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## eLTER PLUS TA/RA Scheme now open: Get free access to a selection of eEurope sites

Our H2020 project [eLTER PLUS](#) now offers free-of-charge opportunities to perform your desired research making use of a selection of LTER-Europe sites handpicked for the purpose of small to medium scale ecological and socio-ecological projects.



**GET FREE ACCESS TO OUR NETWORK!**

Make use of our TA/RA scheme to perform your research.

*Offered through Horizon 2020 project eLTER PLUS, 871128.*

### Types of access offered:

**Transnational Access (TA)** - this option secures in-person, physical, hands-on work by users at one or more of the LTER sites involved in the scheme.

**Remote Access (RA)** - gives an option for protocols regarding measurements, data collection, and possibly experiments to be defined by users and performed on their behalf by site staff.

For their proposals, eLTER PLUS encourages users to combine TA- and RA-related project work where they can test hands-on and refine a protocol they've developed at one site and then have the same protocol performed at other sites remotely.

### Sites involved

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**Austria:**

- [LTER Zöbelboden](#) - TA & RA
- [LTER Plattform Eisenwurzen](#) - TA & RA
- [Rosalia Lehrforst](#) - TA & RA
- [Pristine Forest Rothwald](#) - RA
- [Isola di Pianosa](#) - TA & RA
- [Lago Maggiore](#) - TA & RA
- [Collelongo-Selva Piana](#) - RA
- [Golfo di Venezia](#) - RA

**Belgium:**

- [Brasschaat](#) - TA & RA

**Czech Republic:**

- [Lysina](#) - TA & RA

**Denmark:**

- [Hobe](#) - TA & RA
- [Vestskoven](#) - RA

**Finland:**

- [Hyytiälä SMEAR II](#) - TA & RA
- [Värriö SMEAR I](#) - TA & RA
- [Lammil](#) - RA
- [Kilpisjärvi LTSE](#) - RA

**France:**

- [LTER ZA Alpes](#) - TA & RA
- [LTER ZA Plaine et Val de Sevre](#) - TA & RA
- [AgrHyS](#) - TA & RA
- [Larzac](#) - TA & RA
- [Mont Lozère](#) - RA
- [LTER ZA Bassin du Rhône](#) - RA
- [Doñana](#) - TA & RA
- [Ordesa y Monte Perdido](#) - RA

**Germany:**

- [National Park Bavarian Forest](#) - TA & RA
- [Rhine-Main-Observatory](#) - TA & RA
- [TERENO - Harz](#) - TA & RA
- [TERENO - Siptenfelde](#) - TA & RA
- [TERENO - Bode catchment](#) - TA & RA
- [TERENO - Wüstebach](#) - TA & RA
- [TERENO - Rollesbroich](#) - TA & RA
- [TERENO - Selhausen](#) - TA & RA
- [TERENO - Eifel](#) - RA
- [Kindla](#) - TA & RA
- [Svartberget](#) - TA & RA
- [Bergslagen](#) - RA
- [Aneboda](#) - RA
- [Gammtratten](#) - RA
- [Gårdsjön](#) - RA

**Greece:**

- [Koiliasis CZO](#) - TA & RA

**Hungary:**

- [KISKUN LTER](#) - TA & RA
- [Kiskun Restoration Experiments](#) - TA & RA
- [Cairngorms](#) - TA & RA
- [Allt a'Mharcaidh](#) - TA & RA
- [Whim Bog](#) - TA & RA
- [Moor House](#) - TA & RA
- [Wytham](#) - TA & RA
- [Hillsborough](#) - RA
- [Conwy](#) - RA
- [Glensaugh](#) - RA

**Israel:**

- [Northern Negev](#) - TA & RA
- [Park Shaked](#) - TA & RA
- [Arava Platform](#) - RA

