On behalf of the Workshop Organizing Committee, we would like to invite you to the 4th Workshop on Regional Climate Dynamics:

**Carpathian-Balkan Paleoscience Workshop 2020 (CBPW2020)**

Săcel, Maramureș county, Romania, 31 August - 4 September 2020


The workshop is an initiative of the **Association of Applied Geography GEOCONCEPT**, endorsed by **Past Global Changes (PAGES)**, **Mountain Research Initiative** and the **Carpathian Convention** and will be hosted in a traditional village in the picturesque region of Maramures (Transylvania). This area of Romania is well known for its ancient wood-carving culture and uniquely preserved agro-forest-pastoral landscapes and nature, as well as for its amazing food, traditional music and dancing.

In the 4th edition of this PAGES-supported meeting, we propose an interdisciplinary and multidisciplinary scientific event focusing on climate and environmental changes in the Carpathian-Balkan region since the Last Glacial Maximum. We envisage that this workshop will provide more insight into the most recent advances in paleosciences and help enhance regional collaboration in research, which is still understated, albeit significant steps have been taken in recent years.

CBPW20 can be regarded as a follow-up event on the previous PAGES-supported workshops organized by our team in 2011, 2014 and 2016, which have provided a good framework for sharing research and collaboration for further investigation of the Carpathian-Lower Danube-Balkan region.

**Timescales covered**

**Late Pleistocene and Holocene.** The goal of the workshop is to bring forward data for climate reconstruction from multi-proxy studies with a focus on the Last Termination (ca 22–11.5 ka) and Holocene in the Carpathian-Balkan region.

**Topics of interest** of CBPW2020 include, but are not limited to, the following scientific subjects:

- Characteristics and extents of former glaciation(s) in the Carpathian-Balkan region
- Lake sediments and peat-bog deposits as paleoenvironmental archives
- Past climate and history of vegetation changes
- Karst and cave records as recorders of climate change
- Dendrochronology
- Geoarchaeology, geohistory and landscape archaeology
- Climate variations and fluvial dynamics
Loess-Paleosol complexes
Recent climate change modeling techniques
Human impact and pollution history
Land-use/land-cover changes and climate - modeling and analysis
NEW SESSION: Forest ecosystems and sustainable management in an era of global change

Forest Session – William S. Keeton, Facilitator

Within the CBPW2020 there will be a special session dedicated to sustainable forest management, including adaptation to climate change and continued provisioning of the forest ecosystem services communities depend upon. This session will emphasize research in the Carpathian-Balkan forest domain, but will take a broad approach to topics in forest ecology, science, and management relating to global change. Talks from a range of disciplines are welcomed, particularly those addressing the challenge of sustaining forest ecosystems into an uncertain future.

The topics of interest include:
• forest disturbances, alteration of disturbance regimes, and associated management challenges;
• historic and contemporary forest change with implications for ecosystem services;
• opportunities and challenges for management of national parks;
• forest mapping, inventories, and surveys;
• human impacts on forest ecosystems and biological diversity;
• Carpathian-Balkan forests and carbon storage;
• forests and agro-pastoral / agro-touristic activities;
• Carpathian and Balkan old growth forests;
• forest management through time (e.g. traditional, Austrian-Hungarian, socialist, post-socialist, modern);
• deforestation, soil erosion, and other environmental impacts; and
• traditional forms of forest management by ethnic groups, etc.

Forest resources in the Carpathian-Balkan domain are increasingly vulnerable both to global change – including climate disruption, alteration of disturbance regimes, and invasive species – and increasing pressure for exploitable natural resources. And yet the goods and services these systems provide are critical for rural livelihoods and warrant consideration by scientists, forest managers, and policy makers. This special session will present robust research results with the goal of promoting strategies for the sustainable management of forest ecosystems in the Carpathian-Balkan region, particularly in the increasingly challenging context of present and future global changes.

Format

The workshop will bring together leading researchers and experts in paleoscience from the Carpathian-Balkan region, and welcomes posters and oral presentations. The event will feature keynote lectures from well-respected scientists providing state-of-the-art overviews of main topics and open debates on a wide range of topics related to the regional climate dynamics of the Carpathian-Balkan region during the Late Pleistocene and Holocene. The poster session provides the opportunity to discuss results in more detail.
Keynote speakers

**Angelica FEURDEAN** is a senior researcher at Goethe University and Senckenberg Biodiversity and Climate Research Center Frankfurt am Main in Germany. She received a PhD in Quaternary Geology from Stockholm University in 2004 and was subsequently awarded a Marie Curie Fellowship at the University of Oxford, UK. Her research uses sedimentary archives to reconstruct past vegetation response to recurrent climate fluctuations and disturbance by fire and human impact in various ecosystems in Central and Eastern Europe, with increasing focus on boreal and arctic systems. Recent work combines fossil data with plant functional traits and statistically ecological modeling to understand the role of plant traits in ecosystem resilience to disturbance by fire.

