



Restoring and managing ecological corridors in mountains as the green infrastructure in the Danube basin - ConnectGREEN

CNPA STEERING COMMITTEE ROUND TABLE

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WWF RO

Content of the presentation

- Aim of the project
- Brief description, including partnership
- The need for ConnectGREEN
- Main and specific objectives
- (Expected) Results
- Target groups
- Synergies

ConnectGREEN

Aims at maintaining and improving the ecological connectivity between natural habitats in the Carpathian ecoregion.



Project in numbers

- Duration: June 2018 – 31 October 2021
- 11 Partners from 6 EU countries (ERDF)
- 2 Partners from Serbia (IPA)
- 10 Associated Strategic Partners (ASP)
- Coordinated by: WWF Romania
- Value: ~ 2.5 million euros

Project Partners

- **Romania:** WWF Romania (Lead Partner); National Institute for Research and Development in Constructions, Urban Planning and Sustainable Spatial Development; Piatra Craiului National Park Administration;
- **Austria:** WWF International Danube-Carpathian Programme;
- **Czech Republic:** Nature Conservation Agency; Silva Tarouca Research Institute for Landscape and Ornamental Gardening;
- **Hungary:** CEEweb for Biodiversity; Szent Istvan University;
- **Slovakia:** The State Nature Conservancy of the Slovak Republic; Slovak University of Technology in Bratislava - SPECTRA Centre of Excellence of EU;
- **Serbia:** Institute of Architecture and Urban & Spatial Planning of Serbia; National Park Djerdap.

Associated Strategic Partners

- **Czech Republic:** Ministry of the Environment; Ministry of Regional Development;
- **Hungary:** Bükk National Park Directorate;
- **Romania:** Ministry of Environment;
- **Serbia:** Ministry of Agriculture and Environmental Protection;
- **Slovakia:** Ministry of Transport and Construction;
- **Ukraine:** Ministry of Ecology and Natural Resource;
- **Austria:** Danubeparks - Danube River Network of Protected Areas;
- **France:** Alpine Network of Protected Areas – ALPARC;
- **Montenegro:** Parks Dinarides – Network of protected areas of Dinarides.

Why ConnectGREEN?

Danube-Carpathian region is one of the Europe's last remaining strongholds for the large carnivore species:
gray wolf,
Eurasian lynx and
brown bear





Why ConnectGREEN?

The economic development in the area can lead to:

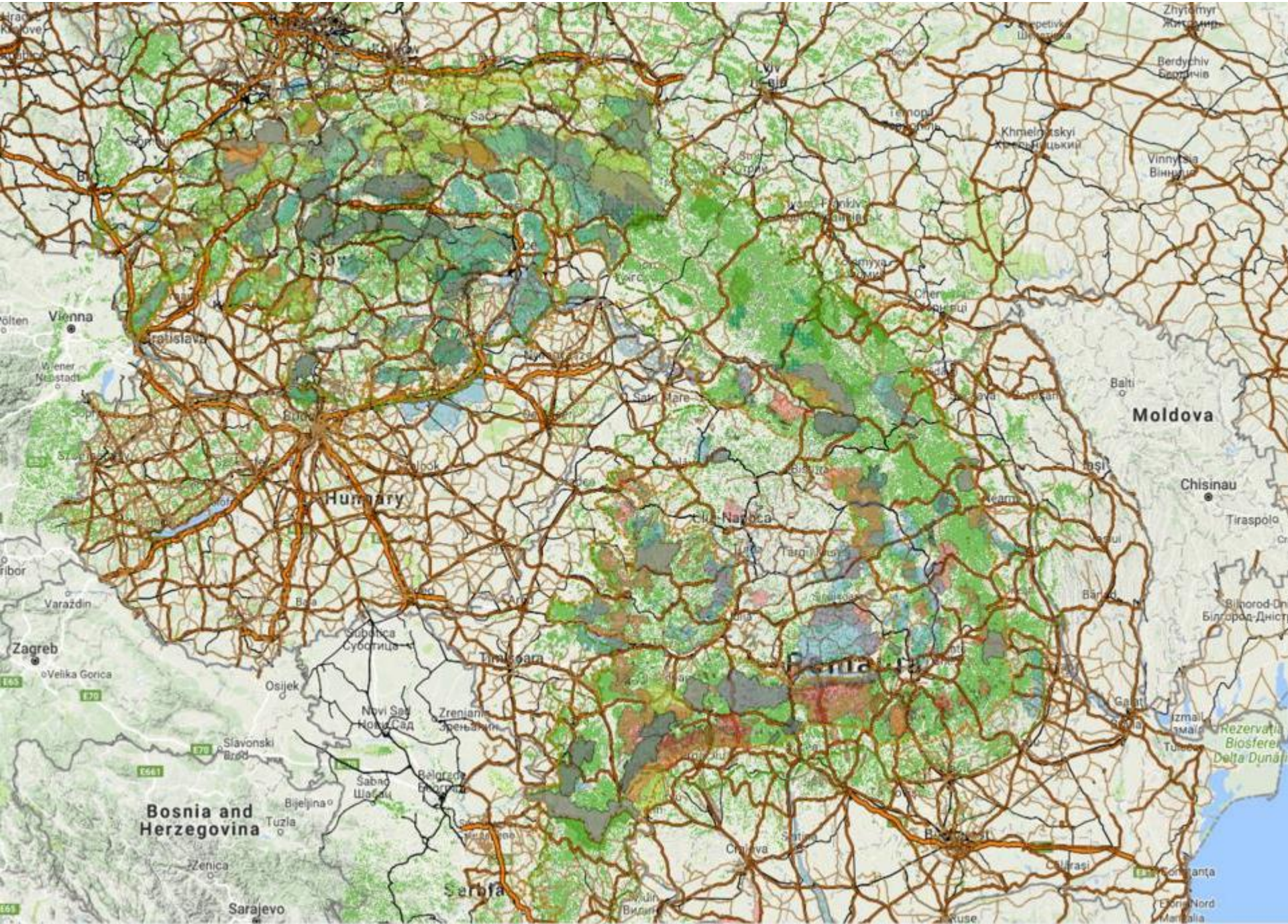


- barriers for wild species movements

- à landscape and habitat fragmentation

- change of land use





Threats to biodiversity (IUCN-CMP)

4. Transportation and service corridors within the protected area

(Threats from long narrow transport corridors and the vehicles that use them, including associated wildlife mortality)

4.1 Roads and railroads (include road-killed animals)	38.39%
4.2 Utility and service lines (e.g. electricity cables, telephone lines, etc.)	32.74%
4.3 Shipping lanes and canals	13.39%
4.4 Flight paths	9.82%

7. Natural system modifications

(Threats from other actions that convert or degrade habitat or change the way the ecosystem functions)

7.1 Fire and fire suppression (including arson)	29.76%
7.2 Dams, hydrological modification and water management / use	30.06%
7.3 Increased fragmentation within protected areas	37.5%
7.4 Isolation from other natural habitat (e.g. deforestation, dams without effective aquatic wildlife passages)	30.06%
7.5 Other "edge effects" on park values	23.81%
7.6 Loss of keystone species (e.g. top predators, pollinators etc.)	27.68%

Project co-funded by European Union Funds (ERDF, IPA)

Why ConnectGREEN?

Various impacts on ecological corridors, affecting:



- Biodiversity
- Wildlife movement/ dispersal routes
- Stability and resilience of ecosystems
- Ecosystems services
- Regional prosperity





