



Society for Tropical Ecology



# 8<sup>th</sup> European Conference of Tropical Ecology *“Time for tropical ecology”* in Amsterdam

Date: 24<sup>th</sup> – 28<sup>th</sup> February 2025

Venue: Hotel Casa, Eerste Ringdijkstraat 4, 1097 BC, Amsterdam

Organized by:



Institute for Biodiversity  
and Ecosystem Dynamics

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## 8<sup>th</sup> European Conference of Tropical Ecology *“Time for tropical ecology”* in Amsterdam

### Scientific Program

#### Keynote speakers

Six keynote speakers have been invited to highlight recent exciting scientific advances within important themes in tropical ecology. The keynotes will be delivered in the combined auditorium.

**Tuesday 25<sup>th</sup> February, 09:00-10:30 – Room: UVA 1-4**



**Jose Iriarte** Department of Archaeology, University of Exeter, UK

#### **The painted forest in the deep past**

This presentation summarises interdisciplinary, multi-proxy case studies in reconstructing past Amazonian landscapes, emphasising Amazonian anthrosols' polyculture agroforestry systems. These ancient, intensive agroecosystems show how, through soil fertilisation, closed-canopy forest enrichment, limited clearing for crop cultivation and low-severity fire management, the forest was largely preserved while providing long-term food security and nutritional diversity. The comparison of fossil and modern records shows how these millennial-scale polyculture agroforestry systems have an enduring legacy on the modern composition of the forest, including legacy stands of edible plants such as palms and Brazil nut trees. These data challenge scenarios suggesting widespread deforestation of the Amazon during pre-Columbian times. These systems demonstrate successful, sustainable subsistence strategies and underscore a rich cultural and ecological heritage with significant implications for sustainable futures in the Amazon. They serve as a reminder of the region's immense biodiversity, vividly painted on the walls of Serranía de la Lindosa in the Colombian Amazon.

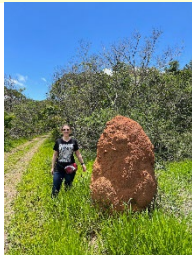


**Nina Witteveen** Institute for Biodiversity & Ecosystem Dynamics, University of Amsterdam, The Netherlands; Forest Ecology & Forest Management Group, Wageningen University, The Netherlands

#### **Long-term forest recovery in Suriname**

The role of Indigenous and local communities in protecting Amazonia's biodiversity is increasingly recognized, but their historical impact on tropical forests remains understudied. Can we learn from past civilizations about sustainable forest management? This study travels back in time to Suriname, one of the most forested countries in the world, to examine how Indigenous and Afro-descendant communities have shaped rainforests over the last millennia. Using charcoal and phytoliths (silica microfossils), we reconstructed the vegetation and fire history of tropical forests near archaeological sites and detected various past human activities. Findings reveal the lasting ecological impact of historical Indigenous and Maroon peoples on modern Surinamese forests, through fire usage and palm enrichment. In particular, disturbance intensity and frequency seem important drivers of long-term forest recovery in the tropics.

**Wednesday 26<sup>th</sup>, 09:00-10:30 – Room: UVA 1-4**



**Emma Sayer** Institute of Botany, Ulm University, Germany; Lancaster Environment Centre, Lancaster University, UK; Smithsonian Tropical Research Institute, Panama

**Tropical forest productivity, element cycling and greenhouse gasses: What we've learned from a 20-year large-scale experiment**

It's surprising what we can learn by studying dead leaves: leaf litter is a vital source of nutrients for plant growth, and the high productivity of tropical forests on infertile soils is attributed to efficient cycling of nutrients via litterfall. Leaf litter also makes a major contribution to soil carbon storage and influences numerous other important ecosystem processes. In 2003, we began the Gigante Litter Manipulation Project – a large-scale experiment to test whether nutrient cycling via litterfall maintains tropical tree growth. 20 years of continuous monthly litter removal and litter addition treatments to large-scale forest plots have given us important insights into the role of leaf litter in forest productivity, nutrient cycling, and carbon storage. We have also learned some surprising things about the forest greenhouse gas balance along the way. I will present some of the advances afforded by this unique long-term experiment and highlight emerging knowledge gaps about tropical forest carbon and nutrient dynamics.



**Nokubonga Mgqatsa** Department of Zoology & Entomology, Rhodes University, South Africa

**Ecological interactions from an African perspective**

Africa supports the highest diversity of ungulates and functional carnivore guilds compared to any other continent. Large African mammals interact in a complex and powerful fashion (i.e. how herbivores structure plant communities and how predator densities are correlated with prey densities). Drawing on research conducted across South African ecosystems, I will explore how these interactions not only shape local environments but also impact biodiversity at multiple scales. My talk will highlight the importance of looking beyond direct interactions, such as those between herbivores and plants or predator and prey, to understand broader ecological networks, including interactions among herbivore species. Ideally, I aim to show how African ecosystems, particularly those in South Africa offer valuable insights into ecosystem functioning and contribute to the development of conservation strategies that reflect the complexity of these systems.

**Thursday 27<sup>th</sup>, 14:00-15:30 – Room: UVA 1-4**



**Gonzalo Rivas Torres** College of Biological & Environmental Sciences, Universidad San Francisco de Quito, Ecuador; Tiputini Biodiversity Station, Ecuador

**Utilizing drones and advanced technologies for mapping and protecting tropical ecosystems: The Ecuadorian model**

To achieve effective conservation at the necessary pace to protect tropical ecosystems, which are currently under significant threat, technological tools are essential. Among these tools are drones, or unmanned aerial vehicles (UAVs). Due to their ability to carry various sensors and collect substantial



amounts of data from remote tropical regions, drones have become vital allies in the conservation of these ecosystems. In this presentation, Gonzalo Rivas-Torres will discuss the results and experiences from his work with drones in the Galápagos and northwestern Amazon, demonstrating how this technological tool is transforming research and conservation efforts in these critically important ecosystems.



**Joeri Zwerts** Department of Biology, Utrecht University, The Netherlands

**Protecting elephants in the hardware store**

Growing global human population and prosperity will require progressively more resources in the decades to come, further pressuring biodiversity. Simultaneously, international pledges and legislation for nature conservation are becoming increasingly ambitious. This raises the question: how can we address the challenge of combining growing resource needs with nature conservation? During this keynote I will dive into the case of tropical timber. More than a quarter of the world's, hyper-biodiverse, tropical forests are exploited for tropical hardwoods. Logging impacts biodiversity in these ecosystems, primarily through the creation of forest roads that facilitate hunting for wildlife over extensive areas. Forest management certification schemes such as the Forest Stewardship Council (FSC) are expected to mitigate impacts on biodiversity, but very little robust evidence is available about the effectiveness of FSC certification because of research design challenges, predominantly limited sample sizes. How can we determine if investing in FSC is worth the investment, and why is it crucial to quantify impacts? In my presentation, I will share the findings of an ambitious research project that explores these questions and takes you through the process of obtaining the results.

**Overview of thematic topics and session**

To help navigate the program sessions have been grouped into thematic topics and colour coded:

|  |  |
|--|--|
|  | <b>TOPIC 1: Freshwater and marine ecosystems</b> |
|  | <b>TOPIC 2: Human-environment interactions</b>   |
|  | <b>TOPIC 3: Monitoring and modelling</b>         |
|  | <b>TOPIC 4: Patterns and processes</b>           |
|  | <b>TOPIC 5: Restoration and conservation</b>     |
|  | <b>TOPIC 6: Spatial and temporal scales</b>      |
|  | <b>TOPIC 7: General ecology</b>                  |

Each thematic topic has a number of more focused sessions within it. **Thematic topics are distributed across the three days of the conference, but all activities for each session will take place on the same day.** A session will comprise one or two oral sessions and may, or may not, include a poster session. Poster sessions will all be held 10:30-11:30 each morning in the Erasmus room, and will have tea and coffee available to fuel discussions. For the parallel oral sessions, the combined auditorium (UVA 1-4) will be split into three parts (UVA 4, UVA 3, and UVA 1-2). The parallel oral sessions will therefore run in three rooms directly adjacent to one another.



