

[Subscribe](#)[Past Issues](#)News from LTER in Europe, www.lter-europe.net[View this email in your browser](#)

Long-Term Ecosystem Research in Europe

NEWSLETTER

November 2019

In this issue:

- [Project news](#)
- [eLTER publications and eLTER science highlights](#)
- [Forthcoming events](#)
- [Highlights of past events](#)
- [Feature stories](#)

All subscribers of the Newsletter, please note that we have changed our [privacy notice](#)!

Project news

eLTER H2020 Starting Communities project successfully concluded in October 2019

The [project](#) was a key contributor in designing and building the [eLTER Research Infrastructure](#), and has thus laid the foundation for two follow-up projects, eLTER PPP and eLTER PLUS. The project outlined major elements regarding the strategy, governance, monitoring approaches and data management of the eLTER RI. Among its major outcomes is the [eLTER DIP](#) (Data Integration Platform) which enables data discovery, visualisation and access across the eLTER network and currently makes available datasets from almost 200 sites. Furthermore, the project actively contributed to the cluster project ENVRIplus with regards to the positioning and interplay of the individual RIs within the European RI landscape.

The Preparatory Phase Project (eLTER PPP) and the advanced community project (eLTER PLUS) are two newly approved eLTER initiatives for the forthcoming five years. Both projects will most likely officially start on 1 February 2020, and the eLTER community from 24 countries is planning to gather into a

Read the official [press release](#).

eLTER publications and eLTER science highlights

eLTER H2020 project has published a Site Catalogue presenting 150 European eLTER Sites and eLTER Platforms, forming about a third of the total European sites. The full Site Catalogue can be downloaded [HERE](#) (118 MB).

[Bäck J. et al., 2019](#) White paper on Terrestrial Ecological and Environmental Research Infrastructures in Finland

[Holzer J.M. et al., 2019](#) Evaluating transdisciplinary science to open research-implementation spaces in European social-ecological systems

[Angelstam P. et al., 2019](#) Learning Landscape Approach through Evaluation: Opportunities for Pan-European Long-Term Socio-Ecological Research

[Somarakis G. et al., \(Eds.\) 2019](#) Thinknature Nature-Based Solutions Handbook. ThinkNature project funded by the EU Horizon 2020 research and innovation programme.

[Mirtl et al., 2018](#) Genesis, goals and achievements of Long-Term Ecological Research at the global scale: A critical review of ILTER and future directions

There is a list of publications arising from the eLTER H2020 project, available here: <https://www.lter-europe.net/elter/outputs/publications>

Forthcoming events

Two eLTER co-sponsored sessions approved for EGU meeting in 2020!!

- Whole system approaches in addressing long-term changes in ecosystems
- Linking terrestrial and aquatic domains with long-term observations and experimentation

See more information on eLTER website at:
<https://www.lter-europe.net/news/lter-at-egu-2020>

Follow the EGU website for the important milestones.

Highlights of past events

The 2nd International Long Term Ecological Research Network Open Science Meeting was held at the UFZ in Leipzig 2-6 September. The conference was well received by the more than 200 attendees from around the globe and has provided a unique opportunity for knowledge exchange and networking among the global LTER communities and other interested researchers. This successful conference series will continue with the third ILTER OSM in China in 2022, kindly hosted by the Chinese Academy of Sciences. For more information, visit www.ilter.network.

Around 700 experts in biodiversity & geodiversity information science, applications and analyses met 22-25 October at the **Biodiversity Next Conference in Leiden/Netherlands**, amongst them representatives from major projects, networks and infrastructures from around the world. Michael Mirtl and Lyubomir Penev (PENSOFT) participated for eLTER. PENSOFT from Bulgaria will be in charge of communication matters in the coming major eLTER projects (eLTER PLUS, eLTER PPP). The opportunity was used for exploring fields of closer collaborations with LifeWatch in the coming year, amongst them a possible joint communication platform and collaboration on priority biodiversity observation variables. The specification of eLTER relations with DiscCO formed part of the activities in the cluster project ENVRplus.



