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# **Issue: January 2023**



# Highlights



# Fund your research at 34 eLTER sites in 19 countries

eLTER has launched its latest call for funded Transnational Access (TA) and Remote Access (RA) for scientists working in the areas of biodiversity, biogeochemistry, hydrology or socio-ecological research. So far, we have granted €400k to over 60 scientists. You could be next!

#### All 34 sites in 19 countries are equipped with state-of-the-art

**instrumentation** to enable comprehensive ecological measurement and experimental campaigns. Long-term data on these sites is available for comparison with other data or used as a reference. Likewise, state-of-the-art socio-economic research is conducted at several of them. IT facilities are provided for data upload, storage and processing. Financial support is available.

The sites, which were selected to represent all European biogeographic zones, are described on the <u>eLTER website</u> and in the <u>eLTER Site Catalogue</u>.

The TA-RA scheme has also been the focus of the last SPF webinar, with interesting contributions from PIs of granted TA-RA projects and a site manager. In case you want to have a second look at the webinar feel free to watch it on eLTERs youtube channel.

Deadline for Submissions: 31 January 2023

Evaluation and notification of outcome: 31 March 2023

Learn more and apply



### eLTER releases 23 new videos: informative, personal and... dancing!

**Ninety researchers from 26 countries**, part of the eLTER PPP and eLTER PLUS projects, gathered in Mallorca from 16 to 20 May 2022 for the first ever consortia physical meeting. This was a great opportunity to capture the spirit of the projects, so a professional team was hired to shoot 23 videos which we present to you now. They are grouped into three categories:

- <u>eLTER Stakeholders Information</u>: The videos here aim to provide comprehensive and tailored information to the four main Stakeholder Groups, namely: Decision Makers; Peer & Sibling RIs & Networks; Public, Business & Industry and Scientific Community.

<u>5 eLTER questions</u>: Here you can find answers to some of the questions which perhaps you have been asking yourself about the project. The answers are the unscripted and honest thoughts of key members of the future RI. The 13 videos represent an interesting mix of views and although each pose the same questions, answers are not as similar as one may expect.

- eLTER Life Stories: This might sound like a cliché but eLTER is not only a project. For many of those involved it is not merely a job but a cause, a place of friendship and a personal story. Here you can find just five of the personal stories of exciting moments or life-lasting friendships that came to be because of eLTER. Like the Swedish banana, the Haifa shisha or the Medieval dance academy.

Last but not least, if you want to know how 90 scientists behave after two years of not seeing each other and experiencing a lockdown... get a glimpse at the eLTER consortia with the special video <u>"Science after COVID"</u>. Maybe you will be tempted to join eLTER after seeing it, who knows?

*Photo: eLTER co-coordinators Michael Mirtl (UFZ/EAA) and Jaana Bäck* (University of Helsinki) during the Mallorca Meeting.

### **Strategic Section**



**NEON & eLTER: First steps into a** 

### strategic cooperation

**During a three-day hybrid workshop** shortly before Christmas 2022, eLTER met with NEON to discuss several topics and learn from NEON's longterm experience in operating a large-scale observation facility. <u>NEON is the</u> <u>US National Science Foundation's National Ecological Observatory Network</u>, a **continental-scale observation facility** operated by Battelle and designed to collect long-term open access ecological data to better understand how the nation's ecosystems are changing. NEON has been operational since 2019 after a long history that started in 2000 with a series of workshops during which an ecological observatory network was first sketched out.

Although Research Infrastructure strategies in the US and Europe differ considerably, there are many **commonalities and lessons to be learned on both sides**. Compared to NEON, eLTER is in its infancy, and can certainly learn from the vast experience that NEON has gathered throughout its operation.

At the same time, **NEON has signed onto the eLTER PPP as an interested third party**, which allows them to seek resources to support the eLTER development. The three-day workshop was a first step to discuss the approaches in detail, in order to better understand respective observatory functions, development pathways, and management structures, and to explore potential forms of collaboration. The discussions included topics around **Research Infrastructure functions**, overall coordination of an RI, standardisation of observations at a continental scale and information infrastructure and management.

During the three day workshop a **huge amount of information was** exchanged that now needs to be fully processed by both parties. Further collaboration has already been agreed and specific follow-up meetings are planned.

