

MSc project:

Reproduction of Quagga mussels across depths and seasons in Lake Constance

We are looking for an enthusiastic MSc student interested in the ecology of invasive freshwater invertebrates. The project focuses on the reproductive biology of the quagga mussel (*Dreissena bugensis*), a highly invasive species that has rapidly colonised Swiss lakes, including deep-water habitats.

Despite their ecological and economic importance, key aspects of quagga mussel reproduction remain poorly understood, particularly how fecundity and reproductive state vary with water depth and season. This project aims to address these gaps by analysing reproductive investment in mussels collected from different depths and times of the year.



The project will involve a combination of fieldwork and laboratory work (microscopy). Fieldwork includes sampling mussels from Lake Constance, while laboratory work will focus on dissections. Data analysis will involve statistical comparison of reproductive patterns across depths and seasons.

The project provides a combination of research planning, fieldwork, laboratory analysis, data interpretation, and scientific writing, embedded in an ongoing research program on invasive species in Swiss lakes.

Requirements: Interest in aquatic ecology, microscopy, statistical skills, independence and motivation. Prior experience with laboratory or fieldwork is beneficial but not required. Start date is flexible. The work will be conducted at Eawag, Department of Aquatic Ecology (Dübendorf). We are looking forward to meeting you!

Main and direct supervisor:

Dr. Alexandra Weber (alexandra.weber@eawag.ch)

➔ More info: <https://www.weberlab.ch/>

Co-supervision: Julie Conrads

Formal link/association to UZH: Prof. Florian Altermatt