|   | Date and time  | Room                          |
|---|--|-------------------------------|
| <b>TOPIC 1: Freshwater and marine ecosystems</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 1: <b>Ecological dynamics and their impacts on tropical aquatic ecosystems</b></li> </ul>                                  | Tuesday 25 <sup>th</sup><br>Oral 11:30-13:00                                     | UVA 4                         |
| <ul style="list-style-type: none"> <li>Session 2: <b>Marine and freshwater tropical ecosystems</b></li> </ul>   | Tuesday 25 <sup>th</sup><br>Oral 14:00-15:30                                     | UVA 4                         |
| <b>TOPIC 2: Human-environment interactions</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 3: <b>Connecting the world's dry topical forests: A platform for understanding their socio-ecology</b></li> </ul>          | Wednesday 26 <sup>th</sup><br>Oral 11:30-13:00                                   | UVA 4                         |
| <ul style="list-style-type: none"> <li>Session 4: <b>Human-wildlife coexistence</b></li> </ul>  | Wednesday 26 <sup>th</sup><br>Oral 16:00-17:30<br>Poster B                       | UVA 4<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 5: <b>Sustainability in the tropics</b></li> </ul>   | Thursday 27 <sup>th</sup><br>Oral 09:00-10:30<br>Poster C                        | UVA 4<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 6: <b>The anthropic tropics</b></li> </ul>   | Tuesday 25 <sup>th</sup><br>Oral 11:30-13:00<br>Poster A                         | UVA 3<br>Erasmus              |
| <b>TOPIC 3: Monitoring and modelling</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 7: <b>Leveraging living collections and biodiversity data</b></li> </ul>   | Tuesday 25 <sup>th</sup><br>Oral 16:00-17:30<br>Poster A                         | UVA 4<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 8: <b>Mathematical and statistical models to predict and protect tropical species and ecosystems: A new era</b></li> </ul> | Thursday 27 <sup>th</sup><br>Oral 11:30-13:00<br>Poster C                        | UVA 3<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 9: <b>Monitoring wildlife populations in tropical forests</b></li> </ul>   | Wednesday 26 <sup>th</sup><br>Oral 14:00-15:30<br>Poster B                       | UVA 4<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 10: <b>Tropical vegetation dynamics</b></li> </ul>   | Wednesday 26 <sup>th</sup><br>Oral 16:00-17:30                                   | UVA 3                         |
| <b>TOPIC 4: Patterns and processes</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 12: <b>Mutualisms in the (changing) tropics</b></li> </ul>   | Tuesday 25 <sup>th</sup><br>Oral 16:00-17:30<br>Poster A                         | UVA 1-2<br>Erasmus            |
| <ul style="list-style-type: none"> <li>Session 13: <b>Tropical ecosystem recovery: Reassembly of species diversity, communities, and interactions</b></li> </ul>          | Wednesday 26 <sup>th</sup><br>Oral 11:30-13:00<br>Poster B                       | UVA 3<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 14: <b>Tropical ecosystem functionality</b></li> </ul>   | Tuesday 25 <sup>th</sup><br>Oral 1 11:30-13:00<br>Oral 2 14:00-15:30<br>Poster A | UVA 1-2<br>UVA 1-2<br>Erasmus |
| <ul style="list-style-type: none"> <li>Session 15: <b>Tropical molecular ecology</b></li> </ul>   | Thursday 27 <sup>th</sup><br>Oral 09:00-10:30<br>Poster C                        | UVA 3<br>Erasmus              |
| <b>TOPIC 5: Restoration and conservation</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 16: <b>Climate change impacts on tropical ecosystems</b></li> </ul>  | Wednesday 26 <sup>th</sup><br>Oral 16:00-17:30<br>Poster B                       | UVA 1-2<br>Erasmus            |



|  |  |                               |
|--|--|-------------------------------|
| <ul style="list-style-type: none"> <li>Session 17: <b>Drivers of recovery in restored tropical forests</b></li> </ul>                                  | Wednesday 26 <sup>th</sup><br>Oral 14:00-15:30<br>Poster B                         | UVA 3<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 18: <b>Ecosystem resilience to altered fire regimes</b></li> </ul>                                      | Tuesday 25 <sup>th</sup><br>Oral 14:00-15:30<br>Poster A                           | UVA 3<br>Erasmus              |
| <ul style="list-style-type: none"> <li>Session 19: <b>Succession and restoration of tropical forests</b></li> </ul>                                    | Thursday 27 <sup>th</sup><br>Oral 1 09:00-10:30<br>Oral 2 11:30-13:00<br>Poster C  | UVA 1-2<br>UVA 1-2<br>Erasmus |
| <b>TOPIC 6: Spatial and temporal scales</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 21: <b>Tropical island ecology: An integrative approach to bridging the past and present</b></li> </ul> | Tuesday 25 <sup>th</sup><br>Oral 16:00-17:30                                       | UVA 3                         |
| <ul style="list-style-type: none"> <li>Session 22: <b>Tropical biogeography and palaeoecology</b></li> </ul>   | Wednesday 26 <sup>th</sup><br>Oral 1 11:30-13:00<br>Oral 2 14:00-15:30<br>Poster B | UVA 1-2<br>UVA 1-2<br>Erasmus |
| <b>TOPIC 7: General ecology</b>  |  |                               |
| <ul style="list-style-type: none"> <li>Session 23: <b>Open session</b></li> </ul>  | Thursday 27 <sup>th</sup><br>Oral 11:30-13:00<br>Poster C                          | UVA 4<br>Erasmus              |

## Overview of poster sessions

| Poster session A   | Tuesday 25 <sup>th</sup> , 10:30-11:30 – Room: Erasmus   | Poster # |
|--|--|----------|
| <ul style="list-style-type: none"> <li>Session 6: <b>The anthropic tropics</b></li> </ul>  |  | 1-9      |
| <ul style="list-style-type: none"> <li>Session 7: <b>Leveraging living collections and biodiversity data</b></li> </ul>  |  | 10-11    |
| <ul style="list-style-type: none"> <li>Session 12: <b>Mutualisms in the (changing) tropics</b></li> </ul>  |  | 12-15    |
| <ul style="list-style-type: none"> <li>Session 14: <b>Tropical ecosystem functionality</b></li> </ul>  |  | 16-22    |
| <ul style="list-style-type: none"> <li>Session 18: <b>Ecosystem resilience to altered fire regimes</b></li> </ul>  |  | 23-24    |
| Poster session B   | Wednesday 26 <sup>th</sup> , 10:30-11:30 – Room: Erasmus |          |
| <ul style="list-style-type: none"> <li>Session 4: <b>Human-wildlife coexistence</b></li> </ul>   |  | 25-26    |
| <ul style="list-style-type: none"> <li>Session 9: <b>Monitoring wildlife populations in tropical forests</b></li> </ul>  |  | 27-28    |
| <ul style="list-style-type: none"> <li>Session 13: <b>Tropical ecosystem recovery</b></li> </ul>   |  | 29-32    |
| <ul style="list-style-type: none"> <li>Session 16: <b>Climate change impacts on tropical ecosystems</b></li> </ul>   |  | 33-36    |
| <ul style="list-style-type: none"> <li>Session 17: <b>Drivers of recovery in restored tropical forests</b></li> </ul>  |  | 37-40    |
| <ul style="list-style-type: none"> <li>Session 22: <b>Tropical biogeography and palaeoecology</b></li> </ul>   |  | 41-46    |
| Poster session C   | Thursday 27 <sup>th</sup> , 10:30-11:30 – Room: Erasmus  |          |
| <ul style="list-style-type: none"> <li>Session 5: <b>Sustainability in the tropics</b></li> </ul>  |  | 47       |
| <ul style="list-style-type: none"> <li>Session 8: <b>Mathematical and statistical models to predict and protect tropical species and ecosystems</b></li> </ul> |  | 48-50    |
| <ul style="list-style-type: none"> <li>Session 15: <b>Tropical molecular ecology</b></li> </ul>  |  | 51-52    |
| <ul style="list-style-type: none"> <li>Session 19: <b>Succession and restoration of tropical forests</b></li> </ul>  |  | 53-56    |
| <ul style="list-style-type: none"> <li>Session 23: <b>Open session</b></li> </ul>  |  | 57-69    |



## Conference timetable

| Time      | Monday 24th                   | Tuesday 25th                     | Wednesday 26th                                      | Thursday 27th                          | Friday 28th              |
|-----------|-------------------------------|----------------------------------|---|--|--------------------------|
| 08:30     |                               | Registration*                    | Registration  | Registration                           |                          |
| 09:00     |                               | Keynote 1: <b>Jose Iriarte</b>   | Keynote 3: <b>Emma Sayer</b>                        | Session 5                              | Session 19.1             |
| 09:30     |                               | Keynote 2: <b>Nina Witteveen</b> | Keynote 4: <b>Nokubonga Mngqatsa</b>                | Session 15                             | Session 19.1             |
| 10:00     |                               |                                  |   |  |                          |
| 10:30     |                               | Posters A (with tea / coffee)    | Posters B (with tea / coffee)                       | Posters C (with tea / coffee)          |                          |
| 11:00     |                               |                                  |   |  |                          |
| 11:30     |                               | Session 1                        | Session 3   | Session 23                             | Session 19.2             |
| 12:00     |                               | Session 6                        | Session 14.1  | Session 22.1                           |                          |
| 12:30     |                               | Lunch Break                      | Lunch Break   | Lunch Break                            |                          |
| 13:00     |                               |                                  |   |  |                          |
| 13:30     |                               | Session 2                        | Session 9   | Keynote 5: <b>Gonzalo Rivas Torres</b> |                          |
| 14:00     |                               | Session 18                       | Session 17  | Keynote 6: <b>Joeri Zwerfs</b>         |                          |
| 14:30     |                               | Tea / coffee break               | Tea / coffee break                                  | Tea / coffee break                     |                          |
| 15:00     |                               | Session 7                        | Session 4   | Closing ceremony                       |                          |
| 15:30     |                               | Session 21                       | Session 10  |  |                          |
| 16:00     |                               | Group photograph                 |   |  |                          |
| 16:30     | Welcome drinks & registration | GTOE Annual meeting              | Conference dinner (House of Watt - ticket required) |  |                          |
| 17:00     |                               |                                  |   |  |                          |
| 17:30     |                               |                                  |   |  |                          |
| 18:00     |                               |                                  |   |  |                          |
| 18:30     |                               |                                  |   |  |                          |
| ....21:00 |                               |                                  |   |  | Excursions and workshops |

\* Registration will open at 08:15 on Tuesday 25<sup>th</sup>.

Room UVA 1-4: Keynotes, Closing ceremony.

Room Erasmus: Posters, Lunch, Tea / coffee breaks.

Room UVA 4: Oral sessions listed in the left hand column each day.

Room UVA 3: Oral sessions listed in the central column each day.

