GLORIA conference September 23-25, Perth, Scotland/UK

Programme

Wednesday, September 22

Arrival day: from 17:00 onward registration at Salutation Hotel, welcome drink at 19:00. Please provide your presentation here!

Thursday, September 23

09:00 Welcome address Georg Grabherr
09:15 Introduction to the meeting Harald Pauli

Session 1: Status of GLORIA at its 10th anniversary A

09:30 Overview of the GLORIA network Georg Grabherr

South America – Chair: Rosario Gavilan

09:45 Stephan Halloy
  Baseline for climate change impacts on biodiversity in the Andes: Establishment and preliminary results of long-term GLORIA monitoring sites

10:05 Francisco Cuesta
  Cuesta, F., Becerra, M.T., Halloy, S., Salgado, S.
  GLORIA as a key element to implement an environmental monitoring system for the Andean Community

10:25 Teresa Schwarzkopf & Tatiana Ojeda Luna
  Methodological insights to the GLORIA field method proposed for the highland vegetation of the Northern Andes/ Páramo Ecosystem Floristic Diversity of Podocarpus National Park to Monitor Climate Change

10:45 BREAK

11:15 Stephan Beck & Karina Yager & Rosa Isela Meneses
  Beck, S., Yager, K., Meneses, R. I., Halloy, S., Domic, A. & García, C.
  GLORIA sites in the high Andes of Bolivia: A multi-disciplinary assessment

North America – Chair: Catherine Pickering

11:35 Colin Maher
  The Wild West: GLORIA in the White Mountains and Sierra Nevada of California

11:50 Lindsey E. Bengtson
  Bengtson, L., Fagre, D., Asebrook, J. & Hintz, J.
  Glacier National Park GLORIA re-survey project: an evaluation of changes in alpine plant species composition and distribution due to five years of climate change in the Northern Rocky Mountains, Montana.

12:05 Martha Apple
  Apple, M., Warden, J. E., Apple, C. J., & Gallagher, J. H.
  Phenology and the seasonal appearance of species at the Southwestern Montana GLORIA site

12:20 LUNCH
EUROPE — Chair: Tatjana Yashina

14:00  **Brigitta Erschbamer**  
Erschbamer, B., Mallaun, M. & Unterluggauer, P.  
*Short-term signals of climate change in the Dolomites (S-Alps, Italy)*

14:15  **George Nakhutrishvili**  
Nakhutrishvili, G., Abdaladze, O., Akhalkatsi, M. & Batsatsashvili, K.  
*High mountain interglacial vegetation of the Caucasus on the background of the global warming*

14:30  **Per Larsson**  
*A new Gloria-site established in Jamtland, west central Sweden*

14:45  **Michael Vogel**  
Vogel, M., Huber, D. & Franz, H.  
*Gloria test site embedded into climate change monitoring programmes of the Berchtesgaden National Park*

15:00  **Alba Gutierrez-Giron**  
Gutierrez-Giron, A. & Gavilan, R.  
*Environmental variables and functional traits relationships in Mediterranean high mountain grasslands in Central Spain*

15:15  **Anne Syverhuset**  
*Results from the reanalysis of the GLORIA summits at Dovrefjell, Norway*

15:30  **BREAK**

Session 2: GLORIA data analysis A — Chair: Stephan Halloy

16:00  Observer variation in visual cover estimation  **Michael Gottfried & Andreas Futschik**

16:45  Changes in species composition and cover across Europe's mountain regions  **Michael Gottfried & Andreas Futschik**

17:30  Species gains and losses on European mountain summits  **Harald Pauli**

**Poster Presentation**

17:45  Presentation of all posters and tasting of regional drinks

19:00  **CLOSE**
Friday, September 24

Session 3: Status of GLORIA at its 10th anniversary B

Asia – Chair: Jean-Paul Theurillat

09:00 Introduction Harald Pauli
09:05 Jan Salick
GLORIA in the Eastern Himalaya
09:25 Tatjana Yashina
Artemov, I. & Yashina, T.
GLORIA Network in the Altai-Sayan Ecoregion
09:40 Jalil Noroozi
GLORIA-Iran: Potential effects of climate warming on a unique high-altitude flora
09:55 Ho-Yih Liu
Liu, Ho-Yih, Hsieh, Ling-Chun
Subtropical alpine vegetation structure in the Central Mountain Range, Taiwan
10:10 BREAK

