

# PE&RC Messages

## January 2018

### HIGHLIGHTS

#### Netherlands Annual Ecology Meeting 2018

**Tuesday 13 & Wednesday 14 February 2018**

The call for submitting abstracts for a presentation in one of the parallel sessions is now closed and the full programme of NAEM 2018 will appear online in the course of the next few days. If you have not yet registered your participation for NAEM 2018, please remember to do so on or before Tuesday 23 January if you want to qualify for the early-bird fee. All information and a registration form is available at [www.nern.nl/NAEM2018](http://www.nern.nl/NAEM2018).

#### Aquatic Ecology – Robustness of aquatic ecosystems in the face of global change (18-23 March 2018)

Aquatic ecosystems play a crucial role in human health and well-being as a source of drinking water and food (irrigation, fisheries, and aquaculture), recreation, and tourism. Aquatic systems also provide diverse habitats, support high levels of biodiversity and vital ecosystems services and play a vital role in the global carbon cycle and in various nutrient cycles. In this 5-day course we will provide a multifaceted overview of the science on aquatic ecosystems in the Anthropocene.

#### Modelling population dynamics with Physiologically Structured Population Models (PSPM) | Concepts, formulation and analysis (29 April – 4 May 2018)

Physiologically structured population models (PSPMs) constitute a subset of structured models in which both the life histories of individuals and the emerging population dynamics unfold in continuous time, and individual states may be continuous or discrete. PSPMs have been very successful in describing and explaining the mechanisms that drive dynamics of natural populations and communities. Moreover, PSPMs form a powerful tool for understanding how population and community dynamics emerge from individual life histories, and equally important, how population and community processes feedback to shape the life histories of individuals.

### PE&RC Postgraduate courses

- **Geostatistics (5-9 February 2018)**  
*Geostatistics is concerned with the analysis and modelling of spatial variability. It also addresses how quantified spatial variability can be used in optimal spatial interpolation and spatial stochastic simulation. Fields of application include hydrology, soil science, ecology, geology, agriculture, and forestry.*
- **Optimisation techniques in Bioinformatics and Systems Biology (12-16 February 2018)**  
*This course is intended to provide you with the main ideas underlying optimisation, and to get you acquainted with the optimisation techniques that are nowadays available and widely used. In addition, a great variety of examples of optimisation problems in life sciences will be presented and discussed.*
- **Life History Theory (11-16 March 2018)**  
*Life History Theory deals with species-specific adaptive schemes of the distribution of the reproductive effort over the life of an organism. The general theoretical problem is to predict which combination of traits will evolve under specific conditions. The concepts used are also relevant to study within species variation in life history traits. The one week course aims at giving an overview of the field and will discuss methodology and recent developments. This course is organised by the Research School for Ecology and Evolution (RSEE) and PE&RC, but coordinated by RSEE.*
- **Grasping Sustainability (12-16 March 2018)**  
*This on-site course will enable you to think about the 'bigger picture', grasp sustainability and to apply concepts and approaches to your own research, in a collaborative learning environment, away from 'office'. To ensure that the content of the course is aligned to your own research, the content of the course will also be determined by the research topics of the participants. This course is organised by the Research School for Socio-Economic and Natural Sciences of the Environment (SENSE) and PE&RC, but coordinated by SENSE.*
- **PE&RC First years weekend (6-8 April 2018)**  
*The idea of this weekend is to make PhD candidates more familiar with what to expect during the PhD track and how to avoid major catastrophes and disappointments. Focus will be on the PhD process and pitfalls you can encounter along the*

way as well as the criteria for a successful PhD within 4 years. Furthermore you will be informed about the PhD Programme itself and the role that the Graduate School plays as a process facilitator.