Room UVA 1-2: Oral sessions listed in the right hand column each day. GTOE Annual meeting.



## Daily timetable

### Tuesday 25<sup>th</sup> February

| Time          |   | Location  |
|---------------|---|-----------|
| 08:15 - 09:00 | <b>Registration desk open</b>   | -         |
| 09:00 - 09:10 | Conference information and notices  | UVA 1 - 4 |
| 09:10 - 09:50 | KEYNOTE 1: <b>Jose Iriarte</b> (University of Exeter)<br><i>"The painted forest in the deep past"</i>                               |           |
| 09:50 - 10:30 | KEYNOTE 2: <b>Nina Witteveen</b> (University of Amsterdam; Wageningen University)<br><i>"Long-term forest recovery in Suriname"</i> |           |
| 10:30 - 11:30 | <b>Poster session A</b> (with tea / coffee)   | Erasmus   |
| 11:30 - 13:00 | <b>Parallel sessions</b>  |           |
| •             | • Session 1: <b>Ecological dynamics and their impacts on tropical aquatic ecosystems</b>  | UVA 4     |
| •             | • Session 6: <b>The anthropic tropics</b>   | UVA 3     |
| •             | • Session 14.1: <b>Tropical ecosystem functionality</b>   | UVA 1-2   |
| 13:00 - 14:00 | <b>Lunch break</b>  | Erasmus   |
| 14:00 - 15:30 | <b>Parallel sessions</b>  |           |
| •             | • Session 2: <b>Marine and freshwater tropical ecosystems</b>   | UVA 4     |
| •             | • Session 18: <b>Ecosystem resilience to altered fire regimes</b>   | UVA 3     |
| •             | • Session 14.2: <b>Tropical ecosystem functionality</b>   | UVA 1-2   |
| 15:30 - 16:00 | <b>Tea / coffee break</b>   | Erasmus   |
| 16:00 - 17:30 | <b>Parallel sessions</b>  |           |
| •             | • Session 7: <b>Leveraging living collections and biodiversity data</b>   | UVA 4     |
| •             | • Session 21: <b>Tropical island ecology</b>  | UVA 3     |
| •             | • Session 12: <b>Mutualisms in the (changing) tropics</b>   | UVA 1-2   |
| 17:30 - 18:00 | <b>Group photograph</b>   | -         |
| 18:00 - 19:00 | <b>GTOE Annual meeting</b>  | UVA 1-2   |





## Daily timetable

### Wednesday 26<sup>th</sup> February

| Time          |   | Location |
|---------------|---|----------|
| 08:30 - 09:00 | <b>Registration desk open</b>   | -        |
| 09:00 - 09:10 | Conference information and notices  | UVA 1-4  |
| 09:10 - 09:50 | KEYNOTE 3: <b>Emma Sayer</b> (University of Ulm; Lancaster University; Smithsonian Tropical Research Institute)<br><i>“Tropical forest productivity, element cycling and greenhouse gasses”</i> |          |
| 09:50 - 10:30 | KEYNOTE 4: <b>Nokubonga Mggatsa</b> (Rhodes University)<br><i>“Ecological interactions from an African perspective”</i>   |          |
| 10:30 - 11:30 | <b>Poster session B</b> (with tea / coffee)   | Erasmus  |
| 11:30 - 13:00 | <b>Parallel sessions</b>  |          |
| •             | • <b>Session 3: Connecting the world’s dry tropical forests</b>   | UVA 4    |
| •             | • <b>Session 13: Tropical ecosystem recovery</b>  | UVA 3    |
| •             | • <b>Session 22.1: Tropical biogeography and palaeoecology</b>  | UVA 1-2  |
| 13:00 - 14:00 | <b>Lunch break</b>  | Erasmus  |
| 14:00 - 15:30 | <b>Parallel sessions</b>  |          |
| •             | • <b>Session 9: Monitoring wildlife populations in tropical forests</b>   | UVA 4    |
| •             | • <b>Session 17: Drivers of recovery in restored tropical forests</b>   | UVA 3    |
| •             | • <b>Session 22.2: Tropical biogeography and palaeoecology</b>  | UVA 1-2  |
| 15:30 - 16:00 | <b>Tea / coffee break</b>   | Erasmus  |
| 16:00 - 17:30 | <b>Parallel sessions</b>  |          |
| •             | • <b>Session 4: Human-wildlife coexistence</b>  | UVA 4    |
| •             | • <b>Session 10: Tropical vegetation dynamics</b>   | UVA 3    |
| •             | • <b>Session 16: Climate change impacts on tropical ecosystems</b>  | UVA 1-2  |
| 18:00 - 21:00 | <b>Conference dinner (House of Watt – ticket required)</b>  | -        |



## Daily timetable

### Thursday 27<sup>th</sup> February

| Time          |   | Location |
|---------------|---|----------|
| 08:30 - 09:00 | <b>Registration desk open</b>   | -        |
| 09:00 - 10:30 | <b>Parallel sessions</b>  |          |
| •             | • <b>Session 5: Sustainability in the tropics</b>   | UVA 4    |
| •             | • <b>Session 15: Tropical molecular ecology</b>   | UVA 3    |
| •             | • <b>Session 19.1: Succession and restoration of tropical forests</b>   | UVA 1-2  |
| 10:30 - 11:30 | <b>Poster session C</b> (with tea / coffee)   | Erasmus  |
| 11:30 - 13:00 | <b>Parallel sessions</b>  |          |
| •             | • <b>Session 23: Open session</b>   | UVA 4    |
| •             | • <b>Session 8: Mathematical and statistical models to predict and protect tropical species and ecosystems</b>  | UVA 3    |
| •             | • <b>Session 19.2: Succession and restoration of tropical forests</b>   | UVA 1-2  |
| 13:00 - 14:00 | <b>Lunch break</b>  | Erasmus  |
| 14:00 - 14:10 | Conference information and notices  | UVA 1-4  |
| 14:10 - 14:50 | KEYNOTE 5: <b>Gonzalo Rivas Torres</b> (Universidad San Francisco de Quito; Tiputini Biodiversity Station)<br><i>"Mapping and protecting tropical ecosystems"</i> |          |
| 14:50 - 15:30 | KEYNOTE 6: <b>Joeri Zwerts</b> (Utrecht University)<br><i>"Protecting elephants in the hardware store"</i>  |          |
| 15:30 - 16:00 | <b>Tea / coffee break</b>   | Erasmus  |
| 16:00 - 17:00 | <b>Closing ceremony</b>   | UVA 1-4  |



## Session guide

### TOPIC 1: Freshwater and marine ecosystems

#### Session 1

Title: **Ecological dynamics and their impacts on tropical aquatic ecosystems**

Conveners: Nadia Raytselis<sup>1</sup>, Naima Starkloff<sup>2</sup>, Ben Lukubye<sup>1</sup>

Affiliations: 1 = Emory University, USA, 2 = University of Amsterdam, Netherlands

**Oral session (Tuesday 25<sup>th</sup> February, 11:30-13:00 – Room: UVA 4)**

| # | Title   | Presenting author     |
|---|---|-----------------------|
| 1 | Flood pulses and fish species coexistence in tropical rivers  | Peter van der Sleen   |
| 2 | Seasonal snail slumber & schistosomiasis: Prolonged vector dormancy disrupts transmission of neglected tropical disease | Naima Starkloff       |
| 3 | Dwelling morphology influences diet composition of coral-dwelling gall crabs  | Jorn Claassen         |
| 4 | Regional-scale disturbances drive long-term decline of reef fish abundance  | Juliana Mello Fonseca |
| 5 | Palaeoenvironmental reconstruction of coastal French Guiana during the Late Pleistocene: A multi-proxy approach         | Stéphanie Bodin       |
| 6 | Miocene mangroves in the Amazon, more diverse than modern counterparts along the Neotropical coastline?                 | Carina Hoorn          |

#### Session 2

Title: **Marine and freshwater tropical ecosystems**

Convener: Sancia van der Meij

Affiliation: University of Groningen, Netherlands

**Oral session (Tuesday 25<sup>th</sup> February, 14:00-15:30 – Room: UVA 4)**

| # | Title  | Presenting author          |
|---|--|----------------------------|
| 1 | Monitoring a critically endangered species: Is the White-bellied Heron ( <i>Ardea insignis</i> ) declining in Namdapha Tiger Reserve, India? | Rohan K. Menzies           |
| 2 | Ecological uncertainty from drying water sources: Reviving springs for biodiversity and water security in the Himalayas                      | Ghanashyam Sharma          |
| 3 | Understanding the relative importance of environmental and anthropogenic drivers on Eastern Himalayan river bird communities                 | Rohan K. Menzies           |
| 4 | Priority areas for conservation and restoration of Amazonian forest-fruit-eating fish interactions   | Amanda Cantarute Rodrigues |
| 5 | Using local ecological knowledge to estimate past abundances of fish and waterfowl species in Lake Titicaca                                  | Daniel Villar              |
| 6 | Drivers of intraspecific niche variation in the South American darter <i>Characidium schubarti</i> (Crenuchidae)                             | Marcio Araujo              |



## TOPIC 2: Human-environment interactions

### Session 3

Title: **Connecting the world's dry tropical forests: A platform for understanding their socio-ecology**

Conveners: Natasha Sofia Ribeiro<sup>1,2</sup>, Ana I. Ribeiro-Barros<sup>2</sup>, Joao Neves Silva<sup>2</sup>, Oswaldo Maillard<sup>3</sup>

