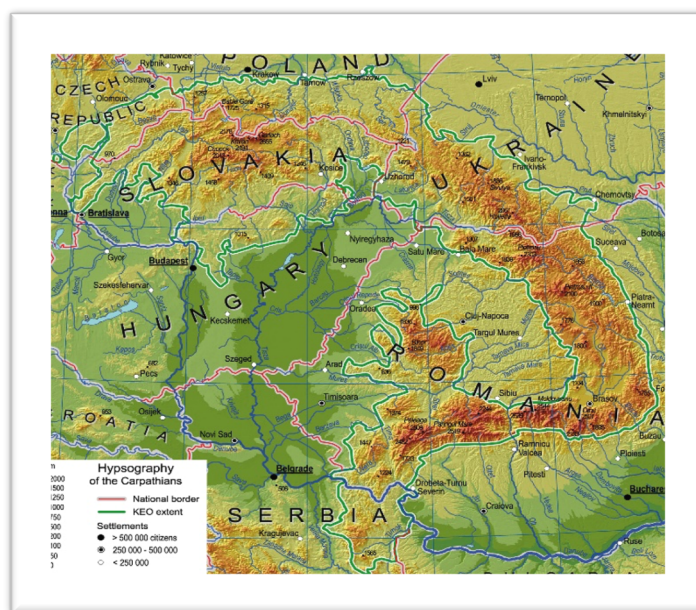


## INTERNATIONAL ACTION PLAN ON CONSERVATION OF LARGE CARNIVORES AND ENSURING ECOLOGICAL CONNECTIVITY IN THE CARPATHIANS



### 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

animal species, large carnivores are at the top of the food chain and can only be directly threatened by humans and their activities. In many cases, humans and large carnivores share the same areas in the Carpathians, and therefore it is obvious that there is a need to enable and improve their coexistence. Where relatively problem-free coexistence is missing, large carnivores and their natural habitats might be destroyed with negative long-term effects on important natural ecosystems.

Therefore, intensive conservation efforts and harmonized management measures need to be put into action, especially in the transboundary contexts. In this respect and following the Guidelines for Population Level Management Plans for Large Carnivores in Europe<sup>1</sup>, the Carpathian countries are **encouraged to develop a common conservation and population level management plan for all three large carnivore species** of the Carpathian populations. The plan should be used as a reference for the national management plans of each country, which should be aligned and in harmony with the regional plans. Such a transboundary conservation and management plan, followed by national implementation actions, will aid the **protection of large carnivores and ensure the ecological connectivity across the Carpathians**, not just in EU Member States but also beyond the EU borders into Serbia and Ukraine.

The Plan shall be in line with national and EU legislation (EU Habitat Directive) and will also contribute to achieving international goals and commitments of the Parties at global (Sustainable Development Goals, especially SDG 15 *Life on land*, or Convention on Biological Diversity and its Post-2020 Global Biodiversity Framework) as well as regional level (Bern Convention).

The legal basis for the protection of large carnivores and ensuring ecological connectivity in the Carpathian region is also embodied in the Framework Convention on the Protection and Sustainable Development of the Carpathians<sup>2</sup> (Carpathian Convention), which was adopted and signed by the seven Parties (Czech Republic, Hungary, Poland, Romania, Serbia, Slovak Republic, Ukraine) in May 2003 in Kyiv, Ukraine, and entered into force in January 2006. It is the only multi-level governance mechanism covering the whole Carpathian area and, besides the Alpine Convention, the second sub-regional treaty-based regime for the protection and sustainable development of a mountain region worldwide. The relevant provisions regarding large carnivores are specified in:

- Article 4 of the *Framework Convention on the Protection and Sustainable Development of the Carpathians* (Carpathian Convention)<sup>3</sup>
- *The Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity*<sup>4</sup> (Biodiversity Protocol) (adopted by COP2 at 2008)
- *The Strategic Action Plan for the implementation of the Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity*<sup>5</sup> (adopted at COP3 in 2008).

