

A one-day occupancy modeling workshop with R

On July 10, 2022, a one-day workshop on occupancy modeling was held at the office of the Nature Conservation Study Centre in Prayagmarg, Kathmandu. Students and professionals who planned to apply the occupancy modeling framework in their research projects were the target audience for the program. Seven people from different academic backgrounds, including forestry, zoology, and environmental science, attended the workshop. Their academic levels ranged from bachelor's to postdoc.



The workshop took place from 10:00 am to 4:00 pm under the instruction of Mr. Manoj Pokharel. The program started with an introduction to the fundamental concepts and terminology of occupancy with a focus on single-season single-species occupancy modeling. Next, the methods for collecting data and preparing it for occupancy analysis were explained to the participants. This was followed by data standardization and the fitting of detection and occupancy models. The last section covered how to select appropriate models and interpret regression coefficients of the variables. Following insightful discussions and participants' feedback, the session was formally concluded.

Table: Schedule of the one-day occupancy modeling workshop

Time	Activity
10: 00 – 10: 30	Registration and introduction
10: 30 – 11: 00	Occupancy modeling – concept and terminologies
11: 00 – 11: 10	Short break
11: 10 – 11: 40	Necessary R packages installation
11: 40 – 12: 10	Data preparation and loading to R
12: 10 – 1: 00	Data standardization and correlation test
1: 00 – 1: 30	Lunch break
1: 30 – 2: 15	Fitting detection models
2: 15 – 2:25	Short break
2:25 – 3: 10	Fitting occupancy models
3: 10 – 4: 00	Questions and concluding remarks