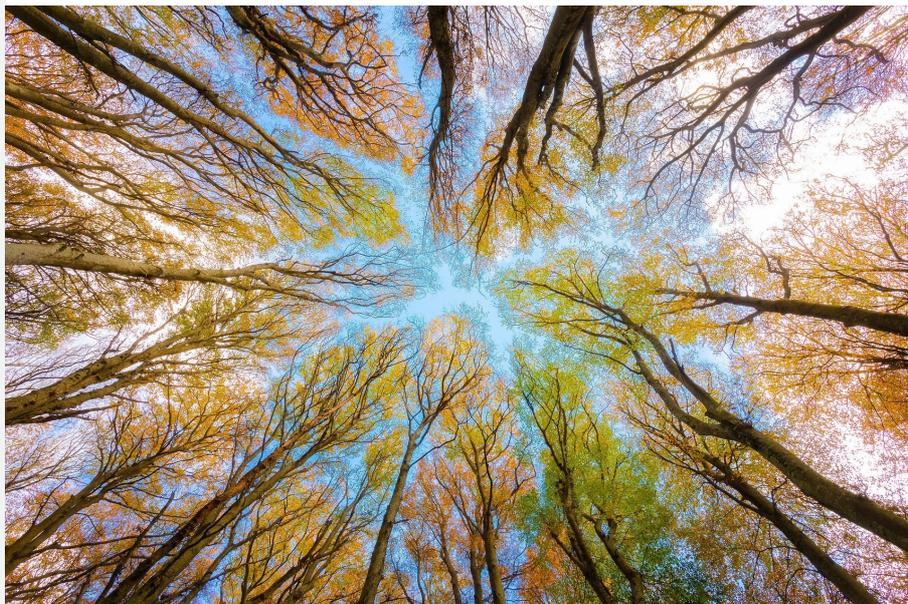




Issue: October 2022



Highlights



Fourth eLTER Interim Council meeting: Statutory seat of eLTER in Germany

The long wait for a physical Interim Council (IC) meeting came finally to end when the **delegations met face to face in Uppsala, Sweden, on September 28-29 2022.**

The IC04 meeting was hosted by SLU and chaired by Prof. Kevin Bishop.

Delegates from **seven countries attended the meeting physically**, with a further 11 delegations joining via Zoom.

Apart from the joy of really meeting many people for the first time, there were also important items on the agenda. The IC discussed the recently established eLTER Site Category concept and **adopted the mandatory criteria for Category 1 and Category 2 eLTER Sites and the eLTSER Platforms** as a foundation for the site labelling process. The IC delegates were introduced to the proposed funding model for the eLTER ERIC operations, and advice on how to develop it further was given. A presentation of the status of eLTER Service Portfolio led to numerous comments, and the discussions on the **Thematic Service Areas and future Topic Centers** will be continued in forthcoming meetings. Similarly, the first items on the Statutes document were decided, the most important being that **Germany is willing and able to have the statutory seat of the eLTER RI.**

Further, the IC decided to establish an **Ethical Advisory Board (EAB)** and approved the eLTER Ethical guidelines and the first draft for the EAB Charter. In addition to these agenda items for decision, the IC was also informed about the **Key Performance Indicators, Risk assessment and HR policy** documents that have been prepared by the eLTER PPP.

Overall the spirit of the meeting was good and the many comments and discussions will help the PPP Work Package leads in the next steps towards the implementation of eLTER RI.

Photo: Delegates and eLTER's team at the IC04.



SHARE AND DISCOVER LONG-TERM ECOSYSTEM SITES AND DATA

Get a glimpse of 760 eLTER sites in our new DEIMS-SDR video

DEIMS-SDR is one of **the most comprehensive publicly available catalogues of long-term ecosystem research and monitoring sites in the world.** It was created to reduce fragmentation and to increase the findability, interoperability, and accessibility of in-situ sites and data.

Today, DEIMS-SDR contains detailed site information of about **760 eLTER sites in Europe** as well as sites outside of Europe. It offers information on long-term research sites and access to data sets.

In order to promote DEIMS-SDR, eLTERs' WP11 produced a video together

with the e-shape project's *myEcosystem showcase* (see NL from 06/2020). It aims to provide a comprehensible **summary of the purpose and functions that DEIMS-SDR** offers to various stakeholders.

