,

Jorge Palmeirim
Conference Chair

ORGANISING COMMITTEE


JORGE PALMEIRIM CONFERENCE CHAIR


ANA LEAL


ANA RAINHO


LUÍS CATARINO


HUGO REBELO


RÚBEN OLIVEIRA

ce3c centre for ecology, evolution and environmental changes
CHANGE Global Change and Sustainability Institute
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LOCAL VOLUNTEERING ECOLOGISTS

The organising committee thanks and acknowledges the availability and dedication of the following volunteers: Ana Leite, Eva Nóbrega, Gonçalo Fernandes, Inês Lacerda, Inês Morais, João Albuquerque, Liliana Ferreira, Madalena Sottomayor, Martina Panisi, Patrícia Chaves, Paula Lopes, Raquel Oliveira e Tiago Gonçalves.

SCIENTIFIC COMMITTEE

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VENUE
THE FACULTY OF SCIENCES OF THE UNIVERSITY OF LISBON

The Faculty of Sciences of the University of Lisbon is an institution of creation, transmission and diffusion of scientific and technological knowledge that promotes a culture of permanent learning, valuing critical thinking and intellectual autonomy.

Its mission is research and teaching, and the transfer of knowledge and innovation in the areas of exact and natural sciences and techno-sciences, as well as the dissemination and sharing of cultures, stimulating a permanent opening to civil society.

What we do not know today, we will know tomorrow

The Faculty's motto, by Garcia de Orta, 1563

CONFERENCE FACILITIES

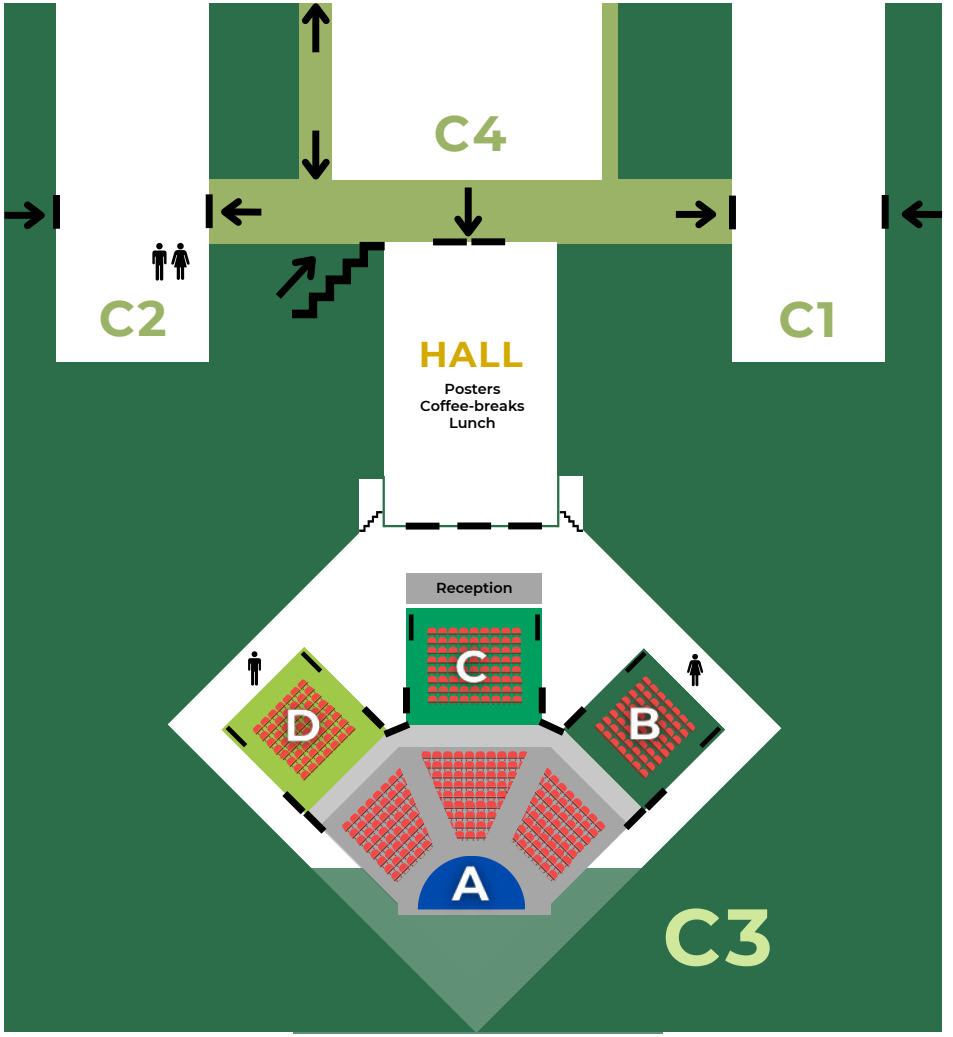
The Conference will take place at the C3 building of the Faculty of Sciences of the University of Lisbon. The entrance is located on the second floor and can be accessed through a direct staircase, marked on the image. It can also be accessed via buildings C1 and C2 as signalled.

After the entrance, the participants will enter the Hall (H in the programme) of the building, where the welcome reception, posters sessions, coffee-breaks and lunch will occur. If you a poster to display, please ensure that you placed accordingly to the code that was given to it.

The Main Auditorium, designated by A, will receive the opening and closing ceremonies, as well as the presentations by the invited plenary speakers.

Three auditoriums, marked with a B, C and D, adjacent to the main one, will be used for the parallel sessions, whose content can be explored in the extended programme. After the sessions have started, we kindly ask all participants that enter the rooms through the upper doors, ensuring that there are no interruptions, no inconvenience to the speakers and no delays in the sessions.

Men's restroom is located behind Room D, and women's behind Room B.



INVITED KEYNOTE SPEAKERS

MIGUEL BASTOS ARAÚJO

Professor Spanish Research Council (CSIC) National Museum of Natural Sciences, Madrid
Professor Chair of Biodiversity at the University of Évora

Miguel Bastos Araújo is a biogeographer seeking to understand how different facets of Life distribute in space and time, and why. He uses a plethora of data-driven and modelling approaches to improve understanding of how climate determines the distributions of species and properties of self-organised community dynamics. Past, current, and future climate changes offer the context for much of his work as they provide spatiotemporal laboratories for understanding change. He is currently a Research Professor at National Museum of Natural Sciences of the Spanish Research Council (CSIC) and Professor at the University of Évora, while serving as Editor-in-Chief of Ecography. Previously, he held positions at the Imperial College London, University of Copenhagen, Oxford University, the CNRS, and the Natural History Museum in London. He his recipient of several prestigious awards, including the European Ecological Federation Ernst Haeckel Prize (2019), the Pessoa Prize (2018), the Rey Jaime I Prize (2016), International Biogeography Society MacArthur & Wilson Award (2013), and the Global Biodiversity Information Facility Ebbe Nielsen Prize (2013).

Moving away from individual species models of biodiversity response to climate change

Moving away from individual species models of biodiversity response to climate change In the past two decades, there has been a significant increase in studies using models to understand and predict the impact of environmental changes on biodiversity. Typically, these studies begin by examining the relationship between species distributions and environmental variables, based on the assumption that the environment determines the limits of tolerance for species survival. As a result, alterations in environmental conditions are expected to lead to shifts in species distributions. However, a major shortcoming of existing models is their focus on individual species. Although these models can be applied to thousands of species at once, they often treat each species as an independent entity, reacting in isolation to environmental changes. This approach neglects the complex dynamics within ecological communities, where collective species responses to environmental changes are not merely the sum of individual responses. While incremental improvements to existing models are possible, progress necessitates the development of models that capture the response of entire communities to environmental change. I suggest a promising direction would be to shift from the traditional environmental-limiting niche theory, which is applicable to individual species, to a resource-limiting niche theory. This approach considers the impact of the environment on the coexistence of multiple species within communities, providing a more comprehensive understanding of ecological dynamics.

INVITED KEYNOTE SPEAKERS

RICARDO ROCHA

University of Oxford, United Kingdom

Ricardo Rocha is an Associate Professor in Conservation Science at University of Oxford. His research aims to provide evidence-based knowledge to support conservation decision-making under contemporary global change, with a special focus on how to restore biodiversity in the aftermath of habitat loss and fragmentation and how to manage human-modified landscapes to retain biodiversity and maximize ecosystem services. He does this by: i) investigating taxonomic, functional, and phylogenetic responses to habitat loss, fragmentation, and secondary forest regeneration from both spatial and temporal perspectives, ii) identifying management options that can augment the permeability of agricultural land to disturbance-sensitive species and investigating agriculture-related ecosystem services and disservices, and iii) assessing the efficiency of conservation interventions and providing tools to facilitate and inform evidence-based decision-making. His work is grounded in ecological theory and involves biodiversity surveys across large-scale manipulative experiments, "real-world" working landscapes, and island ecosystems.

The role of secondary forests in mitigating fragmentation-related extinctions: Insights from an Amazonian whole-ecosystem manipulation experiment

Secondary forests are the predominant type of forest cover across the tropics. They provide myriad services and natural products to human populations worldwide and key habitat for countless forest-dwelling species. Although some fragmentation-related extinctions can be averted by forest regeneration, the role of second growth in biodiversity conservation remains controversial. Central to the debate is the capacity of secondary forests to preserve old-growth specialist species and to buffer the impacts of fragmentation on assemblages living in forest remnants. The Biological Dynamics of Forest Fragments Project (BDFFP) is one of the world's largest and longest-running experimental investigations. Spanning an area of 1000 km2 in the Central Brazilian Amazon, the BDFFP was initially designed to assess how fragment size influences biodiversity and ecological processes within rainforests. However, it has transcended its initial objectives, offering a wealth of insights into the long-term ecological dynamics of fragmented landscapes and their intricate relationship with forest regeneration. This talk will provide an overview of the research conducted over the last decades at the Biological Dynamics of Forest Fragments Project (BDFFP), examining with particular detail the taxonomic, functional, and phylogenetic responses of bats, one of the richest Amazonian mammalian groups, to forest regeneration. I will explore area, edge, and matrix effects and investigate time-related complexities related to both short- and long-term responses to changes in matrix structure and composition. Finally, taking the BDFFP as an illustrative example, we will discuss the conservation implications of these findings for tropical biodiversity and propose avenues for future research in temporal ecology.

INVITED KEYNOTE SPEAKERS

ANNA TRAVESET

Mediterranean Institute of Advanced Studies (IMEDEA),
Mallorca, Balearic Islands, Spain

Anna Traveset is a Research Professor at the Mediterranean Institute of Advanced Studies (IMEDEA), a mixed institution of the Spanish Research Council (CSIC) and the University of the Balearic Islands (UIB). She leads the Terrestrial Ecology Laboratory at IMEDEA where, along with her team, she investigates the impact of global change on native communities, specifically on the ecological interactions established between species. For this, she uses the approach of network theory, collaborating also with theoreticians from other institutions. She mostly works on island systems, currently coordinating an ERC project that embraces different archipelagos worldwide. She was awarded the Jaume I Prize (modality: Environmental Protection) and the Ramon Llull Prize from the Balearic Government in 2022. Since 2019 she is the CSIC delegate at the Balearic Islands, and is currently the Principal Investigator of the accreditation Project “Unidad de Excelencia María de Maeztu” at IMEDEA (2023-2027).

Deciphering the complexity of ecological interactions in tropical islands. A multilayer netork approach

Globally, biodiversity is rapidly decreasing, with islands, constituting about 30% of biodiversity hotspots, facing heightened vulnerability. Anthropogenic activities have led to an alarming 80% of reported extinctions occurring among island species. Despite this, island biodiversity, encompassing diverse species and their interactions, remains inadequately explored. Urgent efforts are needed to document and predict the repercussions of its decline for effective mitigation. The challenge lies in detecting and understanding ecological interactions, a task addressed by emerging theories and tools like complex network analysis. Islands, as relatively simple systems with clear boundaries, offer significant potential to enhance our understanding of nature's complexity. In this talk, I will present you data on the ecological interactions we are studying, with a large variety of methodologies, in two tropical archipelagos, the Galapagos (Pacific Ocean) and the Seychelles (Indian Ocean). We are focusing on different layers of complexity, each corresponding to a different ecological function. We are using a multilayer network approach to unveil which are the keystone species in each community, which are the main functions, and to evaluate how vulnerable the community is to disturbance, specifically to biological invasions. The biodiversity of these ecosystems is indeed unique but shows to be highly vulnerable to the introduction of invasive species. I will show you some preliminary data on the coextinction models we are using to predict persistence and resilience of island biota to disturbances.

INVITED KEYNOTE SPEAKERS

AIDA CUNI-SANCHEZ

Norwegian University of Life Sciences
Honorary fellow University of York

Dr Aida Cuni-Sanchez is an Associate Professor at the Norwegian University of Life Sciences, and an honorary fellow at the University of York. She has a PhD in environmental Sciences from the University of Southampton (UK) and a Licenciatura in Biology from the University of Barcelona (Spain). She has over 10 years of work experience in 12 countries in tropical Africa, where she has focused on tropical forest ecology and carbon stocks, forest use and valuation by local communities and local communities' adaptation to climate change. She received the 2020 L'Oreal-UNESCO Women in Science UK Award for Sustainable Development and the Chr. Michelsen price for outstanding development research (Norway) in March 2022. As well as developing the AfriMont plot network, she is a key partner in research collaborations in Africa including AfriTRON (tropical lowland forest monitoring), Mountain Research Initiative, Mountain Sentinels and ATBC-Africa Chapter.

Local perceptions of forest ecosystem services, insights from Africa

Human culture has an important influence on how forests are utilised, yet its influence on ecosystem service (ES) use and valuation remains underexplored. During the past 5 years, we have investigated how livelihood strategy (farmers, pastoralists, hunter-gatherers) and ethnicity affect local peoples' perceptions of forest ES in tropical Africa, relating their views to instrumental, relational and intrinsic values of Nature. I will present our findings from different socio-ecological contexts in West, Central and East Africa, and also introduce unpublished data on a recent survey carried out with 'forest experts' (scientists and practitioners working in some of these forests).

INVITED KEYNOTE SPEAKERS

MARCO MELLO

University of São Paulo, Associate Professor

Imagine a world where ecological systems were a jigsaw puzzle, and the pieces were scattered across the vastness of data and ideas. This is where Marco comes in. As a biologist with a Ph.D. in ecology and an alumnus of the Alexander von Humboldt-Stiftung, Germany, he works as a professor at the University of São Paulo, Brazil, where he specializes in ecological synthesis. His mission is to unveil the hidden assembly rules of ecological systems formed by species interactions. Bats have always been his main study model, although he also conducts research on many other organisms. His work is like that of a detective, piecing together scattered fragments of information, connecting the dots between data and ideas to reveal the big picture. But his work doesn't stop there. As an educator, he is dedicated to training young scientists and making scientific knowledge accessible to all.

The elephant, the monks, and the topology of interaction networks

Sometimes, in science, we get so obsessed with a particular piece of a puzzle, that we miss the big picture. The same seems to be happening in the study of interaction networks, with different schools arguing over pieces of reality. Aiming to take a step back and change our perspective, this presentation describes a novel cognitive model that provides an integrative solution to two classical dilemmas about interactions between organisms of different species. Our research team, in collaboration with other experts, embarked on an extensive investigation to uncover the underlying principles that could lead to this solution. Through a comprehensive analysis, first, we demonstrated the commonalities between the dilemmas, and employed a graphical model to better understand the theoretical connection between them. We then developed an algorithmic model that predicts the four most commonly observed network topologies in nature. Our cognitive model, initially designed for antagonisms in monolayer networks, was subjected to a series of empirical tests and logical deductions. The results show that the model can be extended to mutualisms and multilayer networks, highlighting its broad applicability. Currently, we are working to refine the model and develop it into a new semantic theory, which may have significant implications for basic and applied ecology. We invite the audience to join us as we share the journey of discovery, unveiling the exciting possibilities that this new theory presents.

