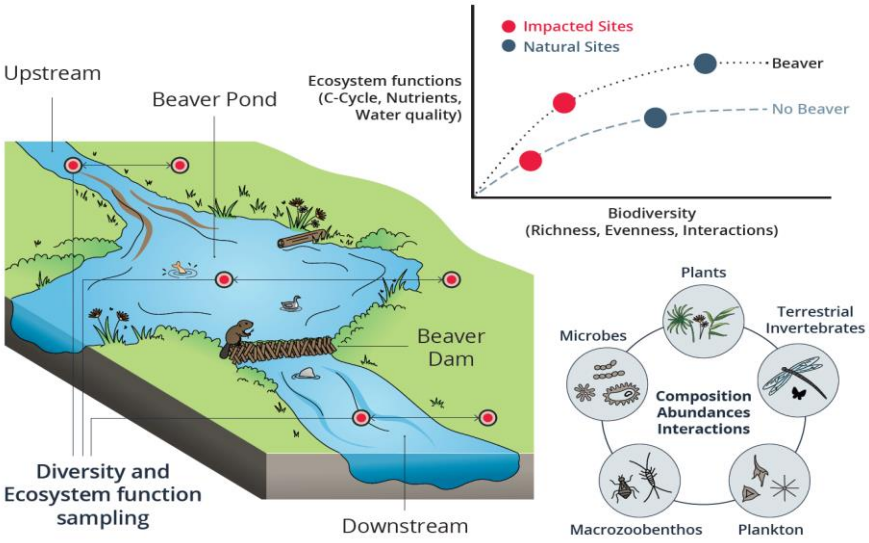
Species interactions in beaver engineered habitats link land-water ecosystem processes

Beavers, as ecosystem engineers, dam rivers and (re)-create a mosaic of flowing and standing water at the land-water interface. They directly influence the heterogeneity of local habitats, the diversity of aquatic and terrestrial organisms they harbour and the associated energy flows. By assessing the composition and abundances of different aquatic and terrestrial biotic communities, we can determine how beaver engineered habitat heterogeneity affects taxonomic and functional diversity, the strength and number of species interactions as well as the connectivity of the local ecological networks. By linking biodiversity changes, interactions and network structure to ecosystem processes we can, in addition, gain information on how and to what extent beaver-engineered ecosystems can mitigate anthropogenic impacts across land-water interfaces. Our project will provide fundamental and novel insights on species interactions and ecological networks that cross the terrestrial-aquatic boundary. By working with external partners from practice, our results will help to update and extend current beaver management practices and policies, locally, nationally and internationally.



This project contributes to the **Blue Green Biodiversity Research Initiative** – an Eawag-WSL collaboration focusing on Biodiversity at the interface of aquatic and terrestrial ecosystems.

There are different options for MSc or BSc students to participate in the project. We offer the chance to work and learn in a supportive, interdisciplinary environment on a topic relevant to conservation in Switzerland. With a potential mixture of fieldwork, lab analysis and data exploration both in aquatic as well terrestrial habitats, we will find a suitable project for you! If you are interested please send us an email.

Project team

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