

MONDAY 25 September 2023

- 14:30-17:00 Workshop on marteloscopes (**room 1.28 - IGSM building**)
Close-to-Nature Silviculture (CTNS) and Digitalization for Sustainable Forest Management - **Mariana Melnykovich**
- 17:00-19:00 Ice-Breaker (location: Conference venue at Kampus UJ - main hall)

TUESDAY 26 September 2023

- 10:00-12:30 Opening ceremony (**room: AULA**)
PLENARY SESSION: CLIMATE CHANGE CHALLENGES IN THE MOUNTAIN REGIONS

Bernat Claramunt-López, Ph.D. Researcher and Ecology Lecturer, CREAM
(Centre for Ecological Research and Forestry Applications)
Maladaptation in Mountains: A Climate Change Challenge

PLENARY PANEL SESSION: MOUNTAIN COOPERATION PERSPECTIVES

- 12:30-13:30 Lunch

13:30-15:00 WATER RESOURCES AND MANAGEMENT (**Room: P.1.1.**)

- Afzali H. et al., Riparian Zone Monitoring and Change Detection using Machine Learning Techniques. Case study: Danube revitalized side arms, Slovakia (oral)
- Khan A.Z., Kidová. A., Prediction of sediment transport after river training of the multi-thread river system in Slovak Carpathians (oral)
- Labaš. P., Kidová. A., Floodplain levels identification and delimitation along the degraded river system in submontane area based on the multi-sourced data (oral)
- Zawiejska A. et al., Exploring the poorly understood Blackwater Streams of the Tatra Mountain foreland, Polish Carpathians (oral)
- Bugár G. et al., Recent hydro-geomorphic response to extreme rainfalls in high-mountain catchment of the Javorinka creek (The Tatra Mts., Slovakia) (poster)
- Gołąb A., Michno A., Functioning of a mountain river in the Anthropocene - the example of Ochotnica River (the Gorce Mts., Western Carpathians) (poster)

CULTURAL HERITAGE AND TRADITIONAL KNOWLEDGE (**Room: P.1.2.**)

- Cooley T., Mlekodaj A., Traditional Ecological Knowledge, Performance Traditions, and Education in the Polish Tatras (oral)
- Mrázová M. et al., Transhumance today – knowledge, rules, heritage, production, communication – many professions in one (oral)
- Baránková Z., Disappearing witnesses to traditional management of hay meadows in northern Slovakia (poster)
- Hurajtová N. et al., Lidar as a tool for mapping of historical anthropogenic features in traditional viticultural landscape of Svätý Jur (Slovakia) (poster)

NATURAL HAZARDS AND RISKS (**Room: AULA**)

- Godziek J., Root plates of uprooted trees – detection and volume estimation using LiDAR point clouds (oral)
- Hajdukiewicz H., Wyżga B., Analysis of historical changes in planform geometry of a mountain river to inform design of erodible river corridor (oral)
- Moroşanu G. et al., Architecture of a regional geodatabase for hazard and vulnerability assessment in coal mining areas in SW Romania (oral)
- Kroh P. et al., Developing of landslide relief during the Holocene. Geomorphological reconstructions based on paleoenvironmental biogenic data from Mt. Śnieżnica landslide (Beskid Wyspowy Mts.) (oral)
- Hrivnáková K. et al., The geomorphological hazards associated with climatic change in high-mountain Carpathian region - High Tatra Mts. (Slovakia) Case study: changing lake ecosystem of Zelené (Kežmarské) pleso (poster)
- Mihai B. et al., Accurate Mapping of Soil Erosion in Complementary Romanian Subcarpathian Areas. Integration of multisensor and multirate satellite images with systematic field pedological survey validation (poster)

Organizers:



Partners:



15:00-15:30 Coffee break

15:30-17:30 INTEGRATED LANDSCAPE MANAGEMENT AND GOVERNANCE FOR BETTER REGIONAL DEVELOPMENT POLICY (**Room: P.1.1.**)

- Ćwik A., How natural conditions in the Polish Carpathians do not affect spatial development (oral)
- De Bortoli I. et al., Promoting a joint perspective for a better cooperation governance among Carpathians and the Alps – the Central Mountains project experience (oral)
- Favilli F. et al., Improving wolf-human coexistence in the Alps: first results from the assessment of socio-economic impact of the LIFE Wolf Alps EU project (oral)
- Jolivet A. et al., Combining system dynamics and decision trees for data-informed decision-making in mountain areas (oral)
- Afanasenko O. et al., Smart Village Mariiampil: Swiss-Ukrainian solutions on sustainability, community governance and industry recalibration for non-mountain Carpathian region of Ivano-Frankivsk oblast (poster)
- Moravčík M. et al., Spatial differentiation of agricultural soils and their properties depending on selected morphopositional properties of the relief in the Liptovská kotlina basin, cadastre area Važec (poster)
- Moyzeová M., Gdul'ová D., Landscape ecological aspects of environmental quality assessment in the context of the health status of its inhabitants (poster)
- Wałdykowski P. et al., What is the relevance of landscape audit in mountain landscapes for landscape research? A case study of the Western Beskidy Mountains (poster)

