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

Type of employment: Temporary position “until the end of 2023 (with possibility to extend to permanent position) Working hours: Full time First day of employment: spring or summer 2020 Number of positions: 1
City: Prague
Country: Czech Republic

Czech University of Life Sciences in Prague, Faculty of Forestry and Wood Sciences, Department of Forest Ecology, https://www.remoteforests.org/

We are seeking a postdoctoral researcher to join our team within the Forest Dynamics Lab of the Department of Forest Ecology, Faculty of Forestry and Wood Sciences in Prague, Czech Republic. 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 broad-leaf 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 is 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 and energetic research team with close collaborations with international partners. Opportunities exist for exchange visits and meetings. To obtain more information about our team, visit http://scholar.google.cz/citations?user=DaBJTM4AAAAJ or www.remoteforests.org

Applicants should have a PhD (at the time of hire) in environmental or related sciences (biology, ecology, geography, forest sciences). English communication and writing skills at the level of a native speaker are essential.

Salary: 45 000 – 60 000 CZK based on the previous experience and performance. We offer a 2-year position. 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 In addition, there is a share increase based on the personal performance.

Applications: Please attach a CV listing skills and qualifications, a list of publications and other documents deemed important by the applicant. Applicants should provide a short statement outlining why they believe themselves to be suitable for the above position. Applicants should include contact information for two references, one being the current or most recent employer.

Send the application to the following address:
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