Impetus for intensified implementation of these provisions was given by the *Declaration on the Management and Protection of Large Carnivores in the Carpathians*<sup>6</sup> issued at the conference in Rožnov pod Radhoštěm, Czech Republic in 2016 calling for development of an international action plan for the

<sup>1</sup> [Guidelines for Population Level Management Plans for Large Carnivores in Europe](#)

<sup>2</sup> [Carpathian Convention website](#)

<sup>3</sup> [Carpathian Convention text](#)

<sup>4</sup> [The Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Carpathian Convention](#)

<sup>5</sup> [The Strategic Action Plan for the implementation of the Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity](#)

<sup>6</sup> [Declaration on the Management and Protection of Large Carnivores in the Carpathians](#)

conservation and sustainable management for the Carpathian populations of large carnivores, the framework of which is laid out here.

The Conference of Parties to the Carpathian Convention, at its Fifth meeting (COP5 - Hungary, 2017) gave the mandate<sup>7</sup> to the *Working Group on Biodiversity* to prioritize its work on large carnivore conservation and initiated the development of the Action Plan.

In the framework of the Memorandum of Cooperation between the Secretariat of the Carpathian Convention and the International Council for Game and Wildlife Conservation, signed in Rožnov pod Radhoštěm, a workshop laying the groundwork for achieving the harmonization of monitoring of large carnivores in the Carpathians, was organized in Eger, Hungary in October 2018 as a part of the 5<sup>th</sup> Forum Carpaticum. The workshop initiated the preparation of a report on the population status of large carnivores and monitoring methods in every Carpathian country as the basis for the implementation of the Action Plan.

The first *Report on population status and monitoring of large carnivores in the Carpathians*, to be finalised in 2020/2021, shall be considered as a background document for the implementation of the Action Plan, and should be regularly revisited and updated by the Carpathian Convention Parties every six years, synchronizing reporting resulting from Art. 17 of the EU Habitats Directive<sup>8</sup> that is mandatory for the EU Member States.

The Action Plan should be implemented taking into account differences in conservation status and management methods between the Parties and with due consideration of the Carpathian Convention Articles, its Protocols and strategic documents, specifically including the Joint Strategic Action Plan 2021 – 2026 for the implementation of the Protocol on Sustainable Transport<sup>9</sup>.

Furthermore, the Action Plan can build on the outcomes of relevant projects, especially but not limited to:

- SaveGREEN<sup>10</sup> - *Safeguarding the functionality of transnationally important ecological corridors in the Danube region* (Interreg Danube Transnational Programme)
- ConnectGREEN<sup>11</sup> - *Restoring and managing ecological corridors in mountains as the green infrastructure in the Danube basin* (Interreg Danube Transnational Programme)
- TRANSGREEN<sup>12</sup> - *Integrated Transport and Green Infrastructure Planning in the Danube-Carpathian Region for the Benefit of People and Nature* (Interreg Danube Transnational Programme)
- EuroLargeCarnivores<sup>13</sup> - *Improving coexistence with large carnivores in Europe through communication, cross-border cooperation and knowledge exchange* (EU LIFE Programme)

<sup>7</sup> [Decisions of the Fifth Meeting of the Conference of the Parties to the Carpathian Convention \(COP5\)](#)

<sup>8</sup> [https://ec.europa.eu/environment/nature/knowledge/rep\\_habitats/index\\_en.htm](https://ec.europa.eu/environment/nature/knowledge/rep_habitats/index_en.htm)

<sup>9</sup> [Joint Strategic Action Plan 2021 – 2026 for the implementation of the Protocol on Sustainable Transport](#)

<sup>10</sup> <http://www.interreg-danube.eu/approved-projects/savegreen>

<sup>11</sup> <http://www.interreg-danube.eu/approved-projects/connectgreen>

<sup>12</sup> <http://www.interreg-danube.eu/approved-projects/transgreen>

<sup>13</sup> <https://www.eurolargecarnivores.eu/en/>

- UNEP – Eurac Research – WWF Report: Combating Wildlife and Forest Crime in the Danube-Carpathian Region (Schlingemann ed. 2017)<sup>14</sup>.