- **[PE&RC Last years weekend](#)** (7-8 April 2018)  
*The idea of this weekend is to prepare PhD candidates in the last years of their track for the specific challenges that await them. Among these challenges are the preparation of a thesis, meeting the deadlines associated with thesis defence and the choice of a further career inside or outside science. Next to this attention to the challenges, participants are offered the opportunity to reflect on the years spent obtaining a PhD: what have they learned, what have they not learned, what do they want to pursue in the future.*
- **[Resilience of living systems: From fundamental concepts to interdisciplinary applications](#)** (29 April – 4 May 2018)  
*During the course, the participants will learn about the basic concepts of resilience and their application, from an interdisciplinary perspective (micro-biome to socio-ecological systems). Accordingly, we will address how resilience theory can be used to tackle fundamental and societal issues from a socio-economic and bio-physical perspective and will provide a critical reflection on the relevance, use, and applicability of the concept of resilience. The course is organised by the Graduate Schools WIAS and PE&RC.*
- **[Basic Statistics](#)** (8, 9, 14, 15, 16 May 2018)  
*This is a refresher course. The level is that of a second course in Statistics. We will refresh basic knowledge of Probability, Statistical Inference (Estimation and Testing), t-tests, simple cases of Regression and ANOVA, Experimental Design, Nonparametric Tests, and Chi-square Tests. Some time is reserved to discuss statistical problems of the participants.*
- **[Introduction to R for Statistical Analysis](#)** (17-18 May 2018)  
*The aim of this course is to provide an introduction to R, a language and environment for statistical computing and graphics. Focus of the course will be on getting familiar with the R environment, to use R for manipulation and exploration of data, and to perform simple statistical analyses. Hands-on exercises will form a large part of the workshop.*
- **[Design of Experiments](#)** (23-25 May 2018)  
*The design and analysis of experiments, using plants, animals, or humans, are an important part of the scientific process. Proper design of an experiment, apart from its proper analysis and interpretation, is important to convince a researcher that your results are valid and that your conclusions are meaningful.*
- **[World Soils and their Assessment](#)** (28 May – 1 June 2018)  
*This is a course on international standards for soils classification and assessment. It will provide an introduction to the soils of the world and their diversity, their main forming factors, classification (according to the World Reference Base for Soil Resources 2014), and management. The course will include lectures and hands-on exercises. PE&RC PhD candidates are entitled to the reduced fee.*
- **[Machine learning for spatial data](#)** (28 May – 1 June 2018)  
*In this course participants will learn how to model patterns and structures contained in data. The course will be focused on statistical and machine learning approaches, where the relationships between the observed data and the phenomenon under study are learned directly from observations. Through a series of lectures and practical exercises (in Matlab), the participants will learn about different strategies and their pertinence for specific problems in environmental sciences. Most applications considered in the course will be remote sensing-based, but the course will remain general for a broader audience.*
- **[Pre-announcement: Fundamentals in crop physiology in a changing world](#)** (3-8 June 2018)  
*This course focusses on the fundamental knowledge and insight one must have about crops to be able to adapt our agronomic practices to the changing world. Here the changing world refers to the environment, increased demands on sustainable production and food quality where we will be integrating the different physiological processes in relation to change, so not to see them separately. The toolbox in this course will be a variety of agronomic models (e.g. G-based, Virtual Plant Modelling,...) that will be used to understand and address the fundamental challenges and questions. Moreover, we will not only see what these models have to offer but also whether they are good enough to support agronomic practice decisions in the current changing world. This certainly is a point to be addressed as these models are poor in predicting extremes and erratic conditions. We will address crop physiology at different scales of space, time and level of integration (cell to field). More information and a registration form for this course will become available soon.*
- **[Linear Models](#)** (8, 11 and 12 June 2018)  
*In this module we continue with Regression, ANOVA, and ANCOVA, set in the general framework of Linear Models. We look at topics like parameter estimation and interpretation, checking model assumptions, regression diagnostics, analysis of unbalanced designs and multiple comparisons.*
- **[Generalized linear Models](#)** (14-15 June 2018)  
*In this module we study how to analyse data that are not normally distributed. We look at fractions (logistic regression), counts (Poisson regression, log-linear models), ordinal data (threshold models), and overdispersion. We discuss (quasi-) maximum likelihood estimation and the deviance.*
- **[Mixed linear Models](#)** (21-22 June 2018)  
*In this module we discuss how to analyse data for which the assumption of independence is violated. So: Do you have a nested experimental set-up? Or repeated measurements? Or weight of the same animal over time? Or pseudo-replication? Then, you are likely to need Mixed Models. In this course, you will learn all about it!*
- **[Pre-announcement: On-site PhD course on Conflicting Demands in European Forestry \(North Sweden\)](#)** (24 June – 2 July 2018)  
*All across Europe we see examples of areas in which various stakeholders try to use or even exploit the land such that it maximises their demands. Often times, these demands conflict between stakeholders. For instance, nature conservationists*