Affiliations: 1 = Eduardo Mondlane University, Mozambique, 2 = University of Lisbon, Portugal, 3 = Fundación para la Conservación del Bosque Chiquitano (FCBC), Bolivia

**Oral session (Wednesday 26<sup>th</sup> February, 11:30-13:00 – Room: UVA 4)**

| # | Title  | Presenting author          |
|---|--|----------------------------|
| 1 | The Socio-Ecological Observatory for Studying African Woodlands (SEOSAW): An African-led research partnership to understand the impacts of global change on savannas and woodlands | Natasha Ribero             |
| 2 | Intrahousehold dynamics in farmer-managed natural regeneration: Insights from Baringo County, Kenya  | Esther Waruingi            |
| 3 | Woody species diversity and aboveground carbon stock of Tara Gedam Church Forest, Ethiopia   | Zora Sabisch               |
| 4 | Rescuing tropical forest ecosystems: are coffee agroforestry systems a solution?   | Ana Ribeiro                |
| 5 | Effects of tree diversity on dead wood in a young subtropical forest   | Matteo Dadda               |
| 6 | Liana diversity and abundance in dry and moist tropical montane forests in Ecuador   | Alejandra Moscoso-Estrella |

### Session 4

Title: **Human-wildlife coexistence**

Conveners: Michiel P. Veldhuis

Affiliations: University of Leiden, Netherlands

**Oral session (Wednesday 26<sup>th</sup> February, 16:00-17:30 – Room: UVA 4)**

| # | Title  | Presenting author           |
|---|--|-----------------------------|
| 1 | Land-use change affects nature's contributions to people in the Kilimanjaro social-ecological system   | Andreas Martin Dominic      |
| 2 | Cultural and social features of nontimber forest products in southern African communities: A case study of <i>Schinziophyton rautanenii</i> in Zambia    | Lukáš Karas                 |
| 3 | Governance and management of community hunting   | Mangama Koumba Lilian Brice |
| 4 | Leaf-cutter ants in cacao agroforestry: Balancing pest control and exploring sustainable solutions   | Blanca Ivañez-Ballesteros   |
| 5 | Using multilayer networks to assess ecosystem service flow in a subsistence farming community in Papua New Guinea  | Anna Stanworth              |
| 6 | Restoring harmony: The decline of transhumant pastoralism and its effects on human-wildlife coexistence and ecosystem resilience in the eastern Himalaya | Ghanashyam Sharma           |



**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author   |
|-----|---|---------------------|
| P25 | What's on the menu? Apparency, palatability, and herbivory interactions in a human-dominated tiger landscape. | Matteo Sciumbata    |
| P26 | Garbage perusal, a foraging alternative for <i>Rhesus macaques</i>  | Sayli Suresh Sawant |

**Session 5**

Title: **Sustainability in the tropics**

Convener: Joeri Zwerts

Affiliations: Utrecht University, Netherlands

**Oral session (Thursday 27<sup>th</sup> February, 09:00-10:30 – Room: UVA 4)**

| # | Title   | Presenting author        |
|---|---|--------------------------|
| 1 | The potential of Sentinel-1 to monitor fine-scale natural and logging-related disturbance patterns and associated carbon emissions                  | Anne-Juul Welsink        |
| 2 | Food insecurity under global human-induced changes: Plants of the future in the Amazonian biome   | Vitor Hugo Freitas Gomes |
| 3 | Brazilian conservation policies fail to protect insect biodiversity   | Juliano Morimoto         |
| 4 | Socio-ecological management of multipurpose climate-resilient agroforestry for biodiversity conservation and food security in the Eastern Himalayas | Ghanashyam Sharma        |
| 5 | Smallholder farmers' knowledge on management of <i>Cinchona</i> in the Democratic Republic of the Congo   | Bezawit Mekonnen         |
| 6 | Landscape features shape multiple dimensions of the phyllostomid and aerial insectivorous bat assemblages in Amazonian cacao agroforests            | Pablo Aycart Lazo        |

**Poster session C (Thursday 27<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author |
|-----|---|-------------------|
| P47 | Agroforestry: A model for sustainable land use and biodiversity | Enoch Ataquaye    |

**Session 6:**

Title: **The anthropic tropics**

Conveners: Kate Dudgeon, Umberto Lombardo

Affiliations: Autonomous University of Barcelona, Spain

**Oral session (Tuesday 25<sup>th</sup> February, 11:30-13:00 – Room: UVA 3)**

| # | Title   | Presenting author |
|---|---|-------------------|
| 1 | Pre-Colombian landscape modifications in the Llanos de Moxos, Bolivia | Kate Dudgeon      |



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|---|--|-----------------|
| 2 | Integrative studies of earth-mound landscapes of natural and cultural origin show why ecology needs archaeology and vice versa | Doyle McKey     |
| 3 | Sensing Maya legacies in Central American forests  | Sara Eshleman   |
| 4 | Shea Parklands: Approaching the historical ecology of West African domesticated landscapes                                     | Alexa Höhn      |
| 5 | What to expect when you're expecting? Historical human presence without lasting effects on Amazonian rainforests               | Encarni Montoya |
| 6 | Multiphasic periods of occupation in an Andean biodiversity hotspot  | Mark Bush       |

#### Poster session A (Tuesday 25<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)

| #  | Title  | Presenting author             |
|----|--|-------------------------------|
| P1 | Soil organic matter provides insight in the building scenarios of raised fields in Central Africa.   | Daria Derbilova               |
| P2 | Early Holocene landscape modification in the Bolivian Amazon   | Umberto Lombardo              |
| P3 | Local- and regional-scale land use associated with the Casarabe Mound Culture of Amazonian Bolivia.  | Marco Raczka                  |
| P4 | Modelling maize agriculture by the pre-Columbian Casarabe culture of Amazonian Bolivia: An agent-based approach  | Joseph Hirst                  |
| P5 | Simulating impacts of climate variability on the pre-Columbian Casarabe Culture of Bolivia using palaeoclimate reanalysis and agent-based modelling            | Eme Dean-Lewis                |
| P6 | Multi-proxy palaeoecological analysis of vegetation dynamics and fire history using the Matematico core in southern Brazil                                     | Antonia Reinhardt             |
| P7 | Environmental dynamics of diatom assemblages of anthropogenic soils from the Mompos Depression (N Colombia)  | M <sup>a</sup> Carmen Trapote |
| P8 | Human legacy on a Belizean tropical forest   | Mark Robinson                 |
| P9 | New insights into pre-Columbian landscape disturbances in forested interfluvial regions of Amazonian lowlands: Examples from ring ditches of the Guiana Shield | Marc Testé                    |

## TOPIC 3: Monitoring and modelling

### Session 7

Title: **Leveraging living collections and biodiversity data**

Convener: Sven Focke

Affiliation: Hortus Botanicus Amsterdam, Netherlands

#### Oral session (Tuesday 25<sup>th</sup> February, 16:00-17:30 – Room: UVA 4)

| # | Title   | Presenting author    |
|---|---|----------------------|
| 1 | BIOWEB Ecuador: The biodiversity of a megadiverse country online          | Omar Torres-Carvajal |
| 2 | The power of living collections: Conservation and research at Kew Gardens | Arnau Ribera Tort    |



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|---|---|----------------------------|
| 3 | The Green Ark: A model for future proof conservation and visibility of living tropical plant collections. | Marc Reynders              |
| 4 | Citizen-science based ecological modelling: The case of intermediate host snails in west-Uganda           | Noelia Valderrama-Bhraunxs |
| 5 | How diet shapes digestion: Gland micromorphology of <i>Nepenthes</i> pitchers                             | Nina van den Ban           |
| 6 | Wetlands and global warming: What can we do as scientists?  | Pia Parolin                |

**Poster session A (Tuesday 25<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author |
|-----|--|-------------------|
| P10 | A renewed collection for the Climate House   | Sven Focke        |
| P11 | Filming 'Echoes of the Rainforest': Outreach and storytelling in Amazonian palaeoecology | Dael Sassoon      |

**Session 8**

Title: **Mathematical and statistical models to predict and protect tropical species and ecosystems: A new era**

Conveners: Juliano Morimoto<sup>1,2</sup>, Ran Levi<sup>1</sup>, Janis Lazovskis<sup>1</sup>

Affiliations: 1 = University of Aberdeen, UK, 2 = Federal University of Paraná, Brazil,

**Oral session (Thursday 27<sup>th</sup> February, 11:30-13:00 – Room: UVA 3)**

| # | Title   | Presenting author |
|---|---|-------------------|
| 1 | Understanding disease-driven density dependence and coexistence   | Marco Visser      |
| 2 | Non-destructive estimation of above-ground biomass for large tropical trees using terrestrial laser scanning data                                       | Anjela Mashera    |
| 3 | How much time until extinction? An agent-based model assessing the impact of logging on an endangered primate in the Ecuadorian Chocó                   | Malika Gottstein  |
| 4 | Beyond retroactive adjustment: A novel score-based approach for proactively mitigating confounding through optimised ecological sampling site selection | Thomas van Schaik |
| 5 | Projected impacts of climate change on ecosystem services provided by terrestrial mammals in Brazil   | Luara Tourinho    |
| 6 | Topological methods in computational ecology  | Jānis Lazovskis   |

**Poster session C (Thursday 27<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author |
|-----|--|-------------------|
| P48 | Allometric model and carbon sequestration rates in <i>Paulownia tomentosa</i> (Thumb.) plantations at ICIMOD's living mountain lab in central Himalaya | Nabin Raj Joshi   |
| P49 | Canopy laser scanning to study complex tropical trees and its biodiversity   | Barbara D'hont    |



