

Excursion to the High Mountain Research Station of the University of Zürich
at Jöri Lake XIII, upper Vereina valley/GR
for participants of the Goldschmidt Conference 2002 in Davos, Switzerland

GEO-MICROBIOLOGY

**Microbial life strategies under harsh environmental conditions and
geochemical nutrient scavenging in nutrient-poor high mountain lakes**

Saturday, August 24, 2002

guided by

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High mountain lakes are ideal for the study of adaptations of organisms to a variety of environmental extremes: water temperatures are often near freezing, darkness under snow and ice lasts for many months, UV radiation is strong during the summer months and nutrients are scarce. One wonders how life has adapted to these challenges over time and yet is constantly amazed at the strategies microbes have developed to cope with these extreme conditions. The Microbial Ecology Group of the University of Zürich, in collaboration with other institutions, is studying how microorganisms respond and adapt physiologically to the complex interactions between chemical, geological and atmospheric determinants in the lakes of the Jöri catchment, thereby contributing to a worldwide effort aimed at understanding evolutionary processes and the microbial diversity in extreme environments.

The water in the 21 Jöri Lakes originates exclusively from rain, snow and ice-melting, which makes them interesting aquatic ecosystems for studies on erosion particles as nutrient scavengers and the role of air-borne natural components and pollutants on the chemical composition of the water.

We are looking forward to having as many guests as possible on this excursion to the beautiful Jöri Lakes. We will have opportunities to enjoy the beautiful landscapes with great views of the Alps. Don't forget your cameras!

Those who would like to know more about the research station or to get an impression about the site will find details under <http://www.microeco.unizh.ch/station/index.html> and a few images under <http://www.microeco.unizh.ch/station/docs/mapimp.html>

Program

08:10	Bus departs from Davos Dorf, Station RhB (reserved seats for excursion participants who have signed up in advance)
08:27	arrive at Wägerhus (2207 m) From here we will walk for about 2 1/2 hrs. to Jörifluelafurgga (2725), climb along the Jörifurgga ridge (2771 m) and down to the Research Station at 2638m.
11:00	Arrival at High Mountain Research Station. Explanation of on-going research investigating the mineralogy, geology and microbial ecology of the catchment. Time for lunch.
Return	
13:30	Departure at Research Station for Winterlücke (2767 m) and descent to Wägerhus (2207 m)
16:41	Wägerhus dep. by reserved bus
17:00	arrive at Davos Dorf, Station RhB.

Travel

Group travel will be arranged from and to Davos. Final meeting point is Wägerhus at Flüelapass road (2207 m a.s.l.). There are enough parking places for those who would prefer to drive with their own cars.

Decision

In case of unstable weather conditions, we will decide the evening before on whether or not the trip can take place. The excursion will only take place if the weather is acceptable.

Clothing

Sturdy hiking shoes, suncream and rain-gear are recommended.

Fitness

5 to 6 hours of walking on fairly good paths in mountainous terrain; climbing from 2200 to 2800 m and descending again. The final choice of the route will depend both on the weather and the fitness of the participants. The path is safe.

Insurance

is the responsibility of the participant. The guides cannot be held liable for damages or lost items. Please do not leave the group.

Registration

Please register before the conference or sign up at the Conference desk before Friday afternoon. We will make the bus reservations for all participants who request it. Registration is still possible during the conference

Costs

Fr. 16.- (10 US\$), free for student participants. This includes bus ride from Davos Dorf to Wägerhus and back. Please take your own lunch and enough to drink; there are no restaurants along the path.

Preparation

Friday evening, 17:30 to 19:00 in the seminar room of the Swiss Institute of Snow and Avalanche Research (SLF) at Flüelastrasse 11, Davos-Dorf. The organizers will give a brief introduction to the area, show a short film on life under water in a high mountain lake and outline on-going research projects.

Information

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Please also consult the Microbial Ecology Group News for last minute changes under <http://www.microeco.unizh.ch/cgi-bin/microeco/ultimatebb.cgi?ubb=forum&f=6>