

From the past to the future: 100 years of Palaeoecology in Bern (1920-2020)

7-8 June 2021, University of Bern, Switzerland

9 June 2021, optional post-conference excursions



Walter Rytz's habilitation thesis in 1911 on the "Floristic History of the Bernese hills between the Alps and the Jura mountains" studied the postglacial relationship between climate and vegetation changes. When Walter Rytz became professor in 1920, palaeoecology was introduced at University of Bern. In 2021, the Palaeoecology section at the University of Bern wants to celebrate this centenary with a two-day international symposium.

The symposium will take place at University of Bern, Switzerland, between June 7th and 8th 2021 and will be followed on June 9th by a choice of optional one-day excursions to the Swiss Plateau and the Alps.

Scope

The symposium aims at providing an overview on the state-of-the-art in palaeoecology, with an outlook on the direction the field may take in the coming years. Renowned speakers will present their research. Their sessions are grouped by topics relevant for palaeoecology. Moreover, two poster sessions will give participants the opportunity to present their own research.

In its different sessions the symposium will focus on the following topics:

1. Session: *Scales & Proxies*

Key words: Spatial and temporal scales, indicators, multi-proxy, environmental archives, disturbance and biotic response

2. Session: *Quantification, Modelling and Theory of Palaeoecology*

Keywords: data-model comparison, numerical techniques, dynamic vegetation models, resilience, hypothesis testing, big data

3. Session: *Palaeoecology's Human and Societal Dimension*

Keywords: environmental archaeology, human impact, farming, pollution, anthropogenic indicators

4. Session: *Implications of Palaeoecology for Biodiversity and Conservation*

Keywords: biodiversity, nature conservation, forest management, ecosystem restoration

Registration and Abstract Submission

The registration fee of CHF 300 for Regular Participants or CHF 200 for MSc and PhD students includes the conference registration, coffee breaks, 2 lunches and the conference reception.

Due to space limitations, the number of participants is limited to 180 and the number of posters to 150.

Deadlines

Deadline for poster abstract submission: 28 February 2021

Notification for acceptance of posters: 5 March 2021

Opening of registration (payment): 8 March 2021

Deadline for registration: 1 May 2021

For more information see:

<https://www.oeschger.unibe.ch/cps2021>

PROGRAMME

Monday, June 7th

- 08.15-09.00 Registration & Coffee at UniS
09.00-09.15 Welcome, by **T.F. Stocker** (President of the Oeschger Centre for Climate Change Research)
09.15-09.45 *100 years of Palaeoecology in Bern: past, present, and future*
H.J.B. Birks: *A view from the outside* // **W. Tinner**: *A view from the inside*
09.45-10.15 Coffee break

Session 1a: Scales & Proxies (Chair: TBD)

- 10.15-10.55 **W. Finsinger/ T. Giesecke**: *Local to continental vegetation response to climate change*
10.55-11.15 **E.K. Magyari**: *Multi-proxy palaeoecology in mountain landscapes: quantitative reconstructions, ancient DNA, and lipid biomarkers as promising new directions*
11.15-11.35 **O. Heiri**: *Long-term aquatic ecosystem development: Climate, human activity and an interplay of stressors and scales*
11.35-12.45 Poster Session 1, Chairs: C. Schwörer & C. Morales del Molino
12.45-13.45 Lunch

Session 1b: Scales & Proxies (Chair: E. Gobet)

- 13.45-14.25 **C. Whitlock**: *Palaeofire reconstructions: A matter of scale*
14.25-14.45 **D.G. Gavin**: *Quaternary disjunctions: Biogeographic inference from palaeoecology in a heterogeneous landscape points to remarkable dispersal histories*
14.45-15.05 **G. Gil Romera**: *Cause and Effect: a view of the spatio-temporal dimensions of disturbance and its drivers*
15.05-15.45 Coffee break

Session 2: Quantification, Modelling and Theory of Palaeoecology (Chair: C. Schwörer)

- 15.45-16.25 **J.W. Williams**: *Community data platforms for global-scale integrative science and the next generation of palaeoecologists*
16.25-16.45 **P.D. Henne**: *Combining palaeoecology with dynamic vegetation models to understand past changes and anticipate future impacts*
16.45-17.05 **A.W.R. Seddon**: *Climate-vegetation turnover relationships at the Pleistocene-Holocene transition*
19.00-20.30 Reception, Naturhistorisches Museum Bern

Tuesday, June 8th

Session 3: Palaeoecology's Human and Societal Dimension (Chair: C. Morales del Molino)

- 09.00-09.40 **J.P. Smol**: *Lakes in the Anthropocene: Using appropriate temporal and spatial scales to better understand human impacts on lakes*
09.40-10.00 **R.H.W. Bradshaw**: *Human impact and disturbance in the palaeoecological record: from landnam to wildwood*
10.00-10.20 **E. Gobet**: *Success and failures during 7000 years of conversion of dark forest into arable land*
10.20-11.00 Coffee break
11.00-12.15 Poster Session 2, Chairs: C. Schwörer & C. Morales del Molino
12.15-13.15 Lunch

Session 4: Implications of Palaeoecology for Biodiversity and Conservation (Chair: W. Tinner)

- 13.20-14.00 **L. Gillson**: *Biodiversity conservation for an uncertain future: using palaeoecology in scenario planning*
14.00-14.20 **M. Conedera**: *Including palaeoecological knowledge in modern forest management*
14.20-15.00 **K.J. Willis**: *Why conserve biodiversity? Answers from the past*
15.00-15.30 **W. Tinner**: *Closing and conclusions*