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| P50 | Using AI to uncover “hidden” species interactions: Using incomplete data on tropical seed-dispersal networks underestimates robustness to extinctions | Kaare Sloth<br>Christophersen |
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### Session 9

Title: **Monitoring wildlife populations in tropical forests**

Conveners: Marijke van Kuijk, Yannick Wieggers, Julia Blok, Joeri Zwerts

Affiliations: Utrecht University, Netherlands

**Oral session (Wednesday 26<sup>th</sup> February, 14:00-15:30 – Room: UVA 4)**

| # | Title  | Presenting author     |
|---|--|-----------------------|
| 1 | Comparative analysis of vertebrate communities along a disturbance gradient in a Guianan forest                      | Raphaëlle Abensur     |
| 2 | Stressed-out primates? The interplay between habitat quality, diet, and stress in black lion tamarins                | Laurence Culot        |
| 3 | Lurking in the leaves: How native trees and leaf litter enrich amphibian diversity in Malagasy agroforests           | Lovaso<br>Rakotozafy  |
| 4 | Edge effects on the population density and distribution of two species of mouse lemurs in northwestern Madagascar.   | Shawn Lehman          |
| 5 | Assessing the role of forest fragments for bird communities using passive acoustic monitoring in northern Costa Rica | Thomas Hiller         |
| 6 | Addressing the Amazonian biodiversity knowledge deficit: The Amazon biodiversity and carbon expeditions              | Torbjørn<br>Haugaasen |

**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author  |
|-----|--|--------------------|
| P27 | A random encounter model for wildlife density estimation with vertically oriented camera traps       | Shuiqing He        |
| P28 | First direct evidence of terrestrial feeding in Central American fruit bats revealed by camera traps | Allegra DePasquale |

### Session 10

Title: **Tropical vegetation dynamics**


Convener: Emily Strange

Affiliations: Leiden University, Netherlands

**Oral session (Wednesday 26<sup>th</sup> February, 16:00-17:30 – Room: UVA 3)**

| # | Title   | Presenting author |
|---|---|-------------------|
| 1 | Rapid conservation assessment of the frankincense tree in Oman  | Frans Bongers     |
| 2 | Rainforest fragmentation decreases the stability of plant-frugivore interaction networks                              | David Becker      |
| 3 | Seed dispersal networks in regenerating forest fragments are influenced by surrounding forest cover, not fragment age | Robert Timmers    |





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|---|--|-------------------|
| 4 | Nature based solutions for tropical plant invasions  | Emily Strange     |
| 5 | Effect of elevated CO <sub>2</sub> and shade on the growth and photosynthesis of Black locust ( <i>Robinia pseudoacacia</i> ) and Honey locust ( <i>Gleditsia triacanthos</i> ). | Kaelin Du Plessis |
| 6 | Seedling germination, growth and non-structural carbon allocation patterns of invasive <i>Robinia pseudoacacia</i> and <i>Gleditsia triacanthos</i>                              | Tiffany Pillay    |

## TOPIC 4: Patterns and processes

### Session 12

Title: **Mutualisms in the (changing) tropics**

Conveners: Anna S. Görlich<sup>1</sup>, Boris A. Tinoco<sup>2</sup>, Bryan G. Rojas<sup>2</sup>, Ricardo Sánchez-Martín<sup>1</sup>

Affiliations: 1 = Swiss Federal Institute for Forest, Switzerland, 2 = Universidad del Azuay, Ecuador

**Oral session (Tuesday 25<sup>th</sup> February, 16:00-17:30 – Room: UVA 1-2)**

| # | Title  | Presenting author          |
|---|--|----------------------------|
| 1 | Causes and consequences of flexibility in trait-matching: A plant perspective  | Ricardo Sánchez-Martín     |
| 2 | Functional diversity of woody species used by birds across a disturbance gradient in high elevation Andean forests     | Gabriela Maldonado         |
| 3 | Hummingbird niche packing in the tropical montane Andean forest of southern Ecuador                                    | Bryan G. Rojas             |
| 4 | Human-induced downsizing of animal communities disrupts plant-frugivore trait matching in the tropics                  | Daniel Nuno Margato Guerra |
| 5 | Defaunation destabilizes the seed dispersal network of the Guianas   | Julia Blok                 |
| 6 | Differences in seed-dispersal networks and functions between tropical montane forest edges and bracken-dominated areas | Cesar Mayta                |

**Poster session A (Tuesday 25<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author            |
|-----|---|------------------------------|
| P12 | Vertical stratification and niche differentiation in the flowering ecology of <i>Marcgravia longifolia</i> in the Peruvian Amazon | Katrin Heer                  |
| P13 | The dark side of bananas: A novel method for quantifying climacteric fruit ripening in tropical ecosystems                        | Evangelia Linda Chronopoulou |
| P14 | Effect of intraspecific variation in fruit traits on animal sensory ecology   | Omer Nevo                    |
| P15 | Indirect fitness effects of key plant species extinctions in plant-hummingbird networks   | Anna Sofia Görlich           |



### Session 13

Title: **Tropical ecosystem recovery: Reassembly of species diversity, communities, and interactions**

Conveners: Malika Gottstein<sup>1</sup>, Eva Tamargo López<sup>2</sup>, Edith Villa Galaviz<sup>3</sup>, Karen Marie Pedersen<sup>3</sup>

Affiliations: 1 = Albert-Ludwigs-Universität Freiburg, Germany, 2 = Philipps-Universität Marburg, Germany, 3 = Technical University of Darmstadt, Germany

**Oral session (Wednesday 26<sup>th</sup> February, 11:30-13:00 – Room: UVA 3)**

| # | Title   | Presenting author   |
|---|---|---------------------|
| 1 | Overview of the Reassembly project: Studying the species interactions network for resistance resilience and functional recovery in an Ecuadorian Chocó rainforest | Edith Villa Galaviz |
| 2 | Recovery of phylogenetic diversity and structure in trees and animals along a chronosequence of forest regeneration   | Sebastián Escobar   |
| 3 | Forest regeneration and recovery of leaf-litter frogs in the Chocó forest   | Karla Neira Salamea |
| 4 | How seed-dispersal interactions drive the recovery of tropical forests  | Anna Rebello Landim |
| 5 | Diversity and host networks of saproxylic beetles along a natural forest recovery gradient in a lowland tropical forest   | Ana Falconí López   |
| 6 | How biodiversity recovers from perturbation: Resistance and resilience of a tropical rainforest   | Timo Metz           |

**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author            |
|-----|---|------------------------------|
| P29 | Riparian herpetological diversity along a regeneration gradient in a Chocóan forest in northwestern Ecuador | Maira Leanda Maxi Wiedebusch |
| P30 | Alkaloid profiles in poison frogs across a land-use chronosequence in the Ecuadorian Chocó                  | Arianna Tartara              |
| P31 | River meanders drive dung beetle beta diversity in lowland Amazonian rainforests                            | Pablo Aycart Lazo            |
| P32 | Shifts in secondary seed dispersal by dung beetles with forest recovery                                     | Karen Marie Pedersen         |

### Session 14

Title: **Tropical ecosystem functionality**

Convener: Katrin Fleischer

Affiliations: VU Amsterdam, Netherlands

**Oral session 1 (Tuesday 25<sup>th</sup> February, 11:30-13:00 – Room: UVA 1-2)**

| # | Title  | Presenting author |
|---|--|-------------------|
| 1 | Eddy covariance measurements of a tropical forest in the Congo Basin | Roxanne Daelman   |
| 2 | Sources of variation in plant chemical diversity                     | Linh M.N. Nguyen  |



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|---|---|--------------------------|
| 3 | Elevational shifts in tree community composition in the Brazilian Atlantic Forest related to climate change | Rodrigo Scarton Bergamin |
| 4 | Influence of the environment on the functional diversity of tropical dry forest trees                       | Jessica Mereci           |
| 5 | The role of rare tree species regarding functional diversity and biomass of tropical montane forests        | Jürgen Homeier           |
| 6 | Lianas cool down tropical forest understories by increasing evapotranspiration                              | Kasper Coppieters        |

**Oral session 2 (Tuesday 25<sup>th</sup> February, 14:00-15:30 – Room: UVA 1-2)**

| # | Title  | Presenting author     |
|---|--|-----------------------|
| 1 | Water use efficiency in threatened tropical montane forests of Ecuador: Insights from herbarium data                                     | Andrea Chávez-Pacheco |
| 2 | Global patterns of insect herbivory across forest canopies and understories: Insights from a tropical case study and a global comparison | Annemarie Wurz        |
| 3 | The importance of every tree: Rare tree species and multifunctionality in a tropical forest  | Estelle Darko         |
| 4 | Amazonian timber species show distinctive ecological attributes  | Gonzalo Rivas Torres  |
| 5 | Burrowing facilitated the distributional success of mammals and imposed contrasting responses to climatic stability                      | Nina Farwig           |
| 6 | Rainforest conversion to monoculture reduces parasitoid wasp diversity and shifts host preferences in Indonesia.                         | Azru Azhar            |

**Poster session A (Tuesday 25<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author    |
|-----|--|----------------------|
| P16 | Functional traits of leaf and fine root depending on the tree species adapted to different topography in a subtropical evergreen forest            | Rico Hachisuka       |
| P17 | Functional erosion in Annonaceae: Implications for global tropical rain forest conservation  | Wei Xu               |
| P18 | Scale-dependent impacts on multidiversity and multifunctionality within rainforest transformation landscapes                                       | Zheng Zhou           |
| P19 | The meta-analytic evidence for growth-reproduction trade-offs in woody plants  | Maciej Barczyk       |
| P20 | Community composition of invertebrates associated to coarse woody debris and leaf litter substrates in the western Amazon, a case study in Ecuador | Gonzalo Rivas Torres |
| P21 | Establishing a 'Central African tree trait database'   | William Verbiest     |
| P22 | Seasonal patterns and drivers of forest transpiration in a subtropical montane forest  | Bo Zhou              |



### Session 15

Title: **Tropical molecular ecology**

Conveners: Ute Radespiel<sup>1</sup>, Pablo Orozco-terWengel<sup>2</sup>

Affiliations: 1 = University of Veterinary Medicine Hannover, Germany, 2 = Cardiff University, U.K.

