

Postdoctoral position on Global Change Ecology and Human-Wildlife Conflicts

Project description:

We invite applications for a postdoctoral position within the SONATA-20 project "Human-Wildlife Conflicts Under Global Change" 2024/55/D/NZ8/01512 funded by the National Science Centre in Poland. The project investigates the ecological mechanisms by which global environmental change influences human-wildlife conflicts at multiple spatial scales.

This postdoctoral project will focus on analyzing patterns and trends of brown bear damage across Europe and modelling the ecological drivers of these conflicts at multiple spatial resolutions. The work will include the use of hierarchical Bayesian models, remote sensing and climate data to predict spatiotemporal risk of conflict under global change scenarios.

The postdoctoral researcher will work closely with Dr. Carlos Bautista and an international team of collaborators with expertise in global change ecology, carnivore biology, remote sensing and statistical modeling.

Keywords: brown bear, human-wildlife conflict, global change ecology, landscape ecology, spatiotemporal modeling, climate change, large carnivores, Bayesian statistics, remote sensing

Scope of work:

The successful candidate will analyze large-scale spatial and temporal patterns in bear damage data. Specifically, she/he will be in charge of the following tasks:

- Model human-bear conflicts in relation to land use, climate, and productivity
- Apply hierarchical Bayesian models with remote sensing and environmental predictors
- Develop predictive maps of conflict risk at continental and landscape scales
- Collaborate on scientific publications and contribute to broader project goals
- Engage in project meetings and international collaboration

Candidate profile:

The successful candidate will conduct research in the popular and exciting areas of humanwildife conflicts and global change. We seek a highly motivated and creative person, with good communication skills, a strong capacity for work, and the ability to think independently. She/he will be part of an international research team. She/he will work









closely with collaborators across several institutions. Therefore, a cooperative character, and a willingness to travel and conduct research stays abroad are highly desirable. The successful candidate is expected to publish results in scientific journals and disseminate them to scientific and non-scientific audiences. Professional experience abroad is an asset.

In a nutshell, we seek a motivated researcher with:

- PhD in ecology, environmental sciences, geography, or a related field
- Strong biological and ecological background, with knowledge of community ecology and Earth system sciences
- Experience with hierarchical Bayesian modeling (e.g., INLA, Stan, JAGS)
- Proficiency in R and experience in statistical analyses
- Experience with managing large databases
- Good knowledge of spatial data, GIS, remote sensing, and spatial analyses
- Experience in scientific writing and prior publications
- International academic experience or collaboration
- Good written and oral communication in English
- Interest in global environmental issues and ecological synthesis

Additionally, is desirable that the candidate will have:

- Experience with remote sensing and satellite-derived indices
- Knowledge of bear ecology or large carnivore conservation
- Scientific publications and communication experience

The applicant must comply with the requirements of the competition rules of the National Science Centre in Poland, in particular, the PhD degree must be obtained in the year of employment in the project or within the past 7 years (the period could be prolonged given the scientific career breaks, see <u>the NCN rules here</u>).

Working environment:

The Institute of Nature Conservation in Krakow, Polish Academy of Sciences (IOP PAN), is the leading research centre on applied ecology, nature conservation and biodiversity monitoring in Poland. IOP PAN offers a stimulating research environment with unique opportunities to develop your career and academic skills. The candidate will join the multinational research team led by Prof. Nuria Selva, whose mission is to investigate the impact of global environmental change on species, ecosystems and ecological interactions.

The institute provides excellent working conditions and great support for the development of young researchers, including specific funds for outstanding ideas, as well as for fostering scientific collaboration and professional networking. It is a very dynamic institute with a friendly working environment in the vibrant and beautiful city of Kraków. The city has a high quality of life, with many film, music, and cultural festivals and excellent public transport







infrastructure. It is quite safe, most people speak English, and it hosts many university students, also from abroad.

Additionally, the successful candidate will have the opportunity to conduct researchs abroad and work closely with other international and interdisciplinary research teams. That includes the research labs of prof Tobias Kuemmerle at the Humboldt University of Berlin and prof. Eloy Revilla at the Estación Biologica de Doñana -EBD CSIC-.

Conditions of employment:

- Duration: Until August 2028, starting ideally in October 2025; almost 3 years. (The full-time contract spans 35 months and may be continued after a 6-month trial period, subject to a positive evaluation.)
- Up to PLN 140,000 (gross-gross) per year (approx. PLN 7,000 net/month) according to <u>NCN regulations</u>
- Workplace: Institute of Nature Conservation IOP PAN-, Kraków
- Travel support: Participation in project meetings, fieldwork, and conferences
- Benefits: Support for training, scientific development, and publication bonuses

The project will cover travel and accommodation costs during project meetings, research stays at project partners and scientific conferences. There are financial bonuses to the salary in IOP PAN, such as publication rewards, as well as IOP PAN internal grants. There is also the possibility to apply for future own research projects at several funding agencies in Poland.

Application for the postdoctoral position:

The required documents are:

- (1) A copy of the PhD's diploma or confirmation of expected completion in the field of ecology, biogeography, environmental sciences or other related disciplines. The degree must be recognized in Poland or nostrified. If required, use the KWALIFIKATOR tool to assess recognition status (see <u>link</u>).
- (2) A **letter of interest** (maximum 2 pages) detailing the candidate's qualifications for the position, her/his research and professional experience, and how this position will help fulfil personal career goals. The letter should include the candidate's contact information, as well as the contact information of two academic referees or people with whom the candidates have worked.
- (3) **Curriculum vitae**, including education, employment and research experience with a list of publications and a short description of scientific achievements, particularly information on participation in scientific conferences, workshops, training and internships, participation in research projects, involvement in learned societies and scientific associations, and awarded distinctions and scholarships.







(4) **Declaration of consent** for processing of personal data for the purpose of recruitment (see below).

The recruitment rules will follow the <u>National Science Centre regulations</u>. The selection will be based on the qualifications of the candidates, including demonstrated skills and competences, scientific achievements, professional experience, awards and internships. Recruitment is a two-stage process and includes: 1) an evaluation of the candidates' documentation and 2) an interview with selected (top-ranked) candidates. The Evaluation Committee will be appointed by the Director of IOP PAN.

The documents should be combined into a single PDF and sent by email to the address sekretariat@iop.krakow.pl by 31st August 2025, 23:00 CET with the subject "Postdoctoral application – Human-Wildlife Conflicts Project". The pre-selected candidates would be invited for an interview in September. The decision of the Evaluation Committee will be announced at the IOP website before the end of September.



