

Factsheet

"Bridging" the Carpathians

Solutions for connecting people and nature, transport infrastructure and ecosystems



Lynx lynx ©Tomas Hulik

Carpathian connectivity for people and wildlife. Steps towards solving the conflict

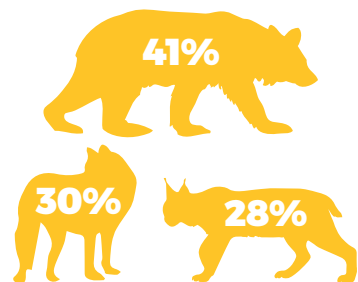
When considering connectivity in the Carpathians, two categories of beneficiaries are at stake: people and wildlife. While for people the Carpathians are a natural barrier which requires effort to cross, for wildlife the mountain chain provides habitat and freedom of movement spanning over several countries.

At a first glance, the connectivity of one category can only be ensured at the cost of the other. Transport infrastructure is required to better connect people from Carpathian countries with the rest of Europe. Infrastructure development threatens wildlife connectivity, as it causes landscape and habitat fragmentation. On the other hand, preserving nature at all costs could mean stopping any type of construction in the area, and thus further slowing down regional development and people's movement across the mountains.

The apparent conflict can be overcome by properly integrating both perspectives into transport planning for the Carpathian region and actively involving varied stakeholders in the process. When all stakeholders collaborate to find transport solutions with low impact on the environment, all parties benefit. This is the aim of the TRANSGREEN project, for the next 2 years (2017-2019): through integrated transport and green infrastructure planning the initiative brings together key stakeholders to find solutions for safer and environmentally-friendly road and rail networks that are being developed in the Danube-Carpathian Region, namely in Czech Republic, Hungary, Romania, Slovakia, and Ukraine.

Threats

- ✓ **More than a quarter** of Europe's large carnivores populations live in the Carpathians. The planned road and rail developments threaten to cut through the movement corridors of these and numerous other species, thus leading to habitat fragmentation that seriously menaces their long-term well-being and survival.
- ✓ **Humans are also at risk**, as the intersection between roads and ecological corridors can lead to collisions and roadkill, menacing both people's lives and wildlife.



THE CARPATHIAN MOUNTAINS ARE HOME TO SIGNIFICANT PARTS OF EUROPE'S WILDLIFE:

- 41%** OF BROWN BEARS,
- 30%** OF GREY WOLVES,
- 28%** OF EURASIAN LYNX.

3X

THE LENGTH OF EUROPEAN HIGHWAYS HAS TRIPLED OVER THE LAST 30 YEARS.



Green bridge connecting historical wildlife migration corridors between High Tatras and Low Tatras

Name: Green bridge Lučivná on Motorway D1 (section) Važec – Mengusovce

Size: 250m, 2 tubuses

Built in: 2007-2009

Run by: Národná diaľničná spoločnosť (NDS, a.s.) - National Motorway Company

Cost: approx 2 millions EUR

Wildlife crossing: tens of red deer, wild boars, roe deer, small mammals, rabbits, foxes, badgers. Individual bears. Exceptionally wolf.

Arguments for building the ecoduct

- ✓ The motorway runs through a historical wildlife migration corridor and threatens to isolate populations or to favor roadkill.
- ✓ For a financial perspective, in 2016-2017 5 animals (2 bears, 1 lynx, 2 otters) were killed in a nearby area (Ivachnová-Hybe) without motorway fencing. Society value of these species amounts up to 10,000 EUR.

How did the integrated planning process work?

- ✓ Initiated upon request by the Tatra National Park (TANAP) Administration, hunters and State Forests of TANAP.
- ✓ Lasted approximately 2 years.
- ✓ Involved various stakeholders: Ministry of Construction of Slovak Republic, Ministry of Environment of the Slovak Republic, National Motorway Company, State Nature Conservancy of the Slovak Republic.

- ✓ Traffic increased exponentially, in countries such as Romania, where road length increased by 7% (NIS data) while number of cars increased by 343% from 1990 to 2015. This led to quadruple number of traffic accidents with human victims.
- ✓ **Implementation** of infrastructure projects faces the **risk of being delayed** due to non-conformity with safety and environmental standards.

Benefits

- ✓ Securing the **viable populations** of the large carnivores in the Carpathians can maintain one of the largest biodiversity hotspots and functioning ecosystems on the continent.
- ✓ Securing **safe traffic** for people crossing the Carpathians by road or rail. The safety issues related to wildlife can be prevented by knowledge-sharing on experience and expertise for mitigating ecological impacts of transport infrastructure.
- ✓ **Accelerating the implementation** processes and contributing to putting into practice much-awaited infrastructure developments.

Solutions. Together possible

- ✓ **Optimized and adapted technical solutions.** Ensuring connectivity for people and wildlife is possible, and there are various technical solutions to choose from.
- ✓ **Collaborative work.** Identifying and implementing the optimal technical solution requires input from and harmonization of various stakeholders' interests on all levels and at all stages of the infrastructure project: legal framework, financing, planning - including spatial planning, building.
- ✓ **Early planning.** Considering wildlife connectivity early in the planning process allows including all relevant perspectives from the beginning and avoids changes or hindrances later on.
- ✓ **Science-based.** Scientific input is essential to optimize decisional and technical processes. Quality data collected from the field, on the long run, indicate movement and dispersal routes and ideal locations for green infrastructure elements.

TRANSGREEN creates a **platform for integrated and sustainable infrastructure planning** where these conditions can be met:

- ✓ **Field studies** focusing on TEN-T infrastructure projects in four pilot areas: Tîrgu Mureş - Iaşi (Romania), Arad (Radna) - Deva (Romania), Miskolc (Hungary) - Kosice (Slovakia) - Uzhgorod (Ukraine), Beskydy (Czech Republic-Slovakia).
- ✓ **Guidelines for improving infrastructure development** at all stages and consultation for interdisciplinary approaches.
- ✓ **Consultative meetings & partnership** with ministries, planners, developers, local authorities, protected areas, consultants and NGOs.
- ✓ Consultation and **knowledge sharing** across pilot areas that are in different stages of linear infrastructure development (planning, construction, operation, management, and monitoring).
- ✓ Developing adapted and **specific technical solutions** (catalogue of measures for each pilot area).
- ✓ On the political level development of **Strategic Action Plan for Sustainable Transport Development in the Carpathians** and fostering **cross-sectoral meetings**.

You can support this process by prioritising biodiversity in the list of environmental criteria, by participating in consultations and by sharing the knowledge.

Follow the latest developments in TRANSGREEN on the project webpage:
www.interreg-danube.eu/transgreen