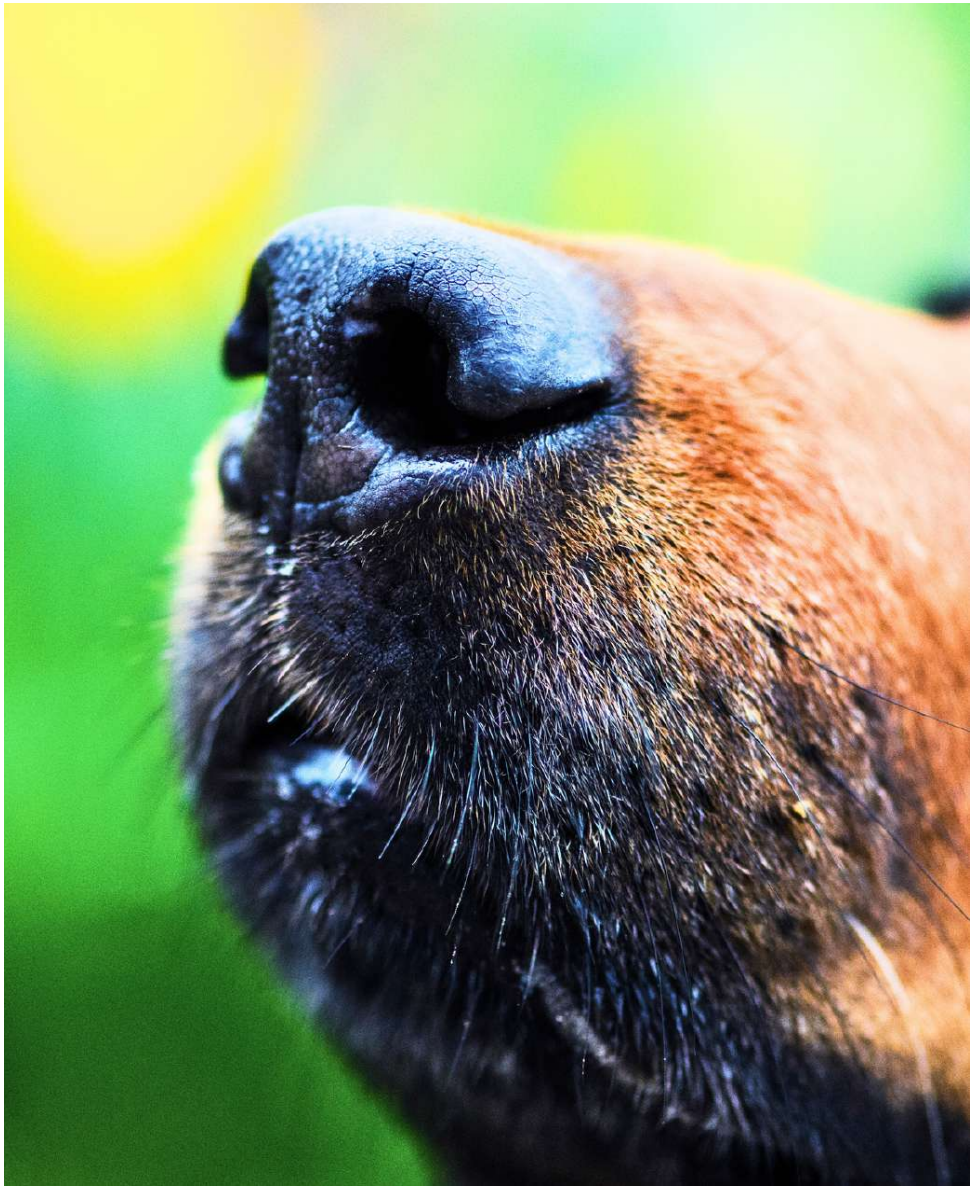
SESSIONS AND CHAIRS

S1

Role and potential of working dogs in conservation in the tropics

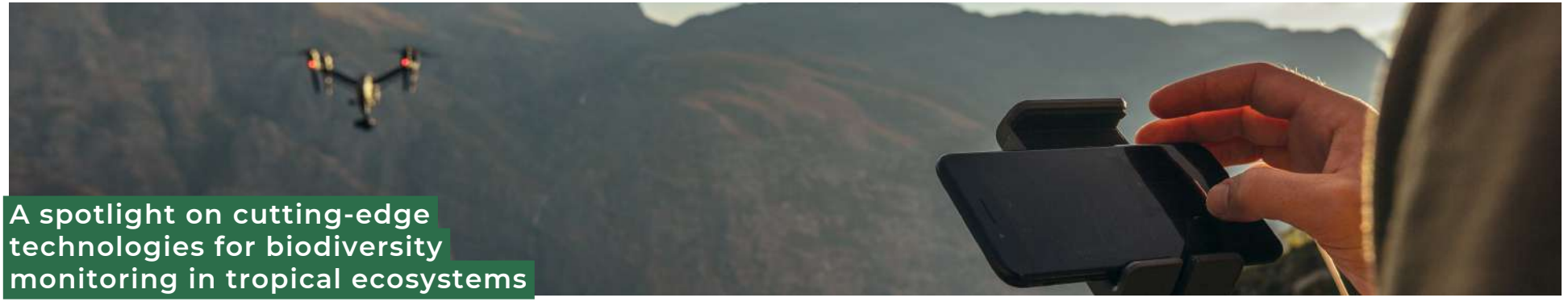
Chairs: Noreen Mutoro, Mary Wykstra, Leopold Slotta-Bachmayr & Jane Sharp

Use of dogs in conservation for wildlife population research, monitoring, management, prevention and enforcement of wildlife crimes is increasing globally due to the dogs' superior olfactory system and ability to develop close working relationships with humans. The tropics host more than two-thirds of the world's biodiversity and are crucial for ecosystem functions and services both at the local and global level. Tropical regions provide safe spaces to many threatened species which are highly elusive and prone to human-wildlife conflict and wildlife crimes such as poaching and trafficking. Effective conservation and management of biodiversity in such areas would therefore require adequate, standardized and cost-effective monitoring techniques that provide reliable data on changes in species abundance, distribution and physiological health over time. However, the use of conservation dogs in most of the tropics is not well established as compared to North America, Europe and Oceania. In this session, we discuss various ways working dogs are being used for conservation in the tropics and why there is scarcity of research on conservation dogs in some areas.



SESSIONS AND CHAIRS

S2



A spotlight on cutting-edge technologies for biodiversity monitoring in tropical ecosystems

Chairs: Thomas Luypaert, Yennie Bredin & Meley Mekonen Rannestad

The tropics are renowned as global bastions of biodiversity but are increasingly imperilled by human activities. In the face of human-induced environmental degradation, the collection of data that provides an objective record of community-level biodiversity is crucial to our understanding of fundamental ecological processes, the trends and drivers of change, and the progress made towards conservation targets. However, the rapid and global nature of the biodiversity crisis makes monitoring biodiversity at appropriate spatio-temporal scales a daunting task, especially in the hyper-diverse tropics, where many species are poorly known. Traditional biomonitoring methods are valuable, but on their own, often fall short in capturing the full extent of tropical biodiversity. In recent times, however, cutting-edge technologies and methodologies have shown great potential to help bridge this gap. In this session, we will explore a range of innovative tools that show promise to revolutionize biodiversity monitoring in the tropics. Automated acoustic sensors can capture tropical symphonies over long periods of time, while environmental DNA has been shown reveal hidden species from thin air.

Drones, equipped with advanced sensors, can capture the three-dimensional structure of rainforests using LiDAR, or reveal hidden species using heat signatures. Camera traps provide a glimpse into the presence and behaviours of elusive species, and GPS tracking can trace the movements of species where humans cannot go. Moreover, machine learning algorithms can aid in processing the vast datasets these new tools produce, enabling precise monitoring while reducing human workloads. This session aims to shine a spotlight on recent technological and methodological advancements that hold promise for enhancing the efficacy of tropical biodiversity monitoring. We aspire to foster cross-disciplinary collaboration, bringing together experts from various fields to harness the power of these groundbreaking tools. We invite researchers, conservationists, technologists, and innovators to join us in showcasing technological advances in tropical biomonitoring.

SESSIONS AND CHAIRS

S3

Multi-trophic interactions in tropical forests and agro-forestry systems

Chairs: Finn Rehling & Heike Feldhaar

Tropical forests are known for their incredibly complex networks of species interactions. The interplay of trophic levels (e.g., herbivores, pollinators, dispersers, pathogens, decomposers, and predators) structures the composition and persistence of primary producers, and thus patterns of biodiversity and ecosystem resilience. However, non-random shifts in the structure and diversity of communities of different trophic levels due to anthropogenic pressures will cascade through interaction networks and the way these interactions affect ecosystem functioning. Although the underlying ecological theory is relatively well-developed, empirical research that comprehensively assesses the consequences of changes in biodiversity on ecological interactions, networks, and their functioning across trophic levels is lacking. This session aims to unite researchers studying interaction networks and their functioning at and across multiple trophic levels along diversity gradients. The scale of studies can encompass a wide range, from interactions among individuals to entire ecosystems, spanning from primary producers to apex predators, and occurring both below and above ground. Priority will be given to studies on multitrophic networks in tropical forests and agro-forestry systems.

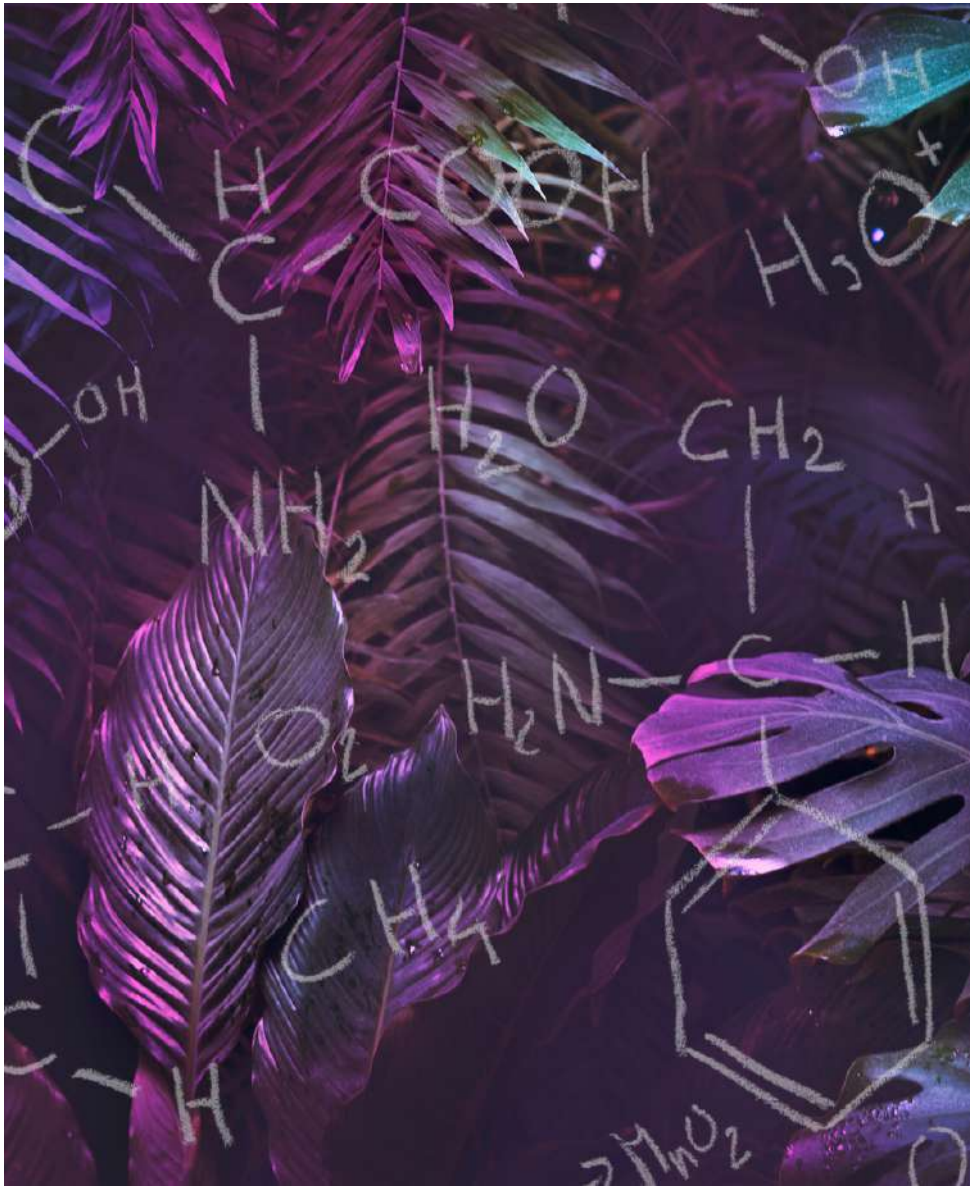
SESSIONS AND CHAIRS

S4

Tropical chemical ecology - current questions, future trends

Chairs: Omer Nevo & Linh M.N. Nguyen

Chemical cues and signals are widespread mechanisms that guide a diverse array of species interactions. In tropical systems, the complexity of species richness and intricate networks forms a highly diverse chemical environment. These chemical signals play a critical role in various essential processes, such as pollination, seed dispersal, predation, herbivory, and symbiotic relationships. Sometimes, these interactions are multifaceted, attracting both mutually beneficial and antagonistic partners, resulting in intricate trade-offs and dynamic interactions. Despite its significance, much of the complexity in chemical interactions within tropical systems remains unsettled, due to challenges in sampling, analyzing the vast diversity of compounds involved, and interpreting the complex systems. Recent advancements in chemical ecology, especially on the application of meta-omics, have presented exciting opportunities for integrated studies at the molecular level, offering broader insights into both the drivers of contemporary processes and their evolutionary history. This session will bring the current developments in chemical ecology and their application in understanding ecological processes within tropical systems. It aims to explore a wide range of interactions, spanning from pollinators to flowers, seed dispersers to fruits, symbiotic bacteria to roots, corals, and predators to their prey, in an effort to identify patterns and major drivers of variance in tropical chemical ecology. The session seeks to foster a comprehensive understanding of the chemical dynamics that shape the biodiversity and interactions within these ecosystems.



