

Ecological connectivity in the Carpathians and beyond



An international conference on ecological connections (“Protected Areas - Cornerstones of Ecological Connectivity in the Carpathians and Beyond”) was held in Visegrád, Hungary at the end of September 2021. Below we give a subjective summary of this - emphasizing that what has been said does not necessarily agree with the position of the Hungarian government, but at the same time they can significantly contribute to common thinking about the transition to sustainability.

Bertalan Balczó: "we raise natural diversity into mainstream"

Bertalan Balczó (Ministry of Agriculture, Deputy State Secretary for Nature Conservation <https://kormany.hu/agrarminiszterium>) in his welcome speech emphasized that it has special message that the conference was organized in Visegrád, Hungary by the River Danube: the Danube is a symbol of cross-border cooperation. He mentioned the establishment of the Mura-Drava-Danube Biosphere Reserve (<https://eionet.kormany.hu/hivatalosan-is-megalakult-a-mura-drava-duna-bioszfera-rezervatum>) as one of the joyful news of recent times.



Mura-Dráva-Duna Biosphere Reserve. Fotó: Goran Safarek

The Deputy Secretary of State emphasized that Hungary is working on the national version of the European Biodiversity Strategy (https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en). The main aim is **to put natural diversity into mainstream biodiversity aspects**. As he said, a key part of this is the mapping of green infrastructures and the assessment of their condition (National Ecosystem Map of Hungary <http://www.termeszetem.hu/en/ecosystem-services/national-ecosystem-map-of-hungary>). The Deputy Secretary of State stressed the importance of education and dissemination of knowledge, in which national parks will play a key role. The ten national parks

in Hungary (<http://magyarnemzetiparkok.hu/>) do an outstanding job in this respect: about 1.6 million visitors a year come to the visitor centres and exhibitions.

Harald Egerer: „ecological connectivity is good for human health and resilience”

Harald Egerer (Secretary General of the Carpathian Convention <http://www.carpathianconvention.org/>) emphasized that ecological interoperability is far from benefiting only for large carnivores but also for human health and resilience (“ecological connectivity is good for human health and good for our resilience ”), which has been given a prominent role in recent times. All this requires a holistic vision, which the Carpathian Convention (<http://www.carpathianconvention.org/>) seeks to keep in mind. The latter's main tasks include promoting sustainable tourism, cooperating with the Visegrad Fund, improving education and dissemination, and addressing climate change, such as the assessment of its impact on forests.



Carpathian Convention (carpathianconvention.org/impressions-of-the-carpathians.html)

Harald Egerer quoted the opinion that states that with the withdrawal of epidemics we can return to the business as usual, to the “old normal”. As he said, this is not the case because there is no such thing as old normal, as the pre-COVID pattern was unsustainable, so there is no going back. There is no old normal, and there is no new normal neither - but new challenges come every day. We need good ideas for good projects.

The Secretary-General emphasized that the place of the conference was also symbolic for him because it is close to Nagymaros, where very important events in environmental democracy had taken place not so long ago, and this is still a valid message: „we have to listen to people”.

Mircea Verghelet: "the spirit of the Carpathian region is common discussion and cooperation"

Mircea Verghelet (Steering Committee Chair, Carpathian Network of Protected Areas CNPA) praised the importance of face-to-face meetings and informal conversations after “online months” and noted

that the spirit of the Carpathian region is precisely this joint exchange of knowledge and discussion and cooperation.



Carpathian Network of Protected Areas

Irene Lucius: "only through joint events and discussions can a common and truly usable solution be found"

Irene Lucius (Conservation Director, WWF Central and Eastern Europe <https://www.wwfcee.org/>) stated that „with farmers, hunters, traffic experts only platforms, meetings can come to solutions that we can live with“. She also highlighted that networking protected areas is beneficial not only for nature but also for people. She stated that “we are lucky to experience a push from the EU Biodiversity Strategy”). The goal is that nature protection go beyond today’s boundaries of protected areas. To do this, we have to take stronger role in spatial planning.



<https://www.wwfcee.org/>

Nikola Notaro: "the goal is to increase nature's resilience"

Nikola Notaro (Head of Unit, Nature Protection, European Commission - DG Environment https://ec.europa.eu/info/departments/environment_en) emphasized that the **European**

Biodiversity Strategy adopted in May 2020 https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en aims not only to increase protected areas but also to increase nature's resilience. To this end, establishing ecological connections is an important tool.



European Biodiversity Strategy (https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en)

Wendy Elliot: "far more species are migrating than previously thought"

Wendy Elliot (Deputy Leader Wildlife Practice, WWF International <https://www.worldwildlife.org/>) highlighted that as our knowledge grows, we can see a great many species migrating - far more than we previously thought. If they cannot migrate, they disappear - and that can cause entire systems to collapse.