The video highlights why DEIMS-SDR is essential for long-term ecosystem, critical zone and socio-ecological research, shows how sites and associated essential metadata link to findability, accessibility and interoperability of contained sites and outlines the benefits for stakeholders.

[Have a look for yourself on this link!](#)

Strategic Section



eLTER formalized its cooperation with the UNECE air pollution monitoring

More than **100 LTER-Europe sites belong to the air pollution effects monitoring of the UNECE Convention on Long-Range Transboundary Air Pollution (CLRTAP)**.

The long-term International Cooperation Centers (ICP) of ICP Forests, ICP Waters, and ICP Integrated Monitoring, and several data and analysis groups, have for many decades been **identifying ecosystem damage** (and subsequent recovery) from air pollution. eLTER and the ICPs work in the same realm of environmental issues, address common societal grand challenges, and work towards an improvement of the state of environment with data-driven advice to policy makers.

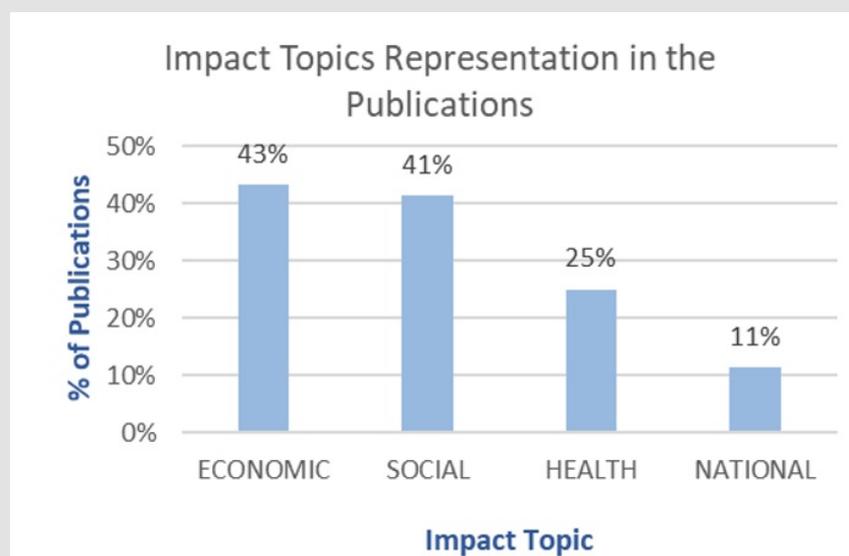
The ICP's focus is, among other pollutants, on **nitrogen, sulphur, ground level ozone, and heavy metals**. Those monitoring sites joining the eLTER RI will additionally measure complementary parameters while maintaining the protocols of the ICPs, thus broadening their usability. In a world of ever more complex sustainability issues, data obtained from beyond traditional disciplinary boundaries is invaluable for understanding ecosystem change

and the drivers involved.

In September, the parties of the Convention agreed to **sign a cooperation letter to formalize joint work in the future**. This cooperation brings us closer to the vision of a European environmental Research Infrastructure serving both science and policy.

Thomas Dirnböck, Environment Agency Austria

Latest Research



What makes a socio-ecological (SE) system more resilient? - Insights from Covid-19

The Covid-19 pandemic provides an extraordinary opportunity to **investigate socio-ecological system resilience** by comparing systems undergoing the same shocks at the same time. This research explores resilience, or a **society's capacity to endure external shocks/stress** like pandemics or climate change, through the lens of social ecology, a discipline that studies the interconnections between society and its natural environment, viewing them as a single, holistic system.

To discover what characteristics meant some communities for the Covid-19 pandemic were better prepared than others, we first **identified general characteristics that have been associated with SE resilience** in the academic literature. We found a broad consensus regarding the importance of diversity/redundancy and modularity (connectivity) of the SE system, as a whole (i.e., pertaining to both the social and ecological elements of the system). We then developed a **set of indicators that reflect the extent to which a region managed to cope with a pandemic**, in retrospect. An

analysis of 908 publications by 23 Israeli news, government, and civic organizations showed that economic and social impacts were most emphasized. Specific impacts on businesses, education, healthcare, and the political system were also prominently featured.

In the next phase of this research, we will apply these two sets of variables in a comparative stakeholder-based study across selected eLTSE platforms. This research will showcase the importance and strength of eLTSE platforms and the eLTER network. It will also contribute to the eLTER RI by suggesting resilience indicators to its standardized data collection.

