We are a research campus with a strong tradition in biosciences focused on complex ecological, evolutionary & developmental aspects of LIFE. Faculty of Science, University of South Bohemia in České Budějovice, Czech Republic is seeking qualified applicants for

PhD position in Bird Migration and Breeding Ecology



The recently established research group **Global Life-history**, **Ornithology & Behavioural Ecology** (GLOBE) – <u>https://GLOBEresearchgroup.com</u> new webpages will be launched soon – focuses on ecology, behaviour, life-history strategies and population dynamics of wild animals, particularly birds, including impacts and consequences of recent environmental changes. The GLOBE research group is led by <u>Vojtěch Kubelka</u> from the Department of Zoology and Centre for Polar Ecology at the Faculty of Sciences, University of South Bohemia in the Czech Republic and has been recently awarded a prestigious ERC CZ grant: *Animal migrations in a changing world – still advantageous strategy or maladaptive behaviour?* for years 2024–2029.

Animal migrations represent one of the greatest spectacles in nature, providing crucial ecosystem services as well as resources for human communities. Why do animals migrate? It has been thought that animals migrate to reproduce at higher latitudes, taking advantage of lower predation pressure, fewer parasites and seasonally high pulses in food supply. However, it has been highlighted that recent climate change and human pressure impacts can erode such benefits and migratory animals are declining globally with poorly understood underlying mechanisms.

We strive to tackle pressing issues: Are there still latitudinal gradients in predation, parasitism and seasonal food availability, supporting the benefits of migratory behaviour? How are migratory animals able to cope with environmental changes? What are the most important drivers and life stages limiting populations of migratory animals? To achieve this, we are executing a comprehensive research of migration profitability, combining experimental, observational and comparative approaches – investigating latitudinal gradients in predation, parasites, food supply and whole life-cycles of tracked shorebirds, suitable model taxon with intra-specific variability in migratory strategies and exposed ground nests – at 16 study sites from the Arctic to Patagonia.

We seek to appoint a **PhD student** to contribute to this new project. The particular targeting of the PhD project will be developed together with the successful applicant within the framework of the ERC CZ project.

### What would be your main responsibilities:

- Study PhD at the Faculty of Sciences, University of South Bohemia in České Budějovice, Czech Republic in the <u>Zoology programme</u>
- Execute ornithological fieldwork at selected study sites across Western Palearctic and South America in association with international collaborators
- Combine experimental and observational fieldwork with a comparative approach based on extracting relevant information from published literature
- Prepare and write manuscripts for publication in peer-reviewed journals
- Optional activities include engaging in the supervision of undergraduate students and participation in funding applications for research in collaboration with other team members
- Participate in conservation activities
- Present and promote the results at conferences and seminars and disseminate the project outputs

#### What we offer:

- A four-year position combining employment on the ERC CZ project and governmental financial support during the course of the PhD study
- English-speaking, stimulating and friendly international research environment in the multicultural GLOBE research group
- Extensive international networking and mentoring opportunities with 100+ collaborators of the GLOBE research group worldwide
- Fieldwork at the ERC CZ project study sites and access to the datasets obtained along latitudinal gradients from Morocco to the Arctic and from tropical South America to Patagonia
- Excellent instruments, equipment and multiple research platforms within the GLOBE research group and Faculty of Sciences, University of South Bohemia in České Budějovice, Czech Republic
- Full logistical support for own follow-up research funding applications
- Flexible working time, full health insurance, student benefits
- Professional administration support and assistance with all personal, economic or logistical needs including the relocation and settlement in CZ
- Meals allowance, special mobile services, university kindergarten
- Work-life balance in a historical middle-sized university city, budejce.cz/en/, offering multiple opportunities for outdoor, sport & cultural activities.

# Competitive candidates are expected to have:

- Master's degree or equivalent in ecology, or relevant field of life sciences
- A foundation of knowledge in two or more fields: evolutionary ecology, climate change biology, demography and population dynamics, predator-prey interactions and animal migration
- Experience in conducting/participating in international research projects
- Hands-on experience for 2+ years in field research, with preference for experience with fieldwork in remote areas, including tropical or polar locations
- Ornithological fieldwork experience including bird handling and ringing (bird ringing licence is welcomed but not necessary)
- Good skills in statistical modelling, advanced level in using R
- Evidence of success conducting research and scholarly activities, including publications in peer-reviewed journals
- Experience working with analyses and presentation of large data sets
- Excellent interpersonal skills and ability to collaborate within a team-based environment, ability to work effectively both in a team and independently
- Valid driving licence

### Representative publications of our research

- Kubelka V., Šálek M., Tomkovich P., Végvári Z., Freckleton R. P. & Székely T. 2018: Global pattern of nest predation is disrupted by climate change in shorebirds. *Science* 362: 680–683.
- Zámečník V., Kubelka V. & Šálek M. 2018: Visible marking of wader nests to avoid damage by farmers does not increase nest predation. *Bird Conservation International* 28: 293–301.
- Halimubieke N., Kupán K., Valdebenito J. O., Kubelka V., other 19 authors, & Székely T. 2020: Successful breeding predict divorce in plovers. *Scientific Reports* 10: 15576 (1–13).
- Koleček J., Reif J., Šálek M., Hanzelka J., Sottas C. & Kubelka V.
  2021: Global population trends in shorebirds: migratory behaviour makes species at risk. *The Science of Nature* 108: 9(1–8).
- Kubelka V., Sandercock B., Székely T. & Freckleton R. P. 2022: Animal migration to northern latitudes: environmental changes and increasing threats. *Trends in Ecology & Evolution* 37: 30–41.
- Székely T., Carmona-Isunza M. C., Engel N., Halimubieke N., Jones W., Kubelka V., Rice R., Tanner C. E., Tóth Z., Valdebenito J. O., Wanders K. & McDonald G. C. 2024: The causes and implications of sex role diversity in shorebird breeding systems. *Ibis* 166: 560–569.
- Cooke S. J., Piczak M. L., Singh N. J., Åkesson S., Ford A. T., Chowdhury S., Mitchell G. W., Norris D. R., Hardesty-Moore M., McCauley D., Hammerschlag N., Tucker M. A., Joshua J. Horns, Reisinger R. R., Kubelka V. & Lennox R. J. 2024: Animal Migration in the Anthropocene: Threats and Mitigation Options. *Biological Reviews* 99: 1242–1260.





# Application

Interested candidates should contact **Vojtěch Kubelka** (vkubelka@prf.jcu.cz). Applications should include: i) **letter of interest** (max 2 pages) – describing how the applicant's qualifications address the terms of the position as well as explaining the motivation of the applicant; **curriculum vitae** (max 4 pages) – including education, relevant research experience and major achievements; iii) **contact information for at least two references**. Three documents in English should be sent to Vojtěch Kubelka before the deadline. The online interviews with selected candidates will follow up soon after the deadline. Applicants from all countries are eligible.

### Deadline for applications: 10 January 2025.

**Position start:** Start dates are negotiable but could be as early as March 2025.

### Location description

České Budějovice is a vibrant medium-sized city and centre of South Bohemian region with an international university community. The University of South Bohemia is the biggest higher education institution in the region with more than 9,000 students, numerous leading departments in natural sciences and field research stations at Svalbard or Papua New Guinea. Five institutes of the Czech Academy of Sciences are situated on the same campus, forming the Biological Centre and representing outstanding cooperation opportunities. The surrounding of České Budějovice has diverse natural and cultural landscapes, including Šumava National Park, two UNESCO biosphere reserves and numerous protected areas with impressive wildlife.