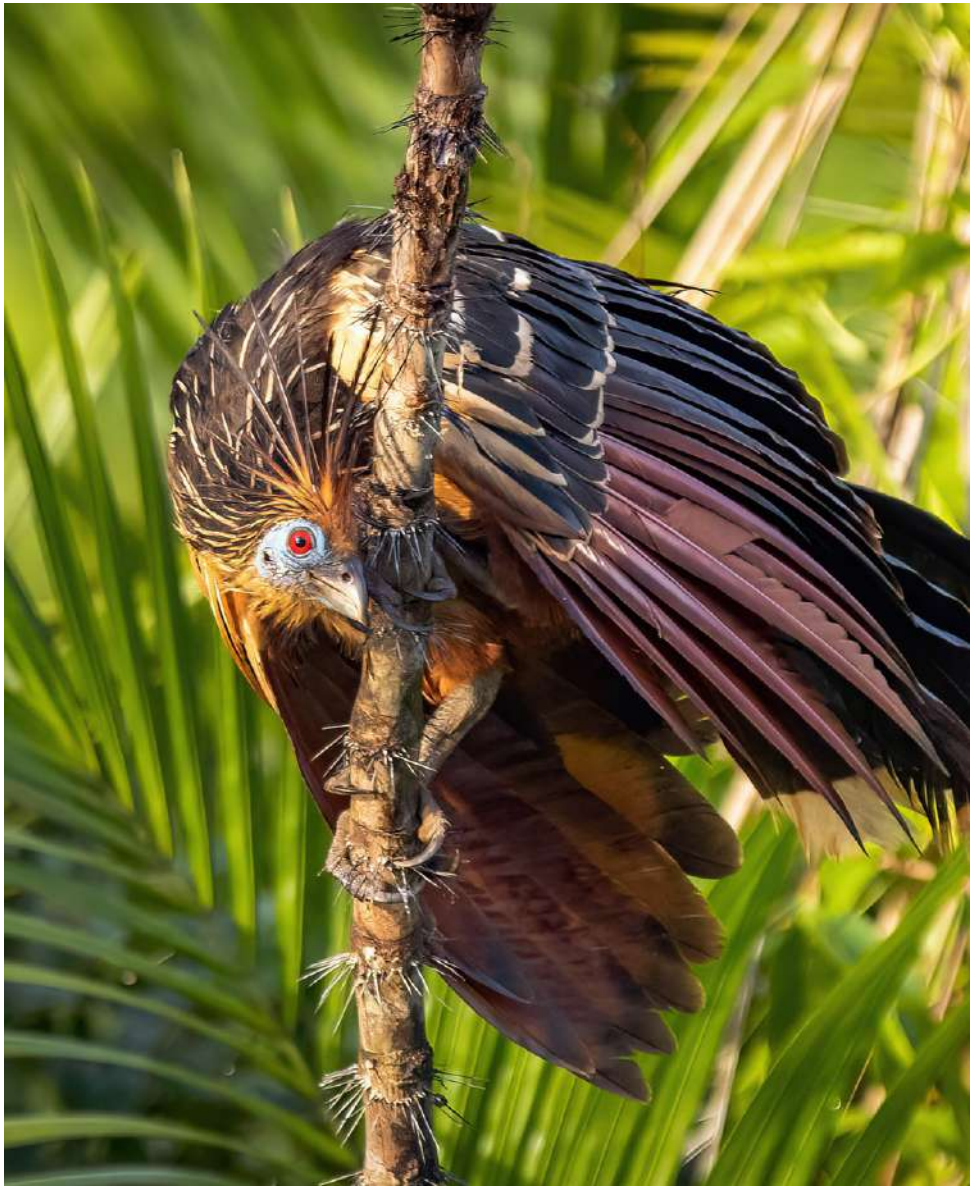
SESSIONS AND CHAIRS

S5

Understanding drivers of evolution and adaptation in Neotropical biodiversity

Chairs: Isabel Marques, David Draper & Clarisse Palma-Silva

The American tropics – Neotropics – comprise more species than any other region on Earth, due to a complex interaction of biotic and abiotic processes. This vast region extends from central Mexico to Argentina, including the Caribbean, and includes several different biomes and habitats such as high-elevation grasslands, seasonally dry forests, and rainforest systems. For centuries, scientists have sleeked to understand how ecological communities have been assembled over time and how abiotic and biotic factors have influenced species interactions, and the origin such astonish biodiversity. This quest is even more important nowadays as studies continue to show that Neotropical biodiversity is becoming increasingly threatened, with the potential to impact the goods and services provide to humankind. Global changes already affect individual species and the way they interact with each other and their habitats, reshaping ecological interactions and ecosystem processes. How will neotropical species respond to such changes is still a largely open question. This session aims to provide an international multidisciplinary platform for discussing the many gaps in neotropical knowledge including (1) drivers of changes in breaking ecological interactions, (2) causes that enhance the risk of extinction and loss of ecosystem functions; (3) to debate and identify gaps and priority areas for research in Neotropics; and (4) fueling the development of new methods. Overall, we aim to facilitate opportunities between students and researchers for networking, collaboration and exchange of ideas using evidence-based studies.



SESSIONS AND CHAIRS

S6

Exploring multi-level species responses to environmental changes in tropical mountainous ecosystems

Chairs: Joao de Deus Vidal Junior & Ana Patricia Sandoval-Calderon

This session aims to convene ecologists and researchers to delve into the intricate relationship between biodiversity, climate, and vegetation in tropical mountainous ecosystems. By linking studies from different tropical regions on multi-level species diversity responses to environmental change, we want to deepen our understanding of ecological changes in these fragile and megadiverse landscapes. This session will be a platform for presenting novel research, discussing methodological advancements, and sharing empirical findings. Throughout the session, we aim to deepen our understanding of the mechanisms driving changes in species composition, community dynamics, and ecosystem functioning in the face of climate and land use change. The ultimate goal is to foster knowledge exchange and collaboration among high-level ecologists and experts in this field. That will enable the development of more comprehensive conservation strategies and sustainable management of tropical mountain ecosystems in the face of environmental change.

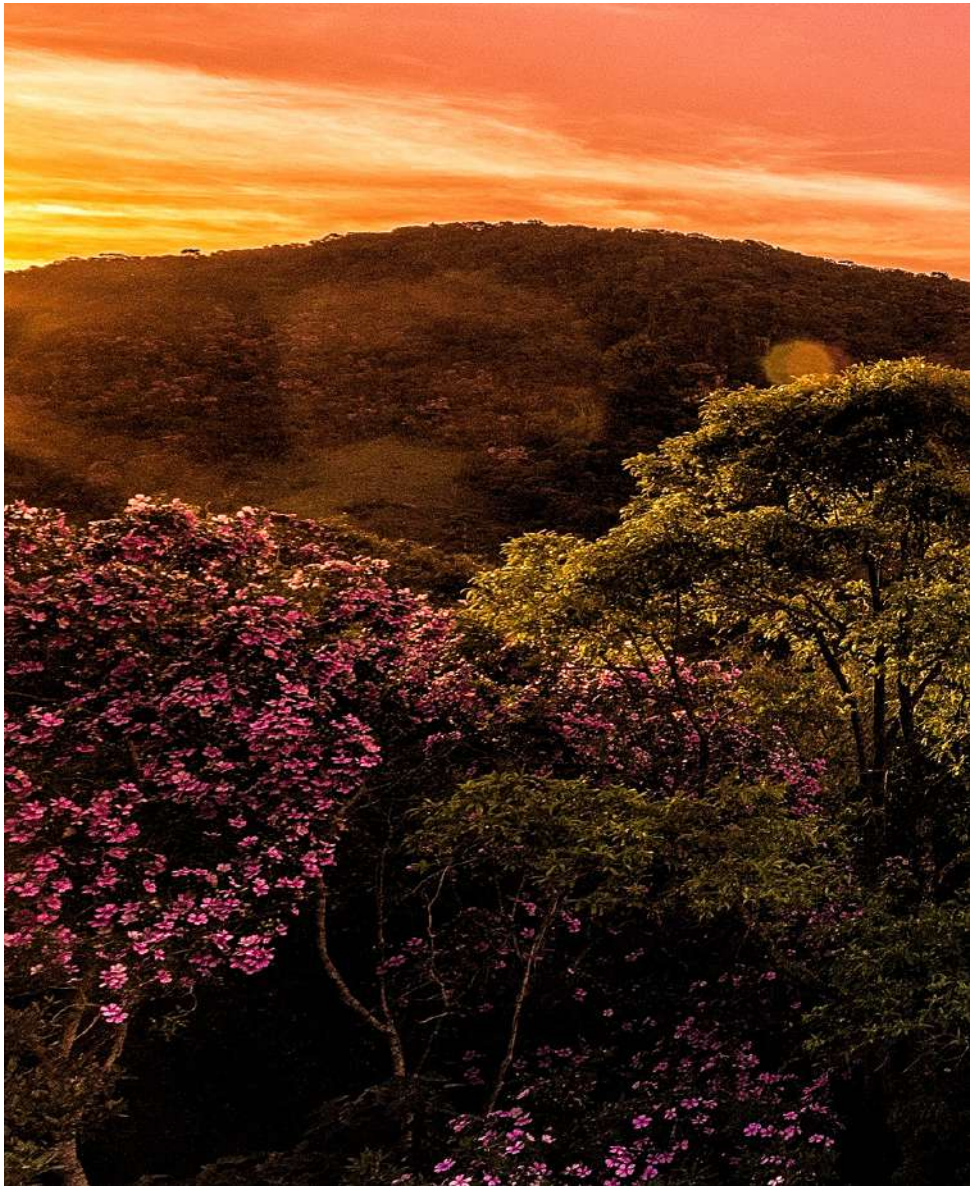
SESSIONS AND CHAIRS

S7

The seasonality of tropical forest/tree functioning

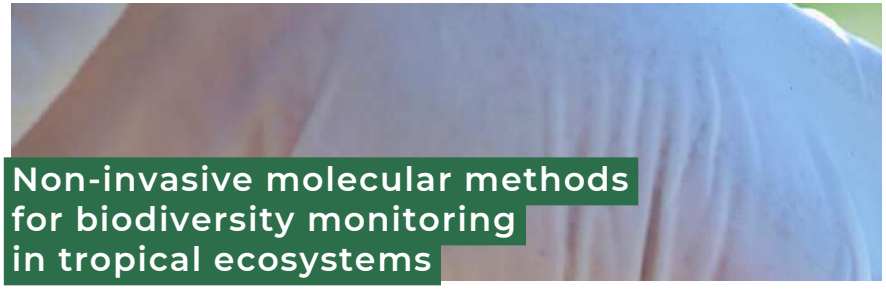
Chairs: Adeline Fayolle & Anais Gorel

Tropical moist forests form a closed canopy with a complex vertical structure under warm and wet environments, where rainfall is evenly distributed. While tropical forests are relatively uniform in physiognomy, recent data have highlighted cross-continental discrepancies. Tropical forests of south America and south-eastern Asia are extremely diverse, in comparison to the depauperate forests of Africa, which usually stands as the odd-man out of cross-continental comparisons. The lower diversity of Africa demonstrated both at local and regional levels has been related to the evolutionary history of lineages (more extinctions), to the history of disturbances (less stable), and also to the current climatic conditions (drier and more seasonal). In this symposium, we will explore the seasonality of tropical forest/tree functioning, in central Africa, and across the global tropics. We will specifically address the question of how tropical forests/trees cope with seasonal drought, combining various approaches including crown and cambium phenology, stem growth monitoring, functional ecology, tree ecophysiology, and high-resolution remote sensing.



SESSIONS AND CHAIRS

S9



Non-invasive molecular methods for biodiversity monitoring in tropical ecosystems

Chairs: Kasun H. Bodawatta & Christina Lynggaard

Effective and efficient biomonitoring tools are critical to evaluate biodiversity and ecosystem health. The rapid growth in non-invasive molecular methods, such as targeting DNA left by organisms in the environment known as environmental DNA (eDNA), has enabled us to detect organisms across the tree of life. These methods were initially developed targeting aquatic ecosystems, but they are currently also used in terrestrial ecosystems through targeting DNA in soil, carrion and hematophagous invertebrates, and faeces. Recently, new sources of DNA have been showcased, such as air, flowers and even spider webs, enlarging the tools available for biomonitoring. These methods can not only detect biodiversity in an area, but also provide valuable information on co-occurrence patterns, trophic interactions, and symbiotic associations. The value of these techniques are imperative in tropical environments, where it is difficult to monitor the extremely high biodiversity with traditional monitoring approaches. In this symposium we aim to showcase a diversity of non-invasive molecular approaches and the current state of the art methods in the field to characterise and monitor biodiversity in tropical ecosystems.

SESSIONS AND CHAIRS

S10

Sustainable agriculture and biodiversity conservation in the tropics

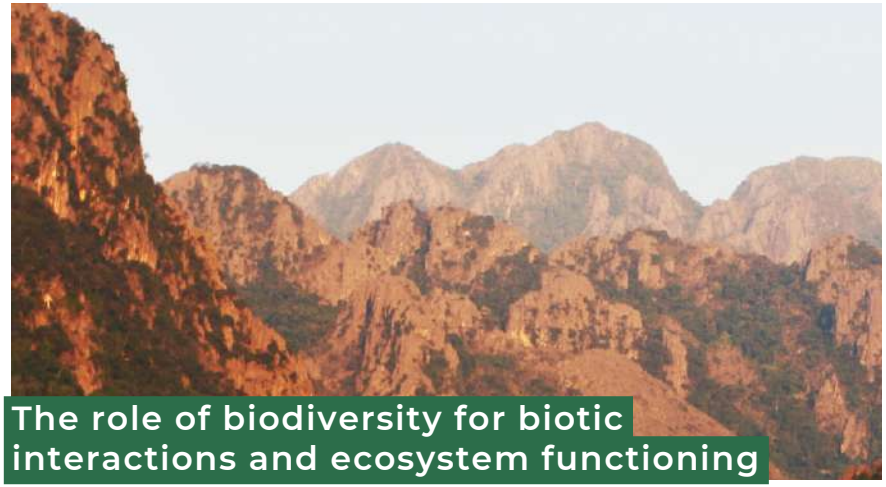
Chairs: Ana Rainho, Karen Mustin, Filipa Monteiro & Maria Manuel Romeiras

The goal of this conference session is to explore the synergies between sustainable agriculture practices, such as agroforestry and organic farming, and biodiversity conservation in tropical regions. As the demand for agricultural products rises, it is imperative to strike a balance that ensures both food security and the preservation of rich tropical ecosystems. One key pathway is through support for small-scale family farming which produces 80% of the food consumed globally and covers 70-80% of farmland.
In the Tropics, smallholders' farmlands are often diverse agricultural systems, as compared with agribusiness which usually involves large-scale monocultures of commodities for export. Smallholder farmers are not only key for food security, but they also play a role in biodiversity conservation, ecosystem services provision and in local economies, supporting rural services, increasing local spending and acting to shorten the food supply chain and thus, reducing waste.

Family farming also often represents on-going expressions of cultural traditions passed down through generations of Indigenous and Traditional Peoples and local communities (ITPLCs), and can be a key part of territorial development.
In this session we will focus on the ways in which scientists and ITPLCs can work together to maintain diversified agricultural systems that simultaneously increase the availability of sustainably produced, culturally appropriate food and safeguard biodiversity. We will also discuss the importance of protecting natural habitats adjacent to farmlands and creating wildlife corridors to foster genetic diversity and resilience, the impacts of both staple and cash crops agroecosystems production as well as the incoming problems of monoculture regimes that foster imbalance agroecosystems by the reduced biodiversity and pests/diseases emergency. Join us in this critical discussion that aims to chart a sustainable and equitable path forward for tropical agriculture and biodiversity conservation.