**Latvia:**

- [Engure](#) - TA & RA

**Portugal:**

- [Montado](#) - TA & RA

**Romania:**

- [Braila Islands](#) - TA & RA

**Serbia:**

- [Fruska gora](#) - TA & RA

**Slovakia:**

- [Trnava LTSE](#) - RA

**Slovenia:**

- [Postojna](#) - TA & RA

**Spain:**

- [Doñana](#) - TA & RA
- [Ordesa y Monte Perdido](#) - RA

**Sweden:**

- [Kindla](#) - TA & RA
- [Svartberget](#) - TA & RA
- [Bergslagen](#) - RA
- [Aneboda](#) - RA
- [Gammtratten](#) - RA
- [Gårdsjön](#) - RA

**Switzerland:**

- [Pfynwald](#) - TA & RA
- [Laegeren](#) - TA & RA
- [Davos](#) - TA & RA
- [Stillberg](#) - TA & RA

**United Kingdom:**

- [Cairngorms](#) - TA & RA
- [Allt a'Mharcaidh](#) - TA & RA
- [Whim Bog](#) - TA & RA
- [Moor House](#) - TA & RA
- [Wytham](#) - TA & RA
- [Hillsborough](#) - RA
- [Conwy](#) - RA
- [Glensaugh](#) - RA

**Important dates**

- **Call opening:** 15 October 2020
- **Deadline for Submissions:** 23 December 2020
- **Evaluation and notification of outcome:** 31 March 2021

Successful projects typically are conducted during the summer season, but users may choose any timing starting as early as April.

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All sites included in the eLTER PLUS (Transnational Access) TA and (Remote Access) RA Scheme are equipped with state-of-the-art instrumentation to enable comprehensive ecological measurement and experimental campaigns. The long-term data on those sites is available to compare with or to be 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. The sites, which were selected to represent all European biogeographic zones, are described at the [eLTER PLUS website](#) and in the [eLTER Site Catalogue](#).

While the scheme will support both single-site and multiple-site projects (i.e. requiring co-ordinated work and data synthesis across two or more sites), preference will be given to research targeting multi-site use and taking advantage of the eLTER site network.

For more information, consult the [blog articles](#) written by users of previous TA schemes offered by eLTER.

## Financial support

The eLTER PLUS TA/ RA scheme offers free of charge access to the site(s) and all the services provided by them.

For site visits within the scheme (TA), users will also receive reimbursement of travel expenses to, from and within the site. Private or rental car travel will be supported if travel by public transport is not possible.

If possible, on-site accommodation and/or on-site meals will be offered at no cost to the user. If not, the costs of reasonable accommodation in the vicinity of the site will be reimbursed and costs for food as well (see subsistence rates).

Users' personnel costs will not be covered.

## Selection criteria

The selection criteria will mainly consider:

- Scientific excellence of the work proposed
- The involvement of promising young scientists at the start of their career
- Feasibility of the proposed application in accordance with the site manager
- Formal eligibility in line with European Commission H2020 access regulations.

A selection and review panel will carefully evaluate the proposals received in order to enable transparent, fair and impartial reviews of applications.

## Question-driven research

For its TA/RA scheme, eLTER PLUS has predefined a set of research-questions within the following thematic categories:

- Drivers, trends and states of biodiversity
- Carbon and nitrogen cycling in ecosystems
- Water stress in ecosystems
- Socio-ecology

Proposers may address one or more of our recommended research questions within this framework.

Likewise, users are encouraged to define their own research questions to demonstrate further options to utilise the eLTER Research Infrastructure.

## How do I apply?

1. Read the **scheme details** carefully - The TA scheme's administrative, operational and financial procedures are described in this document ([PDF file](#)).
2. Fill in the **Proposal template** - Users wishing to request access must fill in this form ([MS Word file](#)).
3. Submit the form as Word format (do not save as PDF) to our TA e-mail address [elter-ta@helsinki.fi](mailto:elter-ta@helsinki.fi)
4. If you want to **contact us** regarding access or should you have any other questions regarding the scheme, please use the same address.

## Reporting requirements

- After completing their site visit, researchers must provide a report, using the **Reporting template** ([MS Word file](#)).