**Zoltán KERN** works as a research fellow at the Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences in Budapest, Hungary. The focus of his research interest is environmental and climate change in the Quaternary. He has research experience related to dendroclimatology, dendrochemistry, application of environmental isotopes, cave ice, time series analysis, and geomorphology.

**Eniko MAGYARI** works at Eötvös Loránd University, Department of Palaeontology in Budapest, Hungary. Her main research focuses on the environmental history of the Carpathian-Balkan region during the last 30,000 years. Using pollen, plant macrofossil, and multi-proxy paleoecological methods, she studies how rapid climate change events and human impact have shaped the forest and steppe environment, what was the amplitude of climate change during the last glacial termination and what are the region’s climate change characteristics. Her studies also address questions connected to the protection of Hungary’s semi-natural landscapes. She seeks baseline conditions in the lowland forest steppe environment prior to major human transformation of the land, studies natural forest composition in the mid mountains and focuses on Holocene land-cover reconstruction, tree and timberline changes in the Carpathians, and the refugial role of the Carpathian Basin for temperate and boreal tree taxa during the Last Glacial Maximum. She also applies novel ancient DNA techniques to reconstruct past vegetation from soils and lake sediments.
Simon M. HUTCHINSON works at the School of Science, Engineering and Environment (SEE), University of Salford, UK. Paleoenvironmental science necessitates an interdisciplinary approach to research. He has worked with a range of talented specialists during his career across Europe, and in China and Russia. As a postgraduate student, his introduction to sediment-based environmental reconstruction began with lake sediment studies focused on the post-industrial. However, subsequently 'playing with mud' has led to research in not only lacustrine, but also peat, floodplain, saltmarshes and estuarine sediments as well as bat guano; at a decadal to whole Holocene timeframe. Predominantly he focuses on abiotic proxies of environmental change and human impacts (e.g. environmental magnetism and geochemistry), but, through collaboration, has also been introduced to wider paleo work in biotic parameters. Moreover, he is currently looking at the aDNA of deposits at the cutting edge of paleoenvironmental research, and trying to use paleoenvironmental tools to tackle applied environmental management questions.

William KEETON is a Full Professor of Forest Ecology and Forestry at the Rubenstein School of Environment and Natural Resources at the University of Vermont, USA, where he directs the Carbon Dynamics Laboratory and is a Fellow in the Gund Institute for Environment. He also serves as Chair of the IUFRO (International Union of Forest Research Organizations) Working Group on Old-growth Forests and Reserves. His research focuses on forest disturbance dynamics, riparian ecology, forest carbon, old-growth forests, ecological silviculture, and sustainable forest management in the US Northeast and Pacific Northwest, but also travels frequently to Central and Eastern Europe where he serves on the board for Science for the Carpathians and as a Fulbright Specialist. He has ongoing research also in Chilean Patagonia and Bhutan as well. In the US, he serves on the Board of Trustees for the Vermont Land Trust and on the science advisory committee for the Forest Ecosystem Monitoring Cooperative. Dr. Keeton has authored over 100 peer-reviewed publications, including 70 journal papers. His new co-edited book “Ecology and Recovery of Eastern Old-Growth Forests” is published by Island Press (Washington, DC). He holds a BSc in Natural Resources from Cornell University (1990), a Masters in Conservation Biology and Policy from Yale University (1994), and a PhD in Forest Ecology from the University of Washington (2000).

Petr KUNEŠ works at the Department of Botany at Charles University in Prague, Czech Republic, where he also was awarded a PhD in 2008. His doctoral research focused on the paleoecology of late-glacial and early-Holocene vegetation. Between 2009 and 2011, he worked as a postdoctoral researcher at the Department of Geoscience, Aarhus University, Denmark, studying past interglacial dynamics. His primary research interests lie in Quaternary paleoecology, which he translates mainly as a connection between ecology, geology, and archaeology on various timescales. He is interested in studying past ecosystem dynamics and recognizing baseline conditions before human impact. He also focuses on the determinants of ecosystem change, such as climate or disturbances (fire and human impact), and on linking these processes with modern times.
**Registration and abstract submission**

For registration please contact us by email at marcel.mindrescu@gmail.com.

**Registration dates:**
- Early-bird registration - 1 May 2020
- Late registration - 1 August 2020

**Abstract instructions:**

Abstracts will be submitted upon registration (deadlines: 1 May 2020 for early-bird registration or 1 August 2020 for late registration).

Acceptance notifications will be sent to participants after submission by email.

Abstracts will range from 1 to 4 pages (extended abstracts) for both oral and poster submissions.

Authors are advised to use the formatting settings provided in the attached abstract template.

All accepted abstracts will be published in a book of abstracts as a special issue of GeoReview Journal (http://georeview.ro/ojs/index.php/revista) and will also be available online.