PARTICIPATORY RESEARCH, MULTI-ACTOR DIALOGUES AND KNOWLEDGE CO-PRODUCTION (**Room: P.1.2.**) **HYBRID**

- Csabay J. et al., Addressing Energy Poverty of the Marginalised Roma Communities: The Case of Lunik IX. Košice City-Ward (oral, on-line)
- Hiedanpää J. et al., Multi-disciplinary Approach for Inclusive, Competitive, and Green Economies and Societies in Mountainous Areas: The Experience of EU COST Action MARGISTAR (oral)
- Hutárová D. et al., Sustainable tourism development in marginal regions (Gemern-Malohont region, Slovakia) (oral)
- Pelyukh O. et al., Challenges and prospects of schools moving towards energy autonomy in the Ukrainian Carpathians (oral, on-line)

18:00-20:30 S4C meeting

WEDNESDAY 27 September 2023

9:00-11:00 SESSION ON UKRAINE (**Room: AULA**) **HYBRID**

Panel discussion part I: Understanding Uncertainties and Needs for Resilience and Post-war Recovery: Voices from the Ukrainian Carpathians
Panel discussion part II: Future of the Carpathians in a Time of Critical Transition: Exploring Triggers for Sustainability in the Post-War Era

11:30-13:00 PLASTIC IN THE MOUNTAINS (**Room: P.1.1.**)

- Haska W. et al., Roads as input zones of artificial macrolitter to fluvial system. The case of Kamienica Gorczańska stream in the Polish Carpathians (oral)
- Liro M. et al., First field experiment on plastic bottles fragmentation in mountain river channel (oral)
- Liro M. et al., Mountains of plastic: Mismanaged plastic waste along the Carpathian watercourses (oral)
- Mikuś P., Liro M., Wood jams as hotspots of macroplastic deposition on mountain river (oral)
- Liro M. et al., Where does it trap? Plastic bottle accumulation hot-spots detected by field experiment (poster)

Organizers:



Partners:



MINI-SYMPOSIUM ON CARPATHIAN ENDEMIC SPECIES (**Room: P.1.2.) HYBRID**

- Hurdu B. et al., Taxonomic diversity patterns in endemic plants of the Carpathian Region (oral)
- Mráz P. et al., The endemic flora of the Carpathians: towards better knowledge and efficient conservation of unique Carpathian biodiversity (oral)
- Renaud J. et al, A database and atlas of endemic vascular plants of the Carpathian Region (oral; on-line)
- Ronikier M. et al., Intraspecific diversity and differentiation of the Carpathian endemic plants: identification of diversity patterns at various spatial scales for natural heritage knowledge and conservation (oral)

13:00-14:00 Lunch

14:00-15:30 CLIMATE CHANGE 1 (**Room: P.1.1.**)

- Skrynyk O., Predicting Thermal and Precipitation Extremes in the Carpathian Region: A Machine Learning Approach (oral)
- Varšová S. et al., Extreme precipitations statistics for the alpine treeline ecotone in the High Tatra Mountains, Slovakia (oral)
- Rusňák T., The monitoring of drought in the Pontrie Protected Landscape Area from 2018 to 2022 with MODIS Land Surface Temperature (oral)
- Corradini P. et al., Assessing the vulnerability to the diminishment of snow coverage in mountain snow tourism destinations. First findings from the Interreg Alpine Space project "BeyondSnow" (oral)
- Wypych A. et al., Snow cover response to temperature and precipitation variability in Polish Carpathians (oral)
- Onderka M. et al., Should we worry about what the future holds for us in terms of rainfall extremes? (poster)

LAND USE AND LAND COVER CHANGE 1 (**Room: P.1.2.) HYBRID**

- Karabchuk D. et al., Monitoring forests from illegal logging in Ukraine for 2020 - 1 quarter of 2023 (oral; on-line)
- Kozelová I., Legacy of the past in the Skalica district (oral)
- Zibtseva I., Petrov O., Mapping of land cover changes in the regions of Ukraine with application of the corine land cover methodology (oral)
- Tokarczyk N. et al., Land use-related threats and risks affecting the biodiversity-rich grasslands in the Alps and the Carpathians (oral)

CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY 1 (**Room: AULA**)