### Multidecadal biodiversity trends in Europe investigated using eLTER site data

A recent [eLTER PLUS supported](#) study published in Nature Communications investigates biodiversity trends in Europe. The research uses a comprehensive dataset of 161 biological time series across Europe mostly collected from eLTER sites. This unique dataset covers 21 European countries, nine biogeoregions, three realms and eight taxonomic groups.

Read [more](#).

#### Source:

Pilotto, F., Kühn, I., Adrian, R. et al. Meta-analysis of multidecadal biodiversity trends in Europe. Nat Commun 11, 3486 (2020).  
<https://doi.org/10.1038/s41467-020-17171-y>

### Investigating species richness and beta diversity patterns in pastured grasslands in the European Alps

Using eLTER long-term site data, a recently published article by Veronika Fontana et al. investigates beta biodiversity patterns in pastured grasslands in the European Alps. The article is published in the [Scientific Reports](#) open-access journal and is titled "[Species richness and beta diversity patterns of multiple taxa along an elevational gradient in pastured grasslands in the European Alps](#)".

Read [more](#).

#### Source:

Fontana, V., Guariento, E., Hilpold, A. et al. Species richness and beta diversity patterns of multiple taxa along an elevational gradient in pastured grasslands in the European Alps. Sci Rep 10, 12516 (2020).  
<https://doi.org/10.1038/s41598-020-69569-9>

## Network news

### Positive funding decision for Romania to finance plans ahead

The University of Bucharest, coordinator of LTER Romania, has received a positive funding decision to finance plans across some of the LTSER sites, part of the national network. The project is financed through structural funds under the "Competitiveness Operational Program (POC) Large R&D Infrastructures - Project type: Research projects for public R&D institutions / universities" with funding allocated for the development of a research infrastructure in 3 LTSER sites situated along Danube River: [Danube Delta](#), [Braila Islands](#) and [Neajlov river Basin](#).



Stunning view from the '[Braila Islands](#)' site covering a total surface of over 2600 km<sup>2</sup> comprises protected natural areas but also heavily modified and economically important socio-ecological ecosystems.

With 13 accredited sites today, representing different biomes typical for the country, the LTER site network in Romania started in 1996. Biome diversity represents freshwater rivers, alpine and agricultural landscapes, as well as different forest types. You can

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The next steps for the eLTER Romania include:

- Inclusion of the eLTER RI on the Romanian Roadmap of Research Infrastructures;
- Implementation of a transdisciplinary research agenda across sites and tighten cooperation within international LTER network and with other existing or future RI infrastructures (LIFEWATCH, ICOS, Danubius);
- Development of the LTER network (implementing harmonized protocols across the network, use of in situ sensors network deployed in all sites);
- Increased visibility of the network, sites and research activities performed using the existing and future infrastructure;
- Showing the societal relevance of the mentioned RI's (addressing both fundamental science questions but also providing scientific support for decision making);

Read [more](#).

## [Reporting back](#)

### **eLTER at the GEO BON conference: making the most of the virtual environment**

From 6-10 July 2020 eLTER took part in the GEO BON Open Science Conference and All Hands Meeting 2020. The event was a milestone for GEO BON aiming to bring together all those involved and interested in the development of Biodiversity Observation Networks and Essential Biodiversity Variables.

Being held 100% online the conference presented a challenging opportunity for eLTER to feature its outcomes and projects in an attractive way considering the limitations of an online exhibition environment. Apart from making use of the capabilities of the platform offered, eLTER also created a virtual booth-like environment, where conference guests could click through resources in an interactive manner.



## [Upcoming events](#)

### **eLTER PPP and PLUS 'Mercury' meeting is taking advantage of an innovative hybrid format**

13-16 October 2020

Online & locally

LTER PPP & eLTER PLUS consortia members will meet in October (13-16) to check in progress and plan further activities and integrations between the projects towards a functional eLTER Research Infrastructure (RI). Considering the travel limitations that COVID-19 brought across the globe, the meeting will test a newly developed hybrid format, where the event will be held mainly online to ensure inclusiveness across members, while also considering the formation of local physical clusters.