SESSIONS AND CHAIRS

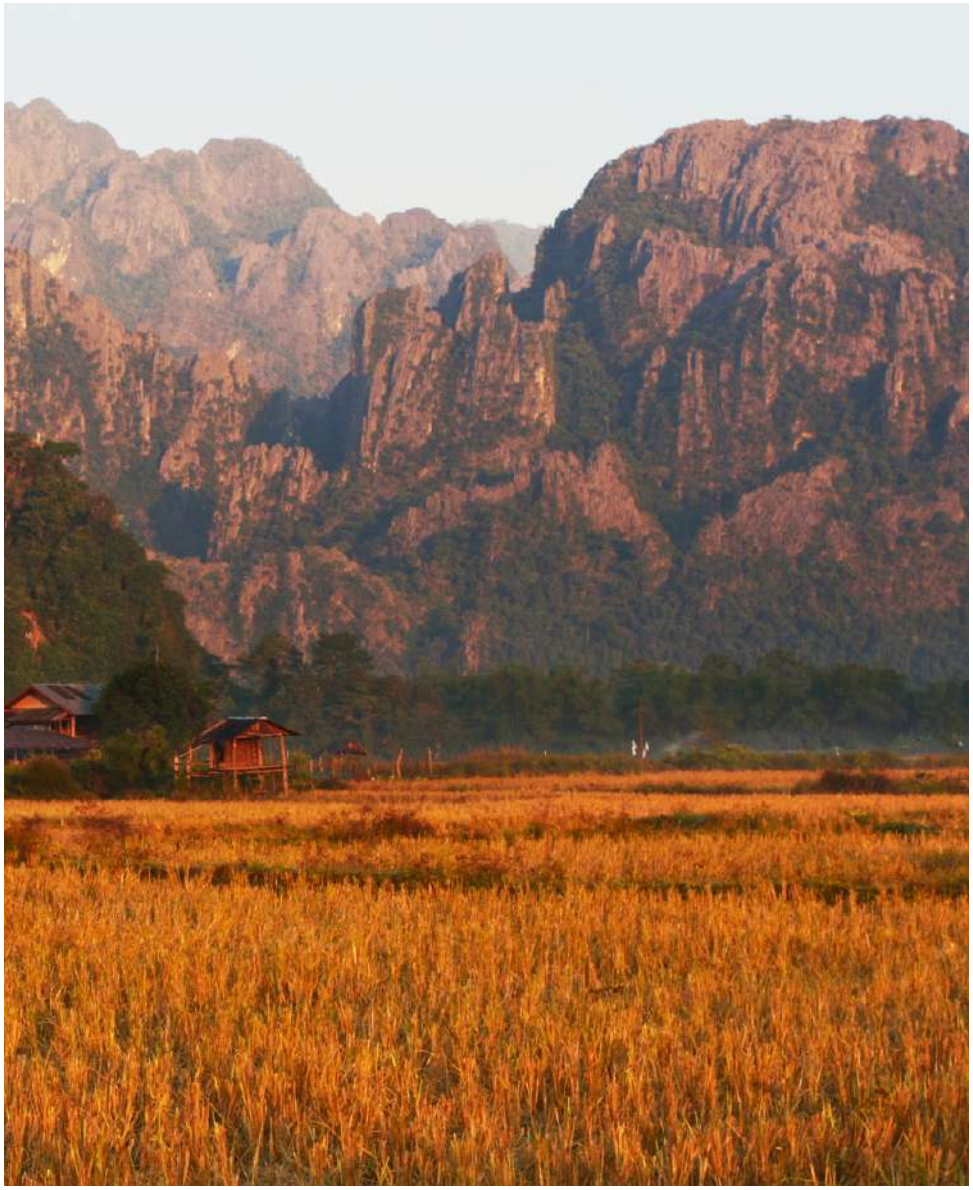
S11



The role of biodiversity for biotic interactions and ecosystem functioning

Chairs: Eike Lena Neuschulz, Jörg Bendix & Nina Farwig

Climate and land-use change modify the structure and composition of ecosystems across the globe. The severe loss of biodiversity calls for a mechanistic understanding of the relationships among environmental change, communities, biotic interactions, ecological processes and functions. Functional traits are considered as key to describe these relationships. Tropical mountain ecosystems with pronounced gradients of environmental conditions can be used as natural experiment to study the links between environmental changes, biodiversity and ecosystem functions. In this session we aim at compiling the latest knowledge on patterns of biodiversity and ecosystem functions and processes across elevational gradients. A special focus will be on the use of functional traits to model and predict biotic interactions and ecosystem functioning across elevational gradients in tropical mountains.



SESSIONS AND CHAIRS

S12

Bridging Gaps: Integrating Local Ecological Knowledge in Tropical Ecology

Chairs: Clémentine Durand-Bessart, Stéphanie Carrière & Vincent Porcher

Tropical ecosystems face unprecedented challenges, such as deforestation, defaunation and climate change. To address these, an in-depth understanding of these ecosystems is needed to provide decision-makers with the best possible guidance. However, the accumulation of scientific knowledge is currently hampered by the rapid destruction of these ecosystems, which stresses the need to develop new approaches and collaboration across scientific fields and local knowledge holders to collect this data quickly. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) alerted on the necessity of paradigm shifts while recognizing the crucial need to involve local people in biological diversity assessments and conventions. This local ecological knowledge (LEK) encompasses a nuanced understanding of plant and animal communities, through resource distribution and ecosystem dynamics, often complementing what can be captured through traditional scientific methods alone. These endeavours to involve LEK in ecology research are supported by a growing bulk of literature examining local people's contributions to global ecological change detection, frugivory networks and biodiversity conservation strategies. In this line, this session aims to encourage a dialogue among researchers, practitioners, and local communities to foster mutual understanding and collaboration. By acknowledging and integrating LEK, we can enhance the scientific foundation of tropical ecology, strengthen conservation efforts, and contribute to the sustainable management of these invaluable ecosystems.

SESSIONS AND CHAIRS

S13

Towards sustainable, equitable and safe wildmeat use in Tropical and sub-tropical countries: opportunities, lessons learnt, obstacles and risks

Chairs: Nathalie van Vliet, Lauren Coad & Donald Midoko Iponga

Wild meat refers to meat sourced from non-domesticated terrestrial mammals, birds, reptiles, and amphibians. Although wild meat is consumed andtraded all over the world, it is a particularly important staple in many tropical and sub-tropical areas, where it contributes to food security. Wild meat is often consumed due to a lack of alternatives and plays a pronounced role in peoples' health in contexts where other sources of protein are either unaffordable or unavailable. Wildmeat also contributes to wellbeing and serves as a source of cultural and spiritual value and collective identity, consumed during festive events, as part of certain traditions, and as a delicacy. Beyond subsistence, wild meat is also traded as part of peoples' livelihood portfolios, with income earned from wild meat sales often used to purchase other food items and necessities and to pay for school fees or medical care. In light of the importance of wild meat to food security, incomes and wellbeing, there is growing interest in understanding the structure and operations of wild meat use networks and how the sector can provide a sustainable and safe source of protein as well as contribute to equitable benefits. However, wild meat use may come along with irreversible ecological risks, when hunting reduces wildlife populations to extinction and contributes to a breakdown in ecological processes , or to significant health risks when it serves as interface for diseases spill over from wild animal hosts to human populations.

The aim of this session is to bring together practitioners and researchers from South America and Africa to share lessons learnt about the opportunities and risks offered by the wildmeat sector. The presentations will evolved around three main questions: 1. How are current wildmeat value chains structured and who benefits or bares the costs?; 2. What indicators, tools and approaches are being used to measure ecological sustainability of wildmeat use?; 3. What are the risks from a one health perspective and what processes are in place to develop food safety protocols related to the use of wildmeat?; 4. What are the determinants for sustainable, equitable and safe wildmeat use?. The presentations will include insights from various countries and regions (Guyana, Zambia, Democratic Republic of Congo, Gabon, Nigeria, Ghana, Tanzania, Indonesia) and will provide food for thought to participants to engage into a productive discussion to improve the sector, reduce risks of future pandemics originating from wildmeat use and prevent further biodiversity loss.

SESSIONS AND CHAIRS

S14

Tropical Forest conservation and management under a changing climate

Chairs: Meley Mekonen Rannestad, Aster Gebrekirstos, Yennie Katarina Bredin & Thomas Luypaert

Climate change is predicted to drive regional climate disruption and instability across the world, increasingly threatening global biodiversity, and ecosystem service delivery. Tropical forests, which makeup just under half of the world's forests (45%) and harbor more than half of Earth’s terrestrial biodiversity are particularly vulnerable to climate change impacts. On the other hand, climate change driven demands for tropical forest land and ecosystem services are increasing with increasing conflict with each other. Given their significance as both sources and sinks of CO2, conservation of tropical forests through mechanisms such as the REDD+ has been globally recognized as a cheap and quick climate change mitigation option with various co-benefits, including biodiversity conservation. Whereas meeting climate change adaptation and other demands such as domestic energy needs require utilization of different forest products and services.

Making management decisions to meet these conflicting demands for tropical forest ecosystems while addressing the problems of climate change and other environmental changes such as land use and habitat changes, and subsequent loss of important ecosystem services is complex. The implementation of forest policies at multiple levels (global, national, and local) extends the complexity of the problem. Consequently, there is a growing demand for tools that enable optimal decisions related to sustainable management vs conservation of tropical forest land and resources given the complexity of the above-mentioned problems. The goal of this session is therefore to bring together scientists working with climate change and its implications for tropical forest management to share recent insights.

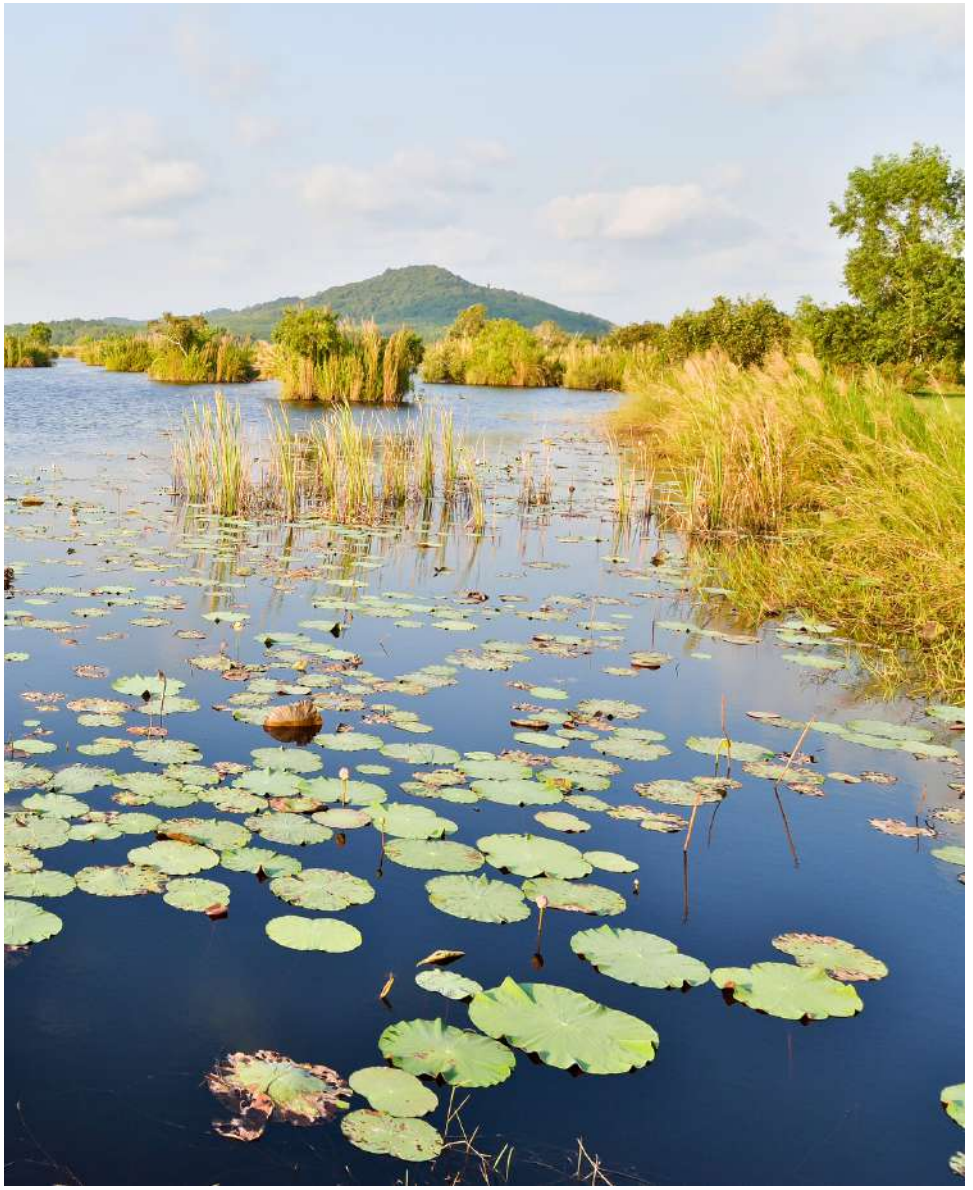
SESSIONS AND CHAIRS

S15

Ecosystem services and conservation of tropical wetlands

Chairs: Pia Paroli & Florian Wittmann

Wetlands are very important yet highly threatened. Their ecosystem services are of local and global importance. Most wetlands are subjected to increasing human pressure, e.g. by water abstraction, changes in the natural flood regime, land reclamation, pollution, and over-utilization of natural resources. The objective of the symposium is to present a state of knowledge about tropical freshwater wetlands: their status, new findings about ecosystem services, threats and solutions. Which are the important questions to ask in order to understand, sustainably use and preserve tropical wetlands? Which are the main challenges to address given the actual status of wetlands and threats like climatic changes and anthropogenic impacts?

