

Three-year PhD position within a prestigious EU funded project:



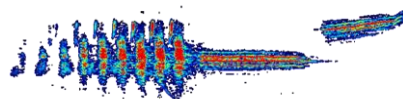
## YELLOWHAMMER:

### Individual acoustic monitoring to study song culture evolution within and between dialect areas

Bird song is one of the best known and most intensively studied examples of social learning and cultural evolution in animals. To study song evolution in time and space, we will use individual acoustic monitoring (IAM) - a non-invasive method that allows the identification of individuals based solely on their vocalisations. IAM has major advantages over traditional methods that require the capture of individuals, which can affect their behaviour over long periods of time. In this project, we will use IAM not only for traditional monitoring of individuals, but also to observe natural vocal interactions between individuals without human intervention. During the project, we will test new passive recorders and recording analysers tailored to individual identification based on vocal cues. This approach should help us to test the potential of passive IAM for conservation purposes, while uncovering potential mechanisms of song structure evolution within and between areas with different song dialects.

#### PhD position offers:

- gross monthly salary ca 1980 EUR (incl. mandatory health and social insurance)
- extra allowance for relocation, and for family/special needs if required
- close collaboration with AI and biodiversity experts from several European countries (Netherlands, Germany, France, Belgium, Czechia, Finland, UK)



The PhD project is based at the [Department of Ecology](#), Charles University, Prague

#### Essential knowledge, skills and experience of an applicant:

- MSc (completed, or soon to be awarded) in a topic relevant for the PhD project (bioacoustics, ecology, zoology, animal behaviour or similar)
- evidence of the ability to conduct high-quality research and write scientific texts
- good written and oral communication in English,
- good planning and time management skills
- ability to work independently as well as collaboratively within the research group
- proficiency in R
- willingness to travel for academic research visits and/or fieldwork
- willingness to learn skills from multiple disciplines (e.g., computer science, machine learning)
- driving license



#### Desirable knowledge, skills and experience of an applicant:

- work with audio data (sound recordings)
- work with machine learning algorithms, especially deep learning
- work on field or lab studies with animals
- experience with species or biodiversity monitoring programs
- interest in biodiversity, ecology or behavioural sciences
- experience with living/stays in foreign countries



The PhD is planned to begin in Feb/Mar 2024

To apply, please submit **(1) a letter of motivation, (2) your academic CV, (3) the names and contact details of two references.** Submit these as a single PDF document to:

[tereza.petruskova@natur.cuni.cz](mailto:tereza.petruskova@natur.cuni.cz)

**The application deadline is October 30, 2023.**

This PhD is one of ten in the BioacAI project. Please see all positions and more details about the project here: <https://bioacoustical.eu>

#### Eligibility requirements:

Candidates can be of any nationality. You must fulfil the EU mobility rule, i.e., **you should not have resided or carried out your main activity (work, studies, etc.) in the Czech Republic for more than 12 months during the 36 months prior to starting the PhD.** You must not already have a doctoral degree. You must be eligible to work according to the host country's regulations (e.g. visa requirements), and also to travel/work in other European countries for collaborations and workshops.