

PhD position at Freie Universität Berlin (3 years, 65% TV-L E13)

Land use consequences for multitrophic ecosystem structure and functioning

- How land use affects functioning of complex multitrophic communities?
- To what extent such changes are mediated by the altered food web structure and biodiversity?

If you are interested in these questions, then we might have the right position for you:

In the **Theoretical Ecology group at FU Berlin** (<http://bit.ly/fu-theoretical-ecology>) we are looking for a PhD-candidate for our DFG-funded project 'LandUseMultBEF' within the Biodiversity Exploratories Program (www.biodiversity-exploratories.de).

Background: To forecast the ecosystem responses to land use we require a mechanistic understanding of how community structure and ecosystem functions across trophic levels in food web constrain one another. This project aims at integrating network modelling tools with the field data to assemble food web models and their energy and C:N budgets for multiple tree holes – the natural models of the temporal freshwater ecosystems, sampled in the Biodiversity Exploratories. With these models we aim to understand the processes underlying the changes in food-web structure, stoichiometry and ecosystem functions in response to forest management and other environmental drivers.

Your tasks

- Develop food web models for tree holes using the existing data.
- Perform additional field sampling of invertebrates and measure in laboratory their body mass and functional rates to fill in the missing model parameters.
- Use the model outputs to statistically analyse the response of food webs to land use.
- Present the results in scientific journals and conferences.

Your profile

- Master or equivalent in ecology, aquatic sciences, or a related subject.
- Good knowledge of scientific programming and data analysis (preferably R).
- Ability and willingness to conduct fieldwork.
- Strong written and spoken English; German is helpful.
- Motivation and willingness to travel to the cooperation partner in Salzburg, Austria.
- Experience in aquatic communities and/or network modelling is beneficial.
- A driver's license would be helpful for the fieldwork.

We offer

- A stimulating working environment, interdisciplinary research team, and international collaboration.
- A salary by TV-L E13 (65 %). The contract for the position is limited to 36 months.
- Qualification programs offered by the FU Berlin graduate school.
- FU Berlin is an equal opportunity employer and specifically encourages female candidates to apply. Disabled persons will be preferred in case of comparable qualifications.

For further information, please contact Dr. Oksana Buzhdygan (oksana.buzh@fu-berlin.de). The position will be filled as soon as possible and the application deadline will be announced soon. Please send the application, including a letter of motivation (ca. 2 pages), a detailed CV, contact details of one or two references, transcripts or degree certificates via e-mail as single pdf-file to Dr. Oksana Buzhdygan (oksana.buzh@fu-berlin.de).