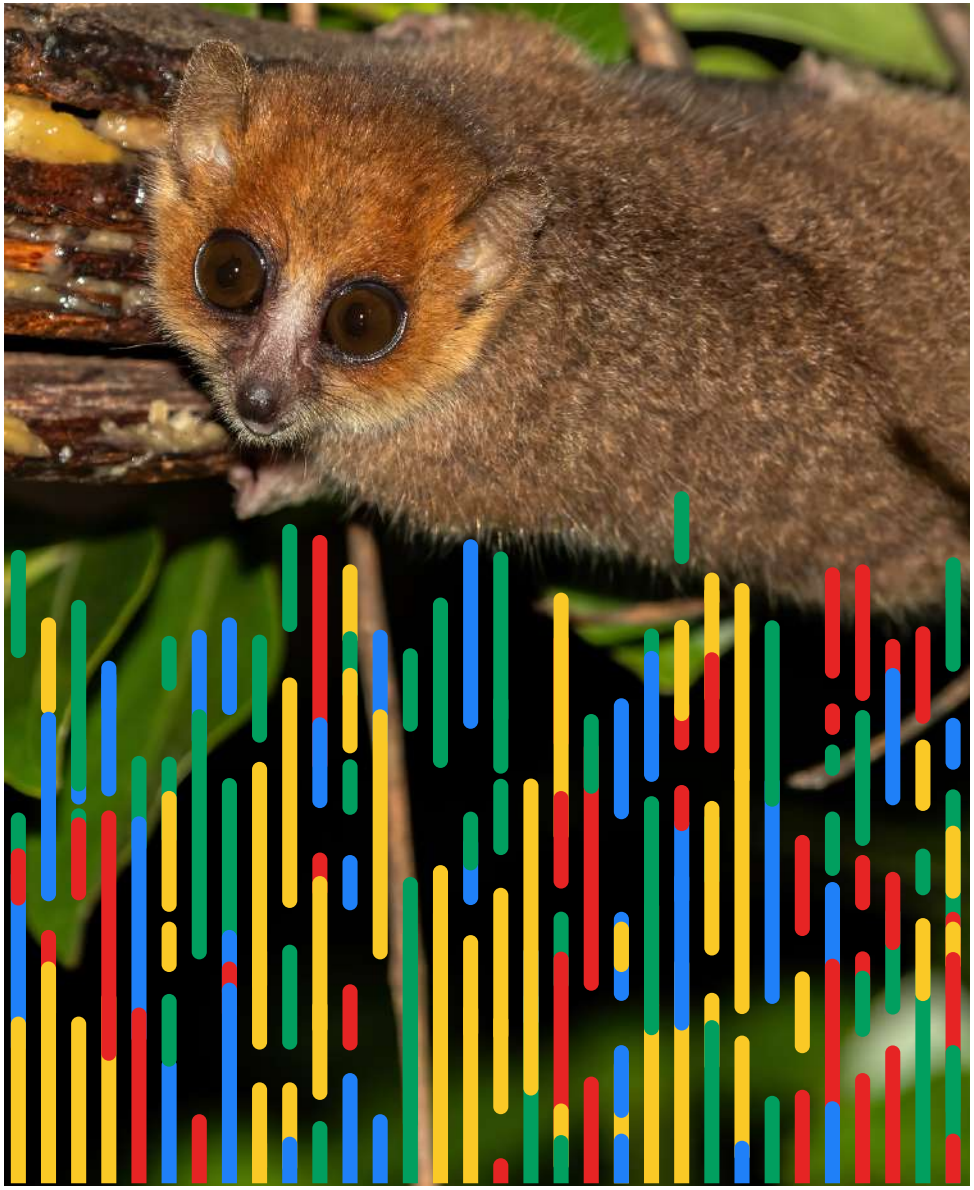


SESSIONS AND CHAIRS

S16

Tropical Molecular Ecology

Chairs: Jonas Depecker, Filip Vandelook, Steven Janssens & Piet Stoffelen



Tropical environments are under threat for a variety of reasons including human population expansion and encroachment, habitat loss and fragmentation, and climate change.
At the same time, tropical biodiversity often remains poorly understood or completely undescribed, so that many species may go extinct before being discovered. Species living in tropical environments are highly challenged, since they are generally adapted to relatively stable environmental conditions with narrow ecological niches but need to modify life history strategies and/or change distribution ranges in response to environmental changes. However, increasing landscape discontinuities in addition to natural barriers to gene flow (e.g., rivers, mountains) constrain movements, population dynamics and consequently the biogeographic plasticity of most species. Modern genetic and genomic techniques are excellent tools to investigate the evolutionary processes responsible for current patterns of biodiversity and the impacts of anthropogenic challenges (e.g., demographic changes, hybridization, extinction, inbreeding). This is of utmost importance for estimating the viability of populations and entire species and implementing effective conservation measures in the future. We aim to bring together a collection of contributions that address these and related questions in tropical biota from around the world. This session will provide the opportunity to present new data, critically review existing evidence and discuss important avenues for future research in tropical molecular ecology.

SESSIONS AND CHAIRS

S17

Current trends in tropical African plant ecology: from species to ecosystems; from conservation to sustainable use

Chairs: Luis Catarino, Salomão Bandeira, Maria Cristina Duarte & Maria Manuel Romeiras

African's major terrestrial and coastal biomes comprises a wealthy repository of biodiversity, with a high proportion of native and endemic plant species, which makes it biologically unique and provides a wide range of ecosystem services. Many of these ecosystems are being degraded, mostly due to the growing impacts from climate change and other anthropogenic and environmental problems, such as overexploitation of natural resources, droughts and floods, changes in land-use and spatial distribution of species. Current land cover change is damaging biodiversity, namely the conversion of forest and other natural areas, such as wetlands, for food production and urban development is happening at a fast step following the rapid transformation of African societies. Such conversion leads to habitat and biodiversity loss, affecting livelihoods, water supply, food security and reducing resilience to extreme events, particularly for people living in rural and coastal areas of African continent.

Also, Africa is extraordinarily rich in useful plants and local knowledge on its properties, comprising a strategic strength for sustainable development in the region. The continent has an important genetic diversity that reflects its unique variety of plants and several important native crop species, which are adapted to an ever-changing environment. The knowledge of the huge African plant diversity, as well as the structure, composition and processes involved in vegetation changes, are crucial to promote their sustainable use and to conserve one of the most understudied regions in the world. This session aims to gather contributions to deliver the timely and emerging research in the main topic of Tropical African plant ecology, and presentations covering a wide and multidisciplinary approaches (e.g. Structure and Composition of Plant Communities; Biogeography; Conservation; Ecological Modeling; Genetic Diversity; Ethnobotany; Agroforestry; Restoration, Climate changes and Ecosystem services) are welcome to be submitted.

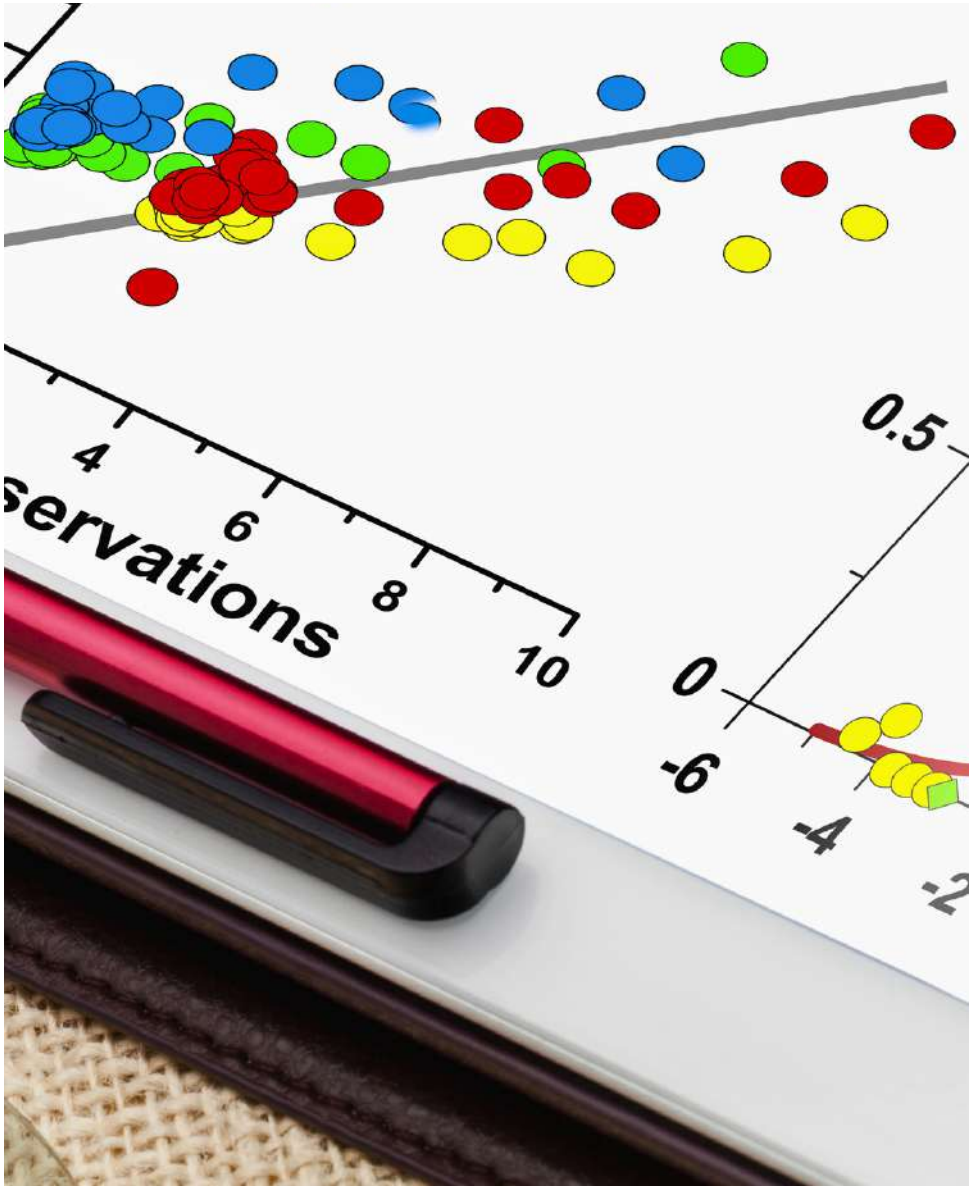
SESSIONS AND CHAIRS

S18

Recent Advances in Tropical Ecological Modelling

Chairs: Mateus Dantas de Paula

Tackling the complexity of ecological systems and understanding patterns and processes for the advancement of theoretical ecology and informing policy makers has been the main goals of Ecological Modelling. Due to their complexity, tropical ecosystems have been for decades a major challenge for the field, due to large spatial scales, biological diversity, interactions and novel processes in relation to other ecosystems. In spite of this, major advances in data collecting, artificial intelligence and improvement in computer power have provided new and exciting insights on key facets of tropical ecology, often out of reach for conventional empirical methods. In this session, we showcase recent work which advance theoretical and applied ecology through the use of models, involving remote sensing, process-based models, machine learning and random forests, species distribution models or other novel methods.



SESSIONS AND CHAIRS

S19

iEcology and the power of digital data in biodiversity conservation in the Tropics

Chairs: Fernanda Alves-Martins & Javier Martinez-Arribas

In the age of smartphones and information technology, digital data, including social media content, has enormous potential to support and complement traditional ecological data. iEcology, an emerging research field that uses digital data to study ecological patterns, has demonstrated its potential to provide fresh insights into species distribution, their phenological and behavioral patterns, among other valuable applications. Furthermore, it plays a crucial role in filling biodiversity knowledge gaps, particularly in tropical countries that have historically faced challenges regarding the collection and availability of biodiversity data.
The symposium aims to showcase some case studies and discuss the use of internet and social media data as significant sources of information for conservation science in the tropics.

SESSIONS AND CHAIRS

S20

Adapting to change: Exploring the ecology and evolution of tropical rainforest understory species amidst a changing world

Chairs: Jonas Depecker, Filip Vandelook, Steven Janssens & Piet Stoffelen

Large trees dominate one's perspective of the African tropical rainforest, which is mirrored in a research focus on canopy trees. Yet, most of the floristic diversity in these forests is actually found in the forest's understory as shrubs or small trees (Lasso et al 2011; Lü & Tang 2010). The communities in this forest layer also play a key role in succession and ecological functioning of the whole forest (Cicuzza et al 2013; Kusuma et al 2018). However, we know very little about ecological processes such as pollination and seed dispersal, and evolutionary processes such as speciation in understory species. The forest's understory is also home to several crop wild relatives (CWR) of for example Coffee and Cocoa, which support multibillion-dollar sectors. Coffea species for example have diversified in the understory of African rainforests (Ref). However, like many understory species, coffee species are facing a plethora of threats related to a fast-changing planet, including climate change, deforestation, and forest degradation. To conserve understory shrubs, including coffee, more research on the evolution and ecology of these species is crucial. The main objective of this session is to gather knowledge on different aspects of the ecology and evolution of tropical rainforest understory species. Specific objectives include bring together early career scientists studying rainforest understory from different perspectives, share knowledge about state-of-the-art techniques and analyses, explore possibilities for joint research projects, share research experiences with early and late career scientists.

SESSIONS AND CHAIRS

S21

On the ecological and social dimensions of hydropower development across the tropics

Chairs: Ana Filipa Palmeirim & Isabel Jones

The burgeoning energy demand worldwide has led to a proliferation of hydroelectric dams, firstly in the northern hemisphere and subsequently across tropical developing countries, which have become the new hydropower frontier. As such, hydroelectric dams have induced widespread loss, fragmentation and degradation of terrestrial and aquatic habitats in lowland tropical and sub-tropical ecosystems. In this symposium, we aim to synthetize current interdisciplinary knowledge on the ecological and social impacts of hydropower development in tropical ecosystems, with a focus on forest habitats. We will give particular emphasis to biodiversity responses to habitat loss and insular fragmentation induced by hydroelectric dams, as well as bringing socio-ecological dimensions of dam development to the fore. During the symposium, researchers currently working on a variety of tropical landscapes will focus on diverse aspects of dam-induced impacts.

As such, our symposium expects to bring together theoretical advancements and guidelines for biodiversity conservation and social-environmental impact mitigation from future dam development across the tropics. This symposium further represents a great opportunity for researchers working on hydropower to get together and discuss about the long-term and ongoing research to be presented. To cover a reasonable number of topics and study areas within the subject of our symposium, we propose a gender-balanced list of six speakers, including both well-established and younger scientists (below we provide the list of potential speakers and corresponding tentative titles) Given that hydropower development is a major environmental issue across the tropics, we expect this symposium to potentially attract a wide range of attendees in the conference.

SESSIONS AND CHAIRS

S22

Fossil fuels in tropical forests: corporate impunity, pollution and unextractable resources

Chairs: Martí Orta Martínez, Cristina O'Callaghan, Pedro Mayor & Gorka Muñoa

Tropical rainforests have an essential role in mitigating the increasing negative effects of the climate crisis. In addition they sustain half of world's species and directly provide home and resources for millions of indigenous people. Besides, tropical rainforests indirectly shape the basic foundation for human welfare worldwide. Yet, despite the common interest in preserving these ecosystems, tropical rainforests are being increasingly affected by the expansion of fossil fuel projects that seek to exploit their resource wealth. Numerous scientific publications point to negligent practices and poor maintenance of infrastructure by the fossil fuel industry. This situation happens in a context of already low environmental standards and weak public systems of environmental control and accountability, which results in the release of pollution and the impunity of fossil fuels corporations. In this context, this session wants to provide a space to researchers to present results on the effects (e.g., water pollution) of extractive industries on ecosystems and human populations, as well as spurring discussions on the role of corporate impunity and the mechanisms of accountability existing in highly biodiverse areas with weak state governance. Furthermore, the session wants to bring in discussions over the role of fossil fuels phase down in areas with outstanding social and ecological values (unburnable fuels) following the paradigmatic case of the Yasuní in Ecuador. The session will be open to the discussion of criteria and the operazionalisation of a methodology to select exclusion fossil fuel extraction areas.

