



## Population modelling of fish in reservoirs treated by biomanipulation

Biology Centre of the Czech Academy of Sciences offers a **postdoc position to analyse the population dynamics modelling of freshwater fish populations.**

Population dynamics of fish in lakes and reservoirs has been studied for decades but is still poorly understood. Recent advances in quantitative sampling promise the improvement thanks to extensive standardized sampling programmes throughout the Europe. The institute of Hydrobiology of the Biology Centre CAS owns two decades of quantitative fish data containing the year class strength, survival, growth, biomass and production of fish in model reservoirs. New information will come in connection with a new project on Biomanipulation of reservoirs. Using these long-termed sampling campaigns data, the candidate is assumed to create and run mathematical models of the population dynamics of the most important species in model lakes. In further steps, the outputs of the models will be confronted to extensive biotic and abiotic background datasets in order to track the main drivers of population changes in fish populations.

The project will be linked to internationally funded, multi-group research projects (ClimeFish, Biomanipulation) and utilize extensive, multi-level data currently available at the Institute of Hydrobiology (<http://www.hbu.cas.cz/en/homepage/>) at the Biology Centre of the Czech Academy of Sciences in Ceske Budejovice, Czech Republic.

### DESIRED SKILLS AND EXPERIENCE

- MSc/PhD in population or evolutionary ecology, theoretical ecology, limnology, computer science, mathematics or related fields
- interest in modelling individual life histories, population dynamics or food webs
- good knowledge of statistical analysis of ecological data
- good knowledge of programming in R and/or Python
- excellent written and spoken English
- postdoc applicants: promising publication record commensurate with the career stage
- prior knowledge of aquatic ecosystem processes and past work in multidisciplinary environment will be preferred

### POSTDOC POSITION DETAILS

Target start date is January 2019 (negotiable). Initial appointment will be for 12 months, with an extension for up to 5 more years based on initial performance. We offer a highly competitive salary in local standards (28000–56000 CZK monthly) commensurate with the applicant's experience and skills. Successful applicant will be encouraged to develop his/her own research agenda compatible with the overall aims of the project.

### HOW TO APPLY

Interested applicants should email the following documents to Prof. Jan Kubečka ([kubecka@hbu.cas.cz](mailto:kubecka@hbu.cas.cz)) **10th December 2018.**

- 1) Cover letter outlining main research interests
- 2) CV including full publication list
- 3) Copy of PhD (postdoc position) or MSc (PhD position) diploma
- 4) Copies of 1–2 relevant publications (optional for PhD position)

5) Contact details for 3 (postdoc position) or 2 (PhD position) references.

Preliminary enquiries are welcome.

#### **BACKGROUND**

Ceske Budejovice is a medium-sized town ca. 150 km south of Prague with 100,000 inhabitants, a relaxed atmosphere, and a growing expat community at the Biology Centre and the University. Both the town and the surrounding countryside provide numerous opportunities for research and leisure activities.

Living costs are low by international standards. Foreign applicants will receive support in transferring to the Czech Republic. The Institute can also help secure non-commercial accommodation in dormitories at the campus shared by the Biology Centre and the University. Czech courses are available for foreign staff to reach a basic level of proficiency in everyday situations.