Cezary Mitrus
prof. dr hab. (Prof.)
Institute of Environmental Biology
cezary.mitrus@upwr.edu.pl
0000-0002-9864-5696
https://bazawiedzy.upwr.edu.pl/info.seam?id=UPWr2fd496e2698047e8acc0970e2568787e&affil=⟨=pl
https://www.researchgate.net/profile/Cezary-Mitrus
"Oak woods in rural landscape of the Carpathian region: origin, dynamics and conservation values". Project funded by the NCN, 2014-2019, primary
implementer (RF)
Habitat suitability modeling for wildlife management by using various tools
Biological Sciences
Loss of biodiversity due to changes in land use, introduced invasive species and climate change is a significant challenge, which is facing habitat loss and species extinction. This requires developing tools to facilitate data management and decision-making, such as ArcGIS. Understanding the distribution of suitable habitats and the factors affecting them is very important for wildlife conservation and management. Habitat modeling is an important tool that is used to simulate the potential distribution of species. Spatial distribution models that predict areas of potential habitat for flora and fauna are very useful for evaluating management practices, especially threatened or endangered species recovery programs. The habitats modeling is very efficient for analyzing the Geographical distribution of species, scarce species. Because biodiversity studies rely heavily on species distribution estimates, predicting species occurrence, determining habitat for a species, and providing information for wildlife management often through environmental niche modeling is obtained. The relationship between wildlife and the habitats used by them is one of the important topics in ecological studies and ecologists often consider habitat as a unifying concept in wildlife ecology. There are several methods for habitat modeling, including maximum entropy (MaxEent), Generalized Linear Model (GLM), Genetic algorithm logistics, Ecological Niche Factor Analysis (ENFA), which are widely used in ecology, conservation with the help of GIS technique. The purpose of this study is to address the habitats and populations of important and key species in the selected regions, according to the current ecological conditions of the region due to the impact of climate change, the presence of invasive or competing species, and human activities on habitats and wildlife populations using various methods of modeling.
 Candidates must have a Master's degree or its equivalent in biology, forestry preferably with an emphasis on zoology, experience in work related to animal ecology is welcome. Fluency in spoken and written English. Knowledge of general basic statistical methods and programs (e.g. p. Statistica, pakiet R, SPSS) ecological modeling Good general IT skills (e.g. MS Office: Excel, MS Word, ArcGIS or similar). Ability, willingness, motivation and experience to work in the field and in team. Previous participation in scientific conferences, presentation of results in the form of a poster or speech, scientific publications are welcome.