



Second Announcement

eLTER H2020, with the cooperation of ICP-Forests, is pleased to announce a training session contributing to Ecosystem Integrity monitoring at LTER sites.

The training will be focused on:

Plant productivity and indexes as a proxy for basic ecosystem features

DATES

8-12 May 2017

LOCATION

CNR Research Area RM-1, Monterotondo (Rome), Italy

Rationale

Measuring productivity and related features like biomass of an ecosystem or habitat is an important objective in monitoring and research programs dealing with system approaches. As a basic system feature this is indispensable when addressing Ecosystem Integrity or Ecosystem Services. We offer a training session bringing together experts from various projects and organizations (LTER, ICP Forests, ICOS), intending to share methods and develop ideas. The main focus is on training recent methods addressing plant productivity of systems at different scales.

In the training, we will consider several methods, also those not requiring too much investment in expensive devices, so that most research, monitoring or observation sites (LTER, ICP Forests, ICOS) will be able to apply the trained methods later on by themselves. The methods will be applicable for sites with sparse or seasonal vegetation too.

The field methods trained will be related to measurement of Leaf Area Index (LAI) and biomass, in forests, grasslands, croplands and arid sites. Methods will spread from optical devices and cameras, to direct methods (biomass). Methods will be also connected to Remote and Proximal Sensing approaches (Normalized Difference Vegetation Index - NDVI, green indexes) at local (drone, cameras) and landscape (satellites) scales, with consideration of up-scaling issues from plot to site and landscape level.

LAI measures will be applied according to protocol which should later be applied at the sites of participants, for which we are aiming at gaining a single dataset for all participating sites, analyse and publish it (as an article and a published dataset as well).

Basic information on logistics

Location: CNR Research Area RM-1, Monterotondo, 30 km North of Rome, connected to Rome Fiumicino – Leonardo da Vinci Airport by train (every 15 minutes)



Lodging: CNR guest house will be provided free of charge for the participants until is filled. In case the number of participants will exceed space in the guest house, information on local hotels of farm guest houses will also be provided. Meals will be provided free of charge to all participants.

<u>**Travel**</u>: travel costs (plane, train, car) have to be covered autonomously by participants

Registration

In order to have a feasible and successful training course, we are aiming at a participation of approximately 20 trainees. Interested people performing activities at research, monitoring, experimental or observation sites, **preferably with the responsibility to later implement the trained methods at their sites**, will have to fill the Registration form that can be found at <u>https://goo.gl/forms/bYvnpmXdh123cRy83</u>

The form requests personal information and a short motivation text (up to 100 words). The Registration form must be filled by 17 March 2017. Acceptance of participation will be communicated by March 24th, 2017.

Preliminary list of trainers (to be completed)

Giorgio Matteucci, CNR, Italy Elli Groner, Dead Sea and Arava Science Center, Israel Ricardo Díaz-Delgado, CSIC, Spain Miklos Kertesz, Academy of Science, Hungary Stefan Fleck, Thunen Institute, Germany Francesco Chianucci, CREA-RPS, Italy

eLTER H2020 organising committee

Giorgio Matteucci, CNR, Italy; Elli Groner, DSASC, Israel; Mark Frenzel, UFZ, Germany; Ricardo Díaz-Delgado, CSIC, Spain.

Preliminary basic timetable

This timetable illustrates the main content of the training week. Within this basic timetable, changes may occur in exact days.

Day 1

Morning: arrival + introduction

Lunch

Afternoon: Course charge, logistics, detailed plan. Infrastructure and Network involved in the training week, common interests and differences. Presentation of main methods that will be trained

Day 2

Morning: training on LAI techniques

Afternoon: training on LAI techniques

Day 3

Morning Workshop on updates in LAI techniques, comparison of methods, uncertainties

Afternoon: training on foliage biomass measurements (direct estimation of LAI)

Day 4:

Morning: training on foliage biomass measurements, training on Remote Sensing methods connected to LAI and biomass

Afternoon: training on Remote Sensing methods connected to LAI and biomass

Day 5:

Field visit with further "hands-on" methods and measurements

Departure (from Afternoon)

For additional information please contact Giorgio Matteucci: giorgio.matteucci@cnr.it