Implementation of the Action Plan will be supported by and further contribute to the Carpathian Countries Integrated Biodiversity Information System (CCIBIS), an online platform for collecting and sharing scientific information and data generated in projects within the Carpathian Convention Community<sup>15</sup>. In addition, undertaking activities of the Action Plan might contribute to the further development of CCIBIS by providing additional/updated data and relevant information.

At the end of the implementation period, every six years from the adoption of the Action Plan, a report on the goals achieved and actions completed shall be prepared by the Secretariat of the Carpathian Convention, with inputs provided by the Carpathian Convention Working Group on Biodiversity.

Contrary to the Convention and its thematic protocols, this Action Plan is not a legal act binding the Parties, therefore it does not require the signature and ratification of the Countries and it is adopted by a decision of the Conference of the Parties.

## ACTION PLAN

Aiming at the maintenance of the long-term viability of large carnivores' populations in the Carpathians, while ensuring their favourable conservation status<sup>16</sup> in the individual countries through transparent national processes, cross-border cooperation and a transdisciplinary approach, the Parties and relevant actors shall undertake the following actions:

### STRATEGIC OBJECTIVE 1

#### Standardize monitoring procedures of large carnivores in the Carpathians

1. Develop and implement standardized monitoring systems for each of the large carnivore species (brown bear, grey wolf, Eurasian lynx) in the Carpathians, based on scientifically robust and agreed methods allowing the continuous assessment of the population status and effective provisioning of information to relevant institutions (e.g. GOs, NGOs, academic) and the public.

---

<sup>14</sup> [UN Environment – Eurac Research – WWF Report: Combating Wildlife and Forest Crime in the Danube-Carpathian Region - publication](#)

<sup>15</sup> The Carpathian Countries Integrated Biodiversity Information System (CCIBIS) is an online platform for collecting and sharing scientific information and data generated in projects within the Carpathian Convention Community. The CCIBIS works to provide a scientific network for professionals and a platform of increased awareness, not only for relevant stakeholders, but also for members of civil society as well as anyone interested in the Carpathian region. The CCIBIS is an open source tool and living platform, thus any organization, institution or private person is welcome to share its data. The platform contributes to overcome the generally observed lack of data availability. It has been built and extended under the Interreg projects BioREGIO, TRANSGREEN and ConnectGREEN. Link: <http://www.ccibis.org/>

<sup>16</sup> According to the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive): "The conservation status will be taken as "favourable" when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis".



**RESULT:** Improved and accurate data collection by using agreed and harmonised monitoring protocols across the Carpathians, as well as increased transparency on how data is acquired and interpreted, uncertainties about the current state and trend of large carnivores' populations resolved.

**INVOLVED ACTORS:** Parties - governmental bodies responsible for large carnivore's management, research institutions, NGOs, WG Biodiversity

**FUNDING:** state budget, project based, if available

**TIMEFRAME:** by 2026

2. Every six years, following the reporting requirements of EU, update the report on the population status of large carnivores and monitoring in the Carpathians.

**RESULT:** Regular reports on the status of the population available, including information about the distribution, size and trends of large carnivores' populations.

**INVOLVED ACTORS:** Parties, Secretariat of the Carpathian Convention

**FUNDING:** state budget, core budget of the Carpathian Convention

**TIMEFRAME:** by 2026

3. Make available on the Carpathian Convention website and/or CCIBIS all relevant documents, including the reports on the population status of large carnivores and monitoring in the Carpathians.

