# Postdoctoral Position in Forest Ecology: Dendroecological perspectives on temperate mountain forest dynamics of central, east and south-east Europe

#### Job description:

We are seeking a postdoctoral researcher to join our team within the Forest Dynamics Lab of the Department of Forest Ecology. The project is titled "Disturbance regimes as drivers of structural variability, carbon dynamics and biodiversity at multiple geographic scales in primary mountain forests of central and eastern Europe."

Disturbance plays a dominant role in shaping the structure and function of forest ecosystems, but quantification of disturbance effects is typically limited by missing information on a location's history and a region's disturbance regime. Our lab uses tree-ring data to reconstruct site histories, providing insight into how forests recover from disturbances of variable severity. We are particularly interested in linking patterns in the severity and frequencies of disturbance to variation in tree size structure, carbon dynamics and biodiversity.

This region of Europe still has extensive remnants of primary mountain forests, particularly in the Carpathian and Dinaric mountain ranges. The large sub-continental region covered by the current research project includes the two dominant forest types in Europe, Norway spruce and mixed broadleaf forests dominated by European beech.

The project will link biomass and biodiversity indicators to disturbance histories in primary forests that permit such direct contrasts of endogenous and exogenous drivers. The project will therefore provide novel insights on whether the predictions of present biomass and forest biodiversity indicators can be improved by more accurately partitioning the relative importance of exogenous and endogenous drivers. At the same time, this project will be the first to reconstruct biomass trends in large patches of primary forests in central and eastern Europe. Currently, our research is organized into interlinked projects quantifying the main drivers of forest dynamics, biomass and biodiversity indicators.

Project 1. Drivers of disturbance dynamics

Project 2. Tree growth history and forest biomass

Project 3. Stand structural diversity and biodiversity indicators

The successful candidate will have access to a completed database of 20 000 tree cores collected from 1000 forest plots distributed throughout remaining patches of old-growth forest in central and eastern Europe. Plots are distributed in a hierarchical design (i.e. plots nested within stands, within landscapes throughout the Carpathian mountain range). The aim of the design is to partition the effects of disturbance at a variety of scales, from local variation among neighboring locations due to smaller-scale gap dynamics to more extreme events impacting entire landscapes.

The selected candidate will be expected to lead projects using available tree-ring data to link tree growth, disturbances and biomass dynamics to abiotic and biotic factors. Responsibilities will predominantly be data analysis and manuscript preparation. Opportunities to visit some of our impressive field locations will be available, but the candidate is not expected to participate in data collection.

We are a young, energetic, international research team and have close collaborations with foreign partners. Opportunities exist for exchange visits and meetings. To obtain more information about our team, visit http://scholar.google.cz/citations?user=DaBJTM4AAAAJ or <a href="https://scholar.google.cz/citations">www.remoteforests.org</a>

Type of employment: Temporary position – 11 months

Working hours: Full time

First day of employment: 11/2020 earliest

Number of positions: 1

City: Prague

Country: Czech Republic

Czech University of Life Sciences in Prague, Faculty of Forestry and Wood Sciences, Kamycka 129, Praha 6 Suchdol, 16521, Czech Republic

# **Requirements:**

- The applicant should have a PhD or other appropriate level 8 of ISCED (International Standard Classification of Education) qualification completed within the last 7 years in environmental or related sciences (biology, ecology, forest science and plant physiology)
- The applicant has worked outside of the Czech Republic for at least 2 years as a researcher (0.5 contract or more) or has studied doctoral studies during the last 3 years.
- The applicant has already published 2 peer-reviewed research outputs during the last 3 years.
- All research activities will be conducted in English, knowledge of the Czech language is not required. Excellent English communication and writing skills on the level of native speaker is essential.
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## **Selection procedure:**

Selection will be based on the relevance of candidates' professional interests and experience, as well as excellence in research achievements.

# Position duration, starting date and salary:

The duration of the position is 11 months, starting earliest in November 2020. The gross monthly salary starts at 62,412 CZK (circa 2,400 EUR) including health insurance and social security cover. The starting monthly salary represents double of the median salary in the Czech Republic. To compare living costs see here: https://www.expatistan.com/cost-of-living.

## Required application documents:

- Diploma (and its nostrification, if necessary)
- Professional résumé (CV), including a list of publications and motivation letter
- Confirmation of 2 years professional activity outside of the Czech Republic within the last 3 years and/or Ph.D. programme documents (confirmation can also be included in the résumé -CV)
- Contact information for two references, one being the current or most recent employer

## **Application deadline:**

The deadline for application is 31 August 2020. Application review will begin immediately. Successful candidates will be contacted in the middle of September 2020. The second round of the interview will take place in the form of a video call.

#### About the employer

Czech University of Life Sciences Prague, Faculty of Forestry and Wood Sciences, is searching for 1 researcher (Post-Doctoral Position) to new project: "PROMO II".

The aim of the project, co-financed by the Operational Program Research, Development and Education, is to support the development of international mobility of research staff at CULS Prague.

#### We offer:

- Working on a temporary contract (11 months, start earliest in October 2020),
- Work full-time employment (1.0)
- Salary: at least 2 400 €
- Place of work: Kamýcká 129, 16500 Prague Suchdol, Czech Rep. (EU)
- Benefits of the CULS employee
- Work in a dynamic, international, cooperative and high professional quality team
- Extend research networks by participation in international conferences and presentation of research findings
- Working in English

#### 4 research areas

- 1. Biology
- 2. Ecology
- 3. Forest sciences
- 4. Geography

Send your CV and other required documents to parpelova@fld.czu.cz