Dimtris Koureas (DiSSCo coordinator), Christos Avranitidis (LifeWatch CEO) and Michael Mirtl (eLTER coordinator) taking to opportunity of meeting at the Biodiversity Next Conference to identify future RI collaborations

From 6th to 8th November, around 100 national ESFRI stakeholders and RI coordinators met in La Palma for the **ESFRI Workshop on the Future of Research Infrastructures in the European Research Area**. The last two ESFRI Roadmap editions have demonstrated clearly how the landscape of research infrastructures in Europe has evolved and matured. The facilities that have now become operational face very different challenges to the ones early in their lifecycle, like eLTER. Recognising the nature of these challenges and responding to the invitation of the Competitiveness Council to strengthen its strategic role, ESFRI started a comprehensive reflection process on the role of research infrastructures and ESFRI itself in the evolving European Research Area. The objective of the workshop was to discuss a number of key topics, including the role of Research Infrastructures and ESFRI in EOSC, RI

eLTER actively contributed through Marjut Kaukolehto (eLTER Head Office) and Michael Mirtl (Coordinator), and took advantage of the vast experience gathered in the workshop and the opportunity to meet numerous national stakeholders of relevance for eLTER.



The Spanish ESFRI delegate (Figuerola Inmaculada), the ICOS CEO (Werner Kutsch) and eLTER coordinator (Michael Mirtl) in work mode towards an ever improved ESFRI contribution to the future ERA.

From 13th to 14th November a **planning meeting for a co-funded Biodiversity Partnership in Horizon Europe** was organized by the BiodIVERSA ERA-Net in collaboration with DG R&I and DG Environment. A draft plan for 4 pillars was discussed by about 70 representatives from countries, related projects, networks and infrastructures (reinforced knowledge basis, solutions for net biodiversity gain, knowledge and innovation effects on policy, increased international dimension). Michael Mirtl (eLTER) and Christos Arvanitidis (LifeWatch) advocated for a more systematic interaction of a Biodiversity Partnership to maximize the relevance of RIs through co-design with scientific user groups and other stakeholders gathered in the Biodiversity Partnership. Another important role of the Biodiversity Partnership could involve facilitating national dialogues between stakeholders and RI implementations, strengthening the compliance and alignment of national developments with European efforts to improve the European Research Area (ERA). eLTER was invited by the BiodIVERSA coordinator to provide related input for the next draft plan, which will be open for broader consultation.

[Subscribe](#)[Past Issues](#)

Gene Likens (eLTER
Biodiversa coordinator)
and Michael Mirtl (eLTER
coordinator) after fruitful
discussions about eLTER
contributions to the
emerging Biodiversity
Platform in Horizon
Europe.

LTER – a true long-term endeavour involving generations of scientists:

On the occasion of the 80th birthday celebrations of Prof. Gerhard Glatzel from the University of Life Sciences in Vienna, who belongs to the founders of LTER in Austria, Gene Likens and Michael Mirtl met in the Vienna Natural History Museum. Gene's research and famous LTER site Hubbard Brook (operating since 1963) paved the way for the establishment of US LTER in 1980. The success of this first national LTER network stimulated LTER around the globe and resulted in the establishment of the International Long-Term Ecological Research Network (ILTER) in 1993. Michael Mirtl coordinated ILTER between 2016-2019 and expressed his deep gratitude for decades of excellent research and hard work at the science-policy interface dating back to the era of Acid Rain and forest dieback. The current work at Hubbard Brook continues to provide valuable evidence of the interactions of long-term trends and shorter-term events impacting ecosystem functioning. Without pioneers like Gene Likens the eLTER RI would not have entered the priority list of European Research Infrastructure development. At the event, Prof. Gerhard Glatzel was awarded with the Austrian Cross of Honour for Science and Art, First Class.

Gene Likens (USA, LTER Hubbard Brook) and Michael Mirtl (eLTER coordinator) at the "Austrian Cross of Honour for Science and Art" award ceremony for Prof. Gerhard Glatzel (BOKU).



Feature stories

Travelling between LTER ecosystems: the fifth

The fifth edition of "Cammini LTER", organized by the LTER-Italy network (National Research Council of Italy, EURAC Research, University of Bolzano and Carabinieri Forestali) in collaboration with LTER-Austria (University of Innsbruck) has just concluded.

Cammini LTER is an initiative of informal communication of ecological research, promoted and realized by LTER-Italy since 2015. They consist of itineraries connecting two or more LTER sites: LTER ecologists walk and cycle together with citizens creating a physical and visible movement of researchers towards and with citizens, aiming at providing the public with the opportunity to learn about different ecosystems and the LTER vision and aims.