<https://www.worldwildlife.org/>

Gary Tabor: "Landscape health is human health."

Gary Tabor (Executive Director, Centre for Large Landscape Conservation / Specialist Group Leader, IUCN Connectivity Conservation Specialist Group <https://www.iucn.org/commissions/world-commission-protected-areas/our-work/connectivity-conservation>) highlighted that, in parallel with the fragmentation of natural habitats, human culture is also fragmented ("it is also fragmentation of humanity"). Landscape health is public health.

He stressed that studies show that the COVID epidemic comes from where links between ecosystems are most damaged. The term “ecological corridor” is not appropriate, but it is well understood by decision makers. Everyone understands why it’s not good when connection between smart phones is not working well. However, not everyone understands why it is not good when ecological connections are not working well. As he put it, protected areas are worthless without connection.

The TRANSGREEN project (<http://www.interreg-danube.eu/approved-projects/transgreen>) “report is fantastic.” A higher level of ecological functions requires the development of ecological connections (“connectivity conservation”). Just as life is dynamic, so must the activities that protect it.

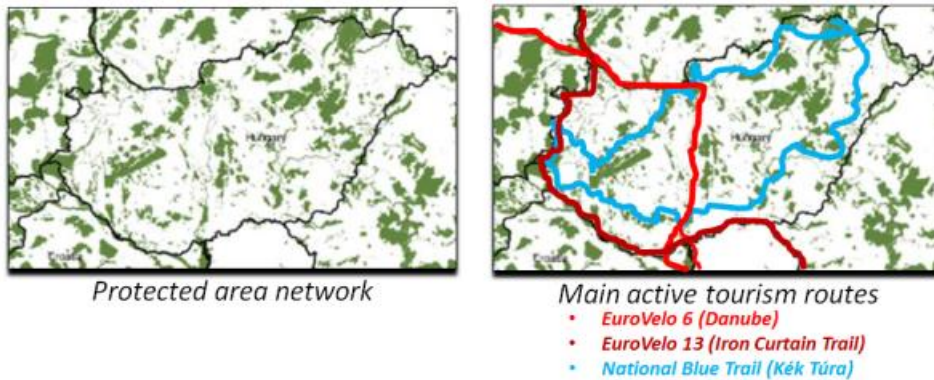


TRANSGREEN project. <http://www.interreg-danube.eu/approved-projects/transgreen>

Gary Tabor also highlighted that it’s also about people-to-people relationships — and how to rebuild them. As an example, he highlighted a thesis which concluded that in order to better understand human cultures, the major protected areas of the world should be connected into a huge hiking route. The 3525-kilometer route, modelled on the Apalachian Trail, would start in Africa, touching the southern landscapes of Europe, and go to Asia and Australia, with dozens of cultures.

Miklós Marton: "it is not enough to link protected areas, but it is also important to convince different sectors"

Miklós Marton (Steering Group Member of the EU Danube Region Strategy, Priority Area 6 - Biodiversity, Landscapes and Quality of Air and Soils <https://nature.danube-region.eu/>) emphasized that in order to restore ecological relations, we need to build stronger links with several other sectors. Such is the case with tourism, as active tourism also prefers the more valuable natural places: banks of rivers, valleys and mountain ranges.



Protected areas and routes of active tourism overlap – not just coincidence

Hildegard Meyer: " When you build, build for all "

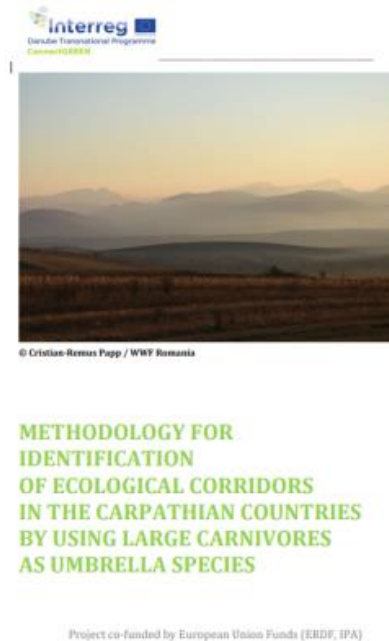
Hildegard Meyer (Project manager, WWF <http://www.interreg-danube.eu/approved-projects/connectgreen/section/contact>) presented the ConnectGREEN project's youth video competition (<http://www.interreg-danube.eu/approved-projects/connectgreen/section/youth-video-contest>). As she said, 26 films came to the competition. The message of the winning film (titled "The Memory"): "When you build, build for all". The film is short but very informative - available here: <https://youtu.be/wwqIYDsP0hM>



final scene of short film titled „The Memory” <https://youtu.be/wwqIYDsP0hM>

Zuzana Okaniková: "The method developed is not about conflicts, but about diversity."