**RESULT:** Information on large carnivores populations' status available for stakeholders and general public.

**INVOLVED ACTORS:** Secretariat of the Carpathian Convention

**FUNDING:** Core budget of the Carpathian Convention

**TIMEFRAME:** by 2023, then regularly updated

## STRATEGIC OBJECTIVE 2

### Prevent habitat fragmentation and ensure ecological connectivity in the Carpathians

1. Identify a) patches of suitable habitats including core areas and stepping stones for large carnivores, within and between protected areas, Natura 2000 and Emerald networks b) key ecological corridors including wildlife/movement/migration corridors between them, and c) critical zones in terms of barrier permeability, with the use of the Methodology for Identifying Ecological Corridors in the Carpathian Countries by using Large Carnivores as Umbrella Species<sup>17</sup>, as appropriate.

**RESULT:** Map of ecological networks for large carnivores in the Carpathians is developed.

**INVOLVED ACTORS:** Parties, ConnectGREEN Project Partners, SaveGREEN Project Partners

**FUNDING:** project based - EU DTP ConnectGREEN project, EU DTP SaveGREEN project, state budget

**TIMEFRAME:** by 2026

<sup>17</sup> [Methodology for Identifying Ecological Corridors in the Carpathian Countries by using Large Carnivores as Umbrella Species](#) - developed by the ConnectGREEN project.

2. Include and regularly update, if applicable, the Map of ecological networks in the Carpathians for the large carnivore's species, and other relevant information, into the Carpathian Countries Integrated Biodiversity Information System (CCIBIS).

**RESULT:** CCIBIS as an information platform supports implementation of the Large Carnivores Action Plan

**INVOLVED ACTORS:** Parties, ConnectGREEN Project Partners, CCIBIS Administrators/Secretariat of the Carpathian Convention

**FUNDING:** project based - EU DTP ConnectGREEN project, other available projects,

**TIMEFRAME:** ongoing

3. Develop and use, as appropriate, guidelines on *identification, conservation, restoration and management of ecological corridors in the Carpathians*.

**RESULT:** The guidelines on ecological connectivity in the Carpathians, developed under the ConnectGREEN project, guide the identification, restoration and management of the ecological corridors in the Carpathians.

**INVOLVED ACTORS:** Parties, ConnectGREEN Project Partners, SaveGREEN Project Partners

**FUNDING:** project based - EU DTP ConnectGREEN project, EU DTP SaveGREEN project and state budget

**TIMEFRAME:** ongoing

4. Promote the use the *Wildlife and Traffic in the Carpathians - Guidelines on how to minimize the impact of transport infrastructure development on nature in the Carpathian countries*<sup>18</sup>.

**RESULT:** The Guidelines developed under the TRANSGREEN project is used as tool for mainstreaming biodiversity into transport planning and development.

**INVOLVED ACTORS:** Parties

**FUNDING:** project based - EU DTP SaveGREEN project, state budget

**TIMEFRAME:** ongoing

5. Gap analysis on the identification of the needs for improving the planning processes and tools related to ecological corridors identification and preservation, if applicable<sup>19</sup>.

**RESULT:** Address the recommendations on improving planning processes, tools and practices to better reflect and integrate ecological networks into spatial planning.

**INVOLVED ACTORS:** Parties and practitioners, ConnectGREEN Project Partners, SaveGREEN Project Partners

**FUNDING:** project based - EU DTP ConnectGREEN project, EU DTP SaveGREEN project

**TIMEFRAME:** ongoing

<sup>18</sup> [Wildlife and Traffic in the Carpathians - Guidelines on how to minimize the impact of transport infrastructure development on nature in the Carpathian countries](#) - developed by the TRANSGREEN project..

<sup>19</sup> Link to the GAP analysis will be available on the [ConnectGREEN](#) and the CC website in due course.

6. Address the need of enhanced connectivity with other mountain ranges and neighboring areas in order to improve the gene pool of large carnivore populations, through knowledge exchange and increased cooperation at the regional and European level.

**RESULT:** Exchange of knowledge between and cooperation with other mountain regions and neighboring areas is improved. Meeting(s) on ecological connectivity in Europe is organized and/or attended.