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**Field trips**

CBPW2020 will also include **daily field trips** to Maramures Depression, Rodna Mts (National Park) and Maramures Mts (Natural Park) in the Northern Romanian Carpathians focusing on glacial environment, caves and karst landscapes, forest ecosystems and management, agro-pastoral activities, traditional patterns of sustainable use of mountain landscapes, and human impact on mountain environments.


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**Venue**

**Pensiunea Lacramioara, Săcel village, Maramures county, Romania**


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**Registration fee**

The registration fee for CBPW2020 includes **all registration costs (workshop materials), coffee breaks, accommodation and meals for the duration of the event.** Participants will need to cover transportation costs.

**Amount:**
- EUR 150 (RON 700) for early bird registration (by 1 May 2020)
- EUR 170 (RON 800) for late registration (by 1 August 2020)

**Early-career researchers (ECR) can apply for financial support** for participation at CBPW2020.

The registration fee must be paid using one of the options provided below:

1) Paypal (EUR)

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**IMPORTANT**

**Early-career researcher (ECR) grants.** We offer partial or full financial support for early-career researchers (under 35) who apply to participate in CBPW2020. The number of grants will range between 10 and 20, depending on the number of applicants and the quality of their submitted work.

Applicants for grants (covering registration fee and/or transportation costs) are required to specify their
age and to submit the title and abstract of their presentation (see attached template), a letter of application highlighting the most relevant contributions of their research, and a letter of recommendation from an experienced researcher no later than 1 May 2020.

The official language of the workshop is English. Translation facilities will only be provided for a planned event involving the local community.

Publication

Based on our experience from previous workshops, we expect that, provided a sufficient number of high-quality contributions are submitted for CBPW202, we will publish a dedicated volume in a Web of Science journal. We have already made a preliminary agreement in this regard.

Special requests

Participants who have specific dietary restrictions or requirements are kindly asked to communicate this upon registration.

We would like to inform you that the accommodation will be made in twin rooms. Participants who prefer to occupy a single room will pay a supplementary accommodation fee. However, we do not encourage this due to the limited number of rooms available at the venue.

If supplementary rooms are necessary we will make arrangements with hotels located in the vicinity.

How to get there

Maramures region is located in northern Romania and can be reached easily by car from neighboring European countries such as Hungary, Poland, Slovakia, Czech Republic, Ukraine, and Republic of Moldova.

Despite the somewhat larger distance, participants from the Balkans can drive across southern Romania and the beautiful region of Transylvania to reach Sacel.

For air transport we suggest you arrive at Cluj-Napoca International Airport (Avram Iancu Cluj International Airport, the largest airport in Transylvania). From Cluj-Napoca we can assist you to reach Sacel. Depending on the number of participants and arrival times we can hire a minibus for the transfer.

For any additional questions or assistance please contact us.

Visit Maramures

If you want to extend your visit in Maramures before or after the workshop and to be accommodated at the same venue where CBPW2020 takes place, please let us know. We can provide assistance and information about leisure options.

Further information concerning the workshop, the detailed scientific program, field trip costs and accommodation will be included in the Second Circular, available on 15 August 2020 via email and on the PAGES website: http://pastglobalchanges.org/calendar/upcoming/127-pages/1996.

Preliminary program

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<tr>
<td>31 August 2020</td>
<td>Arrival at venue</td>
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<td>1 September 2020</td>
<td>Conference and short field trip in Rodna Mts (National Park)</td>
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<tr>
<td>2 September 2020</td>
<td>Conference and short field trip in the historical region of Maramures</td>
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<td>3 September 2020</td>
<td>Conference and short field trip in Maramures Mts (Natural Park)</td>
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Workshop Organizing Committee

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Supported by:

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Past Global Changes (PAGES)
http://pastglobalchanges.org/

The last European old-growth ("subnatural") fir-BEech forests: a long-term and global study for their better understanding, conservation and management
http://anr-bendys.cnrs.fr

The European landscape learning initiative: past and future environments and energy regimes shaping policy tools
https://terranovaproject.vu.nl/

International Association of Landscape Archaeology
https://iala-lac.org/

Partners:

Georeview Journal
www.georeview.ro

Department of Geography, University of Suceava, RO

http://pastglobalchanges.org/science/end-aff/carpclim/overview

http://www.carpathianconvention.org/

http://www.carpathianconvention.org/

http://geoconcept.ro/circ/
You are cordially invited to participate in the CBPW2020 Workshop in Săcel, Maramures, Transylvania, Romania, from 31 August to 4 September 2020.

We look forward to seeing you in Maramures!

Conference website:
http://geoconcept.ro/cbpw2020/

PAGES website:

Visit Maramures:
http://www.fotomotica.ro/portofolio.html?fbclid=IwAR2gRi3-SD41rXi49KpKSNV7E_opsLPlvnPSZ_NFK20y0fSi11-uFfZaku1

Visit Bucovina:
https://geoconcept.ro/mountain-getaway/

Sincerely yours,
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Chairman, CBPW2020

Ionela Mindrescu
Deputy Chairman, CBPW2020