



MSc Project

Finding Nessie: Deepwater amphipods in Swiss lakes

We are looking for an enthusiastic MSc student who will be working on the deep (profundal) fauna of several large lakes in Switzerland. The project involves extensive fieldwork, morphological identification of specimens in the laboratory and statistical analyses of diversity patterns.



Amphipods are a diverse and ecologically highly relevant group of freshwater crustaceans. In a large study program, we have already recorded more than 50 different species of amphipods in Switzerland from thousands of sites. However, we still lack information about the amphipod fauna of the profundal zones of lakes. Only very little is known from historic samples dating back more than 100 years (e.g. by the pioneering Swiss limnologist François-Alphonse Forel). The advertised project should shed light on this dark spot of biodiversity within Switzerland and uncover a very special habitat. We are especially interested in finding deep-water / groundwater *Niphargus* species, which haven't been seen for >100 years, and whose occurrence is relevant in the context of ongoing massive faunistic changes in the lakes due to non-native mussels changing lake benthic communities.

The project involves planning and organizing as well as pursuing intense fieldwork. Several Swiss lakes should be sampled to considerable depths (>100 m). This might require cooperation with local fishermen or the respective water police. Furthermore, the student will be responsible for morphological and molecular identification of the gathered specimens. The project is a comprehensive combination of research planning, conducting fieldwork, pursuing lab work, analyzing data, and preparing a manuscript, with a rather applied focus.

Requirements: Interest in ecology and faunistics of aquatic invertebrates, German and English language skills, high independence and organisation skills, interest to plan fieldwork and to identify invertebrate samples under the stereomicroscope, valid driver's licence and driving practice. The MSc project can start any time. We are looking forward to meeting you!

Contact/Supervision:



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➔ More info: www.altermattlab.ch