PROGRAMME OVERVIEW

TIME	ROOM	MONDAY, 12TH
14h30	H	Registration
16h00	A	Opening ceremony
16h30	A	Plenary **Miguel B. Araújo**
17h00	H	Welcome cocktail, music & network

EXCURSIONS FRIDAY, 16TH

09h30 Departure from the Faculty of Sciences of the University of Lisbon

Discovering the Tagus estuary north-eastern shores and its birds

From birdwatching in Lagoa Pequena to Arrábida´s mediterranean gem

18h30 Arrival at the Faculty of Sciences of the University of Lisbon

TIME	ROOM	TUESDAY, 13TH
09h00	A	Plenary **Ricardo Rocha**
09h45	B	S1: Dogs in conservation: the nose knows
		S4: Tropical chemical ecology
	C	S9: Tropical biomonitoring in a molecular era
	D	S3: Multi-trophic networks in tropical forests
11h15	H	Break for coffee & posters
11h45	B	S5: Adaptations of neotropical biodiversity
	C	S6: Ecology of tropical mountains
	D	S3: Multi-trophic networks in tropical forests
13h15	H	Lunch
14h45	A	Plenary **Anna Traveset**
15h30	B	S5: Adaptations of neotropical biodiversity
		S8: Free session
	C	S6: Ecology of tropical mountains
		S2: Cutting-edge biomonitoring in the tropics
	D	S7: Tropical forest/tree functioning
17h00	H	Break for coffee & posters
17h30	B	S8: Free session
	C	S6: Ecology of tropical mountains
	D	S7: Tropical forest/tree functioning

TIME	ROOM	WEDNESDAY, 14TH
09h00	A	Plenary **Aida Cuni-Sanchez**
09h45	B	S10: Biodiversity and sustainable tropical agriculture
	C	S11: Biodiversity, biotic interactions and functioning
	D	S13: Wildmeat: Opportunities and risks
11h15	H	Break for coffee & posters
11h45	B	S10: Biodiversity and sustainable tropical agriculture
	C	S11: Biodiversity, biotic interactions and functioning
	D	S13: Wildmeat: Opportunities and risks
13h15	H	Lunch
14h30	B	S10: Biodiversity and sustainable tropical agriculture
	C	S11: Biodiversity, biotic interactions and functioning
		S12: The place of ethnoecology in tropical ecology
	D	S13: Wildmeat: Opportunities and risks
		S8: Free session
16h00	H	Break for coffee & posters
16h30	B	S10: Biodiversity and sustainable tropical agriculture
		S19: iEcology in the tropics
	C	S12: The place of ethnoecology in tropical ecology
		S15: Ecosystem services of tropical wetlands
	D	S8: Free session
17h30	H	Poster Session
	B	gtö's General Assembly
20h00		Conference dinner

TIME	ROOM	THURSDAY, 15TH
09h00	A	Plenary **Marco Mello**
09h45	B	S14: Tropical Forest management under climate change
	C	S22: Fossil fuels in tropical forests
		S17: Current trends in tropical African plant ecology
	D	S16: Tropical Molecular Ecology
11h15	H	Break for coffee & posters
11h45	B	S14: Tropical Forest management under climate change
	C	S17: Current trends in tropical African plant ecology
	D	S16: Tropical Molecular Ecology
13h15	H	Lunch
14h30	B	S21: Ecological and social dimensions of hydropower
		S20: Understory shrubs: adapting amidst change
	C	S17: Current trends in tropical African plant ecology
	D	S16: Tropical Molecular Ecology
		S18: Tropical Ecological Modelling
16h15	H	Break for coffee and posters
17h30	A	Closing ceremony + Awards + Invitation for 2025

PROGRAMME

MONDAY, 12TH | AFTERNOON

14h30 | **Hall** | Registration

16h00 | **Room A** | Opening ceremony, with:

Jorge Palmeirim, Conference Chair
Professor at the Faculty of Sciences of the University of Lisbon

Luís Carriço
Dean of the Faculty of Sciences of the University of Lisbon

Cristina Máguas
Coordinator of CE3C - Centre for Ecology, Evolution and Environmental Changes

Pierre-Michel Forget
President of gtö, the Society of Tropical Ecology

16h30 | Room A | Miguel B. Araújo
Moving away from individual species models of biodiversity response to climate change

17h15 | **Hall** | Welcome cocktail, music & network

PROGRAMME

TUESDAY, 13TH | MORNING 1/2

09h00 | Room A | Ricardo Rocha

The role of secondary forests in mitigating fragmentation-related extinctions: Insights from an Amazonian whole-ecosystem manipulation experiment

Room B

S1: Dogs in conservation: the nose knows

09h45 | O01 Leopold Slotta-Bachmayr
Dogs as a possible tool to improve research in the tropics

10h00 | O02 Noreen Mutoro #
Impact of weather conditions on cheetah (Acinonyx jubatus) monitoring with scat detection dogs

S4: Tropical chemical ecology

10h15 | O01 Brian Sedio
Species differences in foliar metabolites define fundamental niche dimensions in a tropical forest

10h30 | O02 Omer Nevo
Fruit scent: an evolved signal for seed dispersal?

10h45 | O03 Linh M.N. Nguyen #
Unveiling the Scent Evolution of Madagascar's Figs

11h00 | O04 Katharina Brandt
How do prey signals attract wasps as pollinators in two generalist plant species of the Caatinga?

Room C

S9: Tropical biomonitoring in a molecular era

09h45 | O00 Christina Islas Lynggaard
Gathering terrestrial biodiversity data through environmental DNA

10h00 | O01 Naiara Sales
Ecosystem monitoring powered by eDNA surveys in megadiverse areas: challenges and perspectives

10h15 | O02 Céline Condachou
Application of eDNA for species conservation: the case of Harttiella (Siluriformes, Loricarridae)

10h30 | O03 R. Haderlé
Environmental DNA (eDNA) in the French West Indies : a non-invasive molecular method to monitor the biodiversity of mobile marine species

10h45 | O04 Jan F. Gogarten
Flies as tools for studying disease ecology in tropical ecosystems

11h00 | O05 Anais K. Tallon
A dive into landfill ecology: The role of New World vultures in the dissemination of anti-microbial resistance

Room D

S3: Multi-trophic networks in tropical forests

09h45 | O02 Marie Séguigne
Interactive effects of drought and deforestation on multitrophic communities and aquatic ecosystem functions – an experimental test using tank bromeliad ecosystems

10h00 | O03 Mingqiang Wang
Tree diversity effects on higher trophic levels in a subtropical forest experiment of China

10h15 | O04 Georg Albert #
Multi-trophic network properties mediate tree biodiversity effects on forest ecosystem multi-functionality

10h30 | O05 Eva T. López
Recovery of tree seedling-herbivore interactions along a tropical chronosequence

10h45 | O06 Elise Sivault #
Bats and birds top-down regulate arthropods to a similar magnitude across temperate and tropical forests

11h00 | O07 Katerina Sam
Insights from the canopy: Both vertebrate- and ant-mediated regulation of arthropod communities and herbivory was revealed in temperate and tropical forests

11h15 | **Hall** | Break for coffee & posters

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

TUESDAY, 13TH | MORNING 2/2

11h15 | **Hall** | Break for coffee & posters

Room B

S5: Adaptations of neotropical biodiversity

11h45 | O01 Guido Briceno
Diversity of frontier processes and frontier metrics to uncover major types of forest cover changes

12h00 | O02 Crystal McMichael
Ecological legacies of past fire and human activity in a Panamanian forest

12h15 | O03 Edith Villa Galaviz
Dynamics of species turnover along a chronosequence in the Ecuadorian Chocó forest: a comparison across different ecological communities

12h30 | O05 Luís M. Rosalino
Drivers of the density and conservation of red-handed howler monkeys, Alouatta belzebul, in an Amazonian savannah

12h45 | O06 Clarisse Palma-Silva
Adaptive Genomics of Bromeliads Along an Elevational Gradient in the Mountains of the Brazilian Atlantic Forest

13h00 | O07 Lucas Buffan
Palaeogene climate deterioration increased South American mammal turnover near the Eocene-Oligocene Transition

Room C

S6: Ecology of tropical mountains

11h45 | O01 Hermann Behling
Ecological response on environmental change in tropical South America during the late Quaternary

12h00 | O02 Homeier Jürgen
Functional properties of Andean upper montane forest trees – the role of rare species

12h15 | O03 João D.V. Junior
Climate-driven loss of plant diversity in African mountains

12h30 | O04 Göran Wallin
Warming responses of growth and mortality of tropical montane tree species in relation to functional traits

12h45 | O06 Bianca Zoletto
The effects of lightning on tropical forests in Central Africa

13h00 | O05 Camille Ziegler #
Heat and drought plasticity in hydraulic traits of Afromontane tree species from contrasting successional types

Room D

S3: Multi-trophic networks in tropical forests

11h45 | O08 Jingting Chen
The ecological effect of tree diversity on spider-prey interaction in subtrophical forest

12h00 | O09 Mareike Mittag
Thriving in Diversity – herbivory and predation rates respond to tree diversity in a subtropical forest biodiversity experiment in China

12h15 | O10 Karen M. Pedersen
Tritrophic mammal dung dung beetle seed interactions in the Ecuadorian Choco

12h30 | O11 Sarah Tossens
Impacts of carnivores on tropical forest dynamics through trophic cascades: the study case of Central African wild cats

12h45 | O12 Natalia Revilla-Martín
Stable landscapes help maintain stable bird communities

13h15 | **Hall** | Lunch

14h30 | Group photo

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

TUESDAY, 13TH | AFTERNOON 1/2

14h45 | Room A | Anna Traveset
Deciphering the complexity of ecological interactions in tropical islands. A multilayer network approach

Room B

S5+

15h30 | O08 Mauricio Bacci
Climate change may differently affect pest and non-pest leafcutter ants and threaten food security

15h45 | O09 Isabel Marques
Effects of natural hybridization on the diversity of Neotropical orchids

16h00 | O10 David Draper
Species extinction in neotropics: how far have we gone and what will future climate change bring?

S8: Free session

16h15 | O01 Guillermo Porriños
Fish community composition in the tropical archipelago of São Tomé and Príncipe

16h30 | O02 Patrícia Guedes
Reassessing the conservation status of the Príncipe's island endemic shrew Crocidura fingui, Central Africa

16h45 | O03 Gonçalo Curveira-Santos
Postwar defaunation in Angola: mammal assemblages in Bicuar National Park

Room C

S6+

15h30 | O07 Olivier J. L. Manzi
Partial thermal acclimation of the photosynthetic heat tolerance in tropical trees

S2: Cutting-edge biomonitoring in the tropics

15h45 | O02 Antoine Plumacker
Comparative Analysis of Large Tree Segmentation in the Canopy of African Tropical Forests

16h00 | O03 Sá N. Lisboa
Drivers of deforestation and degradation of miombo woodlands in Mozambique: what is the extent and shares of forest change?

16h15 | O04 Carly Batist
Eavesdropping on Nature: How ecoacoustics can scale up biodiversity monitoring and inform conservation

16h30 | O05 Dylan Carbone
Automated monitoring of insects supports new research into flying insect populations in tropical ecosystems

16h45 | O06 Massimo Martini
Using DNA barcoding to resolve quantitative multi-trophic interaction network response to tree identity

Room D

S7: Tropical forest/tree functioning

15h30 | O01 Adeline Fayolle
How seasonal is tropical forest/tree functioning?

15h45 | O03 Anais Gorel
How tropical trees in Africa adapted to cope with seasonal drought? Exploring the phylogenetic and climatic distribution of the species leaf habit, maximum height, and wood density

16h00 | O05 Megan K. Sullivan #
Climate & tree crown phenology in Nyungwe National Park, a montane tropical forest in Rwanda

16h15 | O06 Marjane Kaddouri
Tracking the seasonal rythm of tropical forests and savannas with phenocams in Lopé NP, Gabon

16h30 | O07 Bo Zhou
Are intra-annual responses of subtropical trees to climatic variation consistent across species?

16h45 | O08 Achim Bräuning
Forming leaves does not mean not grow: dendrometer records reveal growth failure of dry tropical forest tree species in extreme years

17h00 | **Hall** | Break for coffee & posters

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

TUESDAY, 13TH | AFTERNOON 2/2

17h00 | **Hall** | Break for coffee & posters

Room B

S8: Free session

17h30 | O04 Marion Tafani
Angola as a pivot to promote wildlife ecology research and capacity building opportunities through the establishment of a dynamic collaboration network

17h45 | O05 Filipe Rocha
Unveiling the impacts of fire severity on herbivore occupancy patterns

18h00 | O06 Víctor Fernández-García
Exploring the relationships between fire regimes, plant diversity, and carbon stocks in African savannas

18h15 | O07 Luis Pedro Pratas-Santiago
Withdrawal and expansion: a decade of dynamic ungulate distribution in Amazonian lowland sanctuaries (2010-2020)

Room C

S2+

17h30 | O07 Desamarie A. Fernandez
Temporal ecology of carnivorans in Palawan Island, Philippines

17h45 | O08 Daniel V. Garcéz
Unveiling rat predation dynamics in São Tomé and its implications for conservation

18h00 | O09 Julia Fa
Empowering local communities for effective biomonitoring in Guinean Forests of West Africa

Room D

S7: Tropical forest/tree functioning

17h30 | O09 Pauline Hicter
Seasonality of tree growth and carbon uptake through assessments of the cambial phenology in the Biosphere Reserve of Yangambi in the Democratic Republic of the Congo

17h45 | O10 Claire Wauquiez
Foliar water uptake: a seasonal drought mitigation strategy of central African canopy tropical trees

18h00 | O11 Cristina Antunes
How does water-table depth affect the physiological status of a tropical dune forest?

18h15 | O12 Ligia Vieira
Patterns and drivers of herb biomass in a Caatinga dry tropical forest

Organising committee's suggestion:

Enjoy the end of the day in Lisbon!

PROGRAMME

WEDNESDAY, 14TH | MORNING 1/2

09h00 | Room A | Aida Cuni-Sanchez
Local perceptions of forest ecosystem services, insights from Africa

Room B

S10: Biodiversity and sustainable tropical agriculture

09h45 | O01 Pablo Aycart Lazo #
Interacting effects of local and landscape factors shape bird and bat diversity in Amazonian cacao agroforestry systems

10h00 | O02 Blanca Ivañez-Ballesteros
Assessing cacao pollination: impact of landscape and farming practices on pollinator diversity and fruit yield in Northern Peruvian Amazon

10h15 | O03 Eliza Van de Sande #
Solving the cacao pollinator puzzle: new insights into pollinator identity and ecology

10h30 | O04 Jamal Kabir #
Restoring biodiversity to oil palm plantations in Sumatra, Indonesia: can riparian buffer restoration treatments support Anuran populations?

10h45 | O05 Raquel Oliveira
Conserving biodiversity and enhancing food security: understanding small mammal diversity patterns in mosaic landscapes of Guinea-Bissau (West Africa)

11h00 | O06 Cárol Sierra-Durán #
Bats and rice: contribution of insectivorous bats to pest suppression services in Mexican rice fields

Room C

S11: Biodiversity, biotic interactions and functioning

09h45 | O01 Jörg Bendix
Hyperspectral sensing of functional traits in tropical mountain forests for the parameterization and validation of a biodiversity-informed land model

10h00 | O02 Jürgen Homeier
Drivers of tree diversity in Andean forests: comparing species richness, phylogenetic diversity and functional diversity

10h15 | O03 Laura Würzberg
Root sap flow measurements reveal different plant water uptake strategies in a seasonal tropical dry forest in southern Ecuador

10h30 | O04 Lea Kerwer
Abiotic and biotic filters shape seedling recruitment in a tropical dry forest

10h45 | O05 Jana E. Schön
Do leaf traits of tree canopies shape herbivory in tropical montane rainforests?

