



WORKSHOP ON POPULATION AND COMMUNITY PARAMETER ESTIMATION USING CAPTURE-MARK-RECAPTURE AND OCCUPANCY MODELS

November 13-18, 2023

Location: Hungarian Academy of Sciences (DAB székház), Thomas Mann Street 49., Debrecen, Hungary

Instructors:

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The overall goal of this workshop is to present a unified approach to the science, conservation and management of natural animal populations, and to provide participants with information and resources for the implementation of this approach. The main focus of this course will be:

- 1. Estimation of population parameters (e.g., survival, movement, breeding probability) using multi-state and multi-event capture-mark-recapture models;
- 2. Estimation of site occupancy, breeding success, species richness and other relevant parameters using multi-season and/or multistate occupancy models; and
- 3. Advanced application of these methods for wildlife conservation and management.

The workshop will include a combination of lectures (with ample examples), hands-on exercises, and analysis of participant's data. Computer lab exercises will use software packages such as ESURGE, MARK, PRESENCE and R packages RMark and RPresence.

Participants are encouraged to bring their own data to explore and analyze during the workshop. Participants should be familiar with R computing environment, and also have a general interest in quantitative methods and will gain the most if familiar with basic population ecology, statistics and math (calculus and algebra). The workshop is intended to be both an introduction to population and community parameter estimation methods, and a gateway to advanced applications. Participants will have to bring their own laptops.

For further information and to register, please contact Zoltán Németh (<u>znemeth05@gmail.com</u>), University of Debrecen.