



Spatial analysis for landscape ecologists

Using Geographic Information Systems (GIS) in postgraduate research

SCOPE

Landscape ecology is the study of interactions, across space and time, between the structure and function of physical, biological and cultural components of landscapes. Geographic Information Systems (GIS) are a key tool for many landscape and ecological researchers. They allow detailed landscape patterns to be observed and analysed, high quality maps to be produced and ultimately are used to help guide effective landscape-scale management and conservation.

This workshop will introduce you to the spatial data and software packages which are available for landscape and ecological research. Sessions will be interactive and will include a practical introduction to the new *RangeShifter* software.

RangeShifter: a platform for modelling spatial eco-evolutionary dynamics and species' responses to environmental change.

To find out more, click the link below:

<http://onlinelibrary.wiley.com/doi/10.1111/2041-210X.12162/abstract>

DATES AND FEES

Date: 15th – 16th July 2014
Location: University of Reading
Fee*: £45 (ialeUK members)
£80 (non-members)

*Includes: Course, tea & coffee, 2x lunch, 1x dinner.

It is possible to apply for funding to help with travel & accommodation costs at <http://iale.org.uk/students>

PROGRAMME OUTLINE

Day 1 – Spatial Data in Scientific Research

- Obtaining spatial data online
- Open source vs. license only data
- When is it worth creating your own data?
- Discussion: our experiences / pros and cons
- Interactive session: How GIS and spatial data are used in commercial scientific research*

Day 2 – Using GIS software for analyses

- *FRAGSTATS* for analysing landscape patterns
- *Conefor* and *ArcGIS* connectivity modelling*
- Practical: Modelling using *RangeShifter**

* Includes guest speakers from the University of Aberdeen and Forest Research; a great chance to discuss your research and network with some leading spatial and ecological scientists.

INFORMATION AND REGISTRATION

Target Group: PhD & MSc students studying landscape ecology or similar*

*ecology, geography, biology, archaeology etc.

Registration: To register your interest, find out more, or book a place please email Jess at students@iale.org.uk

Fancy discounted access to all ialeUK events, additional financial support and subscription to the journal of *Landscape Ecology*? Join ialeUK as a student member for just £15 here: <http://iale.org.uk/join>

