



1st International course on:

Wood Anatomy in Arctic and Alpine Environments

Teachers: Fritz Schweingruber, Holger Gärtner & Martin Hallinger

Location: Klosters Dorf, Switzerland

Date: 19. – 25. August 2012

First Announcement

Aim:

The effect of global warming on arctic and alpine environments is more and more in focus of plant science and especially of dendrochronology. Since the anatomical structure of arctic and alpine plants as well as their structural variability caused by environmental changes is not well known, we decided to offer a course to set a base lane for future anatomical and dendroecological studies beyond forests.

Program:

Based on pre-prepared permanent microscopic slides (one complete set for each participant) we will teach basic wood-anatomical knowledge. The main focus is set on trees, shrubs, dwarf shrubs and herbs growing in the boreal and arctic, as well as in the subalpine and alpine zone of the northern Hemisphere.

Each participant will be instructed on

- the anatomy of boreal conifers as *Larix*, *Picea* and *Pinus* species for the analysis of driftwood
- the anatomy and annual ring structures of long living dwarf shrubs e.g. various willows (*Salix* sp.), birches (*Betula*), *Dryas*, various *Ericaceae* as *Arctostaphylos*, *Rhododendron*, *Empetrum*, *Erica*, *Calluna*, *Cassiope*, *Vaccinium*
- the anatomy of root collars and annual structures of herbs of cushion plants as *Silene acaulis*, *Potentilla* sp., *Saxifraga*, *Taraxacum* etc. and many others.

On several excursions in the alpine and subalpine zone of the Alps (near Davos) we discuss sampling strategies to solve problems in relation to climatology, ecology and changes of vegetation zones.

Each participant will learn and practice simple and effective techniques for preparing high quality permanent micro sections in a fully equipped laboratory (microscopes, microtoms, chemicals).

We stay in a holiday house with normal comfort at Klosters-Dorf in Switzerland at 1300m a.s.l in the center of the Alps. Mrs. Hildegard Steck will prepare excellent food.

The price of 950.- Swiss Francs (~790.- Euro depending on currency fluctuations) includes:

- the scientific program as mentioned above
- an anatomical and technical script
- full accommodation (double rooms, breakfast, lunch and dinner, coffee breaks)
- transport to field sites at 2300m a.s.l.

Registration: Email to Martin Hallinger (MartinHallinger@gmx.de)

Reg.-deadline: 31. May 2012

Max. number of participants: 19 (first come, first serve)

Details: http://www.wsl.ch/info/mitarbeitende/gaertner/ArcticAlpineAnatomy/index_EN