

Postdoctoral Researcher in quantitative Environmental Sciences Karlsruhe Institute of Technology, Campus Alpin (IMK-IFU), Garmisch-Partenkirchen, Germany

Overview

We are seeking to appoint a Postdoctoral Researcher in quantitative Environmental Sciences to work within the European Commission funded wildE project (*climate-smart rewilding: ecological restoration for climate change mitigation, adaptation and biodiversity support in Europe* – see annex). The successful applicant will contribute to research on the impacts of environmental and policy change on land use and ecosystems, including biodiversity at large spatial scales (National to European scale). You will contribute to the further development and application of the CRAFTY agent-based model (<https://landchange.imk-ifu.kit.edu/CRAFTY>) within the LandSyMM modelling framework (<https://landsymm.earth/>) with a focus on evaluating the opportunity costs associated with rewilding in Europe along with other environmental trade-offs and co-benefits. The position entails contributions to project management and reporting, and some teaching.

The position will be held within the Land Use Change & Climate Research Group (<https://landchange.imk-ifu.kit.edu/>) of the Karlsruhe Institute of Technology (KIT), located at KIT's attractive 'Campus Alpin' in Garmisch-Partenkirchen, Germany. You will be welcomed into a multi-disciplinary, highly collaborative and friendly team, well connected to national and international research networks and activities. Salaries will range from €48,892 to €55,430 gross per annum depending on qualifications and experience based on the Collective Agreement for the German Public Service Sector (TV-L EG13, St. 1-3). The position is available from April 2023 for an initial 2-year period that may be extended by a further year.

Qualifications

You will have a PhD degree in a relevant discipline such as environmental sciences, geo-ecology, meteorology, geography, ecology, ecological economics, computational social sciences, mathematics and informatics. You will also have:

- 1) strong quantitative skills in environmental modelling and preferably computer programming experience (e.g., Java, C, C++, Python);
- 2) and/or environmental data science and statistical analysis;
- 3) and/or experience with scenario analysis, environmental policy analysis and ecosystem assessment.

You will need to have proficiency in the English language, both spoken and in writing. Willingness to travel to interact with consortia partners is required. Further information can be obtained from Prof. Mark Rounsevell (mark.rounsevell@kit.edu).

Applications

Applications should be sent by email to Sylvia Kratz (sylvia.kratz@kit.edu) by **Friday 2 December 2022**, quoting the reference, *wildE_PD*. Applications should be submitted within a single PDF document that includes your CV, publications list (with citations), a short (1-2 page) letter of motivation and contact details for 2 referees. The motivation letter should clearly state a) your skills and experience in quantitative environmental sciences, and b) how your research interests relate to the job specification and description of the wildE project. Please also indicate where you heard about this job opportunity. Applications that are incomplete or do not address these criteria will not be considered.

Interviews will be held remotely during **the week of 19 December 2022**.

KIT strives to achieve gender balance at all levels of employment. We therefore particularly encourage female candidates to apply for this position. With appropriate qualifications, applications from persons with handicaps are treated preferentially.

ANNEX – wildE: A European project to assess ecological restoration through rewilding

Terrestrial ecosystems throughout Europe face the twin threats of climate change and the loss of biodiversity. Rewilding could be an important ecological restoration solution to mitigate negative effects. The rewilding approach proposes to "let nature take care of itself" (often with temporary help at first) and benefit from natural processes to adapt ecosystems to climate change and support their biodiversity. The wildE project aims to assess and improve the potential of climate-smart rewilding as a nature-based solution for ecological restoration in Europe.

This multidisciplinary research and innovation programme will address the link between climate and biodiversity in close association with the socio-economic dimension of large-scale restoration. It compares scenarios from various land uses, assesses associated risks and opportunities, and explores new approaches to make ecological restoration a socially and economically viable solution for local actors and communities. wildE will provide scientific knowledge, methods and tools for different geographical, ecological and social contexts, based on Europe-wide studies as well as individual case studies.

The aim of the project is to help policy makers (the EU, national governments, regions, local communities) and commercial companies to integrate ecological restoration through rewilding into their policy or management, to achieve carbon neutrality, strengthen climate adaptation and reverse biodiversity loss.

These results will be widely communicated to a broad range of stakeholders (land owners, conservation managers, companies, society at large, etc.) to improve everyone's knowledge of these challenges and opportunities. This interactive sharing will be made possible in particular through a collaborative web platform, which will also function as a shared workspace for stakeholders.

wildE is supported by a team of 22 academic and non-academic partners (NGOs, companies, etc.) from 12 European countries under the coordination of Arndt Hampe, INRAE (France).