PhD candidate Merav Cohen (merav.cohen@campus.technion.ac.il) and Assoc. Prof. Daniel Orenstein (DanielO@ar.technion.ac.il), [Social Ecology Research Group](#), Faculty of Architecture and Town Planning, Technion - Israel Institute of Technology

The top figure details how many articles referred to each of the Covid-19 impact main topics.

Reporting Back



Join eLTER's new Early Career & Friends group

The **Early Career & Friends (EC&F) group** was established after the Integrated Progress Meeting on Mallorca in May 2022. The group includes **scientists, technicians, administrators and other professionals** who are actively engaged in eLTER work and who identify themselves as early career (EC), new to eLTER, or otherwise interested in the goals of the group (& Friends).

With the support of the eLTER Head Office, this group aims to support EC work by **promoting professional collaborations, peer learning and career development** activities, to cultivate the next generation of the eLTER community, and to increase EC&F engagement in eLTER - all for the benefit of the members of the group and the eLTER network as a whole. The group meets on a monthly basis via Zoom and is currently finalising its goals and priorities, and developing a concrete action plan, based on the outcomes of the successful and productive EC&F world café session on Mallorca.

Next meeting: **'The teams of the future - Careers in eLTER'**. James Weldon will help us better understand the eLTER structure, human resources work, and career development opportunities. October 17th, 1pm CET. Email us to request the meeting link.

New members and ideas are more than welcome! If you are interested or want to receive further information on the group's activities, please contact charlotte.wiederkehr@ufz.de. **PIs and National Coordinators are encouraged to bring this group to the attention of relevant early career researchers** and others in their networks.

Photo: The double session during the Mallorca meeting included dynamic group discussions on topics of particular relevance to EC&F, such as the onboarding process of new members, support and career development, network and engagement, and communications.



eLTER meets the ICOS and ACTRIS RIs for a crucial exchange of experience

On 24th and 25th August an eLTER delegation, led by Michael Mirtl (eLTER PPP coordinator) and Jaana Back (eLTER PLUS coordinator), **visited the head offices of their "sister" research infrastructures of ICOS and ACTRIS** for an important exchange of experience and support.

[ICOS](#) was represented by Werner Kutsch (Director General), Katri Ahlgren (Head of Communications), Elena Saltikoff (Head of Operations) and other key members. The [ACTRIS](#) group was headed by Eija Juurola and Paolo Laj, both

Interim Leaders.

As eLTER is **aspiring to become an RI and ERIC** in the next few years, the meeting was crucial for discussing a variety of issues that are at hand:

- difficulties likely to be faced when the RI becomes operational;
- engaging and **supporting early career staff**;
- timeline and key concerns from an RI perspective on **becoming an ERIC**;
- physical and remote **access to sites/platforms**;
- software tools used by the head offices to facilitate better work;
- the **service Portfolio development process**.

The discussion with ACTRIS focused on the service portfolio and data access issues; operating in accordance with the **FAIR principle (findability, accessibility, interoperability, and reusability)**; RI costs and funding options; legal entity establishment and internal structuring.

Special attention was paid to the **communication efforts and feedback by ICOS**: social media reach, staffing, innovative communication ideas, internal cooperation, contacts with news media and many more.

In the end, an informal agreement was reached by all parties for **further exchange of experience** in the future and cooperation in joint endeavors.

The eLTER Research Challenges and related policies

- Biodiversity dynamics**
EU Biodiversity Strategy, Water Framework Directive, Habitats Directive
- Climate change**
European Green Deal, Strategy on adaptation to Climate Change, UNFCCC Paris Agreement
- Eutrophication and pollution**
Water Framework Directive, UNECE-CLRTAP
- Socio-ecology** - Environmental protection, sustainable management of natural resources, water, soils, biodiversity & ecosystems
CAP, Strategy on adaptation to Climate Change, Soils thematic strategy, SDGs

ICOS Science conference and eLTER

The ICOS ERIC (Integrated Carbon Observation System RI) organised its fifth Science conference on September 13 to 15, 2022 in Utrecht, Netherlands.

Among the highly interesting scientific talks were **presentations from three eLTER researchers**, in the session '**Informing transformative change towards a sustainable future using integrated environmental research infrastructures**'.