During "Cammini LTER" scientists act as the ancient "story-tellers" on the road, sharing experimental works and ecological studies with people met along the itineraries and at the LTER sites. "Cammini" are imagined as a sort of "Via Francigena" (the ancient medieval pilgrim route running from Canterbury to Rome) of ecological research and they integrate in a long-lasting tradition where walking is considered an intimate way to engage with nature.



Credit: Sarah Gregg

From 2015 to 2017, LTER-Italy researchers realized 11 trails on the national territory, connecting 17 LTER sites. Starting from 2018, Cammini crossed the national borders, with two transboundary trails in collaboration with LTER-Switzerland and LTER-Austria.

This summer two events were run. The first one "Walking in the time of ecology" (12- 16 September 2019) was dedicated only to the LTER scientists and represented an introspective trail - where walking was used as a metaphor of an inner path which gave the participants, gathered in the Forest of Feudozzo in Abruzzo, a chance to explore their relation with nature, assisted by experts who use different ways of investigating and representing nature, e.g. through arts, senses, mindfulness. The second trail (23-27 September 2019) was a classic one: "Man and the environment, cross-border trail between the Ötztal and the Mazia valleys" connected the LTER-Austria site Obergurgl to the LTER site Val Mazia in Italy and ended with a public meeting during the event "La LUNGA NOTTE DELLA RICERCA" (an event organised within the "European Researchers Nights") in Bolzano.

Through Cammini LTER researchers move out of their comfort zone and

involving not only scientific content but also values, identities, and emotions.



Credit: Sarah Gregg

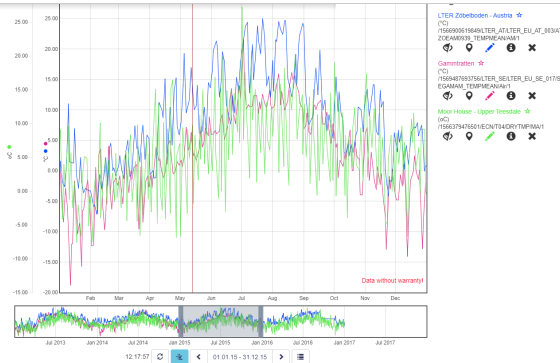
Sharing data through the eLTER Information System

The ambition of the eLTER Information System is to link distributed data sources provided by the long term ecological research community. It will allow access to metadata and data from different data providers, providing a single point of access for the users to retrieve data. It consists of a number of tools including:

- DEIMS-SDR which allows data providers to create, publish and share metadata on sites, datasets and sensors.
- A common controlled vocabulary, EnvThes, to harmonise the structure and content of data shared within eLTER.
- A Data Integration Portal (DIP) which lets users discover, visualise and access data from multiple sites and sensors.

The newest tool that has been developed in the H2020 project, and its extension, is an application to allow users to register and upload data into the eLTER Central Data Node (CDN). This will help eLTER partners that do not have the resources to host standardised data infrastructure, cloud-based data storage and services. The forms, based on 52°North SOS, provide a simple interface to register time series data services and upload data to those services for hosting through the CDN. This will allow partners to make their data accessible through INSPIRE-compliant services in a simple way. Data that are loaded through the CDN can then be viewed using the DIP, allowing data from multiple national networks to be visualised together, e.g. this example shows meteorological data from the LTER-Austria, LTER-Sweden and the UK Environmental Change Network which have been loaded into the CDN and visualised in the DIP.

Subscribe Past Issues



Another recent addition to the eLTER Information System is the EURO-CORDEX regional climate projects. EURO-CORDEX (<https://euro-cordex.net/>) provides regional climate change information based on an ensemble of regional climate model (RCM) simulations for each eLTER site across Europe. The ensemble consists of dynamically downscaled CMIP5 global climate models (GCMs) for different greenhouse gas concentration trajectories. The timespan of the RCM simulation results is from 1950 to 2100. The EURO-CORDEX regional climate projections have been incorporated within DEIMS-SDR and are available through its map viewer.

All the eLTER information management tools can be found at <https://data.lter-europe.net/>



Networking • Research & Development • Infrastructure

Subscribe to our newsletter

This email was sent to <<Email Address>>

[why did I get this?](#) [unsubscribe from this list](#) [update subscription preferences](#)

eLTER newsletter administration - c/o Pensoft Publishers - Prof. Georgi Zlatarski Street 12 - Sofia 1700 - Bulgaria

