



Job vacancy

Research Assistant - Forest Ecology 26/Wi15

University of Greifswald, 16 September 2026 | deadline: 11 October 2026

At the **Institute of Botany and Landscape Ecology's** Experimental Plant Ecology Group, which belongs to the University of Greifswald's Faculty of Mathematics and Natural Sciences, there is a job vacancy, subject to budgetary regulations, that will be available from **1 January 2027** on a fixed-term contract **until 31 March 2030**, for a part-time position (65 %) as

Research Assistant Forest Ecology.

Payment will be made in accordance with pay group 13 *TV-L Wissenschaft*.

The research group Experimental Plant Ecology at the University of Greifswald's Institute of Botany and Landscape Ecology conducts research on various topics in forest ecology and peatland research. We combine basic science with practical applications and real-world relevance. One area of focus is the study of processes within the plant root zone, which we investigate using state-of-the-art techniques. Between one-third and more than three-quarters of plant biomass is produced underground. Roots are crucial for water and nutrient uptake and thus for plant growth, particularly in the context of climate change with its increasingly frequent and severe dry spells. Despite this autoecological and ecosystemic importance, little is yet known about the dynamics of root growth. It is clear, however, that root growth does not correlate directly with above-ground growth dynamics.

In the Experimental Plant Ecology Research Group, we use various methods to quantify and understand root growth. These include ingrowth cores, litterbags, marker horizons and, in particular, minirhizotrons. These are plexiglass tubes installed in the rhizosphere which, with the aid of a scanner, enable the observation of root development. The method has been significantly refined in our group's previous projects. Thanks to the scanner's automation, image data can now be transferred at the desired temporal resolution directly from the field to databases, and the scans are analysed automatically using an AI algorithm ('RootDetector'). These tools now provide completely new insights into the spatiotemporal dynamics of root growth.

The position advertised here involves applying and further developing these methods in the field and in controlled experiments. Technical support is available.

Long-term observation series have already been established at field sites in beech forests in north-eastern Germany and north-western Poland, where above-ground growth (dendrometers), phenology (phenocams) and root growth (manual mini-rhizotron scans) have been recorded. These measurement series are to be continued and expanded to include automatic root scanners, and then analysed with regard to the interplay between above- and below-ground growth dynamics. Controlled experiments in mesocosms or individual pots are also possible and encouraged. For example, the position holder could use these methods to investigate the significance of the establishment phase of forest trees for their subsequent root architecture and, thus, also their later adaptability to drought.

Developing your own research focus and profile is definitely encouraged!

Tasks:

- Data collection at field sites and its analysis
- Planning, conducting and analysing controlled experiments
- Publication of the results in scientific journals
- The aim is to complete a cumulative PhD on the topic

Requirements:

- A master's degree (or equivalent) in Biology, Ecology, Geoecology, or a related discipline by the time employment starts
- A solid knowledge base in plant ecology; knowledge of forest ecology and root growth is an advantage
- Experience with and enthusiasm for statistical analysis of research data, preferably in R
- Excellent English language skills
- High level of motivation to work in an interdisciplinary and international research and training environment
- Ability to work independently with a hands-on approach, team spirit, helpfulness and reliability.

This vacancy is open to all persons, irrespective of gender. Severely disabled applicants with the same qualifications will be considered with preference.

Pursuant to § 83(8) Sentence 3, read in conjunction with § 83(1) Item 1 PersVG M-V, the Staff Council shall only be consulted on the appointment and determination of the pay grade for members of academic or artistic staff upon request. The request may be submitted in text form, via email, together with the application documents.

Unfortunately, application costs will not be reimbursed by the state of Mecklenburg-Vorpommern.

Please note that by submitting your application, you provide your consent pursuant to data protection law for our processing of your application data. Further information about the legal bases and the use of your data can be found [here](#).

Applications comprising all usual documents must be sent with reference to the job advertisement number **26/Wi15** by **11 October 2026**, preferably via email (one PDF file), to:

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