Following the [joint kick-off meeting](#) of the two projects, this event will provide a unique opportunity to define cross cutting issues that link together across different project tasks and across the two projects and ensure seamless collaboration across the different teams.

### **EU Green Week 2020 on the theme of nature and biodiversity**

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The EU Green Week 2020 is on the theme of nature and biodiversity. After the adoption of a new EU Biodiversity Strategy for 2030, the EU Green Week will highlight the contribution biodiversity can make to society and the economy, and the role it can play in supporting and stimulating recovery in a post-pandemic world, bringing jobs and sustainable growth. EU Green Week will examine how EU policies such as the European Green Deal can help protect and restore nature, leaving it room to recover and thrive.

## WMO DATA CONFERENCE: Earth system data exchange in the 21st century

 16-19 November 2020 100% online<https://public.wmo.int/en/events/WMO-Data-Conference>

The WMO Data Conference aims to develop a common understanding among entities from all sectors of society of the roles and arrangements for international exchange of observations and data for monitoring and prediction of the Earth System environment, including weather, climate and water. Regarding the ongoing WMO review of data policies the Conference is expected to formulate recommendations to WMO and its partner organizations and stakeholders regarding current needs and modalities for data exchange.

## AGU Fall Meeting

 1-17 December 2020 100% online<https://www.agu.org/fall-meeting>

The AGU Fall Meeting will be one of the world's largest virtual scientific conferences, with exciting programming and events. To focus on engagement, most sessions will be one hour long and organized as lightning presentations with moderated discussions. Sessions will generally be held in two-time blocks with a long networking break to accommodate a global audience.

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## Feature article

### Trees under drought stress: eLTER Zöbelboden reports

*New insights in the effects of drought in the mountain forest from the eLTER research site in Zöbelboden, Austria*

You can access the full report (in German) [here](#).

According to new findings on drought effects in mountain forests from the [eLTER research site Zöbelboden](#), Austria's forests are demonstrably affected by heat and drought. Long dry periods, which are increasing due to climate change, weaken the trees and make them more susceptible to pests. Those periods lead to drought stress and the trees grow more slowly.

The comparison of dry years with years with average precipitation shows how repeated periods of drought affect growth. When it is dry, the tree trunk circumference decreases, the tree literally contracts and only expands again when the fluid balance is restored. The measurement results show that the trees on the Zöbelboden were much more exposed to drought stress in the dry year 2018 than in the wetter year 2019. These conditions led to detectable effects even in these humid forest ecosystems. Over the study period of twenty years, the annual trunk growth decreased from 3,080 kilograms per hectare to 2,760 kilograms per hectare due to droughts - a decrease of 10%. With such decrease in trunk growth, climate protection performance also decreases, as less carbon can be bound in the tree. In other words, around 1.6 tonnes less carbon per hectare has been bound in the trunk wood of the Zöbelboden in the last 20 years. That is about as much as the forest on the Zöbelboden binds carbon in one year.

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However, individual dry years only minimally reduce the annual trunk growth of individual trees, explains Monika Mörth, managing director of the Environment Agency Austria. "With a mixture of tree species adapted to the location, countermeasures can be taken," she emphasizes. Diversity makes the forest resilient and climate-friendly, as species-rich forests can maintain their climate protection effect quite well. The Austrian Federal Forests have already started to adapt and convert the forests to climate change. The forest of the future will be a species-rich, colorful mixed forest, as mixed forests have proven to be more resistant to environmental influences than monocultures.

The ecosystem and air quality monitoring on the eLTER Zöbelboden has been providing data on the consequences and successes of air pollution control for more than a quarter of a century. At the beginning of the monitoring at Zöbelboden in the 1990s, the focus was on the fight against forest dieback due to "acid rain", but for a good ten years the focus has also been on the impact of climate change.

*In this issue's header we feature the blue skies above the **Hyttiälä Forestry Field Station - Finland**, which is celebrating its 25th anniversary this year.*

**More about the site**

*Stay tuned for more beautiful landscapes from sites across Europe in our next issues!*



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