

Biodiversity Informatics and Species Distribution Modelling

Course lead: Prof. Nicklaus E. Zimmermann, Swiss Federal Research Institute WSL

Dates: 19-20th October 2018

Location: Kilkenny Ormonde Hotel, Ormonde Street, Kilkenny, R95 Y5CX. (52.64982, -7.25339)

Booking: €100, incl. refreshments and lunch
www.biodiversityireland.ie/events/



Friday 19 th		
09:30	10:00	Registration
10:00	10:15	Welcome and introduction to the workshop <i>Introduction from the hosts and partners; workshop overview</i>
10:15	10:45	Introduction to GBIF data resources <i>Overview of data and tools available from GBIF</i> - Kyle Copas, Communications Manager, GBIF
10:45	11:30	Biodiversity data quality and GBIF-mediated data <i>Metadata, uncertainty and best practice approaches to data cleaning</i>
11:30	12:00	Break
12:00	13:00	Exercise 1 on data cleaning <i>Data cleaning in Excel and R</i>
13:00	14:00	Lunch
14:00	15:00	Data cleaning and visualisation in GIS and R <i>Basics of GIS and best practice in visualising and cleaning data</i>
15:00	16:00	Exercise 2 on data cleaning with GIS <i>Data cleaning in GIS and R</i>
16:00	16:30	Break
16:30	17:30	Species data: issues of design <i>Overview of autocorrelation, sample size, sampling design</i>
Saturday 20 th		
09:00	10:00	Introduction to habitat suitability modelling <i>Overview of habitat suitability and species distribution modelling</i>
10:00	11:00	Environmental predictors: issues of processing and selection <i>Existing sources, processing, properties and selection of variables</i>
11:00	11:30	Break
11:30	13:00	Exercise 3 processing environmental data <i>Processing and selecting environmental data for modelling</i>
13:00	14:00	Lunch
14:00	15:00	Exercise 4 habitat suitability and distribution model <i>Running and calibrating a habitat suitability and distribution model</i>
15:00	16:00	Exercise 5 assessing model performance and interpretation <i>Thresholding and assessing model fit using internal and external validation</i>
16:00	16:30	Break
16:30	17:30	Ensemble models and model averaging <i>Overview of ensemble modelling and averaging approaches</i>
17:30	17:45	Course evaluation and wrap-up <i>Brief overview of online course evaluation form and closing remarks</i>