Zuzana Okaniková (Nature Conservation Agency of the Czech Republic <https://www.ochranaprirody.cz/en/>) emphasized that the mapping of large carnivores was important for the method: they indicate the presence or absence of ecological corridors ("Methodology for identification of ecological corridors in the Carpathian countries by using large carnivores as umbrella species " <http://www.carpathianconvention.org/key-carpathian-convention-documents-337.html>). He also stressed that the method developed is not about conflicts, but about diversity.



*METHODOLOGY FOR IDENTIFICATION OF ECOLOGICAL CORRIDORS IN THE CARPATHIAN COUNTRIES
BY USING LARGE CARNIVORES AS UMBRELLA SPECIES*

Dusan Rpmportl: "the three C concept: Cores - Corridors - Carnivores"

Dusan Rpmportl (Silvia Tarouca Reasearch Institute for Landscape and Ornamental Gardening, Czech Republic <https://www.vukoz.cz/index.php/en>) emphasized the concept of Cores - Corridors – Carnivores concept. Its main principle is to create viable populations, with the possibility of migration if necessary. The main steps of the concept:

1. Data collection
2. Habitat suitability modelling
3. Definition of core areas and stepping stones
4. Modelling habitat connectivity
5. Definition of ecological corridors

Dr. Krisztina Kovács: "the problems in the countries of the region are very similar"

Dr. Krisztina Kovács (Hungarian University for Agriculture and Life Sciences <https://apply.scyp.hu/institutions/institution/86-hungarian-university-agriculture-and-life-sciences-former-szent-istvn-university>) emphasized that it is better to avoid critical areas when planning improvements than to mitigate impacts later. The problems that arise are very similar in the Czech Republic, Hungary, Serbia, Slovakia, Romania... However, the concepts, methods, legal frameworks

and institutional frameworks are very different. She highlighted the *Budapest Agglomeration Spatial Plan* and the *Balaton Agglomeration Spatial Plan* - as she said; they were not clearly successful because they did not introduce moratoriums before they came into force, so they actually accelerated the trends to be avoided. Another problem is that they were not consulted well at the local level, so a kind of “top-down” principle can be felt in them.

Milan Husár: "harmonization is the key concept"

According to **Milan Husár** (Slovak University of Technology in Bratislava - SPECTRA Center of Excellence of the EU <https://www.stuba.sk/>), harmonization is the key concept. We are not against development, but it is a fact that “un-sustainable development of tourism is one of the main conflicts”. The area of operation must be demarcated, notable research must be carried out beforehand, preliminary plans must be drawn up, and only then can real planning begin.

Dr. András Weiperth: "European Biodiversity Strategy highlights the establishment of Trans-European Natural Network"

Dr. András Weiperth (Hungarian University for Agriculture and Life Sciences <https://apply.scyp.hu/institutions/institution/86-hungarian-university-agriculture-and-life-sciences-former-szent-istvn-university>) noted that in Hungary M1, M3 and M7 motorways have serious ecological border effects. At the same time, the Danube is a link between European Biogeographical Regions.

It is a problem that when training engineers, they are not taught who should be interviewed, involved and consulted, but that they should solve the problem alone.

It is hoped that the **European Biodiversity Strategy** (https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en) **highlights the creation of a Trans-European Nature Network**. However, in his opinion, it is not worth waiting for this to happen at EU level, because it will "last for eternity". We need to move - at local and regional level. (In the meantime, the question arises as to whether there will be ecological corridors at sea as well.)

Cristian-Remus Papp: "the word connection is interpreted differently by transport professionals"

Cristian-Remus Papp (WWF Romania <https://wwf.ro/>) highlighted that the mapping of ecological corridors should be followed by the identification of gaps and strategic decisions - involving planners and decision makers. As he said, the word ‘connectivity’ is interpreted differently by transport professionals - and even because of COVID, by the average ones too.

As he said, in Romania, for example, no one wants to hear about new nature protected areas. It should be worded differently: for example, the term *multifunctional land use* can be useful.