- Gugushvili T., Salukvadze G., General policy orientation change from agriculture to rural development: family-based entrepreneurship in mountainous regions of Georgia (oral)
- Halada L. et al., Hotspots of the Habitats Directive species and habitats in the Carpathians (oral)
- Manu M. et al., Soil mite fauna as bioindicator for ecological assessment of some grassland ecosystems from Romanian Carpathians (oral)
- Melnykovich M. et al., Nurturing the Future of the Carpathians in a Time of Critical Transition: Exploring Triggers for Sustainability in the Post-War Era (oral)
- Nowak-Olejnik A., Hibner J., Factors influencing cultural ecosystem services and disservices (poster)
- Węglarz A. et al., Carpathian Quality System for Grass-Fed Beef (poster)

15:30-16:00 Coffee break

Organizers:



HUMAN-ENVIRONMENTAL SYSTEM
RESEARCH CENTRE

Partners:



16:00-17:30 CLIMATE CHANGE 2 (Room: P.1.1.)

- Kholiavchuk D. et al., Climate change in the Carpathian forests: recent developments (oral)
- Soshenskyi O. et al., Silvicultural approach required to increase forest resilience to climate change and wildfires in the Ukrainian Carpathians (oral)
- Lukasova V. et al., Climate change affects the phenology of *Fagus sylvatica* in the Western Carpathians (poster)
- Slobodová T. et al., Vertical migration of alpine plant species on the Belianske kopa summit (Belianske Tatras Mts., Slovakia) (poster)
- Purgat P., Gajdoš P., Changes in the composition of araneocenoses in the Malá Lehota village (central Slovakia) in response to global climate and landscape changes over a long-term horizon (poster)
- Kholiavchuk D. et al., Drought Patterns in the Western and Eastern Carpathians: A Focus on Montane Forested Regions (poster)
- Szydłowski T., Wójcik S., Variability of cloudiness and sunshine in 2002-2022 in the Low Beskids, Outer Western Carpathians (on the example of the Research Station IGiPZ PAN in Szymbark near Gorlice) (poster)

LAND USE AND LAND COVER CHANGE 2 (Room: P.0.1.)

- Barančok P., Barančoková M., Historical and present changes in the landscape diversity and biodiversity in a selected part of the Lower Spiš (Slovakia) (poster)
- Boltížiar M., Petrovič F., Land-Use Changes of the World Heritage Site of Vlkolínec (Slovakia) Since the Late Eighteenth Century (poster)
- Miklar A., Analysis of the diversity of cadastral communes in Galicia located in the Carpathian region in the mid-19th century (poster)
- Rudnik A. et al., Stability and pool of Soil Organic Matter under different types of land cover and under the influence of various soil-forming processes on the example of the Gorce Mountains (S Poland) (poster)
- Szwagierczak A. et al., Effects of land-use changes on the connectivity of brown bear (*Ursus arctos*) habitats in the Low Beskid Mts region (poster)
- Wójtowicz P. et al., Verification of the taxonomic position of soils affected by a 50-year history of Land Use and Land Cover changes on the example of the Jaszcze and Jamne Valleys in the Gorce Mountains (S Poland) (poster)

CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY 2 (Room: AULA)

- Onete M. et al., Linking management, plants, soil invertebrates and environmental variables in pastures from S-W Făgăraș Massif (Romanian Carpathians) (oral)
- Omizzolo A. et al., Participatory approach and regional stakeholders' platforms to improve wolf-human coexistence in the Alps. Hints from the LIFE Wolf Alps EU project (oral)
- Pechanec V. et al., Using modelling of biodiversity in the protected landscape areas Beskydy and Kysuce in the Czech and the Slovak Republics (oral)
- Gašparovičová P., Ševčík M., Using species distribution models as a tool to predict occurrence of *Fallopia taxa* in Slovakia (poster)

17:30-17:45 Coffee break

17:45-18:30 PLENARY SESSION: FOOD WASTE MANAGEMENT IN THE CONTEXT OF RURAL ECONOMIES (Room: AULA)

Viachaslau Filimonau, Ph.D. Centre for Sustainability and Wellbeing in the Visitor Economy, School of Hospitality and Tourism Management, University of Surrey
The opportunities and challenges of food waste management in tourism and hospitality services in the context of rural economies

19:00-21:30 Conference dinner (location: Conference venue at Kampus UJ)

THURSDAY 28 September 2023

9:00-9:45 PLENARY SESSION: CLIMATE CHANGE CHALLENGES IN THE MOUNTAIN REGIONS - 2

William Keeton, Professor, the Rubenstein School of Environment and Natural Resources, University of Vermont
Forest restoration in the Carpathians and globally – a critical component of climate adaptation

