



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

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## Postdoc position (80-100%) in Long-Term Forest Dynamics

### Company & Workplace

Professorship of Forest Ecology, ETH Zurich, Switzerland

### Description

The Forest Ecology Group at ETH is a dynamic interdisciplinary research team that examines both theoretical and applied questions in forest ecology using a combination of empirical and modeling techniques. The overarching aim of the group is to further our understanding of the structure and function of forest ecosystems, with a particular focus on mountain areas such as the European Alps. We offer world-class facilities in a relaxing work atmosphere with ample opportunities for collaboration within and beyond our group.

We seek to appoint a new group member to conduct and co-supervise research activities that deal with long-term forest dynamics based on the use of dynamic, individual-based models, specifically ForClim and LandClim, both of which have been developed in our group. The models are used to shed light on the relationship between abiotic driving forces, system-internal processes and ecosystem properties, with an emphasis on their development through time at decadal to centennial time scales.

The postdoc should develop research activities in one or several of the following fields: (1) aboveground-belowground linkages and the long-term sustainability of forest management; (2) structural model uncertainty at the stand and/or landscape scale; (3) non-linear responses to drivers of environmental change, including the possibility of multiple stable states and hysteretic behavior of forest stands and/or landscapes. The co-supervision of PhD and MSc students as well as the supervision of BSc students is an integral part of the job, albeit at a low level (max. 20%). Involvement in formal teaching at ETH (MSc level) is possible.

### Education

Required qualifications comprise a PhD degree in forest sciences, environmental sciences, ecology, forestry, landscape ecology, or a related field, with good knowledge of forest ecology. Experience with the development, testing and application of dynamic models at the stand or landscape scale is a prerequisite for this position. Knowledge of the R software and of the C family of programming languages (C++, C#) is a strong asset. Knowledge of European forest ecosystems is highly welcome. Finally, candidates should have good skills in statistics.

### Starting date

1 January 2020; negotiable within limits.

### Duration of appointment

Two years, with possibility of extension depending on performance and the development of the funding situation.

### Contact address

For more information on the Forest Ecology Group, check its website (<http://www.fe.ethz.ch>) or contact the group leader, Prof Harald Bugmann (e-mail: [harald.bugmann@usys.ethz.ch](mailto:harald.bugmann@usys.ethz.ch)).

**To apply** for this position (in English or German), submit a letter (1-2 pages) explaining your interests, your CV, diploma transcripts (BSc/MSc/PhD) from which the grades are evident, and the names and addresses (including e-mail) of three reference persons. Only electronic applications are accepted via [https://www.jobs.ethz.ch/job/view/JOPG\\_ethz\\_M8UGCamzubdSUjfUJe](https://www.jobs.ethz.ch/job/view/JOPG_ethz_M8UGCamzubdSUjfUJe).

Screening of applications will start on 1 October 2019. Applications are accepted until the position is filled.