

PE&RC Messages

February 2018

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 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.

[PE&RC weekends: First years edition \(6-8 April\) & Last years edition \(7-8 April\)](#)

PE&RC organises three types of PE&RC Weekends. Firstly, a 'first years weekend' that is particularly useful for people in the early stages of their PhD. Then, there is a 'midterm weekend' for PhDs that are about halfway down the PhD trajectory, and finally, a 'last years weekend' for PhDs that are close to finishing their PhD project and that are starting to look ahead. The first years edition and the last years edition are now scheduled and open for registration; First years: <https://www.pe-rc.nl/weekends/first-years>, Last years: <https://www.pe-rc.nl/weekends/last-years>!

[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.

[On-site PhD course in Lapland, Sweden: Conflicting Demands in European Forests – a wicked problem? \(24 June – 2 July 2018\)](#)

More and more, we are confronted with conflicting demands when trying to develop sustainable land-use strategies, resulting in so-called wicked problems. Scientists working on such wicked problems need to be trained to work in trans-, multi- and interdisciplinary teams of experts with various scientific backgrounds, such as ecologists, economists, political, and social scientists. This course aims to teach them the skills they need for working in such diverse teams, by means of a real-life case. The course is focused around Gällivare, a small town in the far north of Sweden, where one can 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. A travel subsidy is available for PE&RC PhD candidates.

PE&RC Postgraduate courses

- [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.

- [**Mathematical Models in Ecology and Evolution**](#) (19 March – 30 June May 2018)
The aims of the course are to teach why mathematics is so useful in ecology and evolution, to acquire the ability to read and interpret equations, and to master the art of constructing and analyzing new models.
- [**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.
- [**Survival Analysis**](#) (17-18 May 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..
- [**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.
- [**Fundamentals in crop physiology in a changing world**](#) (3-8 June 2018)
The course focusses on the fundamental knowledge and insight one must have about crops to be able to adapt agronomic practices to the changing world. Here the changing world refers to the environment, increased demands on sustainable production and food quality.
- [**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!

Other Postgraduate courses

- [**Summer School on agroecology and animal production \(first week of July 2018\)**](#) @ Wageningen, the Netherlands (2 July – 6 July 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

- [Minisymposium: Plant Organic](#) @ Munnekezijl, the Netherlands (13 March 2018)
- [Causes and consequences of plant and animal movement](#) @ Utrecht University, the Netherlands (21 March 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)
- [Land-Water-Food Nexus: Towards sustainable food production in China & other regions](#) @ Wageningen, Orion building, the Netherlands (8 May 2018)
- [6th Plant Genomics and Gene Editing Congress Europe](#) @ Rotterdam, the Netherlands (14-15 May 2018)
- [5th Annual Wageningen PhD Symposium 2018, Bridging Science and Society: Unifying Knowledge](#) @ Wageningen, the Netherlands (17 May 2018)
- [Symposium and Workshop: Principles and dynamics governing transmission of mycobacterial infection](#) @ Wageningen, Zodiac, the Netherlands (22-24 May 2018)
- [International Conference on Ecological Sciences](#) @ Rennes, France (22-25 October 2018)

PE&RC Discussion group meetings

- [Agricultural-Climate-Forests-Food PhD discussion group](#) (21 February 2018 (12.15 – 13.15 hrs)
The PhD Discussion group on Agriculture – Climate – Forests – Food is an acknowledged discussion group operating under the Graduate Schools PE&RC and WASS, and is open to all PhD candidates. This session Sarah Carter will present the results of a paper on the link between forests and agriculture.
- [Careers after PhD \(CAP\) Seminar](#) (13 March 2018 (16.00 – 17.00 hrs)
The aim of the seminar series is to inform current PhDs about career perspectives after their PhD. In a one-hour setting we ask two PE&RC alumni to give a brief presentation on their career pathway after they finalised their PhD. Afterwards there will be drinks and the opportunity for PhD candidates to address the speakers with their specific questions.

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

- [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 Trippenhuus 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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