



Science for the Carpathians: Report on activities and recommendations relevant for WG Biodiversity

14th Meeting of the Carpathian Convention Working Group on Biodiversity

23 May 2023, Vsetín, Czech Republic

Outline



- Recent S4C activities
- S4C Research Agenda
- S4C recommendations relevant for the WG Biodiversity
- Forum Carpathicum 2023



6th FORUM CARPATICUM



Linking the Environmental, Political and Societal Aspects for Carpathian Sustainability

Date: 21 June - 25 June, 2021, online

Main Organizer: Mendel University, Brno, Czech Republic

19 sessions and 5 workshops, >180 registered participants

Supported by Visegrad Fund



<http://forumcarpaticum.czechglobe.cz/>

<http://carpathianscience.org/forum/forum-carpaticum-2020/>



International scientific conference

6th FORUM CARPATICUM –

Linking the Environmental, Political and Societal Aspects for Carpathian Sustainability

Book of Abstracts

21st June to 25th June, 2021

Brno, Czech Republic



MOU with the Caucasus Scientific Network



- developed with support of the Convention Secretariat
- aimed at supporting exchange of information and joint research activities:

The Science for the Carpathians Network (S4C) and the Scientific Network for the Caucasus Mountain Region (SNC-mt) joint hands to link scientists working in the Carpathians and Caucasus, empower academic and scientific institutions and establish prerequisite to level the playing field for research and development in these countries.

- signed during Forum Carpaticum 2021 (online)





S4C Interdisciplinary Winter School

Sustainable development in hot spots of nature and tourism in the Carpathians

- Krakow-Zakopane 1-4.02.2022, supported by International Visegrad Fund
- Students and young researchers from 9 countries, multiple disciplines
- 1-day seminar followed by three days of field workshops
- Impressions from winter school:

<https://storymaps.arcgis.com/stories/3f502c008a1e4466823748d68ec5d995>



War in Ukraine



- [S4C statement on war in Ukraine on 10 March 2022](#)
- Program for Ukrainian students and PhD students offered by the [Polish Academy of Sciences](#)
- Support to Ukrainian researchers and students by the [Slovak Academy of Sciences](#)
- Zoom conversation about the **impacts of the war in Ukraine on Carpathian Mountain communities** on 14 May 2022 organised by the [Appalachian Studies Association](#)
- Workshop “**Ukraine Nature**” – 13 September 2022 organised online by the Hamburg University of Applied Science
- “**Ukraine: A Sustainable Economic Recovery for People and Nature**” – [WWF-BCG report](#) report and webinar on 5 October 2022



UKRAINE

**A SUSTAINABLE
ECONOMIC RECOVERY
FOR PEOPLE AND NATURE**

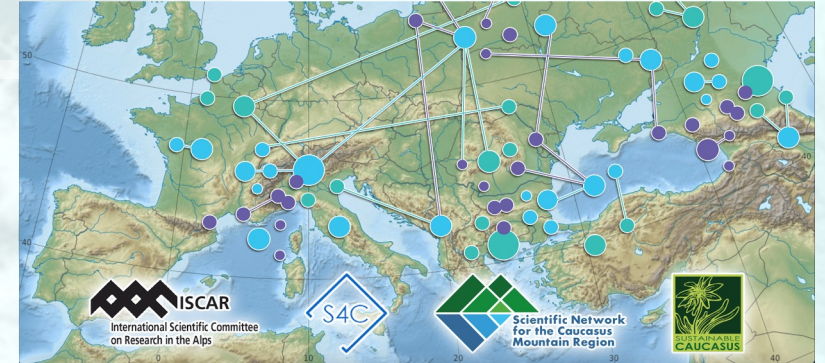


International Mountain Conference



Innsbruck, 11-15 September 2022

- Joint plenary session 1: on **strengthening regional scientific networks with the Alpine and the Caucasus Scientific Networks**
 - Science for the Carpathians (S4C)
 - The International Scientific Committee on Research in the Alps (ISCAR)
 - Scientific Network for the Caucasus Mountain Region (SNC-mt)
 - MountMed Institute
 - Network for European Mountain Research (NEMOR) / EUROMONTANA
- Common challenges presented
- Potential collaboration discussed, including involving young and early career researchers



Joint plenary session 2: **Discussing transdisciplinary practices for global mountain sustainability: opportunities, challenges and experiences**

