

The Institutes of Biodiversity and of Farm Economics at the Johann Heinrich von Thünen-Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries, in Braunschweig is seeking as soon as possible

a scientist (m/f/d)

as doctoral candidate for conducting research in context of the project *Monitoring biodiversity in agricultural landscapes* (MonViA), with 65% of the regular weekly working hours (currently corresponding to 25.35 h per week). The position is limited to a three (3) year employment in compliance with § 2 (1) S. 1 Wissenschaftszeitvertragsgesetz.

Agriculture is considered to be a major factor for modifying and reducing above ground biodiversity in terrestrial ecosystems and beyond. Germany has currently no comprehensive data describing the status and trends of biodiversity in agroecosystems. Therefore, 12 Institutes of the Thünen Institute and Julius Kühn Institute and the Federal Office for Agriculture and Food have joined forces in the MonViA initiative for developing a modular approach for characterizing biodiversity in agroecosystems (<https://www.agrarmonitoring-monvia.de/en/>).

Butterflies use the landscape at a fine scale and react quickly to changes in land-use such as intensification or abandonment according to their specific habitat requirements. Hence, butterflies are widely regarded as sensitive indicators, especially for grasslands and extensively managed agroecosystems. As these ecosystems are currently of particular interest in land-use policies, the objective of the PhD position is to assess the suitability of the German Butterfly Monitoring Scheme (<https://www.ufz.de/tagfalter-monitoring/>) for depicting changes in land-use and farming practices. The focus of the position is (1) to identify gaps by critically evaluating whether the geographic and temporal range of the monitoring scheme is suited for assessing the trends and status of butterflies and their drivers in agricultural landscapes, (2) to suggest strategies, tools and frameworks about how to fill these gaps, and (3) to analyse the impacts of agricultural land-use and farming practices on butterflies across temporal and spatial scales.

The successful candidate will closely work with researchers from the Department of Community Ecology at the Helmholtz Centre for Environmental Research - UFZ (<https://www.ufz.de/index.php?en=38749>).

Responsibilities:

- Preparation of the butterfly monitoring data (e.g. transects, habitat parameters, butterfly data) for statistical analyses
- Identify existing gaps of the Butterfly Monitoring Scheme with respect to agricultural landscapes
- Processing high resolution data (e.g. agricultural statistics, Sentinel) on agricultural land-use
- Analyse the impacts of agricultural land-use and farming practices on butterflies across temporal and spatial scales
- Produce reports and presentations for internal and external meetings, including those of the MonViA initiative, and at international and national conferences
- Preparation of manuscripts of the publication of own research results in peer-reviewed international journals

Required qualifications:

- A university degree (Univ.-Diploma, M.Sc.) in landscape ecology, biology, environmental sciences, agricultural sciences or a similar discipline
- Profound knowledge in statistical modelling using R
- Profound knowledge in the ecology of butterflies and landscape ecology/ spatial ecology
- Experience in the analysis of spatial data, including remote sensing data, using GIS (e.g. ArcGIS, QGIS) is beneficial

- Interest in agricultural and environmental topics and good understanding of agroecosystems and farming systems is desirable
- Ability to work independently and as part of a team, good organizational skills
- Very good English language skills – knowledge of German language is advantageous

We offer the opportunity to work on socially relevant issues at the interface between science and practice. The successful candidates will work in an international research team connected to a network of national and international research institutions. To further the professional and personal development of its employees, the Thünen Institute offers a family-friendly work environment, flexible working time models and opportunities for professional training and further education.

The employment is within the context of the regulation of the collective agreement for the civil service (TVöD). Compensation will be according to salary group 13 TVöD.

The Thünen Institute promotes the professional equality of women and men and is thus especially interested in applications from women.

People with disabilities are given special consideration if they are equally qualified; from them only minimal physical aptitude is required.

For further information please contact Dr. Petra Dieker (phone +49 531-596-3166; petra.dieker@thuenen.de).

In order to apply, please combine a curriculum vitae in tabular form, letter of motivation presenting your professional development, the contact information of two referees as well as copies of certificates into a **single (!) pdf-file** and send it until **30.04.2020**, quoting code number **2020-070-BD** to

bd@thuenen.de

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Informations about Artikel 13 DSGVO: www.thuenen.de/datenschutzhinweis-bewerbungen.