

The 1½ day full excursion is leading us from Zurich to the canton Valais, into the center of the Swiss Alps, providing an insight into the extreme environmental conditions and functions of Alpine forest ecosystems.

On Friday 11 June, we will travel by bus from Zurich to the Long-term Irrigation Experiment within the Pine forest nature reserve Pfyn.



Figure 1. View on the Pine forest nature reserve Pfyn, located on a debris cone (Foto: Schmitt, WSL)

At the Long-term Irrigation Experiment in Pfyn Forest, the natural precipitation of approx. 700 mm is doubled on 4 replicates since 2003 to investigate drought effects on *Pinus sylvestris* and gain a better understanding of the pine decline.



Figure 2. Irrigation system of the Long-term Irrigation Experiment in Pfyn Forest. (Foto: M. Schaub)

On the nearby <u>ICP Forests Level II plot Visp</u>, *Pinus sylvestris* is heavily affected by drought, leading to tree mortality up to over 50% since 1996.



Figure 3. Nature Reserve Center Villa Cassel (Foto: ©Pro Natura Zentrum Aletsch)

On Saturday 12 June, we will take the cable car to Riederalp, located at 1'925 m a.s.l., in the center of the <u>UNESCO World Heritage</u>, the Swiss Alps Jungfrau-Aletsch. We will visit the <u>Nature Reserve Center Villa</u> <u>Cassel</u>, enjoy a splendid view on the <u>Aletsch, the largest</u> <u>Alpine glacier</u> and hike through one of the oldest high alpine forests, the <u>Aletsch Forest</u>. The development of the stone pine (*Pinus cembra*) forest under climate change and the harsh environmental conditions will be discussed.



Figure 4. View on the Aletsch glacier from the Aletsch Forest (Foto: ©Pro Natura Zentrum Aletsch)

# Valais Excursion on 11 – 12 June 2021

#### Programme

<u>Friday 11 June</u>

14:00 Departure from WSL Birmensdorf By bus or car (ca. 3 hrs): WSL – Brünig – Interlaken – Lötschberg tunnel (car transport) – Leuk By train (ca. 3 hrs): Birmensdorf train station – Zurich – Bern – Lötschberg – Leuk
17:00 Long-term Irrigation Experiment Pfyn Forest
19:00 ICP Forests Level II plot, Visp
20:00 Hotel Good Night Inn, Brig
Saturday 12 June 2020

O7:30 Departure from Brig Brig – Mörel (cable car) – Riederalp – ½ hour walk to – Villa Cassel
09:00 Aletsch Forest
12:00 Villa Cassel
Villa Cassel – ½ hour walk – Riederalp cable car – Mörel
By bus or car:
Mörel – Lötschberg tunnel – Brünig – WSL – Zurich

By train:

Mörel – Lötschberg – Bern – Zurich

20:00 Arrival Zurich main station

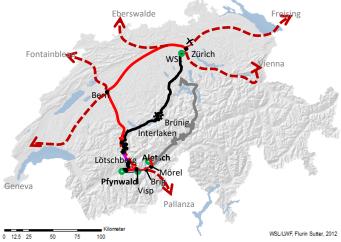


Figure 5. Map of excursion from WSL Birmensdorf into the Valais

# **Recommended equipment**

- Hiking boots (for grade T2 paths according to <u>SAC</u>)
- Backpack with extra cloths in case of cold and rainy weather, sun protection utilities, drinking bottle, specific personal first aid utilities.
- Separate luggage for overnight stay in hotel.



Figure 6. One of 9 scaffolds in Pfyn Forest, allowing access to the top of the canopy for intensive measurements (Foto: C. Hug)

# Travelling options & costs

The places for the excursion are limited to max. 25 participants. For costs and transportation, we offer the following options (see registration):

- A. Travelling by WSL bus: CHF 200.-(limited number of places)
- B. Travelling by train: CHF 150.-(train ticket Zurich – Visp not included)
- C. Travelling by own car: CHF 150.-(ticket for car transport Lötschberg not included)
- D. Additional costs for single room in Hotel Good Night Inn: CHF 50.-

### Presenters

Peter Waldner, Arthur Gessler, Marcus Schaub, Esther Thürig, Martina Hobi and others

### Contact

Peter Waldner Email: <u>peter.waldner@wsl.ch</u> Natel: +41 44 739 25 02