



Sustainable Tourism in the Ukrainian Carpathians: Integrating Science, Safety and Cultural Authenticity through the International Educational and Scientific Center 'Observatory'

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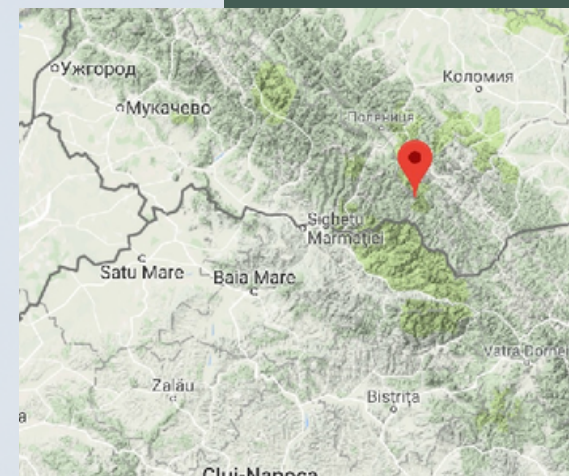
2,028 m above sea level. On the border of two countries. Open year-round.

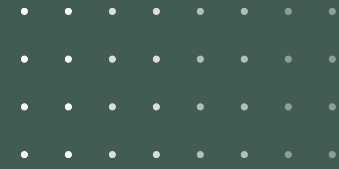
Situated at 2,028 metres in the heart of the Carpathian Biosphere Reserve, on the Ukrainian–Romanian border, the International Scientific Centre 'Observatory' is a year-round residential research and education facility where science has no off-season.

Re-established in 2017 through a joint initiative of Vasyl Stefanyk Carpathian National University and the University of Warsaw, the Centre operates under a bilateral institutional agreement – its very existence an embodiment of transboundary cooperation.

One Summit. One Argument.

- **Scientific Monitoring.** Tracking ecology and climate year-round — producing the baselines that responsible visitor management depends on.
- **Safety Coordination.** On-site rescue capacity with established cross-border protocols alongside Romanian partners.
- **Cultural Authenticity.** Bringing rigour to heritage — documenting Hutsul traditions and the intertwined Polish-Ukrainian mountain legacy.

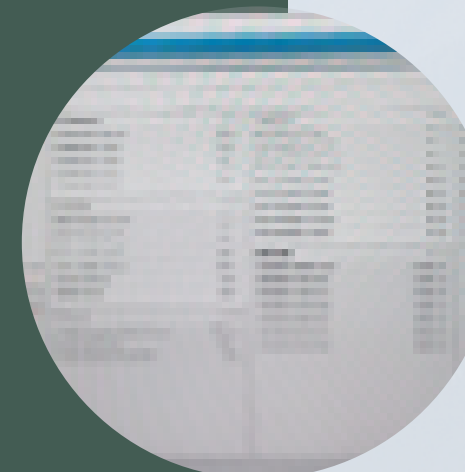




PILLAR I — SCIENCE

Scientific Monitoring as the Basis for Tourism Management

Continuous meteorological records, seasonal biodiversity surveys and long-term climate datasets together form the scientific backbone of responsible tourism management in the Carpathian Biosphere Reserve — informing safety advisories, carrying capacity thresholds and climate-adaptive planning within the INTERACT network.



Biodiversity and Ecological Research

Seasonal surveys documenting flora, fauna and ecosystem condition within the Carpathian Biosphere Reserve. Supports citizen science development programmes.

Meteorological Monitoring & Climate Change Research

Permanent high-altitude station at 2,028 m recording climate variables and building long-term datasets on snowpack, phenology and hydrology — an INTERACT network node open to scientific and astrotourism.

Meteorological Monitoring & Climate Change Research

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PILLAR II — SAFETY

Mountain Rescue Coordination as a Component of Tourism Governance

Observatory functions in rescue coordination:

- First-Response Support Emergency shelter, first aid and communication relay to distressed visitors pending GIRS team arrival.
- Operational Communication Primary communication node for rescue operations in the Pop Ivan zone, coordinating rescue teams, park administration and emergency services.
- Weather Data Provision Real-time meteorological observation informs rescue team deployment decisions and risk assessment during active incidents.
- Visitor Safety Briefings Structured pre-departure briefings covering route conditions, weather forecasts and emergency procedure





PILLAR III — CULTURAL AUTHENTICITY

Cultural Heritage, Polish-Ukrainian Legacy and Pan-Carpathian Identity

Hutsul Traditional Culture

Hutsul culture as substantive educational content — delivered through local knowledge-holders and field programmes, not decorative theming.