**Oral session (Thursday 27<sup>th</sup> February, 09:00-10:30 – Room: UVA 3)**

| # | Title  | Presenting author  |
|---|--|--------------------|
| 1 | Comparative phylogeography of <i>Microcebus</i> in a centre of endemism in northeastern Madagascar   | Ute Radespiel      |
| 2 | Bat gut microbiota responses to short and long-term diets in fragments of Papuan rainforest  | Elise Sivault      |
| 3 | Peering into the black box of Amazonian soil microbial structure and function  | Erika Buscardo     |
| 4 | Seed and pollen dispersal in both hunted and intact forests in the lower canopy African rainforest tree, <i>Coula edulis</i> Baill (Coulaceae)   | Narcisse Kamdem    |
| 5 | Mating system shift following a range expansion of the African timber species <i>Pericopsis elata</i> and consequences for inbreeding depression | Bloude Toumba-Paka |
| 6 | Evolutionary history of an endangered African timber legume with a mixed mating system, <i>Pericopsis elata</i> (Fabaceae)                       | Olivier Hardy      |

**Poster session C (Thursday 27<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author          |
|-----|--|----------------------------|
| P51 | Biodiversity effects on leaf and litter volatiles composition  | Gabriela A. S. Escalante   |
| P52 | Inbreeding depression, functional traits and phenotypic plasticity in an endangered tree species from Congo basin with a mixed mating system | Jean Pierre Ngongo Lushima |

## TROPIC 5: Restoration and conservation

### Session 16

Title: **Climate change impacts on tropical ecosystems**

Convener: Crystal N.H. McMichael

Affiliations: University of Amsterdam

**Oral session (Wednesday 26<sup>th</sup> February, 16:00-17:30 – Room: UVA 1-2)**

| # | Title   | Presenting author  |
|---|---|--------------------|
| 1 | Holocene climatic and vegetation changes in the Brazilian semi-arid                           | Marie-Pierre Ledru |
| 2 | Impacts of Holocene land use and climate change upon Brazil's iconic <i>Araucaria</i> forests | Charlie Davies     |
| 3 | Climatic drivers of carbon stock dynamics in the Brazilian Atlantic forest                    | Joice Klipel       |



|   |  |                               |
|---|--|-------------------------------|
| 4 | Tree species diversity stabilizes the Amazon forest across multiple spatial scales   | Johanna Van Passel            |
| 5 | Global increase of lianas in tropical forests  | Manuela Andrea Rueda Trujillo |
| 6 | Employing canopy time-lapse cameras to unravel the climatic drivers controlling phenological transitions in tropical forests | Alessandro Mainardi           |

**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author    |
|-----|--|----------------------|
| P33 | Assessing climate vulnerabilities and resilience strategies in the Teesta River Basin: Insights from critical climate-stress moments                   | Ghanashyam Sharma    |
| P34 | Beyond survival: Physiological recovery of Amazonian rainforest trees following El Niño in 2023/24   | Lion Martius         |
| P35 | Climatic implications of vegetation dynamics in the Nile River basin   | Samuale Tesfaye Baye |
| P36 | Understanding the diversity and composition of sap-sucking communities (Auchenorrhyncha: Hemiptera) along an altitudinal gradient in Papua New Guinea. | Francesca F. Dem     |

**Session 17**

**Title: Drivers of recovery in restored tropical forests**

Conveners: Ximena Palomeque<sup>1</sup>, Selene Báez<sup>2</sup>, Gabriela Maldonado<sup>1</sup>

Affiliations: 1 = Universidad de Cuenca, Ecuador, 2 = Escuela Politécnica Nacional del Ecuador, Ecuador

**Oral session (Wednesday 26<sup>th</sup> February, 14:00-15:30 – Room: UVA 3)**

| # | Title  | Presenting author     |
|---|--|-----------------------|
| 1 | A trait-based approach for restoring tropical bracken-dominated areas  | Silvia C. Gallegos    |
| 2 | Forest transition revealed: Tropical tree cover dynamics and the role of mature forests, second-growth forests and tree plantations          | Johan de Jong         |
| 3 | Canopy cover not tree richness influences predator ant recovery in young plantations   | Joshua Spitz          |
| 4 | Primary and secondary forest cover promotes frugivory in a restored tropical landscape   | Pedro Luna            |
| 5 | Matching of restoration strategy to soil and other environmental conditions matters for forest landscape restoration: Evidence from Ethiopia | Alfred Kokas Alejeje  |
| 6 | Evaluating ecological recovery: A comparative study of active and passive restoration strategies   | Betzabet Obando-Telle |



**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title  | Presenting author |
|-----|--|-------------------|
| P37 | The role of bracken fronds and litter on the performance of tree species: facilitative or competitive effects?     | Cecilia López     |
| P38 | Understorey bird and dung beetle community responses to artisanal small-scale gold mining                          | Sean Glynn        |
| P39 | Long-term dynamics of diversity-interaction network relationships in a controlled forest tree diversity experiment | Massimo Martini   |
| P40 | Early tree survival in a restoration experiment is influenced by plant functional traits and tree diversity        | Yevgeniya Korol   |

**Session 18**

Title: **Ecosystem resilience to altered fire regimes**

Conveners: Imma Oliveras Menor<sup>1,2</sup>, Masha van der Sande<sup>3</sup>, S. Yoshi Maezumi<sup>4</sup>

Affiliations: 1 = University of Montpellier, France, 2= University of Oxford, UK, 3 = Wageningen University & Research, Netherlands, 4 = Max Planck Institute of Geoanthropology, Germany

**Oral session (Tuesday 25<sup>th</sup> February, 14:00-15:30 – Room: UVA 3)**

| # | Title   | Presenting author            |
|---|---|------------------------------|
| 1 | Vegetation evenness predates ecosystem tipping point linked to high fire activity in East Africa over the past 16 000 years | Julie Aleman                 |
| 2 | Spatio-temporal analysis of fire hotspots to assess ecological vulnerability of forest cover in Tolima, Colombia            | Jeisson Rodriguez-Valenzuela |
| 3 | Lightning-ignited fires in the Brazilian Amazon   | Cunhui Zhang                 |
| 4 | Fire resistance in Amazonian wet and seasonally dry tropical forests  | David Pacuk                  |
| 5 | Post-fire recolonization of dry deciduous forests by lemurs in northwestern Madagascar                                      | Naina Ratsimba Rabemananjara |
| 6 | Assessing fire risk and land use impacts for the preservation of indigenous sacred landscapes in Santa Marta                | Shaddai Heidgen              |

**Poster session A (Tuesday 25<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author    |
|-----|---|----------------------|
| P23 | Public information seeking, place-based risk messaging and wildfire preparedness in Ghana | Enoch Atuquaye       |
| P24 | Detecting wildfire dynamics using satellite remote sensing technologies                   | Dominic Osei Agyeman |



**Session 19**

**Title: Succession and restoration of tropical forests**

Conveners: Tomonari Matsuo, Lourens Poorter

Affiliations: Wageningen University & Research

**Oral session 1 (Thursday 27<sup>th</sup> February, 09:00-10:30 – Room: UVA 1-2)**


| # | Title  | Presenting author   |
|---|--|---------------------|
| 1 | Tropical forest succession: Theory, a conceptual framework, and a cross-site analysis  | Lourens Poorter     |
| 2 | Forest ecological succession and restoration along an elevation gradient in Papua New Guinea.  | Francesca F. Dem    |
| 3 | Using functional traits to maximize restoration success in tropical forests  | Eike Lena Neuschulz |
| 4 | Between pasture and canopy: Diverse dependencies of tropical pollinators on old forests reveal contrasting patterns of resistance and resilience | Ugo Mendes Diniz    |
| 5 | Trajectories of above-ground biomass and diversity recovery in secondary forests of the Tshopo province, DRC                                     | Lisette Mangaza     |
| 6 | Growth form replacement during early tropical forest succession: Drivers and mechanisms  | Iris Hordijk        |

**Oral session 2 (Thursday 27<sup>th</sup> February, 11:30-13:00 – Room: UVA 1-2)**

| # | Title   | Presenting author   |
|---|---|---------------------|
| 1 | Multidimensional recovery of ecosystem functioning during secondary tropical forest succession  | Tomonari Matsuo     |
| 2 | Impacts of climate on regrowth trajectories of Afrotropical forests   | Viktor Van de Velde |
| 3 | Drivers of ant and termite alate distributions during nuptial flights along a tropical forest recovery gradient   | Nina Grella         |
| 4 | Perturbation- recovery experiment (PREX) along a tropical chronosequence in the Ecuadorian Choco-forest   | Eva Tamargo Lopez   |
| 5 | Impacts of selective logging on structure, species taxonomic and functional diversity of East African tropical rainforest: Recovery of Budongo forest reserve, Uganda | Anjela Mashera      |
| 6 | The pioneer's paradox: How pioneer species balance drought tolerance and fast growth during early tropical forest succession  | Jazz Kok            |