A huge '**thank you**' to NEON, and to all who represented eLTER.



eLTER joins the EuroGEO Action Group on ecosystems, biodiversity and geodiversity EuroGEO is Europe's part of the Group on Earth Observations (GEO) - a worldwide network working to build a Global Earth Observation System of Systems (GEOSS). The aim is to provide a coherent picture of environmental and Earth observation in Europe by combining existing Earth observation assets and initiatives. Fundamental to this is the provision of insitu data for calibration and validation purposes which was emphasized several times during a recent EuroGEO workshop.

eLTER was represented at the event by Michael Mirtl (EAA, UFZ), Saku Anttila (SYKE) and Ulf Mallast (UFZ). In their presentations they outlined the potential of eLTER as an in-situ data provider with a long-term focus and Europe-wide coverage, both of which are drawbacks with respect to current in-situ data provision.

Following several discussions with representatives of **GEO**, **KCEO**, **EEA**, **ESA**, **and Copernicus**, eLTER will initiate the formation of an expert group with all representatives to start a dialogue around how to include eLTER in EuroGEO and to begin co-designing in-situ data monitoring for calibration and validation purposes.

eLTER will also be part of the "EuroGEO Action Group on ecosystems, biodiversity and geodiversity" which was re-initiated within the framework of the EuroGeo workshop and will be provisionally led by Antonello Provenzale. eLTER will join Lifewatch ERIC, the European Geoparks Network, Biodiversa+, the University of Twente, Deltares, CNR, the University of Bayreuth, CREA, CERTH, the Center for Integrated Monitoring of the Natural Environment and the Space Research Centre of the Polish Academy of Sciences in this group.

Four specific themes will be at the centre of the Action Group's intention to pilot applications. During an inaugural meeting, the close interaction with European Research Infrastructures, regarded as being at the core of data and knowledge sharing, was noted.



### achieving credible soil carbon farming in the EU

HORIZON-MISS-2022-SOIL-01 Lead by: Tristano Bacchetti-De-Gregoris, SAE Spain Budget: ~€3M Lifespan: 2023 - 2026

The main goal of the CREDIBLE project is to **build momentum and trust for the implementation of carbon farming** in the EU. This will be primarily achieved by **setting up and moderating a network of initiatives, projects and stakeholders** for favouring transparency, environmental integrity, and methodology standardisation in soil carbon accounting.

Such a Network of Networks will be responsible for pushing forward multiple discussions (articulated around three main themes: **which practices; what standards; how to monitor**) and is expected to evolve from a mostly technical/scientific network at the onset of the project, into a process catalysing policy making and business innovation toward its end.

CREDIBLE brings together experts of different land-uses (**arable, forestry, agroforestry, peatland and grassland**), cropping systems, and ecosystem services linked to agriculture, experts on carbon standards and on the implementation of regulatory processes and experts from the **European Soil Observatory, eLTER, ICOS and the EJP Soil**, to underpin the establishment of data collection networks.

In four WPs, CREDIBLE will build and disseminate a practical toolbox for promoting carbon farming, capable of taking into account local land uses, best practices, and multi-actor interests (**WP1**). It will identify options for benchmarking and selecting standards, certification mechanisms, fair rewarding systems and policy instruments for carbon farming (**WP2**). CREDIBLE will favour the establishment of a network of soil carbon data collectors and repositories to improve measuring and monitoring carbon dynamics (**WP3**), and it will develop processes and tools to drive conversations for the upscaling of carbon farming (**WP4**).

*Graph: Structure of the initial Network of Networks for answering the question "how to monitor".* 

# **Reporting Back**



### Back to Berlin: eLTER Scientific Advisory Board and Steering Committee meeting

Between 29 November and 1 December, eLTER held its first hybrid Scientific Advisory Board (SAB) and Steering Committees (SC) meeting in Berlin. 25 members of the SC and 5 members of the SAB met physically at the Berlin Office of the Helmholtz Association joined by 60 online participants from research performing organisations during a dedicated half day info session.

Michel Mirtl, co-coordinator of eLTER, opened the meeting with the following inspiring words:

"This meeting marks a milestone in several aspects. Berlin was the last place before the Pandemic where we met physically and **33 months later it is again Berlin** where we meet after Covid. We have experienced the two long years with Covid, and its diverse consequences to our projects have been extremely evident.

The meeting in Berlin is the opportunity for everyone to discuss and clarify these matters, either bilaterally, in groups or in the plenary. **Our plea is not to withhold any important matters or feelings**. This explicitly contains matters of coordination and leadership. Hopefully, we can work on solutions to the concerns and take crucial steps forward towards the operational eLTER RI."