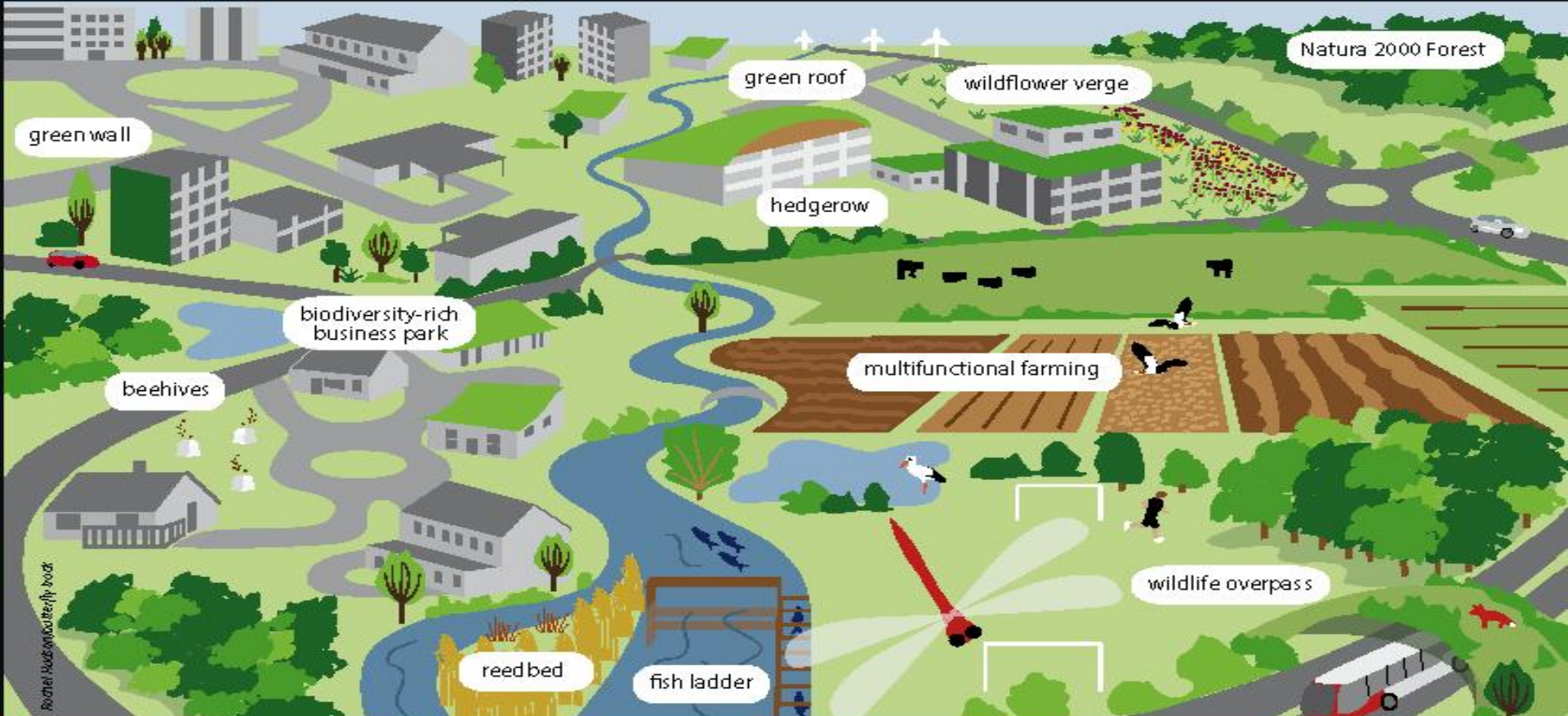
Preserve Nature & Wildlife for me too!!!

Policy Context

The integrated planning for transport and other infrastructure works prioritized by public policies and international regulations ...

- EU Strategy for the Danube Region
- EU 7th Environmental Action Plan
- EU 2020 Biodiversity Strategy
- EU Strategy on Green Infrastructure
- TEN-T – Trans-European Network of Transport
- Carpathian Convention (and its relevant Protocols).

... **demands** a balanced infrastructure development taking into account the nature conservation for generating durable solutions



Potential components of a Green Infrastructure



- Core areas of high biodiversity value which act as hubs for GI, such as protected areas like Natura 2000 sites



- Core areas outside protected areas containing large healthy functioning ecosystems



- Restored habitats that help reconnect or enhance existing natural areas, such as a restored reedbed or wild flower meadow



- Natural features acting as wildlife corridors or stepping stones, like small watercourses, ponds, hedgerows, woodland strips



- Artificial features that enhance ecosystem services or assist wildlife movement such as eco-ducts or eco-bridges, fish ladders or green roofs



- Buffer zones that are managed sustainably and help improve the general ecological quality and permeability of the landscape to biodiversity, e.g. wildlife-friendly farming



- Multi-functional zones where compatible land uses can join forces to create land management combinations that support multiple land uses in the same spatial area, e.g. food production and recreation



