a PRIFOR, NordicDendro and GDRI workshop, a SLU PhD level course

1st circular

Nordic vegetation under changing climate

Southern Swedish Forest Research Centre, SLU Alnarp, September 21-26 2015

PRIFOR, a SNS-supported research network for studies focusing the ecology, natural dynamics and history of the remaining primeval forest of Northern Europe, and NordicDendro network, supported by Nordic Council of Ministers, will hold a workshop under the theme "Nordic vegetation under changing climate" during September 21-26, 2015. The workshop will be hosted by the Southern Swedish Forest Research Centre, SLU Alnarp.

The main focus of the workshop will be on the modern methods to reconstruct, model, and project dynamics of Northern European vegetation. The workshop will therefore be shaped as mixture of presentations, supervised group discussions, lab seminars, and excursions to locations in Southern Sweden.

The event will be, at the same time, a SLU PhD-level course, which will allow attending PhD students earn up to 5 academic credits (ECTS). We therefore specifically direct this announcement towards younger researchers with the interest in general forest ecology and vegetation dynamics, paleo- and dendrochronology, vegetation modelling, forest productivity, biogeography, and climate change issues.

Background and rationale

Climatic variability affects regeneration, growth, and distribution of vegetation across biomes, causing large-scale changes in ecological and socio-economic processes. Linking environmental variability at multiple temporal scales to ecological and physiological drivers of this dynamics is paramount for developing sound management strategies. Three principal lines of research in this area are (a) historical reconstructions of climate-vegetation links, done by paleo- and dendrochronological methods, (b) fine-scale analyses and modelling of weather effects on growth and regeneration, and (c) model-based predictions of global and continental scale changes in vegetation cover as a result of climate change. Recently, major advancements have been made in merging multiple approaches and datasets in the analyses of climate-related drivers of vegetation dynamics.

By adopting a wide and multi-disciplinary approach, the workshop will provide an overview of the recent advancements in understanding historical, modern, and future vegetation dynamics of Northern Europe. A particular focus will be given to the potential effects of climate variability on the natural, and commercially-relevant distribution limits of species in the Northern Europe and relevant climatically-driven ecosystem processes.

Topics

The workshop will cover, among others, the following topics:

1. Paleochronological reconstructions and Holocene-level dynamics of species distribution limits.
2. Overview of methodology to reconstruct historical dynamics of vegetation.
3. Indirect effects of climate variability on vegetation dynamics: importance of natural disturbance

regimes and competitive interactions.
4. Case studies across boreal and temperate regions of Northern Hemisphere.
5. Reconstruction and modeling of historical climatic variability.
6. Forestry view on dynamics of biomass productivity: composition and geographical limits of the commercial forests be in the future.
7. Legacy of human land use and its interactions with climate variability: what is a natural vegetation?

Logistics

The workshop will take place at the premises of SLU campus in Alnarp. The venue is within few minutes train ride from Malmö and about 40 minutes away from the Copenhagen airport Kastrup (CPH) and Malmö airport Sturup (MMX). Several accommodation options will be available for the workshop participants, starting from very basic dormitory type housing (1000 SEK per week) to double and single rooms in vicinity of the Alnarp (500-1200 SEK per day). The registration fee for the course is 2500 SEK (~250 Euro) for PhD and Master students and 3000 SEK for non-student participants. We currently try to acquire additional funding to reduce the registration fees. A number of participation and travelling grants will be available for PhD students.

Contact

Please contact Igor Drobyshev (Igor.Drobyshev@slu.se) for further information and registration. Although there is no strict deadline for the registration at this moment, the organizers encourage those interested in attending to **pre-register now**.