# Postdoctoral scholarship in global change ecology

At the Department of Biological and Environmental Sciences (BioEnv) we have teaching and research activities that span from the alpine ecosystem, through forests, cultivated land and streams, all the way into the marine environment. In these environments, we study different levels of biological organisation from genes, individuals and populations, to communities and ecosystems. We work within ecology, evolution, physiology, systematics and combinations of these fields in order to understand the impact of natural and anthropogenic changes of the environment.

The department is placed at three different localities: in Gothenburg Botanical Garden, at Medicinareberget in Gothenburg and Kristineberg Marine Research Station. There is some flexibility for the placement of the position, but ideally the person will sit at the Gothenburg Botanical Garden.

# Subject area

Global change ecology and plant ecology

# Subject area description

Human activity is leading to rapid changes in the distribution and diversity of species on Earth. Understanding these changes and their consequences for human well-being is vitally important but is hampered by a lack of global, comprehensive monitoring data. Together with international collaborators, we have compiled a large dataset of plot-based plant community monitoring data from many habitats across the globe that can be used to determine how the composition, diversity, and function of plant communities has changed over the past century.

# **Study description**

The postdoc will contribute to the analysis and writing for a large synthesis project using the already-compiled database of plant community monitoring. The general goal of this project is to understand how plant biodiversity has changed over the past century, but the specific topic of this position is flexible. Potential topics include understanding what traits enable a species to cope with climate change, identifying the drivers of diversity change, or investigating whether recent biodiversity change has led to a shift in traits relevant for ecosystem functioning. Although the dataset is largely "ready" to use, some additional data cleaning and curation may be necessary, depending on the specific question(s) we choose to address.

#### **Eligibility**

To be considered as a postdoctoral student on an external stipend you need the following:

- Hold a PhD degree in plant ecology, global change ecology, or a related field.
- Shall have completed the doctoral degree no more than three years before the application deadline. In particular circumstances, such as leave due to illness, parental leave, clinical duties, commissions of trust within union organisations or similar, the degree may have been awarded earlier.
- May not have a current employment or have hold one for the last two years at the University of Gothenburg.
- Scholarship holders who are required, pursuant to the Tax Procedures Act (2011:1244), must submit a self-assessment and include information on the scholarship received.

Note that while citizens of most countries are not required to pay income tax on scholarship income, United States citizens are required to pay tax on scholarship income in the USA, regardless of where they are residents.

#### **Assessments**

We are seeking a highly motivated and skilled person with a background in global change ecology/plant ecology and quantitative ecological methods. During the period you will gain experience in compiling large datasets, analyzing complex hierarchical data using Bayesian methods, and contributing to a large international network of global change ecologists. Because this project is part of an international collaboration, you are expected to work collaboratively, including using the project's GitHub repository for your study. Excellent communication skills, both written and spoken, in English are required.

# The stipend

The stipend is temporary for 24 months with an extent of 100%, placed at the Department of Biological and Environmental Science. Starting date is upon agreement.

# The application should be written in English and must include:

- A cover letter with the applicant's motivation for application, describing how the applicant meets the selection criteria (max. two A4 pages)
- A list of qualifications (CV)
- Certificate of PhD exam and other educations of relevance
- Complete list of publications, including submitted and accepted manuscripts
- Contact information for at least two referees that are familiar with the applicant's qualifications

The most qualified candidates, in relation to the assessment criteria in the advertisement, are invited for an interview conducted in English via Zoom.

# For further information please contact

Anne Bjorkman, Senior Lecturer in Plant Ecology

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Website: www.edge-ecology.com

Åsa Arrhenius, Head of Department asa.arrhenius@bioenv.gu.se

# How to apply

The application is sent to Anne Bjorkman, <u>anne.bjorkman@gu.se</u>, with the subject line "Postdoctoral scholarship in global change ecology".

Closing date: January 3<sup>rd</sup>, 2023