Course for beginners on R and Species Distribution Modelling

Dates: Monday 25 June – Friday 29 June 2018

Location: ICT lab 4, University of Venda

Co-ordinator: Katelyn Faulkner

Content: The course will comprise two parts. The first part, on the Monday and Tuesday, will be a basic introduction to R for beginners. The second part, on the Wednesday and Thursday, will be a course for beginners on Species Distribution Modelling (SDM), with a particular focus on MaxEnt. The Friday will be a practical/clinic when students will be able to go over some of the exercises or bring and work with their own data.

Requirements: Access to University computers or a laptop with internet access and the latest versions of R, R studio, MaxEnt and java installed

Background: No experience of R is needed for the introduction course to R. But it would be useful to attempt to work through an online beginner course before the course: http://www.stat.wisc.edu/~st571-1/BeginnersRcourse.pdf

Some experience of R is required for the course on Species Distribution Modelling (SDM). If you have no experience of R and would like to attend the course on SDM, then please also attend the R course for beginners.

Programme:

Date	Time	Topic
Monday 25 June	09h00-17h00	1. Introductions and welcome 2. Introduction to R 3. Using R as a calculator 4. Introduction to functions 5. Vectors 6. Creating and working with different types of objects
Tuesday 26 June	09h00-17h00	1. Recap of what we learned yesterday 2. Creating and working with different types of objects 3. Plotting 4. Statistical analysis 5. Importing and exporting data 6. Introduction to packages 7. Getting help 8. Citing R
Wednesday 27 June	09h00-17h00	1. Introductions and welcome 2. Background on Species Distribution Modelling 3. Data types and sources 4. Preparing species occurrence data for SDM

		5. Preparing predictor variables for SDM
Thursday 28 June	09h00-17h00	1. Recap of what we learned yesterday 2. Preparing background data for MaxEnt 3. Model Evaluation 4. Modelling using MaxEnt
Friday 29 June	09h00-16h00	1. Practical/clinic

Contact: If you are interested please contact Katelyn Faulkner (katelynfaulkner@gmail.com). Please note there are limited spaces available.