9:45-10:00 Coffee break

10:00-12:15 EDUCATION FOR SUSTAINABLE DEVELOPMENT (**Room: P.0.2.**) **HYBRID**

- Clius M., Virdol D.C., The Green Week - a step forward in education for sustainable development in Romania (oral)
- Sziva D. et al., Students on sustainability – first results of a V4 research initiative (oral)
- Mykhaylenko V. et al., The role of universities in the formation of global principles of sustainable development (oral)
- Piscová V. et al., Social and environmental education in the Tatra Biosphere Reserve as a task for the implementation of Agenda 2030 (poster)
- Shchoka I., European Wilderness Society's activities on Respect nature and Youth involvement - Practice-based input (on-line presentation)
- Torres M., Integrating Ancestral education into universities in Santiago of Chile - Input from another mountain region (video presentation)
- Session keynote: Daniel Fischer, Leuphana University. UNESCO Chair on ESD at Leuphana University Lüneburg. Potential cooperation on Carpathian ESD (on-line presentation, title TBC)

Workshop: Strengthening the Carpathian ESD Expert Network - Vision, Aims, Role in the Carpathian Convention

FORESTS, THEIR MANAGEMENT AND GOVERNANCE (Room: AULA) HYBRID

- Chaskovskyy O., Havryliuk S., Near to real time forest monitoring and forest cover loss assessment in Ukraine (oral)
- Grabska-Szwagrzyk E. et al., Exploring the dynamics of trees spring phenology in the Polish Carpathians using Sentinel-2 time series (oral)
- Kruhlov I. et al., Management, not climate change, is the main factor of the future Carpathian forest landscape (oral, on-line)
- Pawlik Ł. et al., Tree aboveground biomass increment and mortality in the Gorce National Park (oral)
- Rosset C. et al., Towards Close-to-Nature Forestry: Tracking Forest Changes to Improve Management Using Photospheres with the Sylvotheque.ch Platform (oral)
- Švik M. et al., Seasonal trend analysis of MODIS vegetation index time series for the fir and beech forest stands in Carpathians (oral)
- Frink J.P. et al., Floristic composition, diversity and similarity analysis of forest ecosystems in Romanian LTER-sites (poster)
- Pawlik Ł. et al., Soil development and properties under trees (poster)

HUMAN-WILDLIFE COEXISTENCE (Room: P.1.2.) HYBRID

- Bautista C. et al., Natural and anthropogenic drivers of brown bear damage occurrence (oral)
- Cherepanyn R. et al., Large carnivore monitoring and human-wildlife conflicts prevention in the Ukrainian Carpathians (oral; on-line)
- Kaim D. Ziółkowska E., et al., Using of historical spatial data improves current species distribution models – case of the Carpathian brown bear (oral)
- Pop I.M. et al., Emergency-line calls as a tool to assess human-wildlife interactions in the Carpathian Mountains (oral)
- Kaim D., Radeloff V.C., Impact of wildland-urban interface on human-wildlife interactions in the Polish Carpathians (oral)

Organizers:



Partners:



SUSTAINABLE TOURISM (Room: P.1.0.2.) HYBRID

- Hibner J. et al., Experience design and nature conservation via Visitor Monitoring and management in protected areas (VIMOMA) (oral)
- Kiptenko V., Profiling Sustainable Tourism Destination: Boykos' Carpathians project case (oral; on-line)
- Krzesiwo K., Barriers and limitations to ski resort development in the Polish Carpathians in the opinion of ski resort operators (oral)
- Medek M., Carpathian Long-distance Hiking Trail – Threat to Conservation or Chance for Sustainable Tourism? (oral)
- Ruzstecka-Rodziewicz M. et al., Environmental carrying capacity index as a base for management of tourist traffic in mountain national parks - Karkonosze National Park case study (oral)
- Kubal-Czerwińska M., Mika M., The succession dilemma in family tourist enterprises in the Polish Carpathians (oral)

12:15-13:15 Lunch

13:15-15:30 PLENARY PANEL SESSION: CARPATHIAN FUTURES – CRITICAL TRANSITIONS
(room: AULA)
Closing ceremony

SIDE EVENTS

TUESDAY 26 September 2023

13:30-20:30 HES-GEO PARTNERSHIP WORKSHOP (Room: P.1.0.1.) HYBRID
(by invitations)

THURSDAY 28 September 2023

10:00-12:15 INTERREG CENTRAL EUROPE CENTRAL MOUNTAINS: Workshop with Young Students on Good Governance Models and Participation Processes in Alpine-Carpathian Areas (Room: 1.28 - IGSM building)
(by invitations)

Organizers:



HUMAN-ENVIRONMENTAL SYSTEM
RESEARCH CENTRE

Partners:



Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection



Federal Agency for
Nature Conservation