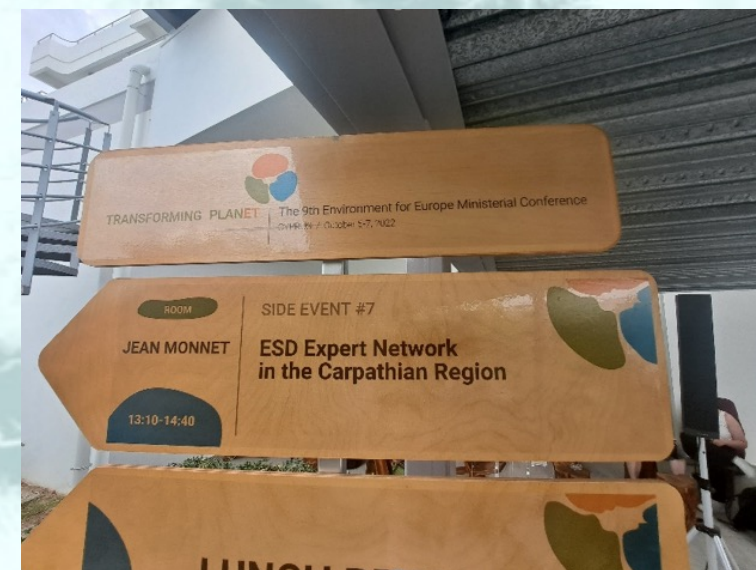
! Next conference - Innsbruck, 14-18 September 2025



Third High-Level Meeting of Education and Environment Ministries on Education for Sustainable Development

5-7 October 2022, Nicosia, Cyprus

- Invited interventions in plenary sessions by S4C representatives
- Side event: ESD Expert Network in the Carpathian Region

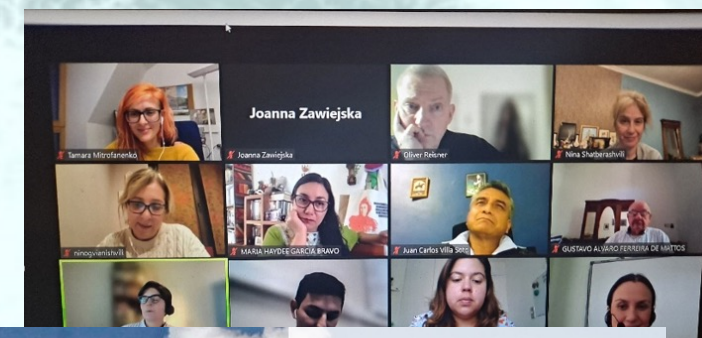




Examples of S4C involvement and activities



- 2nd International Seminar on Education for Sustainable Development, 29-30 September 2022, Zakopane, Poland,
- Carpathian Ministerial Conference, 21 - 22 November 2022, Rzeszów, Poland
- Open Networking Meeting - Caucasus-Carpathian-Latin American scientific networks, 16 November 2022, online



CONNECTING CARPATHIAN, CAUCASUS AND LATIN AMERICAN NETWORKS: CO-CREATING KNOWLEDGE FOR SUSTAINABLE DEVELOPMENT IN MOUNTAIN REGIONS AND BEYOND

November 16, 2022

Georgia	19:00	Turkey	18:00
Austria / Poland (CET)	16:00	Iran	18:30
Costa Rica / Mexico	09:00	RF	18:00
Uruguay / Argentina / Chile	12:00		

S4C chapter in book

„Safeguarding Mountain Social-Ecological Systems“



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SAFEGUARDING MOUNTAIN SOCIAL-ECOLOGICAL SYSTEMS
A Global Challenge: Facing Emerging Risks, Adapting to Changing Environments and Building Transformative Resilience in Mountain Regions Worldwide

1st Edition - November 1, 2023

☆☆☆☆☆ Write a review

Editors: Stefan Schneiderbauer, Paola Pisa, John Shroder, Jorg Szarzynski

Paperback ISBN: 9780128220955

Part 1: Preamble

Part 2: Introduction

Part 3: Contemporary topics in Mountain Research worldwide concerning hazards, exposure and vulnerabilities

Part 4: Major Mountain Ranges - The Regional Perspective

Part 5: Final synthesis chapter

Mitrofanenko, T.; Melnykovich, M.; Kubal-Czerwińska, M.; Kuras, K.; Vetier, M.; Halada, L.; Zawiejska, J.; and Nijnik, M., 2023: **Science-policy-practice collaborations towards sustainable development in the Carpathian Region**

Third Caucasus Mountain Forum



Transdisciplinarity for Sustainable Tourism Development: Role of Caucasus Scientists

4-7 July 2023, Kutaisi, Georgia

- Contribution of S4C representatives to plenary sessions and discussions
- Building enhanced cooperation between networks
- Second networking workshop, follow-up from discussions in International Mountain Conference in Innsbruck



<https://www.caucasus-mt.net/Caucasus-Mountain-Forum-2023/>

S4C Research Agenda



Editors: P. Cudlin, J. Zawiejska, T. Mitrofanenko, K. Mazsa, M. Melnikovych

New chapters on:

- Education for Sustainable Development
- Cultural Heritage
- Participatory research
- Social innovation
- Green energy and energy efficiency

New topics:

- Natural and human disturbances of ecosystems
- Local communities' participation / involvement in research
- Plastic pollution
- Addressing the role of non-English-language science for the Carpathian region.
- Integrating inter- and transdisciplinary approaches and participatory methods



http://carpathianscience.org/downloads/S4C_Research%20Agenda_2030.pdf

Chapters of the S4C Research Agenda



- Climate Change
- Water resources and management
- Natural hazards and risks
- Land use and land cover change
- Integrated landscape management and governance for better regional development policy
- **Forests, their management and governance**
- **Conservation and sustainable use of biodiversity**
- **Ecosystem services and human well-being**
- Urban and rural development
- **Traditional Ecological Knowledge and Tourism**
- Cultural heritage and traditional knowledge
- Education for Sustainable Development
- Participatory research, multi-actor dialogues and knowledge co-production
- Social innovation to promote sustainable development
- Green energy and energy efficiency
- Data Management

Recommendations to the Carpathian Convention from the Science for the Carpathians Network

Recommendations to the Carpathian Convention from the S4C

Editors: Joanna Zawiejska, Tamara Mitrofanenko

- Recommendations from FC2021 organised according Forum Carpaticum conference sessions
- For each session is indicated to which Convention articles and working groups are recommendations relevant

Annex 1: Recommendations for the S4C and research agenda for the Carpathians*

Annex 2: Facilitating A Stronger Role for the S4C in the Carpathian Region

* *Inputs from the Workshop on improving knowledge exchange among scientists and decision makers in Carpathians, Ostrava, Czech Republic, 2019*

Full document:

<http://carpathianscience.org/news/s4c-recommendations-for-the-carpathian-convention/>



Recommendations to the Carpathian Convention from the Science for the Carpathians (S4C) Network

Based on the inputs of participants of the 6th FORUM CARPATICUM
"Linking the Environmental, Political and Societal Aspects for
Carpathian Sustainability", 21-25 June 2021

Editors: Joanna Zawiejska, Tamara Mitrofanenko
S4C Science for the Carpathians

2021



Recommendations to the Carpathian Convention from the S4C



- Prioritize strong **protection of existing natural or semi-natural habitats** (esp.) with lower regeneration capacity and facilitate restoration when needed
- Support **conservation of semi-natural areas and ecosystem services** in the Carpathians, at local, national and international levels, and development of green infrastructure
- Consider and support ongoing projects on **restoration and conservation of wetlands**
- Focus on **protection, restoration and re-connection of habitats**
- Develop action plans to **minimise wildlife - vehicle collisions**



Recommendations to the Carpathian Convention from the S4C



- Promote the identification and increased use of **traditional ecological knowledge** in nature conservation and sustainable land management
- Reconcile and link conservation of biological and landscape diversity to sustainable local socioeconomic development.
- Harmonize biodiversity protection measures and socioeconomic strategies to facilitate transboundary cooperation.



Recommendations to the Carpathian Convention from the S4C related to forests



- Support the on-going assessment by the Carpathian Convention Secretariat of the **risks and impacts of climate change** to forest ecosystems in the Carpathian region
- Support **model development and forecasting methods** to anticipate:
 - shifts in habitats and plant species composition;
 - future changes in dead wood dynamics
 - changing/reduced carbon uptake and storage dynamics
- Support **development** of adaptive carbon forestry techniques



Recommendations to the Carpathian Convention from the S4C related to forests



- **Enhance ecosystem resilience** to shifts in species ranges and abundance
- Enhance resilience to increasing **forest disturbances**
- Reduce vulnerabilities to the increase in **forest fires**
- Expand the use of retention forestry practices and **close-to-nature forest management**
- Support development of novel concepts for **adaptive forest management** and forest policy



7th Forum Carpathicum 2023



FORUM CARPATICUM 2023

Carpathian Futures – Critical Transitions, 25-28 September 2023, Kraków, Poland

Main organiser: Jagiellonian University in Kraków, Poland



Theme: Carpathian Futures – Critical Transitions

- To address challenges and possible modes of adaptation to ongoing environmental, economic and socio-political crises in the Carpathian region
- Contributions on a range of topics related to the themes of the S4C Research Agenda 2020-2030 are welcomed

Abstract submission deadline: 31 May 2023

<https://hes.geo.uj.edu.pl/forum-carpathicum-2023>



7th Forum Carpathicum

Carpathian Futures: Critical Transitions

25-28 September 2023

Institute of Geography and Spatial Management, Jagiellonian University, Kraków, Poland

- Multiple, inter- and transdisciplinary themes
- Special hybrid session on Ukraine
- Celebration of the Carpathian Day
- Side/networking events, workshops
- **Launch of S4C working groups:** - to foster cooperation with CC working groups
- to support short term cooperation on thematic projects
- suggestions and cooperation welcome!

<http://carpathianscience.org> <https://hes.geo.uj.edu.pl/forum-carpathicum-2023>



Thank You for Attention!

Forum Carpathicum 2023: <https://hes.geo.uj.edu.pl/forum-carpathicum-2023>

Abstract submission deadline: **31 May 2023**

<http://carpathianscience.org>

Science for the Carpathians

connects scientists and practitioners in Central Europe, defines research priorities for the region and enhances international collaboration with partners from outside the Carpathians