**Poster session C (Thursday 27<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author |
|-----|---|-------------------|
| P53 | Exceptional dryness affects the internal clock of Amazonian bamboos   | Kalle Ruokolainen |
| P54 | Overstory-understory relationships of a Ugandan rainforest suggest declining tree diversity and shifting composition. | John Paul Okimat  |



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|-----|--|----------------|
| P55 | Bird perches and artificial bat roosts increase seed rain and seedling establishment in deforested tropical areas dominated by bracken | Cesar Mayta    |
| P56 | Effects of elevation, shading, and exotic pastures on the early performance of native species in Andean forest reforestation           | Marín Franklin |

## TOPIC 6: Spatial and temporal scales

### Session 21

Title: **Tropical island ecology: An integrative approach to bridging the past and present**

Convener: S. Yoshi Maezumi

Affiliations: Max Planck Institute of Geoanthropology, Germany

Oral session (Tuesday 25<sup>th</sup> February, 16:00-17:30 – Room: UVA 3)

| # | Title  | Presenting author       |
|---|--|-------------------------|
| 1 | Past human settlements in the tropical forest of Borneo reveal distinct climate, soil, and settlement patterns         | Nathalia Pérez Cárdenas |
| 2 | Conservation of eleven endemic <i>Boswellia</i> species: Case study from Socotra Island                                | Petr Maděra             |
| 3 | Reconstruction of the fire history for Ankarafantsika National Park in northwestern Madagascar over a 35 year-period   | Misa Rasolozaka         |
| 4 | Preliminary results of the palaeoecological investigations of the sediment cores from Curaçao's Saliña Sint Marie      | Rebecca Lellau          |
| 5 | Montane isolation is not the main driver of plant community assembly in the ancient mountains of eastern South America | Yago Barros-Souza       |
| 6 | Larger tree islands enhance evapotranspiration in an oil palm landscape  | Thorge Wintz            |

### Session 22

Title: **Tropical biogeography and palaeoecology**

Conveners: Renske Onstein<sup>1</sup>, William D. Gosling<sup>2</sup>

Affiliations: 1 = Naturalis Biodiversity Centre, Netherlands, 2= University of Amsterdam, Netherlands

Oral session 1 (Wednesday 26<sup>th</sup> February, 11:30-13:00 – Room: UVA 1-2)

| # | Title  | Presenting author           |
|---|--|-----------------------------|
| 1 | Floristic patterns in Amazonia: Scaling up and down  | Hanna Tuomisto              |
| 2 | Disentangling the 'odd man out' tropical rain forest tree diversity with a global perspective of Annonaceae evolution and assembly     | Serafin Streiff             |
| 3 | Ecological stability facilitates Annonaceae and tropical rainforests diversification patterns  | Laura Holzmeyer             |
| 4 | Niche evolution in the ancient tropical fern genus <i>Danaea</i> (Marattiaceae)  | Venni Keskiniva             |
| 5 | How plant-herbivores interactions change along an altitudinal gradient in tropical forests: unique patterns for different plant clades | Juan Ernesto Guevara-Andino |





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|---|---|-------------|
| 6 | Is the fleshy fruit an overlooked key innovation that underpins the species richness of flowering plants? | John Clarke |
|---|---|-------------|

**Oral session 2 (Wednesday 26<sup>th</sup> February, 14:00-15:30 – Room: UVA 1-2)**

| # | Title  | Presenting author        |
|---|--|--------------------------|
| 1 | The role of late Pleistocene human arrival and megafauna extinction on Amazonian tree composition  | Masha van der Sande      |
| 2 | Tree diversity patterns along an elevational gradient in Durango, Mexico.  | Norberto Domínguez-Amaya |
| 3 | Utilising multi-proxy datasets to understand long-term drivers of change in the lowland forests of the north-western Amazon  | Molly Spater             |
| 4 | Impact of atmospheric relative humidity on a forest-savanna transition reconstructed using the 17O-excess of phytoliths from sediments of Lake Ngofouo (Republic of Congo, central Africa) | Charlotte Mention        |
| 5 | Late Holocene vegetation and environmental dynamics in Tripa peat swamp forest, Leuser ecosystem, Aceh, Indonesia  | Arif Habibal Umam        |
| 6 | Regional and sub-regional plant use for palm-leaf manuscript production in the South and South-East Asia: Literature review and palaeoecological findings                                  | Anastasia Poliakova      |

**Poster session B (Wednesday 26<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)**

| #   | Title   | Presenting author              |
|-----|---|--------------------------------|
| P41 | Climate change and human influence during the Holocene at the Andean forests and páramos of Oña, Southern Ecuador   | Susana León-Yáñez              |
| P42 | Relative importance of abiotic and biotic factors in driving local adaptation: Divergence in resource acquisition and herbivore defense traits in the hyperdiverse rainforest tree genus, <i>Inga</i> | María-José Endara              |
| P43 | Understanding the environmental conditions that favored early human occupation in Northeastern Brazil   | Haut-Labourdette Marie         |
| P44 | Pollen signal of modern vegetation registered in surface soil samples along an elevation gradient from Iztaccíhuatl volcano, Central Mexico   | Erandi Tzayani Rodríguez-Pérez |
| P45 | Did north-south antiphase climate fluctuations influence past ecological changes in Madagascar?   | Vincent Montade                |
| P46 | Biogeography and diversity of agroforestry trees in the tropics: The BigDATAF initiative and call for collaboration   | Karim Barkaoui                 |



## TOPIC 7: General ecology

### Session 23

Title: **Open session**

Convener: William D. Gosling


Affiliations: University of Amsterdam

#### Oral session (Thursday 27<sup>th</sup> February, 11:30-13:00 – Room: UVA 4)

| # | Title  | Presenting author     |
|---|--|-----------------------|
| 1 | Interplay of intraguild predation and environmental drivers shapes the spider community of a tropical rain forest          | Jakub Pawlik          |
| 2 | Mechanisms influencing the network topology in plant-hummingbird pollination networks                                      | Catherine Graham      |
| 3 | Changes in functional traits and resources reduce the specialization of hummingbirds in fragmented landscapes              | Boris Tinoco          |
| 4 | Tropical rainforest fragmentation drives contrasting patterns of functional and phylogenetic diversity in bird assemblages | Kryštof Korejs        |
| 5 | Uneven ecological research effort on birds community ecology point to conservation challenges in Africa                    | Andres Angulo-Rubiano |
| 6 | Terrestrial ecosystems push African rainforest countries towards carbon neutrality   | William Verbiest      |

#### Poster session C (Thursday 27<sup>th</sup> February, 10:30-11:30 – Room: Erasmus)

| #   | Title   | Presenting author |
|-----|---|-------------------|
| P57 | Biodiversity and conservation of a megadiverse South American region  | Vanessa Pontara   |
| P58 | Disentangling the evolutionary history of the woody species in Earth's most diverse tropical savanna  | Vanessa Pontara   |
| P59 | Birds across forest layers: Community structure, diet, microbiome, and predation impact   | Katerina Sam      |
| P60 | Is fruit ripening under selection by seed dispersers? Insights from the Brazilian Savanna   | Maria Appel       |
| P61 | Living on the edge: Understanding herbivory patterns in a fragmented landscape  | Upasana Sengupta  |
| P62 | Mapping of environmentally suitable areas for the occurrence of endemic, threatened and poorly known species in rupestrian grassland in the state of Minas Gerais, Brazil | Marcelo Bueno     |
| P63 | Tree flora of the La Plata Basin: Centers of diversity, endemism and conservation status  | Marcelo Bueno     |
| P64 | Hind wing tails of Neotropical Skipper butterflies, geographical and ecological patterns  | Daniel Linke      |
| P65 | A fire history for the Dahomey Gap: Insight from sedimentary charcoal analysis Ewe-Adakplame Forest, Benin (West Africa)  | Alfred Hounnon    |
| P66 | Perceptions of crop-raiding among hunter-gardener Maroons in Suriname   | Marijke van Kuijk |
| P67 | An index of structural complexity: Application and evaluation in forests of Puerto Rico   | Mark J. Ducey     |

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|---|--|-----------------------|
| P68   | Frogs in space: Using call triangulation to map frog distributions in three dimensions   | Edmund Basham         |
| P69   | Species responses to nutrient enrichment in Ecuador's montane forests: Insights of regeneration dynamics from the NUMEX experiment | Daisy Cárate Tandalla |

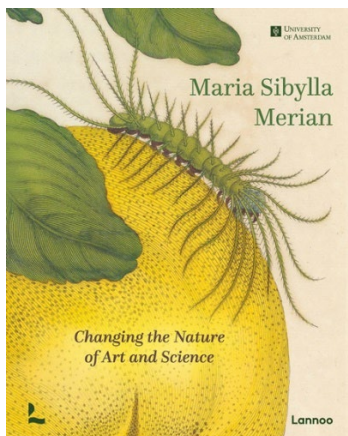
## Special invite lecture

As part of the closing ceremony, and in relation to the Society for Tropical Ecology's "Merian Award" prize giving, we have invited Bert van de Roemer to present a special lecture entitled: "**Maria Sibylla Merian. Changing the Nature of Art and Science**". This talk will be based upon Bert's book by the same title, the content will cover the life of Maria Sibylla Merian and present an academic reflection on her place in scientific history.