11h00 | O06 Nina Farwig
Environmental heterogeneity consistently increases diversity effects on ecosystem functioning in tropical mountains

Room D

S13: Wildmeat: Opportunities and risks

09h45 | O01 Oswin David
Towards the conservation and sustainable use of Yellow-Spotted River Turtle (Podocnemis unifilis) in the Rupununi region, Guyana

10h00 | O02 Jonas Kakule Muhindo
Reducing wild meat sales and promoting local food security: lessons learnt from a behavior change campaign in Yangambi, Democratic Republic of Congo

10h15 | O03 Sagesse Nziavake
Uneven transmission of traditional knowledge and skills in a changing wildmeat system: Yangambi, Democratic Republic of Congo

10h30 | O04 Sandra Owusu-Gyamfi
Monitoring frog meat harvesting and population estimation as a key step to sustainable wildlife utilisation in Ghana

10h45 | O05 Juanita Gómez
Is place at the foundation of Indigenous Stewardship for wildlife: Case studies from Guyana and DRC

11h00 | O06 Jonas K. Nyumu
Alternative livelihoods to reduce reliance on wildmeat in the Yangambi landscape, DRC

11h15 | **Hall** | Break for coffee & posters

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

WEDNESDAY, 14TH | MORNING 2/2

11h15 | **Hall** | Break for coffee & posters

Room B

S10: Biodiversity and sustainable tropical agriculture

11h45 | O07 Madalena Sottomayor
Nature-based solutions to increase rice yield: an experimental assessment of the role of birds and bats as agricultural pest suppressors in West Africa

12h00 | O08 Gonçalo A. Fernandes
Patterns and predictors of insectivorous bat activity around isolated trees in rice fields of Guinea-Bissau (West Africa)

12h15 | O10 Eike Lena Neuschulz
The benefits of eco-certification for biodiversity

12h30 | O11 Patrícia A. P. Chaves
Friend or Foe? Attitudes of Rice Farmers towards Wild Animals in West Africa

12h45 | O12 Aster Gebrekirstos
Agroforestry for food security, biodiversity, and climate resilience

13h00 | O13 Mary A. George #
Influence of household livelihood assets on agrobiodiversity and food availability and accessibility outcomes along urbanisation gradients in tropical smallholder agroforestry systems

Room C

S11: Biodiversity, biotic interactions and functioning

11h45 | O07 Christoph Meyer
Fear or food? Prey availability is more important than predation risk in determining aerial insectivorous bat responses across a disturbed tropical forest landscape

12h00 | O08 Divya Divya #
Understanding the functional dynamics of plant-avian frugivory in novel urban ecosystem of Delhi

12h15 | O10 Gladys N. Kungu
Movement behaviour of a cooperatively breeding bird scales to the level of habitat degradation in Afrotropical cloud forests

12h30 | O11 Luke Powell
The queens of the Congo rainforest and their loyal subjects: Dorylus driver ants and the specialized birds that follow them

12h45 | O12 Finn Rehling #
Animal carrion decomposition and decomposers are influenced by canopy cover, topography, ants and tree species richness in a subtropical forest biodiversity experiment

13h00 | O13 Natalia Medina-Serrano #
Plant-animal interactions in restoration ecology: insect pollinators and other floral visitors in the semi-arid savannas of the Ferlo region in Senegal

Room D

S13: Wildmeat: Opportunities and risks

11h45 | O07 Lola Nihotte
Are tropical countries prepared to guaranty food safety in wild meat use: a comparative analysis of legal frameworks across different countries

12h00 | O08 Emmanuela Mbangale
Using Local knowledge and camera traps to assess and monitor hunting systems in the Democratic Republic of Congo

12h15 | O09 Chanda Mwale
The legal game meat value chain in Zambia: Lessons Learned for Supporting the Socio-Economic and Sustainability Potential of Wild Meat Economies

12h30 | O13 Nadia Balduccio
Assessing the impact of traditional hunting on mammal populations in the buffer zone of Salonga National Park, DRC

12h45 | O14 Julia Fa
Wild foods are less important for those who farm for sedentarised Baka in Cameroon

13h00 | O15 Joshua Bauld
The impact of local market access on wildmeat consumption in Gabon

13h15 | **Hall** | Lunch

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

WEDNESDAY, 14TH | AFTERNOON 1/2

13h15 | Hall | Lunch

Room B

S10: Biodiversity and sustainable tropical agriculture

14h30 | O14 Karen Mustin
Impacts of agribusiness expansion on territorial development in the Savannas of Amapá

14h45 | O15 Jean C. Nsengiyumva #
Assessing Fairtrade Feasibility for Sustainable Practices in Guinea-Bissau's Cashew Agroecosystems

15h00 | O16 Filipa Monteiro
Nuts for cashews: achieving sustainable production in Guinea-Bissau (West Africa)

15h15 | O17 Sofía Ocaña-Cabrera
Sweet beekeeping from the middle of the world

15h30 | O18 Paola Sierra-Baquero
Cashew field prospection in Guinea-Bissau: characterization of the production system and pest occurrence

15h45 | O19 Rafael António
Discriminating cashew varieties from Guinea-Bissau through agromorphology, nutritional, and allergen analysis

Room C

S11+

14h30 | O14 Joana Ribeiro
Functional and phylogenetic correlates of invasion risk across tropical biomes

14h45 | O15 Belinda Kahnt
When lizards shift to a plant-based lifestyle: The macroevolution of mutualistic lizard-plant-interactions

S12: The place of ethnoecology in tropical ecology

15h00 | O01 José M. V. Fragoso
Enhancing collaboration among scientists and traditional peoples for biodiversity research: identifying and addressing diverse interests in biodiversity monitoring programs

15h15 | O03 Chiara Bragagnolo
Tell me what you do in the park and I'll tell you who you are: Exploring human-nature interaction in the Obô Natural Park (São Tomé Tropical Island)

15h30 | O04 Martina Panisi
Which species do children prefer to protect and why? Exploring wildlife knowledge and conservation preferences in two African tropical sites

15h45 | O05 Opale Coutant #
Confronting forest dweller local ecological knowledge and eDNA measurements of biodiversity

Room D

S13+

14h30 | O16 Lilian Mangama
The impac of subsistence hunting on local wildlife communities

14h45 | O17 Franciany B. Pereira
Access, technology, and urbanization drive wild meat trade dynamics in Guyana, at the heart of the Guiana Shield

S8: Free session

15h00 | O09 Gargi R. Chowdhury
Sounds of survival: impact of vessel traffic on endangered Ganges river dolphins in the Hugli River

15h15 | O10 Eckhard W. Heymann
Sisi e'u ("food of the tamarins") – plant-frugivore interactions of the Neotropical understory tree Leonia cymosa (Violaceae)

15h30 | O11 Fatima Chaudhary #
Human visitation alters the behavioral response of wildlife: a study on vigilance behavior of Japanese pika at Mount Highashi-nupukaushi-nupuri

15h45 | O12 Anastasia Poliakova
Applied palaeoecological and molecular methods in the studies of material codicology: new aspects of known techniques used for palm-leaf manuscript studies

16h00 | Hall | Break for coffee & posters

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

WEDNESDAY, 14TH | AFTERNOON 2/2

16h00 | **Hall** | Break for coffee & posters

Room B

S10+

16h30 | O22 Tamanna Tamanna
Groundwater quandary of Bathinda, Punjab: a balance between sustainable agriculture and ecology

16h45 | O23 Alex B.D. Etchike
Characterization agroforestry systems based on cocoa and oil palm on the outskirts of a forest concession in southern Cameroon

S19: iEcology in the tropics

17h00 | O01 Fernanda Alves-Martins
A culturomics approach to map African protected areas value and vulnerability

17h15 | O17 Sofía Ocaña-Cabrera
Using social media and machine learning to understand negative sentiments towards Brazilian National Parks

Room C

S12+

16h30 | O06 Clémentine Durand-Bessart #
Local ecological knowledge enhance our understanding of Afrotropical frugivory networks

S15: Ecosystem services of tropical wetlands

16h45 | O01 Pia Parolin
Introductory overview on diversity and the conservation of globally important tropical freshwater wetlands

17h00 | O02 Florian Wittmann
Amazonian large-river floodplain forests: ecology, biogeography and conservation

17h15 | O03 J. Ethan Householder
How unique are the tree communities of the Amazon's floodplain forests?

Room D

S8: Free session

16h30 | O13 Beatriz Lucas Arida
Consequences of floral colour polymorphism on the reproductive success of a Neotropical deceptive orchid

16h45 | O14 Arianna Tartara
Leaf litter decomposition along a chronosequence in the Ecuadorian lowland Choco' forest

17h00 | O15 Guido B. Castillo
Diversity of frontier processes and frontier metrics to uncover major types of forest cover changes

17h15 | O16 Gonzalo Rivas-Torres
Summarizing two decades of research on Scalesia (Asteraceae), the most endemic and iconic plant genus radiated in the Galapagos Islands

17h30 | **Hall** | Poster Session

17h30 | **Room B** | gtö's General Assembly (Members only)

20h00 | **Conference dinner**

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

THURSDAY, 15TH | MORNING 1/2

09h00 | Room A | Marco Mello
The elephant, the monks, and the topology of interaction networks

Room B

S14: Tropical Forest management under climate change

09h45 | O02 Joana S. Carvalho
Will there be any suitable habitat left for African great apes by 2050?

10h00 | O03 Noé Madingou
Vulnerability of African tropical rainforest to projected climate change

10h15 | O04 Andrés Gerique
Unraveling the effects of market-based conservation on the sociocultural capital of indigenous peoples in the Western Amazon

10h30 | O05 Mikkel Vindegg
Community perceptions of dry forest change in Tigray, Ethiopia: the role of local perspectives for governance and policy

10h45 | O07 Carolina Soto Navarro
The AmistOsa lifeboat: building resilience to climate change through nature-based solutions in one of Central Americ´s last great forests

11h00 | O08 William Gosling
A 2300 year perspective on land-use change in the Andes biodiversity hotspot

Room C

S22: Fossil fuels in tropical forests

09h45 | O01 Martí Orta-Martínez
Compensation for Rights Holders of Unextractable Fossil Fuels in Tropical Rainforests

10h00 | O02 Guillem R. Taberner
Environmental justice for the transition away from fossil fuels in tropical rainforests

10h15 | O03 Gorka Muñoa
Assessing unburnable fossil fuels in the world's tropical rainforests: scaling down to oil and gas fields and coal deposits

S17: Current trends in tropical African plant ecology

10h30 | O01 Antonia Reinhardt
Rainforest fragmentation in northern Madagascar during the past millennium - a result of intensified human impact and climate dynamics?

10h45 | O02 Juliette Picard
Mapping tropical forest types and associated floristic, functional and faunistic composition in central Africa

11h00 | O03 Madalena Matias
Between land and sea – Analysis of historical land cover dynamics at the coastal interface in Guinea-Bissau

Room D

S16: Tropical Molecular Ecology

09h45 | O01 Helena Teixeira
Past volcanic activity predisposes an endemic threatened seabird to negative anthropogenic impacts

10h00 | O02 Shawn Lehman
Dispersal dynamics of mouse lemurs in fragmented dry forests of Northwestern Madagascar

10h15 | O03 Marine Ha-Shan
Inferring a demographic scenario accounting for population structure in two Indian Ocean bird species endemic to a single island

10h30 | O04 Cock van Oosterhout
Genomics-informed conservation to the rescue

10h45 | O05 Jordi Salmona
The critically endangered Coquerel's sifaka retains pre-deforestation genetic makeup

11h00 | O10 Kasun Bodawatta
Living with toxins: convergent modifications of sodium channels against deadly batrachotoxin in New Guinean toxic birds

11h15 | **Hall** | Break for coffee & posters

PROGRAMME

THURSDAY, 15TH | MORNING 2/2

11h15 | **Hall** | Break for coffee & posters

Room B

S14: Tropical Forest management under climate change

11h45 | O09 Laura Benitez
14,000 years of climatic and anthropogenic change in the Afromontane forest of São Tomé Island, Gulf of Guinea

12h00 | O11 Hailemariam Tsegay #
Modeling the current and future distribution of Dracaena ombet Kotschy and Peyr. under climate change in Ethiopia

12h15 | O12 Abrha M. Meressa
Strict protection reduces environmental and economic sustainability of dry afromontane forests in low-income countries

12h30 | O13 Bianca W. Kassun
Fuelwood or carbon: spatio-temporal trade-offs between major forest ecosystem services in a dry Afromontane Forest in Ethiopia

12h45 | O14 Dora M. Villela
Edge effect caused by linear canopy openings on tree biomass dynamics in an Atlantic Forest fragment

13h00 | O16 Mengistu G. Mojo
Woody carbon stock estimation and factors affecting their storage in Munessa Forest, Southern Ethiopia

Room C

S17: Current trends in tropical African plant ecology

11h45 | O05 Francisco Gonçalves
Leaf phenology across southern African woodlands varies with floristic composition and structure

12h00 | O06 Nathaly R.G. Ramírez
Contributions of subtropical and tropical plant species to belowground ecological strategies

12h15 | O07 Ana Leite
Rural communities' views on woodland contributions to people in Guinea-Bissau: the importance of wild edible plants

12h30 | O08 Maria Romeiras
Conservation and sustainable use of tropical biodiversity: ongoing projects with Guinea-Bissau and Angola flora

12h45 | O09 Luís Catarino
Ecology and socio-economic importance of palms in West Africa

13h00 | O10 Prishnee Bissessur
Conservation lessons learnt from research on one of the fastest declining oceanic island endemic plant species worldwide

Room D

S16: Tropical Molecular Ecology

11h45 | O06 Heike Pröhl
Ecological and molecular mechanisms of colour diversity in tropical aposematic frogs

12h00 | O07 Fabio Pinheiro
Genetic consequences of abiotic and biotic forces shaping the distribution limits of a neotropical orchid

12h15 | O08 Paulo de Sousa
How fragmentation impacts the population genetics of specialist versus generalist oil-collecting bees in the Brazilian Cerrado

12h30 | O09 Stefan Merker
Imperfect but improving – evolving insight into the phylogeography of Sulawesi tarsiers

12h45 | O11 Carina Moura
Effects of land-use change on above and below-ground plant phylogenetic diversity and carbon storage in soil, roots, and litter

13h00 | O12 Chris Barratt
Combining genomics and spatial modelling to make multi-species population vulnerability predictions

13h15 | **Hall** | Lunch

Eligible candidates for the Merian Award are marked with an #

PROGRAMME

THURSDAY, 15TH | AFTERNOON 2/2

13h15 | **Hall** | Lunch

Room B

S21: Ecological and social dimensions of hydropower

14h30 | O01 Isabel Jones
Interdisciplinary approaches to quantifying the social-environmental impacts of large hydropower development

14h45 | O02 Angelica Resende
Renewable but not sustainable: the environmental and social costs of hydroelectric dams in the Brazilian Amazon

15h00 | O03 Thomas Luypaert #
Extending species-area relationships to the realm of eco-acoustics: Island Soundscape-Area Relationships

15h15 | O04 Ana F. Palmeirim
Disentangling the effects of habitat fragmentation and top-down trophic cascades on small mammal assemblages on Amazonian forest islands

S20: Understory shrubs: adapting amidst change

15h30 | O01 Jonas Depecker
Unveiling the genetic diversity and structure of wild Coffea canephora populations in Yangambi (DRC) and how they are impacted by forest disturbance

Room C

S17: Current trends in tropical African plant ecology

14h30 | O11 Mohammad I.Z.A. S. Abbass
Application of spatial conservation prioritization for terrestrial ecosystem management: a tropical island oriented global systematic review

14h45 | O12 François Baguette
Review of tropical pioneer trees' roles for restoration and conservation management: Harungana madagascariensis (Hypericaceae) as a model

15h00 | O13 Susan Eshelman #
Malagasy grass flora dynamics: an exploration of environmental influences on grassy functional traits

15h15 | O14 Ghanishta Seeburrun
A review of the impact of alien species on the biodiversity of a tropical oceanic island

15h30 | O15 Peter Jörg Horchler
Invasive alien plants drive inexorable loss of native woody plant diversity in a tropical oceanic island: Insight from changes over 17 years in permanently set plots

Room D

S16: Tropical Molecular Ecology

14h30 | O13 Margarida Henrique
How to deal with the impact of the reference divergence in the demographic history of non-model species

14h45 | O14 Lounes Chikhi
Reconstructing the evolutionary history of species with genomic data: what can the IICR (inverse instantaneous coalescence rate) tell us ?

