

PE&RC Messages

December 2017

HIGHLIGHTS

[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 ecosystem 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.

[Frontiers in Microbial Ecology | Eco-evolutionary dynamics of microbial-host interactions](#) (8-13 April 2018)

This course will examine our current understanding of the eco-evolutionary dynamics controlling host-microbiome interactions, by focusing on questions such as how and why microbial-host associations are formed, how they are maintained, and what the relevance is of these associations for host survival and adaptation to a changing world. This course is organised by PE&RC and RSEE (Research School Ecology & Evolution, Groningen), and coordinated by RSEE.

[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 feed back to shape the life histories of individuals.

PE&RC Postgraduate courses

- [Structural Equation Modelling](#) (22-26 January 2018)
While much of statistics focusses on associations between variables and making predictions, the aim of structural equation modelling is to establish causal relationships between variables. The focus will be on classical structural equation models with a small number of (latent) variables, but we will also give an introduction to recent developments on methodology for high-dimensional data. This course is taught by the international expert in this field, Prof. Bill Shipley from the Université de Sherbrooke in Canada.
- [Introduction to Zero Inflated Models with R | Frequentist and Bayesian approaches](#) (29 January - 2 February 2018)
During the course several case studies are presented, in which the statistical theory for zero inflated models is integrated with applied analyses in a clear and understandable manner. Zero inflated models consist of two integrated GLMs and therefore we will start with a revision of GLM. Zero inflated GLMMs for nested data (repeated measurements, short time series, clustered data, etc.) are discussed in the second part of the course. We will focus on zero inflated count data, and zero inflated continuous data. This course is taught by Dr Alain Zuur and Dr Elena Ieno, who are the leading authorities in the world on the topic of zero-inflated models in R.
- [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.
- [Survival Analysis](#) (22-23 February 2018)
In this short course, the concept of survival analysis will be introduced and it will be shown how to apply the methods to biological data. Main topics are how to handle censored data, estimation of Kaplan-Meier survivor curves, the Log-Rank test, and Cox' regression models for estimating and testing effects of covariates.

- **Pre-announcement: On-site PhD course on Farming Systems and Rural Livelihoods (South Africa)** (late February – early March 2018)

This course provides skills and methods to analyse (the dynamics of) farming systems as embedded in the complex livelihoods of rural people in Africa. Typically, these skills and methods integrate agro-ecological analyses with understandings of the social organization of agricultural production, and the differential ways in which the wider socio-economic environment impacts on farming systems (e.g. the importance of rural-urban linkages, socio-cultural orientations in rural livelihoods, farm investment patterns, labour allocations. Special attention will be given to the vulnerability of agricultural production and aspects of food security in the face of global environmental, social and economic change. Tools for exploration of the adaptive capacity of rural livelihoods and their rural-urban connections will also be reviewed critically. It is not 100% certain yet that this course will actually run, but if so, more information and a registration form will become available very soon.

- **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.

- **Pre-announcement: 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. 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. More information and a registration form will become available soon.

- **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.

- **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.

- **Pre-announcement: On-site PhD course on Conflicting Demands in European Forestry (North Sweden)** (late June – early 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

- [Legal Clinic for your PhD](#) @ Wageningen University, the Netherlands (8 January and 16 February 2018)
- [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)
- [Netherlands Annual Ecology Meeting 2018](#) @ Congrescentrum De Werelt, Lunteren, the Netherlands (13–14 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)
- [6th Plant Genomics and Gene Editing Congress Europe](#) @ Rotterdam, the Netherlands (14-15 May 2018)

PE&RC Discussion group meetings

- [B-Wise Lunch meeting](#) (9 January 2018 (12:30 hrs)
On Tuesday January 9th, there will be a B-Wise meeting at 12:30h in room C0226 in the Forum building. Lunch will be available from 12:00h onwards. We will have a guest speaker from the Vrije Universiteit Amsterdam, Anton Feenstra and Ehsan Motazed (WUR Bioinformatics).
- [R Users meeting: Calling C++ code from R using Rcpp](#) (16 January 2018 (16:00 hrs)
We will do some coding exercises to learn from each other. The location is room C0097 in the Atlas building (104), Droevendaalsesteeg 4, Wageningen.

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

- [Pilot Industrial Doctorates](#) (Deadline: 16 January 2018)

On 9 October 2017, NWO started the pilot programme Industrial Doctorates. This programme is aimed at facilitating collaboration between knowledge institutions and industry, and small and medium-sized enterprises (SMEs) in particular. Within the programme, a candidate PhD student carries out his or her research at both the knowledge institution and the participating company.

- **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

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