Parallel Workshops

10:40 A: Data analyses – planning regional and continental scale comparison
   Organised by Michael Gottfried
   B: Ethnobotany – Traditional Knowledge and climate change
   Organised by Jan Salick
12:30 LUNCH

Session 4: Status of GLORIA at its 10th anniversary C

Australasia & Africa – Chair: Martha Apple

14:00 Catherine Pickering
Pickering, C., Green, K. & Venn, S.
Relationship between topography, soils and micro-climate and the current composition of vegetation and functional traits among five GLORIA summits in the Snowy Mountains, Australia
14:15 Katharine Dickinson
GLORIA activities in New Zealand
14:30 Abdeltif El Quahrani
El Quahrani, A. & Merzouki, A.
Planned GLORIA sites in the Moroccan Atlas

Europe Part 2

14:45 Anna Maria Fosaa
Fosaa, A. M., Nagy, L.
A GLORIA site in the Faroe Islands
15:00 Rosario G. Gavilán
Gavilán, R. G., Gutiérrez Girón, A.
GLORIA activities in central Spain (ES-SIC): how far are we going?
15:15 BREAK
Session 5: GLORIA Methods – Chair: Gian-Reto Walther

15:45  A suggestion for a refined and commonly agreed method Harald Pauli
16:00  A comparison of different methods of cover estimation Barbara Friedmann
16:15  Species recording at different spatial levels Harald Pauli
16:45  Temperature measurement - Devices, technical standards Michael Gottfried
17:00  Check of Changes - Implications for resurveys Harald Pauli
17:20  Final discussion and agreements on methodological standards
19:00  CLOSE
Session 6: Additional GLORIA activities & Master Sites – Chair: Jan Salick

09:00  Introduction Georg Grabherr
09:10  Yuri Mikhailov
       Invertebrates as additional indicators for monitoring at target regions in the Urals
09:25  Dirk Hofmann & Karina Yager
       Identification and incorporation of socio-economic and cultural aspects of site implementation and monitoring
09:40  Jarle I. Holten
       Holten, J. I. & Wehn, S.
       A new approach - the Mountain Slope Approach
09:55  Christian Rixen
       Increasing plant biodiversity on mountain tops at the upper limit of dwarf shrub heath
10:10  Juan José Jimenez
       Jimenez, J. J., Villar, L.
       Soil data (C, N, P, and pH) in Monte Perdido massif (CPY, Spain) and their relation with abiotic and biotic factors (a GLORIA optional activity)
10:25 BREAK

Workshop on collateral data

11:00  Collateral data: Organised by Harald Pauli
       Vertical range of species, species distribution / endemism; potential treelines (thematic and/or regional working groups)

Session 7: The central GLORIA database – Chair: Brigitta Erschbamer

12:00  Upcoming data analyses (workshop report)
12:30  LUNCH
14:00  Data property, data sharing and authorship issues Michael Gottfried
14:30  Discussion on Data property, data sharing and authorship issues

Session 8: Workshop reports and discussion – Chair: Georg Grabherr

15:30  Ethno botany
16:00  Collateral data
16:30  BREAK
17:00  Final discussions
19:00  CLOSE
Excursion day (joint day with the Conference on Global Change in the World’s Mountains): several options including a visit of the Cairngorms GLORIA sites. Buses are leaving in front of Perth City Hall at 09:00 and return at approximately 18:00.

Evening: Conference Dinner at Salutation Hotel 19:00

Supporters of the

GLORIA conference September 23-25, Perth, Scotland/UK