Research infrastructures such as ICOS have **significantly improved quantification of ecosystem greenhouse gas (GHG) balances**. Thereby

ICOS has paved the way for model-based regional to global data on current and future natural GHG fluxes and their underlying mechanisms, as well as their potential role as “nature-based-solutions” to the climate crisis.

However, the **complexity behind ecosystem-climate interactions, including dynamics of land use, hampers the straightforward identification and implementation of solutions**. eLTER is able to bring in a complementary approach that explicitly addresses potential trade-offs (most prominently biodiversity loss), as well as the dynamics of society-nature interactions, for which the established data and knowledge bases provide a good starting point. There are currently **23 ICOS Ecosystem sites co-located with eLTER sites**, which are an excellent basis for concrete collaboration.

The presentation of eLTER PLUS coordinator Prof. Jaana Bäck (University of Helsinki, Finland) **valorized the current status of eLTER RI and highlighted a few recent examples in our scientific work**, while Prof. Martyn Futter (SLU, Sweden) looked **in depth at how leveraging RI co-location would help to quantify biogeochemical, ecological and social constraints** on landscape-scale carbon sequestration.

Finally, Prof. Veronika Gaube (BOKU, Austria) talked about **developing land-use decision-making models as inter- and transdisciplinary tools in LTSER regions**. The discussion after each of the presentations was lively and there was a desire to continue the dialogue in the near future. This was previously acknowledged by the ICOS General Assembly who had signed a Memorandum of Cooperation with eLTER in late 2021.

Photo: Slide from the presentation of Prof. Jaana Bäck.

Upcoming and ongoing events



eLTER Sites and Platforms Forum webinar series start

The eLTER Sites and Platforms Forum (SPF) is planning a series of one hour webinars covering a wide range of topics linked to the research done at eLTER Sites and Platforms.

This autumn, we will start with biodiversity. Several LTER-Europe sites are involved in the [LIFEPLAN project](#), which aims to collect well-standardized global data on biodiversity using semi-automated methods. Some of these methods might become part of eLTER Standard Observations, so this has been an excellent opportunity for sites to test them. LIFEPLAN will use the data to estimate the current state of biodiversity across the globe. The first webinar on the 12 Oct will include an update on the LIFEPLAN project and the experiences of a participating eLTER site team.

The second SPF webinar (23 Nov) with focus on the Transnational and Remote Access to eLTER Sites and Platforms. Through the [eLTER TA-RA programme](#), eLTER PLUS offers opportunities for researchers to perform small to medium scale ecological and socio-ecological projects at a selection of LTER-Europe sites. In this webinar we will hear insights both from a TA user and from a hosting site. The new TA-call will open this autumn, so this is also an opportunity to ask questions.

The webinars are free and open to everyone, but require registration. [LIFEPLAN REGISTRATION](#), [TA-RA PROGRAMME REGISTRATION](#). Please also follow the information on our calendar.

Photo: Sound recorder and Malaise trap from Värriö, Finland. Photo taken by Pauliina Schiestl-Aalto

International conference on research infrastructures

Date: 19-21 October 2022 | **Place:** Brno, Czech Republic

A major worldwide event providing an opportunity for strategic discussions about international cooperation in research infrastructure. A variety of experts and stakeholders discuss challenges and emerging trends, highlighting the essential role of research infrastructures.

[Learn more](#)

eLTER PPP&PLUS SC physical meeting

Date: 29-30 November 2022 | **Place:** Berlin, Germany

The eLTER PPP and PLUS Steering Committees shall gather from 29th to 30th of November for a project work meeting in Berlin, Germany.

[Learn more](#)

eLTER SAB meeting

Date: 1 December 2022 | **Place:** Berlin, Germany

eLTER Scientific Advisory Board will meet PPP & PLUS projects physically in Berlin, Germany for an information session and discussion.

Research performing organisation's represented are invited to the information part of SAB meeting taking place in the morning.

[Learn more](#)

Natural Disasters Expo Asia

Date: 7-8 December 2022 | **Place:** Singapore

This show is an opportunity to raise environmental awareness as environmental issues have become the greatest concern for the whole world. Environmental awareness has become a very important term as it not only implies having knowledge about the environment, but also our moral values and necessary education to solve environmental related problems.

[Learn more](#)

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.

[Learn more](#)

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.

[Learn more](#)

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.

[Learn more](#)



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