

PhD position in trophic ecology of saproxylic beetles

We are looking for a **highly motivated PhD candidate** with a background in **ecology, zoology or entomology** to join our research team investigating the feeding strategies of saproxylic beetles. Saproxylic (=deadwood dependent) beetles are among the most important taxonomic and functional groups in woodlands and a model group in forest ecology. Their feeding habits are, however, seldom investigated. Our project aims to study the links between various deadwood substrates which may serve as food resources and the saproxylic beetles as their potential consumers. The project will use a combination of extensive field work, controlled experiments, and diverse diet tracking methods to reveal the composition of the beetles' diet.

Responsibilities of the candidate

The successful candidate will:

- Assist in field during the collection of beetle material;
- Prepare collected material (adults and larvae of beetles, deadwood substrates) for laboratory analyses;
- Collaborate with team members on the analysis of stable isotopes and analysis of digestive enzymes activity;
- Perform gut content analysis of larvae in selected saproxylic beetle species;
- Process and analyse acquired data using statistical methods;

The findings of the project will help understand the nutrient acquisition in different species of saproxylic beetles and the potential key role of fungi as the main source of nutrients in deadwood trophic networks. The PhD student will publish these findings in impacted international scientific journals focused on ecology, functional ecology, insect physiology, or entomology and present the results on international conferences.

Requirements:

- **Master degree** in biology or related fields (requirement for PhD programme eligibility);
- Strong interest in **ecology** and **entomology**;
- Motivation for field work;
- Experience in **data processing** and **statistical analysis** (R software);
- **Fluency in written and spoken English**;
- Ability to work **independently** as well as in a **team**.
- Driving licence B (advantageous)
- Experience with work in laboratory (advantageous);

The successful candidate will join the team of **Pavel Sebek** (sebek@entu.cas.cz), **Laboratory of Woodland Ecology** (<https://www.oldtree.cz/>) at the **Institute of Entomology, Biology Centre of the Czech Academy of Sciences** (<https://www.bc.cas.cz/en/>), and will enroll into a PhD programme at the **Faculty of Science, University of South Bohemia** in Ceske Budejovice, Czech Republic (<https://www.prf.jcu.cz/en/>). Our team combines expertise in forest ecology, entomology and nature conservation. The Institute of Entomology hosts an international research environment and is recognized as a leading institution for basic research in entomology and insect science in Europe. The PhD candidate will benefit from close collaboration of researchers conducting complementary fieldwork and laboratory studies. The scholarship comfortably covers living expenses in the Czech Republic for the entire 4-year PhD programme.

Application Details:

Deadline for application is **December 16, 2025**. Best evaluated applicants will be selected for an online interview which will be held on December 19, 2025. **Estimated start of the PhD study:** March 2026.

To apply, please send your **CV**, a **cover letter** describing your motivation and relevant experience, and **contact details for two references**.

Applications and inquiries should be sent to **sebek@entu.cas.cz**