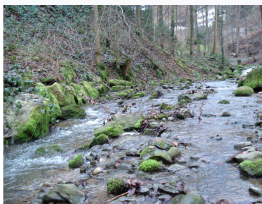


Teachers on the Freshwater Trail

On 14th March 2008 the continuing education event for teachers of the Waedenswil Region took place at the Zurich University of Applied Sciences in Wädenswil under the Title: "Tinker and Quest: Natural Sciences in Daily Teaching".

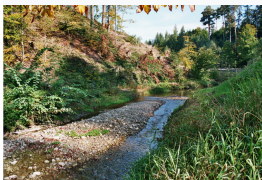
30 Teachers took part in the workshop "Water", offered by the Ecological Engineering Group, which also used the event to publicize the "Play-With-Water"- Project and the Freshwater Trail in Reidbach, Waedenswil. The Freshwater Trail is not equipped with panels, but consists of a Guide for Teachers describing the stations, and tasks which can be performed by pupils at every station.

Stations of the Freshwater Trail "Reidbach"



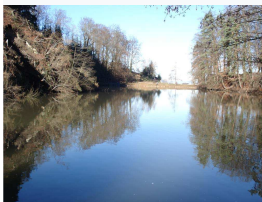
Station 1: In the Forest

- very natural stream section
- high structural diversity
- artificial steps
- strong current with riffles



Station 2: Gravel deposits

- the streambed expands
- less current
- more light than station 1



Station 3: Pond

- very different wildlife habitat
- very weak current
- stratification in summer
- artificially backed-up by a weir



Station 4: Canal

- concrete enforced streambed
- natural structure are missing
- hostile environment for many organisms
- strong current, no riffles

Selpurification experiment

- A simple model of a gravel bed/soil filter
- Empty PET bottles, cut in half and filled with stones, gravel and sand, were used as a filtering device for the turbid water.



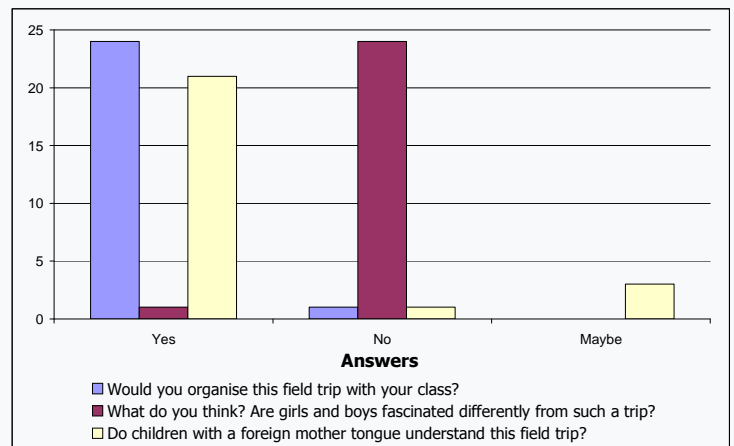
Search for aquatic animals

- find small bottom dwelling aquatic animals by sieving the sediment and searching under the stones
- separate these into groups according to appearance
- identify the animals with the help provided pictures
- define the water quality on the basis of the animals found



Evaluation

The participating teachers (total 25) evaluated the suitability of the water trail for their pupils. The majority was sure to repeat the excursion with their pupils in the future.



The tasks

During the workshop, teachers performed several tasks, which can be carried out by pupils at the stations of the freshwater trail.

Describe the stream

- describe the stream at the station with several keywords
- draw the section of the stream and immediate surroundings
- measure the current velocity and calculate the flow quantity
- measure the water temperature
- observe the turbidity and smell of the water