

	Week 1				Week 2			
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
9:00 – 10:00	Background What are SDMs and why we use them.	GIS Primer extract(), spatSample(), buffer(), etc.	Practical 1 Run again the First SDM using different covariates.	Model Projection Risks and uncertainty.	Individual project			Student Presentations Explain the case study. Illustrate the workflow. Show the results. Group feedback.
10:00 – 11:00	Theory Primer The basic theory behind SDMs and how they work.	Data Processing Prepare data for the teacher example.		Theory Advanced What are we modelling with SDMs? Group discussion.				
11:00 – 12:00	Stat Recap GLM, Random Forest + examples.							
13:00 – 14:00	Data Where to find data to run a SDM? GBIF + WorldClim.	Run First SDM GLM and Random Forest for the teacher example.	Model Projection Project the model for future data + where to find future climate data.	Data Download Students download their own GBIF and climate data + set up their workflow.	Teacher Feedback			<i>Free flexible slot</i>
14:00 – 15:00	Data Download Download GBIF and climate data for the teacher example.							Wrap Up + Assignment

Species distribution models

This course introduces the theory and practice of Ecological Niche Modelling (ENM) and Species Distribution Modelling (SDM) and their applications in ecology and conservation. Students will learn the core concepts, data requirements, and basic modelling approaches, supported by hands-on practical sessions using real-world datasets. By the end of the course, students will be able to independently build, evaluate, and interpret basic ENM/SDM analyses.