may attempt to maintain the area in a natural state, while local industry (forestry, mining, agriculture) may try to exploit the land maximally. The tourism sector, on the other hand, may wish to use the area for recreational purposes, potentially pressurizing the environment. And of course, the local community has its demands for land use. More and more, decision makers are confronted with such conflicting demands when trying to develop a sustainable land-use strategies. This may lead to a so-called wicked problem; a complex issue that defies complete definition, for which there can be no final solutions, since any resolution generates further issues, and where solutions are not true or false or good or bad, but the best that can be done at the time. This course is focused around Gällivare, a small town in the north of Sweden. Here we find the "last wilderness of Boreal Europe", part of an UNESCO World Heritage Site with large nature reserves and national parks. At the same time, it has an active mining industry, forestry, reindeer herding and tourism. It is a perfect place for land use and land use change discussions. The idea of this course is to bring PhD candidates and postdocs from various countries and cultural backgrounds, and working in different scientific disciplines but related to European forests, together in a professional on-site training course. As multidisciplinary teams, we will introduce them to the various stakeholders, and allow them to collect necessary data that can help them to ultimately present a sustainable, long-term land-use strategy for the case study area. More information and a registration form for this course will become available soon.

## Other Postgraduate courses

- [Practical Modelling for Biologists](#) @ University of Groningen, the Netherlands (26 February – 16 March 2018)
- [Exploring climate change challenges and solutions in the real world: from research to practice](#) @ Sofia, Bulgaria (21-25 May 2018)

## Career development, skills and competences

- For a complete overview of this type of courses offered by Wageningen Graduate Schools, please click [here](#).
- For a complete overview of this type of courses offered by the Graduate School of Life Sciences at Utrecht University, please click [here](#).
- For a complete overview of this type of courses offered by Leiden University, please click [here](#).
- For a complete overview of this type of courses offered by The Graduate School of Science at the University of Amsterdam, please click [here](#).

Note that when you would want to have a course like this organised at your own institute, please contact [Claudius van de Vijver](#)

## Symposia, Lectures, Workshops, Seminars and other activities

- [Wageningen University & Research Career Day – Explore your future](#) @ Wageningen University, the Netherlands (6 February 2018)
- [European Conference of Tropical Ecology](#) @ Paris, France (26–29 March 2018)
- [Network Event TKI Horticulture & Propagation Materials](#) @ NBC Nieuwegein, the Netherlands (3 April 2018)
- [The First Meeting of the Netherlands Society for Evolutionary Biology \(NLSEB\)](#) @ Akoesticum, Ede, the Netherlands (11 April 2018)
- [6<sup>th</sup> Plant Genomics and Gene Editing Congress Europe](#) @ Rotterdam, the Netherlands (14-15 May 2018)

## PE&RC Discussion group meetings

- [WEES Seminar – Honeydew as food source for insects: a sweet that can become toxic](#) (30 January 2018 (16.00 hrs)  
Dr Alejandro Tena (Researcher, Center for Plant Protection and Biotechnology, IVIA – Instituto Valenciano de Investigaciones Agrarias (ESP)), will give a lecture called 'Honeydew as food source for insects: a sweet that can become toxic'.  
For a complete overview of all PE&RC discussion groups, please click [here](#).

## Position Announcements

- For job vacancies, check [our website](#).

## Calls and other information

- [Heineken Young Scientists Awards](#) (Deadline: 1 February 2018)

*The Heineken Young Scientists Awards are intended to give the next generation of talented researchers extra encouragement. They are presented simultaneously with the international Heineken Prizes to promising young researchers whose outstanding work sets an example for other young scientists and scholars.*

- [Immana Fellowships](#) (Deadline: 1 March 2018)

*Postdoctoral Fellowships on Innovative Methods and Metrics for Agriculture and Nutrition Actions (IMMANA Fellowships) aim to create a cadre of emerging leaders in agriculture, nutrition, and health research.*

- [Academy Colloquia](#) (Deadline: 1 March 2018)

*Academy Colloquia are small, exclusive expert meetings, hosted and funded by the Academy. They are held at the Academy's Trippenhuis Building in Amsterdam. The aim is to bring together a select international group of no more than fifty top researchers to discuss a subject in which key innovations are expected.*

- [Funds to publish in an Open Access journal](#) (Deadline: Continuous application)

*Since the rise of fully Open Access journals some 15 years ago, there is a possibility to disseminate your research more widely. Some publishers nowadays also offer the option to make an individual article from subscription journals Open Access. WUR Library supports you in Open Access publishing. Find out what your possibilities are or contact us for immediate support.*

- [NWO Visitor's Travel Grants](#) (Deadline: Continuous application)

*Researchers in the Netherlands can apply for a visitor's grant for highly qualified senior researchers from abroad who hold a PhD. With this grant these researchers can stay in the Netherlands for a maximum of four months)*

If you have information that you would like to have included in the PE&RC messages, please send this information to [Claudius.vandeVijver@wur.nl](mailto:Claudius.vandeVijver@wur.nl)

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