**INVOLVED ACTORS:** Parties, WG Biodiversity, the Secretariat of the Carpathian Convention, NGOs, ConnectGREEN Project Partners

**FUNDING:** EU DTP ConnectGREEN project, external - depending on funds availability

**TIMEFRAME:** by 2023

### STRATEGIC OBJECTIVE 3

#### Improve coexistence of humans with large carnivores

1. Promote collection and exchange of best practices on managing and reducing conflicts between humans and large carnivores among the Carpathian countries and other mountain and neighboring regions, including exchange of strengths/best practices and weaknesses/bad practices in the administrative procedures and legislation on existing practices, in dedicated workshops and field trips.

**RESULT:** The Carpathian stakeholders benefit from and contribute to the international exchange of information on managing and reducing conflicts between humans and large carnivores. Exchange and implementation of know-how, knowledge, best and bad practices and methods is improved.

**INVOLVED ACTORS:** Parties, research institutions, international organizations, NGOs

**FUNDING:** state budget, project based - depending of funds availability

**TIMEFRAME:** ongoing

2. Develop and test efficient methods to minimize human-large carnivore conflicts according to different territorial systems and socioeconomic situations.

**RESULT:** Conflicts between humans and large carnivores are substantially minimized.

**INVOLVED ACTORS:** Parties, research institutions, international organizations, NGOs

**FUNDING:** state budget and/or project based – depending on funds availability

**TIMEFRAME:** 2026

3. Establish and build capacity of professional intervention teams to respond fast and to negative human-large carnivores' interactions, using preferably non-lethal methods, if applicable.

**RESULT:** Any human – large carnivore conflicts are properly addressed and in a timely manner.

**INVOLVED ACTORS:** Parties, relevant governmental agencies

**FUNDING:** state budget

**TIMEFRAME:** 2026

4. Develop and promote impactful common national and Carpathians-wide public awareness campaigns and environmental education projects, including measuring the public attitude/acceptance towards large carnivores through surveys and interviews.

**RESULT:** Acceptance of large carnivores among the general public is maintained/increased.

**INVOLVED ACTORS:** Parties, research institutions, international organizations, NGOs

**FUNDING:** state budget and/or project based

**TIMEFRAME:** 2026

5. Promote and use existing communication materials and recommendations with respect to improving coexistence with large carnivores.

**RESULT:** Results of EU LIFE EUROLARGE CARNIVORES, LIFE WolfAlps, LIFE WolfAlps.EU, AS ALPBIONET2030, LIFE StockProtect projects are used for improving human - large carnivores coexistence.

**INVOLVED ACTORS:** Parties, relevant governmental bodies, local authorities, NGOs, general public

**FUNDING:** state budget, project based - EU LIFE EUROLARGE CARNIVORES project other available projects

**TIMEFRAME:** 2026

## STRATEGIC OBJECTIVE 4

### Improve law enforcement with respect to illegal killing of large carnivores

1. At the country level, if applicable, ensure proper law-enforcement with respect to illegal killings of large carnivores through raising awareness of illegal killings (shooting and poisoning) of large carnivores among law enforcement agencies and other relevant authorities, through research aiming at better understanding local causes of illegal killings and through encouraging a greater investment of resources into investigation and activities preventing illegal killings.

**RESULT:** Illegal killings of large carnivores are considered as a serious violation of law and awareness concerning the penalties and legal consequences for killing illegally throughout the society is strengthened.

**INVOLVED ACTORS:** Parties, relevant national law-enforcement agencies, governmental bodies responsible for nature conservation, research institutions

**FUNDING:** state budget

**TIMEFRAME:** ongoing

2. Promote and enhance a cross-border cooperation of law-enforcement agencies of the Carpathian countries and promote exchange of best practices on reducing illegal killings between them.

**RESULT:** Communication and exchange among the relevant law-enforcement agencies from the Carpathian countries is established and functioning.