Environmental Impact Assessment (EIA)

The **ConnectGREEN** project analysed the operation of Environmental Impact Assessments in a separate work-section. One of the main lessons of the work was that the regulation at EU level itself and the implementation at national level need to be seriously updated for ecological networks. Due to the importance of the topic, the short and concise recommendations from ConnectGREEN project are presented in the original text:

- Serbia: mapping the ecological corridors, construction of over and underpasses, legislative harmonisation, active involvement of stakeholders into decision-making process.
- Slovakia: conflict resolution between sectors systematically, negotiation between sectors, detailed database of vehicle collisions with animals, enforce the protection of ecological connectivity in planning process.
- Romania: integration of corridors and ecological corridors approaches in the relevant national legislation, identification and designation of ecological corridors and their inclusion into spatial plans at all levels.
- Hungary: follow-up process should be strengthened (effectiveness of mitigation measures) national database for road/railway underpasses, timeframe for monitoring activities and field studies, unification of the nature protection part of EIAs, substantive assessment of alternatives in EIAs.

Suggestions for EU-level EIA Directive:

- The term of 'ecological corridor' should be nominated in EIA Directive, to highlight its important role in prevent genetic isolation and maintain healthy ecosystems, in line with the current EU Biodiversity Strategy (*Article 3 (1) b*) „significant effects on biodiversity”)
- Impact of the railway/ road projects to ecological corridors should be assessed and evaluated in EIAs, so the criteria to determine whether the project listed Annex II. should be subject to an EIA and basic requirement of EIA report should be complemented (*Annex III. 1., 2. (characteristics and location of projects), Annex IV. 4. (description of factors likely to be significantly affected)*)
- Applicable / suggested methods for field studies; environment condition-based planning aspects; base requirements for assessing impacts on biodiversity and measures implementation should be unified (*Article 5 (3): „in order to ensure the completeness and quality of EIA report”*)
- Timeframe should be outlined for the field studies connecting to road/railway EIAs' wildlife protection part: minimum one growing season (vegetation period) is needed (*Article 5 (3): „in order to ensure the completeness and quality of EIA report”*)
- Timeframe should be outlined for the monitoring activities, mainly in connection with effectiveness of mitigation measures (green bridges/eco-ducts) (*Article 8a (4) – duration of the monitoring*)



Foto: Miklós Marton

Conversations

During the conversation between the participants of the conference, it emerged that the actors of agriculture do not seem to be ready to adopt new business models and new ways of thinking. However, this is not a problem, it is a potential. This opens up space for dissemination of knowledge, education (“capacity building”) and negotiations. The picture is nuanced by the fact that farmers in the area are typically older people...

According to a strong opinion, **it is in such uncertain times that there is a great need for long term visions and long-term plans. What kind of world do we want in 2050?**

A colleague from Greece emphasized that the protection of the environmental values of the Carpathians is exemplary and is being paid attention to by professional audiences all over the world.

As has been said, establishing / protecting ecological connections can be problematic as they are typically outside of the protected areas. Bypassing protected areas (for example, during road construction), we have not yet solved the problem. However, when natural values are mentioned as a “common heritage”, it is difficult to ignore them.

Our previous articles in the topic:

- Mura-Drava-Danube Biosphere Reserve has been officially established (Hivatalosan is megalakult a Mura–Dráva–Duna Bioszféra-rezervátum) <https://eionet.kormany.hu/hivatalosan-is-megalakult-a-mura-drava-duna-bioszfera-rezervatum>
- Scenarios for nature outlook in Slovakia (Forgatókönyvek a természeti környezet szlovákiai jövőjére) <https://eionet.kormany.hu/forgatokonyvek-a-termeszeti-kornyezet-szlovakiai-jovojere>
- The TRANSGREEN project won award - European recognition for the region's environmental protection (Díjat nyert a TRANSGREEN projekt – európai szintű elismerés a térség környezetvédelmének) <https://eionet.kormany.hu/dijat-nyert-a-transgreen-projekt-europai-szintu-elismeres-a-terseg-kornyezetvedelmenek>

- Greening Carpathians: “Nature Need space!” (Zöldülő Kárpátok: „Nature needs space!”) <https://eionet.kormany.hu/zoldulo-karpatok-nature-needs-space>
- DANUBE parks <https://eionet.kormany.hu/danubeparks>
- TRANSGREEN – Sustainable transport (TRANSGREEN – Fenntartható Közlekedés) <https://eionet.kormany.hu/transgreen-fenntarthato-kozlekedes>
- **Danube Ecological Corridor (English language article)** <https://eionet.kormany.hu/danube-ecological-corridor>
- Dam or connection (Gát, vagy összeköttetés?) <https://eionet.kormany.hu/gat-vagy-osszekottetes>



„like stepping stones: chain of protected areas along Danube ecologic corridor”

Organizers of the international conference:

- ConnectGREEN project
- UN Environmental Programme
- Carpathian Convention
- CNPA
- INTERREG Central Europe
- CEEweb
- WWF