Polish-Ukrainian Shared Heritage

A jointly operated site embodying shared ownership — and a natural anchor for cross-border visitor interest and transnational tourism.

Carpathian Intangible Heritage

Systematic documentation of pastoral traditions and craft knowledge connecting mountain communities across Ukraine, Romania, Poland and Slovakia.

The Integrated Model

Why Integration Produces Superior Governance Outcomes

Managing science, safety and cultural heritage as integrated institutional functions produces qualitatively different governance outcomes than managing each component in isolation. Eighty-seven years of continuous operation at 2,028 metres is an operational proof of concept — not a theoretical proposition.



Science → Management On-site monitoring data directly informs safety decisions, visitor capacity limits and heritage documentation — eliminating the information gap between research and management practice.



Safety → Trust Embedded rescue coordination delivers the operational continuity and local contextual knowledge that reactive, externally-deployed services cannot replicate.



Culture → Quality Research-grounded heritage programmes produce authentic, differentiated visitor experience — resistant to commodification and aligned with measurable community benefit.





Conclusions & Recommendations

Observations for the Working Group on Sustainable Tourism

Scientific Monitoring as a Baseline Requirement

Scientific monitoring should be established as a baseline governance requirement for sustainable mountain tourism — not an optional supplement. CSTP sustainability standards should incorporate explicit criteria for the use of on-site ecological, meteorological and climate data in visitor management decisions.

Rescue Coordination as Tourism Infrastructure

Mountain rescue coordination capacity should be recognised as a component of sustainable tourism infrastructure. Consideration should be given to embedding coordination functions within resident institutions at key high-altitude destinations, and to formalising cross-border rescue communication protocols at shared mountain tourism sites.

Evidence-Based Cultural Authenticity Standards

Evidence-Based Cultural Authenticity Standards
Cultural authenticity criteria in the CSTP sustainability standards should be grounded in documented heritage research, with provisions for the equitable engagement of local knowledge-holders as active contributors to tourism programmes — not passive service providers.