**Biography:** Bert van de Roemer is a senior lector at the Cultural Studies department of the University of Amsterdam, and programme director of the master Museum Studies. He has published extensively on the history of collecting, especially on Dutch collections of art and nature in the seventeenth and eighteenth centuries. His interest lies primarily in the epistemological relationship between the arts and sciences within these collections. Recently, he has also been investigating the use of indigenous knowledge in early modern natural history treatises.

**Abstract:** When the life and work of Maria Sibylla Merian is discussed in literature, the adjective 'remarkable' is easily used. And she certainly was a 'remarkable' woman. After two German publications on the metamorphosis of European insects, she published her magnum opus in Amsterdam in 1705, *Metamorphosis Insectorum Surinamensium*. In sixty lavish prints, she depicted plants and insects of Surinam, where she studied for almost two years. Moreover, in Amsterdam, as a divorced woman, she started a studio together with her two daughters where she published books, colored natural history treatises, taught girls the art of painting, and produced enchanting watercolors for the art market. Certainly 'remarkable,' but the image of Merian has slowly been changing in recent years. This presentation briefly discusses how Merian changed the relation between science and art, but also how the image of Merian herself is changing.



**Book details:** van de Roemer, B., Pieters, F., Mulder, H., Etheridge, K. & van Delft, M. (2022) *Maria Sibylla Merian. Changing the Nature of Art and Science*. Lannoo / University of Amsterdam. pp. 304. ISBN: 9789401485333

**Maria Sibylla Merian Society:**

<https://www.themariasibyllameriansociety.humanities.UVA.nl/>



## Workshops

### WORKSHOP 1: **Fieldwork in the Tropics: The good, the bad, and the downright crazy**

Organizers: Yennie Katarina Bredin, Thomas Luybaert, and Meley Mekonen Rannestad

Description: As many of us know, fieldwork in tropical environments comes with unique challenges and learning moments, both positive and negative. Sharing these experiences with peers can foster essential discussions and provide valuable insights for the broader community of researchers. This workshop, “Fieldwork in the Tropics: The good, the bad, and the downright crazy”, invites participants to come together and reflect on the realities of field research—from preparation and logistics to navigating cultural dynamics and managing unexpected challenges in the field.

We look forward to seeing you there!

- Date: Friday 28 February 2025
- Time: 13:00-17:00
- Location: Science Park 904, Room D1.116

### WORKSHOP 2: **Collaborations with African partners**

Organizer: Diletta Martinelli, and sponsored by the Faculty of Science, University of Amsterdam

Description: There is an emerging network of scientists in the Faculty of Science at the UVA willing to increase and foster collaborations with institutions in the Global South. We are organizing an informal discussion to reflect on current opportunities and challenges, focusing in particular on collaborations with African partners. We would like to invite to the discussion the participants of the European Conference in Tropical Ecology. One of the keynote speakers of the conference, Nokubonga Mqgatsa, will give a short presentation about her experience.

- Date: Friday 28 February 2025
- Time: 15:00-16:30, followed by a Borrel at 16:30
- Location: Science Park 904, Room A1.04.
- Web page: <https://www.UVA.nl/en/about-the-UVA/organisation/faculties/faculty-of-science/research/science-projects/global-south-project/global-south-plan.html?cb>



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## Excursion

### Hortus Botanicus Amsterdam

Organizer: Sven Focke, Collection Specialist

We will be giving a short presentation about the Hortus and the projects we are currently working on, followed by a 3-part tour through the garden, greenhouse and nursery. For this tour it is important for participants to wear sturdy shoes as we will be entering an active construction site as well as a somewhat slippery nursery, therefore it is highly recommended not to wear any shoes with high heels or the likes. The Hortus will make sure everyone that enters the construction site will have a safety helmet and be briefed about the safety rules; however, please do be aware that an active construction site means participants are expected to not leave the tour guide and to mind your step at all times on the site.

- Date: Friday 28 February 2025
- Time: 10:00-13:00
- Location: Meet at the main entrance of Hortus Botanicus Amsterdam, Plantage Middenlaan 2a, 1018 DD, Amsterdam.

Please tell the person behind the counter/gate that you are here for the excursion and to give out your name and surname, they will be checked and crossed off our list of participants. The complimentary coffee & tea and the presentation will be held in our “Laranjazaal” which is situated on the second floor of our restaurant. When you enter through the main entrance our restaurant will be visible directly to your right. To get to the presentation room you will have to walk up a small staircase inside the restaurant followed by a bigger staircase in the hallway. Directions will also be provided by front office and restaurant personnel when you arrive. Bags and jackets can be left safely inside the presentation room until the end of the tour, though it will most likely be chilly outside.

**de hortus**  
Hortus Botanicus Amsterdam - anno 1638

**Photo (right):** BSc Tropical Ecology students of the University of Amsterdam getting their first experience of tropical plants and ecosystems at the Hortus Botanicus, Amsterdam.

The tropical ecology course is taken by students with a range of backgrounds, but mainly recruits from the BSc Future Planet Studies and BSc Biology programs.

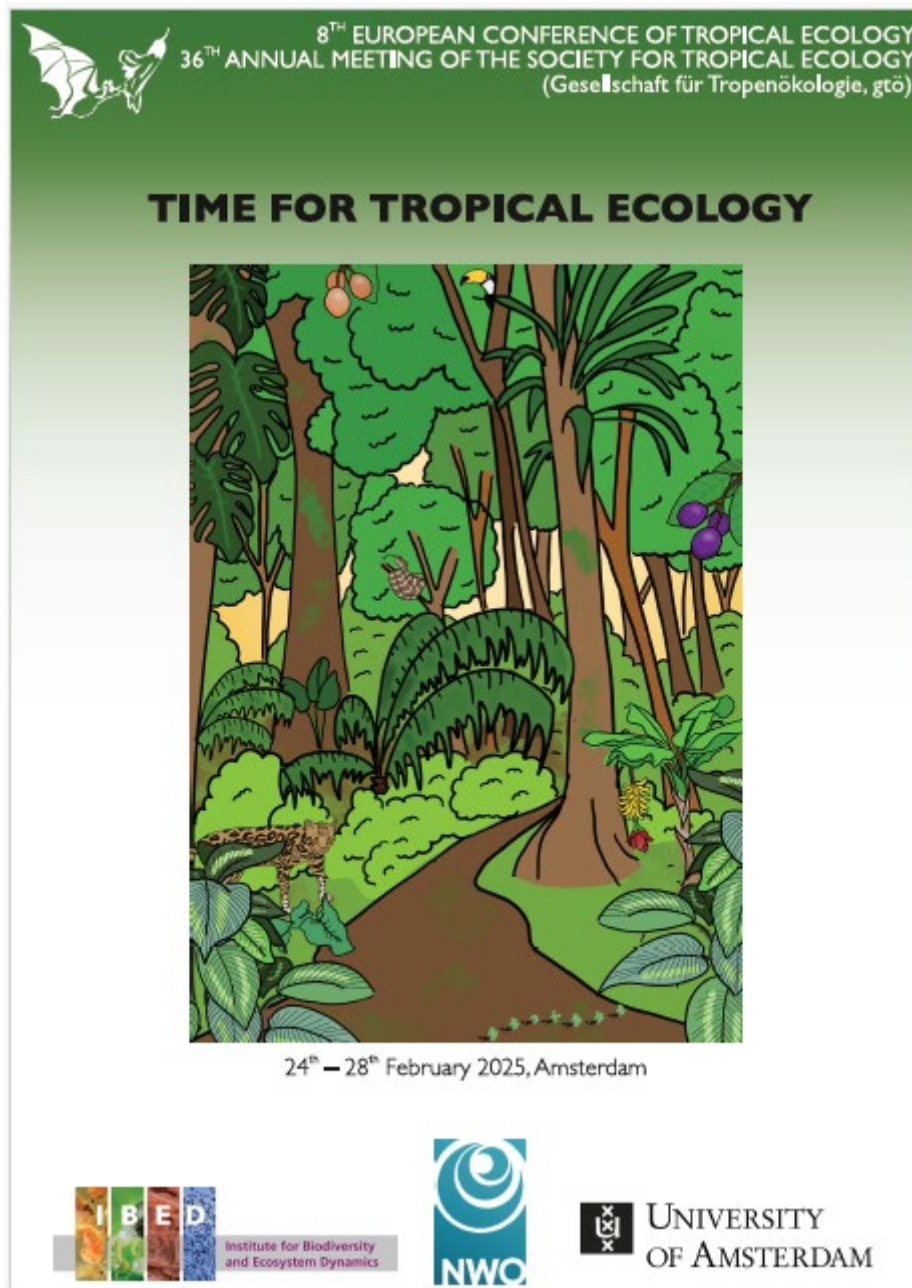
Photo ©C.N.H. McMichael 2024





## Abstract booklet

The full set of abstracts from the “*Time for tropical ecology*” meeting can be found, open access, in the Society for Tropical Ecology publication *Ecotropica*.



Gosling, W.D. & McMichael, C.N.H., eds. (2025) Time for tropical ecology: Abstracts of the 8th European Conference of Tropical Ecology, Amsterdam, The Netherlands; 24.-28.2.2025. The Society for Tropical Ecology, *Ecotropica*, 26 (1-2): 1-222. <https://doi.org/10.30427/ECOTROP202501>