



## MSc Project

### How much leaf do the amphipods shred? Leaf litter decomposition experiments using amphipods as study organism.

We are looking for an enthusiastic MSc student who will be studying ecosystem functioning, using amphipods and leaf litter as study model. The project could be performed in field-based experiment or in laboratory setting using mesocosms. The project is part of a larger research program (based at Eawag, Dübendorf).

Amphipods are a diverse and ecologically highly relevant group of freshwater invertebrates. In a large study program (Amphipod.CH), we have already recorded about 40 different species of amphipods in Switzerland over the last few years. The leaf litter decomposition by amphipods is essential for the functioning of freshwater ecosystems in many regions. While some aspects such as density-dependence or diversity effects on the functioning were already studied, there are still many aspects that need a deeper understanding to support conservation efforts.

In this MSc project, you would build on previous experiments using amphipods as study organism. Performing a field-based experiment would involve extensive preparation and fieldwork. Running an experiment in the lab would require setting up many replicate mesocosms and high frequency monitoring. Both approaches require extensive laboratory processing of leaf litter and weighing amphipods. You will analyse the resulting data using appropriate statistical approaches.



**Requirements:** Interest in ecology of aquatic invertebrates and ecosystem functions, English language skills, interest to work on a theory-driven experiment, some prior statistical knowledge. The MSc project can start any time. We are looking forward to meeting you!

#### Contact/Supervision:



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