Workshops

We are pleased to announce the workshops taking place at Ecology Across Borders.

Pre-Conference Workshops

On Monday 11 December we will be holding three pre-paid workshops from 10:00 – 17:00. If you wish to attend one of these workshops, please make sure to add it to your booking when you register. Lunch and refreshments will be provided.

Join us for our early career development day
Karen Devine, BES
In response to the feedback and suggestions from previous years, we'll focus on funding for grants and fellowships across Europe and internationally, identifying and increasing opportunities for career progression in our session "There's no such thing as lucky". We'll repeat our popular session on "Staying employable in and out of academia" and finally we'll look at top tips for CV's and interviews. This year, you are welcome to bring along your CV and we will find time to sit with you to provide a little advice and guidance.

The construction, calibration and evaluation of Individual Based Models (IBMs)
Richard Sibly, University of Reading
Individual-based models (IBMs) are increasingly used to simulate the lives of individual animals in their landscapes, so that the population consequences of management plans can be evaluated. The Workshop will teach the use of NetLogo to build IBMs and Approximate Bayesian Computation (ABC) to evaluate them. Participants will learn how to build ecological models in NetLogo using GIS to produce dynamic maps of food availability and temperature. They will be shown how to include energy budgets of individuals and landscape data obtained by satellite; how to carry out model checking; how to document models using ODD; how to speed up NetLogo models to be as fast as those written in Java. Finally they will learn how to evaluate models using Pattern Oriented Modelling (POM) and/or Approximate Bayesian Computation (ABC). Participants will be asked to bring laptops and install programs and spreadsheets so that they can work through a series of tutorials covering the topics listed above. Each topic will be introduced by a brief lecture. Participants will then work their way through associated worksheets, with plenty of help provided by facilitators. The day will include several breakout groups in which participants of similar levels of experience can exchange information on their projects, achievements and problems encountered. The Workshop will conclude with an interactive discussion of problems experienced, methods of solving them and the ways ahead.

Ecology Hackathon: Developing R Packages for Accessing, Synthesizing and Analysing Ecological Data

BES Quantitative Ecology Special Interest Group
GFÖ Computational Ecology Working Group
NeCov Ecological Informatics SIG
Sponsored by: Methods in Ecology and Evolution

This one-day hackathon will divide participants into teams, with the aim to develop or add to R packages for accessing, synthesizing and analysing ecological data.

A short tutorial provided by experts in R package development at the start will provide instruction on how to design and develop high-quality, user-friendly R software. Throughout the day, experts will advise participants in creating new code within their teams and provide them with hands-on training.

"Challenges" for the teams will be sourced from the community (bit.ly/CallForHackathonChallenges), voted on and communicated to participants in advance of the event. They will revolve around these themes:

• interfacing ecological databases with R
• combining different databases / data sources
• advancing statistical methods
• creating tutorials for ecological analyses

Participants will be allowed to self-select into small groups based on skills and interest in the offered challenges. The collaborative nature of a hackathon will allow delegates to make contacts with new colleagues and develop new skills.

Who should participate?

Ecologists with a good knowledge of R and an interest in learning about R package development. Those with more advanced knowledge of R and with software development tools such as markdown, version control systems (e.g. git) and code-sharing platforms (e.g. Github) will be able to contribute and gain the most from the workshop. However, any participant with good knowledge of R will be able to contribute and learn.

Participants will be co-authors of the R packages they contribute to during the workshop. Participants will also have the opportunity to contribute to manuscript(s) describing the software, for consideration as Application articles in Methods in Ecology and Evolution.

For more information, please contact, Andrea: andrea@britishecologicalsociety.org