

## Department of Aquatic Ecology

Responsible: Dr. Janine Rüegg







Study Project / B.Sc. or M.Sc. Thesis

The study project focuses on the evaluation of a stream restoration project on the Dahme River. After many years of research and preparation, an old meander of the Dahme was excavated and reconnected to the Dahme, converting a channelzed section back into a more natural and dynamic stream segment. The restoration elongated the stream from its channelized form and created new habitat and recreated habitat types no longer present in the channelized section in the form of more variable depths, more variable flows, and a larger range of sediment sizes. The aim was to enhance the diversity and productivity of the Dahme reach.

The student will evaluate the restoration based on the goals of productivity and biodiversity. Potential topics include the comparison of the newly connected meander to an existing meander further downstream, as well as to the more channelized sections upstream. The focus can be on macroinvertebrate communities (e.g., snails, mussels, insect larvae), stream and sediment metabolism (e.g., production and respiration), or channel structural aspects (including the surrounding terrestrial area).

Focus of the work is threefold and lies on a) learning stream field ecological practices, b) the laboratory analyses of collected samples, and c) data analysis and reporting of the collected information to evaluate stream ecosystems, both for their current ecological status, as well as restoration success.



Type: Natural field study

Supervisor: Dr. Janine Rüegg

Contact: janine.rueegg@b-tu.de

Start: Flexible, field surveys preferably spring (Apr-May)

Students: 1-3 (each with their own topic of interest)

Prerequisites: Knowledge of aquatic ecosystem and data

analysis preferable

## **BTU Cottbus-Senftenberg**

Department of Aquatic Ecology
Faculty of Environment and Natural Sciences

## **Research Station Bad Saarow**

Seestraße 45 15526 Bad Saarow