



Field of doctoral studies: Forestry

Doctoral supervisor: Prof. Dr. Ovidiu Ionescu

TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES

TOPIC 1: *Comparative Analysis of Wildlife Monitoring Methods Across Different Species and Habitats*

Main aspects to be considered:

- To assess wildlife population size, density, distribution, and population dynamics and range expansion across different species and habitats across Europe;
- To apply and compare traditional (transects, observations) and modern wildlife monitoring techniques (camera trapping, UAV, genetics) through standardised field protocols, data collection;
- To analyse wildlife monitoring data using statistical models, including occupancy, capture-recapture, and density estimation methods, while identifying environmental, behavioural patterns;
- To integrate multiple monitoring techniques and ecological datasets in order to improve the reliability and comprehensiveness of wildlife assessments and to support biodiversity conservation, sustainable wildlife management, and human–wildlife conflict mitigation.

Recommended bibliography:

- Ionescu, O., Ionescu, G., Jurj, R., Cazacu, C., Adamescu, M., Cotovelea, A., Pașca, C., Popa, M., Mirea, I., Sîrbu, G., Chiriac, S., Pop, M., Attila, Ș., Deju, R. 2013. Ghid sintetic de monitorizare pentru speciile de mamifere de interes comunitar din România, Ed. Silvică
- Burton, A. C., Neilson, E., Moreira, D., Ladle, A., Steenweg, R., Fisher, J. T., ... & Boutin, S. (2015). Wildlife camera trapping: a review and recommendations for linking surveys to ecological processes. *Journal of applied ecology*, 52(3), 675-685.
- Yoccoz, N. G., Nichols, J. D., & Boulinier, T. (2001). Monitoring of biological diversity in space and time. *Trends in ecology & evolution*, 16(8), 446-453.

Prerequisites:

The candidate must demonstrate the existence of a preliminary set of collected data covering the subject matter by the date of the admission exam.

X Scientific Doctorate

X Professional Doctorate

X without tuition fee (state budget funded)

X with tuition fee or with funding from other sources than the state budget

Doctoral supervisor,

Prof. Dr. Ovidiu IONESCU

Coordinator of the field of doctoral studies,

Prof. Dr. Ovidiu IONESCU