Replicability Across the Carpathian Arc

Conditions for Scaling the Integrated Model

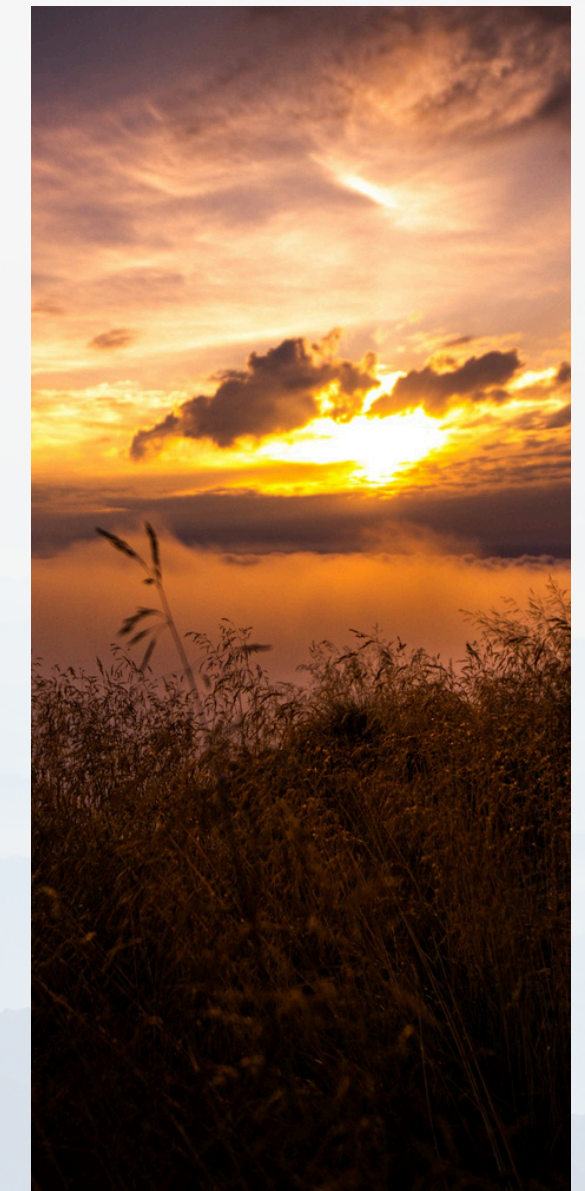
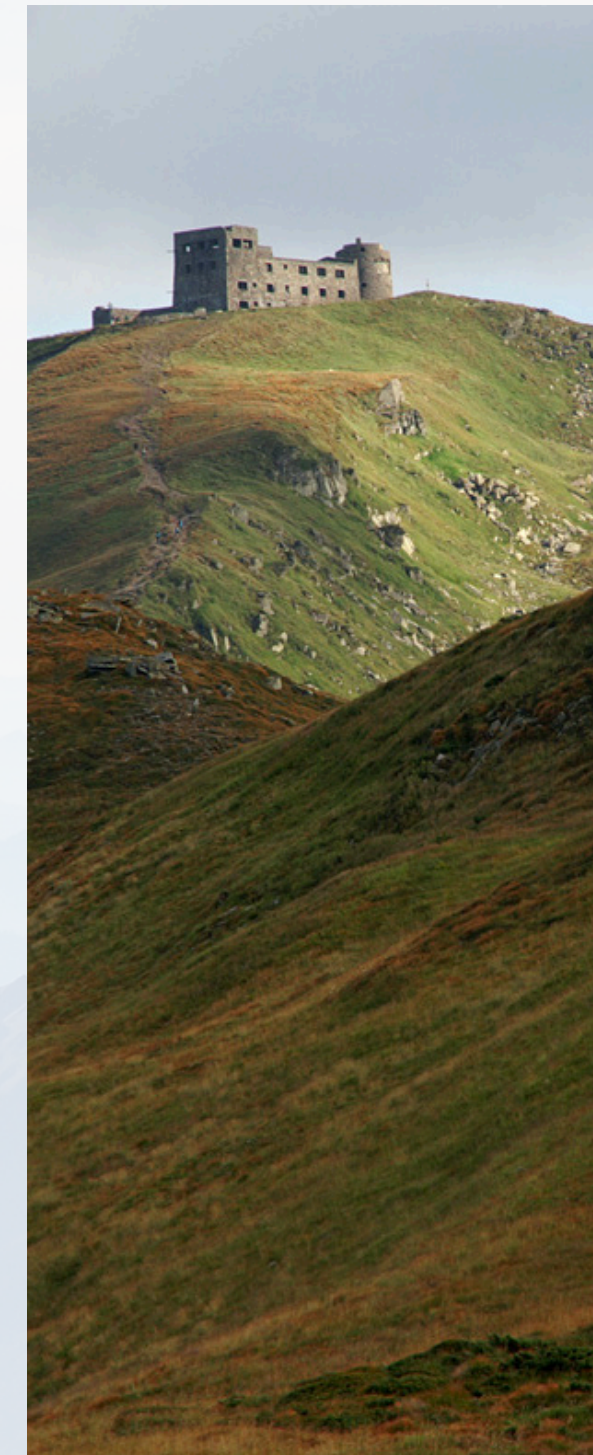
The Observatory model is, in principle, replicable at other resident institutions across the Carpathian region — research stations, biosphere reserve facilities, and educational field centres. The principal constraint on replication is not technical but institutional: it requires that science, safety, and culture be treated as integrated governance responsibilities rather than as separate administrative domains.





Mount Pip Ivan Chornohirskyi stands at the intersection of borders — geographic, cultural, and scientific. For 87 years, the Observatory has functioned as a node where these dimensions do not compete, but reinforce one another.

We believe this experience is directly relevant to the priorities of the Carpathian Convention and the current tasks of the CSTP. We welcome discussions on further collaboration within the framework of this meeting or in any format the Working Group considers appropriate.





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Get in touch to plan your visit or explore collaboration
opportunities.

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