**INVOLVED ACTORS:** Parties, relevant national law-enforcement agencies, research institutions, NGOs



**FUNDING:** state budget and/or project based

**TIMEFRAME:** ongoing

## STRATEGIC OBJECTIVE 5

### Improve communication and cooperation between all relevant stakeholders

1. Identify appropriate key stakeholders for the implementation of the Action Plan and encourage regular communication and cooperation between them.

**RESULT:** A Carpathian wide Platform of relevant stakeholders established and functioning. Regular communication and exchange between the relevant stakeholders is ensured through online exchange and physical meetings (subject to the availability of funds).

**INVOLVED ACTORS:** Parties, the Secretariat of the Carpathian Convention, key stakeholders identified

**FUNDING:** state budget, external funding according to availability

**TIMEFRAME:** ongoing

2. Ensure involvement of representatives of different sectors, such as environment, transport, forestry, hunting, agriculture, tourism, and spatial planning and others in generating and implementing viable solutions and measures to address the conservation of large carnivores through the implementation of the Action Plan and cross-sectoral cooperation.

**RESULT:** Cross-sectoral cooperation is ensured to address complex issues related to large carnivores conservation. The Action Plan is implemented in consultations and cooperation with other relevant sectors avoiding isolated or opposite approaches.

**INVOLVED ACTORS:** Parties, relevant Carpathian Convention Working Groups, the Secretariat of the Carpathian Convention, key stakeholders (i.a. research institutions, hunting organizations, NGOs)

**FUNDING:** state budget, external funding according to its availability

**TIMEFRAME:** ongoing

## STRATEGIC OBJECTIVE 6

### Strengthen institutional capacity-building

1. At the national level, if relevant, ensure sufficient resource availability and technical capacity of responsible authorities to conduct efficient large carnivore's management (from planning to implementation of effective measures, monitoring and evaluation of management effectiveness, management and resolution of conflicts), stakeholder dialogue and communication and law enforcement.

**RESULT:** Effective institutions that can work proactively to reduce conflicts and ensure the viability of species under their jurisdiction.

**INVOLVED ACTORS:** Parties, relevant governmental bodies responsible for large carnivores' management, law enforcement agency

**FUNDING:** state budget – depending on funds availability

**TIMEFRAME:** 2026

## STRATEGIC OBJECTIVE 7

### Decrease impacts of climate change on large carnivores and their habitats

1. Discuss and develop, if possible, an assessment of climate change effects on large carnivores and their habitats, as a part of a bigger assessment of the impacts of climate change on the Carpathian forests and their ecosystem services, including related recommendations and adaptation measures.

**RESULT:** Assessment of climate change effects on the Carpathians' large carnivores and their habitats and related recommendations and adaptation measures are developed.

**INVOLVED ACTORS:** Parties, WG Biodiversity, WG Climate Change, WG Forest, Secretariat of the Carpathian Convention, Science for the Carpathians (S4C), international organizations, NGOs

**FUNDING:** project based

**TIMEFRAME:** 2023

2. Once the assessment is developed, support the implementation of its recommendations and adaptation measures, as appropriate.

**RESULT:** Effects of climate change on the Carpathian large carnivore population and their habitats are known, recognized and reduced.

**INVOLVED ACTORS:** Parties, WG Biodiversity, WG Climate Change, WG Forest, Secretariat of the Carpathian Convention, Science for the Carpathians (S4C), international organizations, NGOs

**FUNDING:** state budget and/or project based

**TIMEFRAME:** 2026

3. Promote knowledge exchange to identify local targeted actions aimed at reducing impacts of climate change on large carnivores and their habitats within Carpathians and with other mountain and neighbouring regions.

**RESULT:** Knowledge on reducing impacts of climate change on large carnivores and their habitats is generated and applied in the region.

**INVOLVED ACTORS:** Parties, WG Biodiversity, WG Climate Change, WG Forest, Secretariat of the Carpathian Convention international organizations, NGOs

**FUNDING:** state budget and/or project based

**TIMEFRAME:** 2026