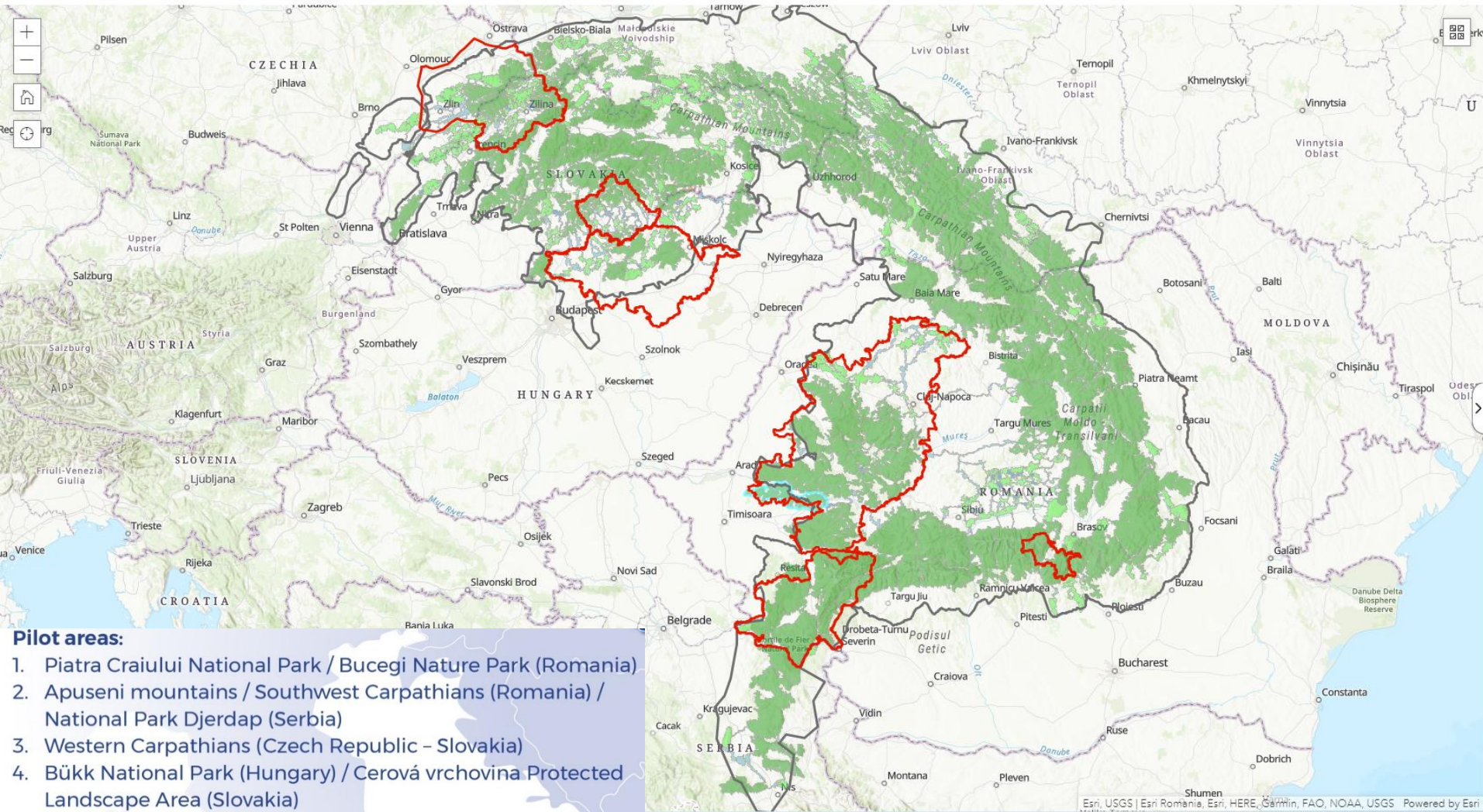
Main Objective

Maintain and improve the ecological connectivity between natural habitats, especially Natura 2000 and other protected area categories of transnational relevance in the Carpathian ecoregion through...

Specific Objectives

1. Eco-corridors and connectivity gaps identified in the Carpathians
2. Capacity for identifying and managing eco-corridors improved
3. Identify and implement strategic directions and instruments/practices in order to promote the value of ecological connectivity, in particular of large carnivore corridors, among planners and decision makers

Pilot Areas



Deliverables (I)

- Methodology for identifying ecological corridors
- State of the Art Report on the existing planning systems and their application for ecological corridor identification and management
- GAP analysis report on the identification of the needs for improving the planning processes and tools
- Set of recommendations developed together with spatial planners to avoid/ minimise fragmentation of ecological corridors and Natura 2000 sites