During the three days of meetings, Steering committees first discussed focal topics including **"Legal matters, Governance, Finance implications of the design", "Service Portfolio & Thematic Service Areas" and "Standard Observations & Methods"**. These were then presented to the Scientific Advisory Board who critically but constructively commented on both current actions and future needs.

Updating the Research Performing Organisations that have provided support for eLTER on the achievements and status of the eLTER ESFRI process was also an important target of the meeting. **Registrations from over 80**  **organisations in 22 countries** reflect the high interest on eLTER activities and hopefully indicate continuous support from the institutions potentially hosting future eLTER Sites.

The lively discussions **demonstrated the need for more face-to-face meetings**, but it was not all work, there was also time for some fun. The eLTER Head Office had prepared some games, such as the acronym test, designed to check how people deal with the ever-growing number of abbreviations – **WAILS, RPO, ESFRI, FAIR,** etc.

Photo: Red City Hall in Berlin

## Upcoming and ongoing events

### **Monthly SPF webinars**

#### Date: Varies monthly | Place: Online

eLTER will continue with SPF webinars also in 2023. This first one will be on Citizen Science and <u>iNaturalist</u> on the 1st of February. Other topics will be related to Remote sensing and research performed at eLTER Sites and Platforms. Dates will be confirmed later. Stay tuned! Information will be available on the eLTER website.

eLTER events calendar

### First eLTER cluster meeting: UK, Ireland & Benelux

Date: 17-18 January 2023 | Place: Brussels, Belgium

In mid-January representatives from Belgium, the Netherlands, Luxembourg, the UK and Ireland are invited to meet physically in Brussels. This first eLTER cluster meeting will be hosted at Research Institute for Nature and Forest (INBO). The purpose is to enable face-to-face interaction between the national teams and the eLTER coordination, to exchange experiences from the different national networks and to address region- or country-specific matters.

Learn more

### **Towards FAIR Digital Twins - 1st session**

Date: 26 January 2023 | Place: Online

The Biodiversity Digital Twin's design, implementation, and maintenance present several issues, including the linkage and integration of various data types and related computing services. Consequently, FAIR principles are extremely important, especially during the modelling and prototyping process.

To facilitate discussions around this topic, the BioDT consortium is organising a series of online webinars to stimulate conversations around FAIR with a focus on BioDT and the digital twinning paradigm.

Learn more

#### eLTER tools workshop

Date: 7-9 February 2023 | Place: Lyon, France

This workshop will focus on data collection, analysis and visualization tools

that have been developed in the context of eLTER. The workshop is aimed at researchers, administrators and technicians who are involved in eLTER projects, or long-term ecological research. The workshop is full, but you can check from Terhi (terhi.rasilo @ helsinki.fi) for free spots in case there are cancellations.



#### eLTER PPP & PLUS Consortia meeting

Date: 17-21 April 2023 | Place: Frankfurt, Germany

The next eLTER PPP & PLUS consortia meeting will build upon the successful consortia Mallorca meeting. eLTER members will present latest news about finished and ongoing project work in dedicated sessions, participants will have the chance to visit a long-term research site, and of course, a social event will also be offered. The agenda and more details will be communicated via email and will be published on the <u>dedicated eLTER wiki page</u>.



#### EGU23

Date: 23-28 April 2023 | Place: Vienna, Austria

The EGU General Assembly 2023 brings together geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary, and space sciences. The EGU aims to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience.



### International Society for Ecological Modelling Global Conference

Date: 2-6 May 2023 | Place: University of Toronto, Canada

The International Society for Ecological Modelling Global Conference 2023 (ISEM 2023), under the theme 'Ecological Models for Tomorrow's Solutions', will bring together scientists from all professions and applications that deal with the use of ecological models and systems ecology.

Toronto shall be the inspiring space for the Ecological Modelling community to meet, discuss and share ideas. In this conference, ecological modellers will join in their ongoing effort in advancing the concepts and methods of ecological modelling to develop ecological theory in a wide range of topics and modelling approaches.



### 20th International Boreal Forest Research Association Conference

Date: 28-31 August 2023 | Place: Helsinki, Finland

The 20th IBFRA (The International Boreal Forest Research Association) Conference will be held in Helsinki, Finland from 28-31 August 2023. Call for abstracts will open on 29 August 2022.

The bi-annual conference will bring together researchers, companies, policymakers, and members from civil society to discuss the future of boreal forests in Pikku-Finlandia conference centre.



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