15h00 | O15 Ravi Vishwakarma
Life history traits predict contrasting dynamics of genetic diversity during a ca. 14,000-year glacial cycle: a spatial simulation study

15h15 | O16 Ana I. Ribeiro-Barros
Coffee agroforestry, reforestation, and landscape genomics: the successful case of Mount Gorongosa, Mozambique

S18: Tropical Ecological Modelling

15h30| O02 Mateus D. de Paula
Modeling the influence of herbivory on plant functional trait diversity and nutrient availability in a tropical mountain forest gradient

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PROGRAMME

THURSDAY, 15TH | AFTERNOON 2/2

Room B

S20+

15h45 | O03 Thomas Couvreur
Evolutionary dynamics of central African rain forest trees and understory plants reveal contrasting responses to past climatic fluctuations

16h00 | O04 Rémi Tournebize
Ecological and genomic vulnerability to climate change across native populations of Robusta coffee (Coffea canephora)

Room C

S17+

15h45 | O16 Cláudia Baider
Control of invasive alien plants from native forests of a tropical oceanic island improves forest biomass against a backdrop of strong benefits to threatened biodiversity

16h00 | O17 F.B. Vincent Florens
Control of invasive alien plants promotes seed dispersal mutualisms and human-wildlife conflict mitigation: Case of the flying fox Pteropus niger on tropical oceanic island Mauritius

Room D

S18+

15h45 | O05 Angelica Resende
Tracking successional stages of the Atlantic Forest through space technology

16h15 | **Hall** | Break for coffee and posters

17h30 | **Room A** | Closing ceremony + Awards + Invitation for 2025

Eligible candidates for the Merian Award are marked with an #

POSTER PRESENTATIONS

S2: Cutting-edge biomonitoring in the tropics

P01 Carolina Soto Navarro
The Osa conservation campus: protecting central America's greatest pacific lowland rainforest

P02 Claudia Viganò #
Shedding light on the dark side of the forest: using camera traps to uncover nocturnal plant-animal interactions in the canopy of Handroanthus chrysanthus, a neotropical tree species

P03 Ricardo Jorge Lopes
Automated acoustic monitoring for tropical biodiversity assessment - prospects for small island developing States

S3: Multitrophic networks in tropical forests

P01 Malika Gottstein
Seed dispersal by brown-headed spider monkeys in the Chocó biodiversity hotspot, Ecuador

P02 Patrícia A.P. Chaves
Unveiling the role of bats and birds in rice pest control: A case study in Guinea-Bissau's rice paddies

P03 Selma Kosmas
Trophic simplification of predator-prey mammal systems in postwar Angola

S4: Tropical chemical ecology

P01 Malika Gottstein
Seed dispersal by brown-headed spider monkeys in the Chocó biodiversity hotspot, Ecuador

S5: Adaptations of neotropical biodiversity to changes

P01 Patricia Morellato
Center for Research on Biodiversity Dynamics and Climate Change, a Brazilian center dedicated to research, innovation and science dissemination

P02 Beatriz Lucas Arida #
Different but not isolated: investigating reproductive barriers and morphological divergence between ecotypes of Epidendrum fulgens

P03 María Rita Guzman
Impacts of salinity on Guatemalan marigold (Tagetes patula L.) flowers: small and fewer flowers despite high antioxidant performance

P04 Anaïs K Tallon
A 10-year case study: How do global changes influence hummingbird survival and phenology?

P05 Luís Pedro Pratas-Santiago
Withdrawal and Expansion: A Decade of Dynamic Ungulate Distribution in Amazonian Lowland Sanctuaries (2010-2020)

P06 Sean Glynn
Impacts of small-scale artisanal gold mining on understory bird communities in Guyana

S7: Tropical forest/ tree functioning

P01 Luis Amadeu Pungulanhe
Horizontal composition of miombo species in two areas with different fire frequencies. Gilé National Park, Zambezia Province

P02 Laura Helena Porcari Simões
Functional composition in different canopy strata in unmanaged Eucalyptus plantations

S8: Free session

P01 João Albuquerque
Dietary segregation between two sympatric West-African swallows: Red-chested Swallow Hirundo lucida and Wire-tailed Swallow Hirundo smithii

P03 Megan K. Sullivan
Disturbance dynamics: abiotic understory characteristics that are altered by selective logging and elephant trails impact seedling performance in a Gabonese tropical forest

Eligible candidates for the Merian Award are marked with an #

POSTER PRESENTATIONS

S8: Free session +

P04 Diego P. Santos
The problem of conserving an ecosystem that has not been completely delineated and mapped: the case of the Cocais Palm Forest

P05 Filipe Pedroso-Santos
Vertebrate taxonomic and functional hotspots in the Brazilian Atlantic Forest

P06 Diego P. Santos
Production of Babassu Coconut Almonds in the "Core" region of the Cocais Forest

P07 Alfred Houngnon
Floristic clues to the origins of the Dahomey Gap from the Ewe-Adakplame forest (Benin, West Africa)

P08 Cláudia Ribeiro
Assessing colonization trends of translocated ungulates using camera-trapping data

P09 Jason Vleminckx
Inter-annual changes in plant phenology in a tropical ever-wet forest community of Western Amazonia

S9: Tropical biomonitoring in a molecular era

P01 Elise Sivault
Fecal DNA metabarcoding and stable isotopes shed light on the short-term and long-term diet of frugivorous bat species in Papua New Guinean rainforests

S10: Biodiversity and sustainable tropical agriculture

P01 Bruna Xavier da Silva
Consequences of replacing natural savannas with eucalyptus plantations and soybean fields for the taxonomic and functional diversity of bats in the Amazonian Savannas

P02 Inês Morais
Gleaning insectivorous bats eat seasonably on a West African rice farming landscape: implications for ecosystem services

P03 Paula Lopes
Guild-dependent patterns of bird abundance along the rice growth cycle in lowland rice fields of Guinea-Bissau (West Africa)

P04 Inês Lacerda
Sowing Seeds, Soaring Feathers: Exploring the role of temporal and spatial heterogeneity in shaping bird assemblages of Guinea-Bissau's freshwater rice fields

P05 Tiago Gonçalves
Variation of pest consumption by insectivorous bats and birds in smallholder rice fields in West Africa

P06 Eliza Van de Sande
Global variation in the flowering phenology of cacao trees (Theobroma cacao)

P07 Eliza Van de Sande
Simulating the potential effects of cocoa-related deforestation on species connectivity in a West African biodiversity hotspot

P08 Rafael António
Effects of land use change on soils from Guinea-Bissau

P10 Miguel Brilhante
African wild beans as a source of nutritional and bioactive compounds

P11 Carla Tavares
Characterization of the invasive pest fall armyworm, Spodoptera frugiperda Smith (Lepidotera, Noctuidae), populations in Cape Verde

P12 Adriana Padilha
Communities of pollinating arthropods in the agroecosystems of São Tomé

S11: Biodiversity, biotic interactions and functioning

P01 Charuta Murkute
Water and carbon fluxes induced by seasonal variations of microclimatological conditions using eddy-covariance measurements over a tropical mountain dry forest ecosystem in South Ecuador

P02 Kim Lea Holzmann #
From large mammals to small dung beetles: Diversity & abundance along a forest elevational gradient in Peru

P03 Pablo Aycart Lazo
Detecting functional rarity in a hyperdiverse Amazonian dung beetle assemblage

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POSTER PRESENTATIONS

P04 Pedro Alonso-Alonso
From Andes to Amazonia: Abundance of bees along a tropical forest elevational gradient

S14: Tropical Forest management under climate change

P01 Bianca Nunes dos Reis
Forest regeneration in a chronosequence of restored areas in the Atlantic Forest of Rio de Janeiro, Brazil

P02 Madalena Matias
People, Rice and Mangroves in coastal Guinea-Bissau: modelling sea level rise and its potential effects

P03 Berihu Kahsay
Forest regeneration in a chronosequence of restored areas in the Atlantic Forest of Rio de Janeiro, Brazil

P04 Juan David González-Trujillo
Protected areas are more exposed to extreme weather than unprotected areas across Central America

S15: Ecosystem services of tropical wetlands

P01 Flavia Machado Durgante
Drought affects tree growth in two species (Nectandra amazonum and Hydrochorea corymbosa) in Central Amazonian Floodplain Forests

P02 Chung Hoai Nguyen
Late Holocene riparian vegetation dynamics, environmental changes, and anthropogenic impact in the Harapan forest of Sumatra, Indonesia

P03 Djeuni Romuald Duplex
Floristic diversity and carbon stock of cocoa-based agroforestry systems in the Littoral department Cameroon

S16: Tropical Molecular Ecology

P01 Camille Steux
A demographic model of structured populations for common chimpanzees (Pan troglodytes) to infer past changes in connectivity

P02 Ninda L. Baptista
Filling gaps in tropical Africa: the fascinating diversity of Angolan frogs

S17: Current trends in tropical African plant ecology

P01 Víctor Fernández-García
Recent fire history and plant diversity in Madagascar Central Highlands

P02 Domingos Francisco
Forest cover dynamics in Angolan protected areas between 2001-2022

P03 Tewachew Worku Kegne
Tree species diversity as a function of environmental conditions in potential seed collection areas in Amhara Region, Ethiopia

P04 Claudete Bastos
Wild edible plants in Angola: diversity, uses and properties, and socio-economic potential

P05 Vanezia Rocha
Thriving in dry tropical ecosystems: species functional adaptation

P06 Fátima José Inácio da Costa #
Mangrove restoration in Africa: case of success stories of the Western Indian Ocean

S20: Understory shrubs: adapting amidst change

P01 Thomas Nicole
Monitoring plant-animal interactions with camera trap: Heliconia model in Martinique

S21: Ecological and social dimensions of hydropower

P01 Isabel Jones
"Power Up!" A mobile phone videogame collecting big data on sustainable development decision-making: Insights from COP26

P02 Norbert Tchamadeu Ngameni
Benthic macroinvertebrates as bioindicators of water quality in view of the construction of a hydropower dam on the Dibombe River in Cameroon

Eligible candidates for the Merian Award are marked with an #

EXCURSIONS

FRIDAY, 16TH

Discovering the Tagus estuary north-eastern shores and its birds

Embark on a journey through the untamed beauty of the Tagus Estuary, where nature's spectacle unfolds in every direction. Traverse the winding paths that lead through a mosaic of habitats, each teeming with life and possibility. As you wander through the cork oak woodlands, breathe in the earthy scent of the forest and listen to the rustle of leaves overhead. Marvel at the intricate network of life that thrives beneath the canopy, from delicate wildflowers to elusive woodland creatures.

With the dawn chorus as your soundtrack, immerse yourself in the tranquil ambiance of the EVOA lagoons. Located in the heart the most important wetland of Portugal, the Tagus Estuary Natural Reserve, EVOA Tagus Estuary Birdwatching and Conservation Area, allows the visitors to know and enjoy the unique heritage that we have between the Lezíra and the Tagus Estuary. Here, the still waters mirror the vast expanse of the sky, creating a sense of boundless serenity. Keep your binoculars handy as you scan the horizon for the graceful silhouettes of herons, egrets, and other waterfowl.

Led by expert guides, delve into the secrets of this remarkable wetland ecosystem. Learn about the importance of the Tagus Estuary as a vital stopover for migratory birds, a crucial link in their epic journeys across continents.

Facilitated by Companhia das Lezírias Portugal's grandest agroforestry domain, a mere 40-minute escape from the vibrant heart of Lisbon, the visit will include:

- Birdwatching and interpretation of the landscape (12.5 km), passage through rice paddies, Alcamé church and Leziria's pastures;
- Visiting the interpretation Center; guided tour at EVOA's lagoons, nestled within the Tagus Nature Reserve; “Ponta d’erva ” view of the Tagus Estuary;
- Visit to the Stud Farm of Companhia das Lezírias (Lusitano Pure Blood Horse);
- Stop at the cork oak " montado ": Cork production in Portugal and at Companhia das Lezírias , ongoing research projects and other forestry activities;
- Visit to the Cellar, vineyard, and olive grove of Herdade de Catapereiro

EXCURSIONS

FRIDAY, 16TH

From birdwatching in Lagoa Pequena to Arrábida´s mediterranean gem

A captivating journey that takes you from the tranquil shores of Lagoa Pequena to the rugged beauty of Arrábida's Mediterranean gem. This comprehensive tour promises a wealth of unforgettable experiences, each one revealing the rich natural and cultural heritage of this enchanting region.

Begin your adventure with a leisurely session of birdwatching at Lagoa Pequena, a haven for a diverse array of avian species. Let the soothing melodies of birdcalls serenade you as you observe graceful waterfowl gliding across the shimmering surface of the lagoon. Follow interconnected boardwalks that lead to secluded bird observatories, offering unparalleled vantage points for closer encounters with feathered inhabitants. Marvel at the intricate dance of life unfolding before your eyes, from elegant herons to vibrant kingfishers.

Next, venture to the dramatic cliffs of Cape Espichel, where the rugged coastline meets the endless expanse of the Atlantic Ocean. Stand in awe at the sheer majesty of nature's power, as waves crash against weathered rock formations, leaving behind a salty mist that hangs in the air.

Continue your exploration with a visit to the historic Sesimbra castle, perched proudly atop a hill overlooking the picturesque town below. Delve into centuries of history as you wander through ancient stone corridors and soak in panoramic views of the surrounding landscape.

Finally, immerse yourself in the pristine beauty of the Arrábida mountain range, a sanctuary for Portugal's most pristine Mediterranean forest. Lose yourself in a labyrinth of lush greenery, where sunlight filters through the canopy to illuminate a world teeming with life.

Throughout your journey, take solace in the knowledge that the areas visited are carefully protected, ensuring the preservation of their natural splendor for generations to come. Let this immersive experience be a testament to the enduring beauty and resilience of Portugal's remarkable ecosystems.

MERIAN AWARD

In 2001 the gtoe established the Merian Awards for the best contributions given by young scientists during the annual meeting. There are six Merian Awards annually, three for the best oral contributions and three for the best posters. ECOTROPICA highlights these contributions by publishing the abstracts.

The gtoe has selected Maria Sibylla Merian as the patron of the Merian Prize to commemorate her unique work as an outstanding artist and as the first female tropical naturalist who actually travelled to the tropics in order to study their fascinating diversity, in particular insects. Maria Sibylla Merian was born in 1647 in Frankfurt/Main as the daughter of the engraver, etcher, and book dealer Matthäus Merian. She died in 1717 in Amsterdam, Netherlands. Sibylla Merian's most remarkable contributions included a book on the fauna and flora of Surinam: "Metamorphosis insectorum Surinamensium", which brought her international fame even during her lifetime. She was the first scientist who recognized, and documented in her artistic work, that insects go through various developmental stages. This is particularly remarkable as the general public in her time still believed that, for instance, mosquitoes and caterpillars were generated in mud by the devil.

Eligible candidates are students and PhDs who are members of the gtö and finished their dissertation less than three years ago.