Deliverables (II)

- Ecological connectivity related database under the CCIBIS
- Database with all relevant spatial information in each pilot site
- Maps with the distribution of target species, core areas, ecological corridors and critical barrier sites in each pilot areas
- International Action Plan on Conservation of Large Carnivores and Ensuring Ecological Connectivity
- Guidelines on identifying, conserving and managing ecological corridors in the Carpathians

INTERNATIONAL ACTION PLAN ON CONSERVATION OF LARGE CARNIVORES AND ENSURING ECOLOGICAL CONNECTIVITY IN THE CARPATHIANS



INTRODUCTION, LEGAL BACKGROUND AND IMPLEMENTATION

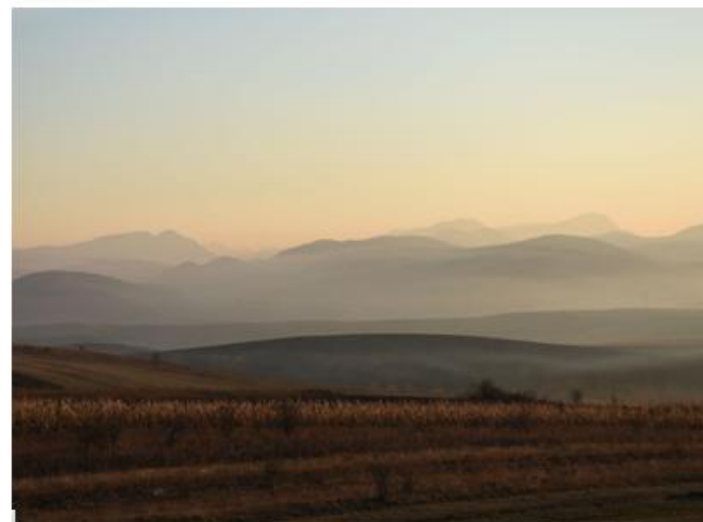
The Carpathians are a range of mountains in Central and Eastern Europe, stretching across seven countries in the form of an arch, starting in the north-east of the Czech Republic, continuing through the whole Slovak Republic, southern Poland, eastern Hungary as well as the west of Ukraine and Romania, and then going south to the eastern part of Serbia.

The Carpathian region is one of Europe's last great wilderness areas, with exceptional levels of biodiversity, extensive tracts of old-growth forest and one of the most important and biggest large carnivore populations in Europe. It is estimated that over 7,200 brown bears, 3,000 grey wolves, and 2,350 Eurasian lynxes currently existing in the Carpathian region (Chapron et al., 2014).

The above-mentioned species require extensive, non-fragmented habitats to establish their large home ranges and to allow long-distance movements to satisfy their biological and ecological needs. However, the sizes of habitats and their connectivity are being challenged by increasing pressures of current and future development of transport and other types of infrastructure in the Carpathian region.

Furthermore, despite their functional role as ecosystem keystone species and their long-term protection in some countries, human-carnivore conflicts can occur.

The large carnivore species existing in human-dominated landscapes often face a multidimensional problem, ranging from human-caused mortality to habitat loss and fragmentation. Compared to other



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

Project co-funded by European Union Funds (ERDF, IPA)

Examples of Key Activities

- Develop a harmonized Methodology for the identification of ecological corridors
- Implement the Methodology for ecological corridors/core areas identification
- Identification of core areas and ecological corridors for large carnivores in the Carpathians
- Develop a Guideline on harmonizing the interests between nature conservation and different land uses

Examples of Key Activities

- Develop management measure to maintain and/or improve the connectivity in the pilot sites
- Develop an innovative Decision Support Tool and test it in pilot sites
- Develop an ecological connectivity related database within the CCIBIS
- Develop an International Action Plan on Conservation of Large Carnivores and Ensuring Ecological Connectivity
- Capacity building and experience-sharing across the region and beyond
- Feeding into wider Danube and EU relevant processes and experience

Target Groups

- Local Public Authorities
- National Public Authorities
- Sectoral Agencies
- Infrastructure and (public) Service Providers
- Interest Groups including NGOs



Synergies

- TransGreen
- SaveGREEN
- CENTRALPARKS
- BioGOV
- OBWIC
- HARMON
- EuroLargeCarnivores, etc.



Together possible!



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www.interreg-danube.eu/connectgreen

