





Meeting Report

Large carnivore's session at the Forum Carpaticum 2018 15 October 2018, Eger, Hungary

The Carpathian region harbours some of the most important large carnivore populations (the Eurasian lynx, the Brown bear, and the Grey wolf) in Europe. These species require extensive, non-fragmented habitats to establish their large home ranges and to allow long-distance movements.

Monitoring is central to large carnivore conservation and sustainable management, as it provides solid basis for adaptive management procedures and to address the widespread conflicts caused by disagreement over population status. Current monitoring practices among the Carpathian countries are diverse, varying in methods used, transparency and quality. Therefore, there is a need for harmonization of sound monitoring procedures and improved transboundary coordination of large carnivore monitoring within the region, allowing introduction of effective management measures.

The Conference of Parties to Carpathian Convention, at its Fifth meeting (COP5) in Lillafüred, Hungary, 10-12 October 2017, gave the mandate to the Working Group on Biodiversity to prioritize the work on the large carnivores, and initiated the development of an International Action Plan for Conservation and Sustainable Management for the Carpathian Populations of Large Carnivores.

The Large Carnivore's session organized by the Secretariat of the Carpathian Convention and the International Council for Game and Wildlife Conservation was one of the first activities undertaken in the framework of the Memorandum of Cooperation signed by the two institutions in Rožnov pod Radhoštěm, the Czech Republic at 19 October 2016.

At the opening of the session, Mr. Klaus Hackländer, University of Natural Resources and Life Sciences, Vienna (BOKU) International Council for Game and Wildlife Conservation (CIC) introduced the workshops topic, setting the scene for the discussion about the status of carnivores in the Carpathians.

The main objective of the workshop was to lay ground for achieving standardization of monitoring of large carnivores in the Carpathians.

During the workshop, each of the Carpathian countries presented its monitoring procedures and experiences in this field. Findings per counties are briefly presented below. Before, however, Mr. Cristian Remus Papp, WWF Romania, explained why harmonization of large carnivores in the Carpathian region is needed, pointing out that monitoring helps and lays foundation for decision-making, helps to evaluate the effectiveness of management actions and improve management measures, as well as it provides feedback loop for learning about the system.

Large carnivore's monitoring in the Czech Republic

Mr. Martin Strnad, Nature Conservation Agency of the Czech Republic







- Monitoring methods include the following: Camera traps, snow tracking Lynx patrols.
- Once a year there is a joint action that last for a week, where PLA/NCA employees and volunteers of NGO's are tracking large carnivores.
- The data is inserted into species occurrence data, which is a database managed by NCA.
- Since 2011-2012 there is a systematic use of camera traps for robust estimation of lynx abundance, population density and reproduction, organized by "Friends of the Earth".
- Non -invasive genetic analyses is also in the use since 2009 by scientific institutions.

Situation of the large carnivores in Hungary, as of the case of Bükk National Park Directorate with reference to the used monitoring methods

Mr. Péter Gombkötő, Bükk National Park Directorate

- Monitoring methods for brown bears include: snow tracking, search for prays and droppings, hair traps, acoustic monitoring, camera tracking, genetic analysis
- Wolf pack consists 7-8 individuals of the Bükk Mts
- No EU-report is required for brown bear in Hungary
- Growing Carpathian population of brown bear individuals passing through Hungary to Romania (Possible new challenges to face).

Monitoring of large carnivores in Romania

Mr. Ovidiu Ionescu, Transylvania University of Brasov

- Brown bear population estimated in Romania 6.500 but the optimum number is 4.000, lynx is estimated to be 1.500 but the optimum is 1.200.
- The main problem in Romania is that damages caused by mainly brown bears are not being reported.
- Monitoring methods for brown bears include: Camera tracking, measuring tracks and genetical sampling.

Monitoring of large carnivores in Republic of Serbia

Mr. Vukan Lavadinovic, University of Belgrade

- Serbia 95% of the territories are hunting grounds
- Hunting sectors are responsible for wildlife management
- Game census estimation through hunting ground management plan (10/20 years), population dynamics prediction and population estimation
- Problem with the game census estimation is that it is based on personal level not on a native level.
- On the hunting ground, large carnivore occurrences can be monitored through feeding station occurrences, trap cameras and through tracks and droppings.







- Estimations: Annual management plan: -WOLF (optimal) 1.344, (estimated) 1.520, (planned) 432, BEAR :54/20 individuals, LYNX :15/60 individuals

Monitoring of large carnivores in Slovakia

Mr. Slavomír Findo, Slovak State Nature Conservancy

- Methods for species monitoring: Non-invasive DNA Sampling (bear and wolf), camera trapping (lynx-CMR), snow tracking (wolf, lynx), summer monitoring of breeding of wolf packs, bear observation, hunting statistics.
- Estimated population size for brown bears in 2013 2015: 1.256
- Estimated population size for wolves in 2016: 45

Large Carnivore of the Ukrainian Carpathians

Mr. Volodymyr Domashlinest, Ministry of Ecology and Natural Resources and Mr. Andriy-Taras Bashta, Institute of Ecology of the Carpathians

- 17 carnivore mammal species occur in Ukraine
- The current population of brown bears in the Ukrainian Carpathians is estimated no more 200-220 individuals.
- Monitoring methods for brown bears include the following: Mapping, monitoring potential migration corridors, damage reports, collecting of material for genetic investigations, questionnaires and observations from hunters.
- Currently there are 400 wolves in the Ukrainian Carpathians, however counting methods do not always give a certain number.
- Monitoring methods for wolves include the following: Monitoring for dynamics of distribution and population number, monitoring of pack movement, tracking in winter, questionnaires, annual winter census in hunting areas.
- Lynx populations in the Carpathian Mountains is estimated about 2.300-2.400 individuals.
- Monitoring methods would include the following: Dynamics of distribution and population number, mapping of observation, trap camera, tracking, annual winter census in hunting, questionnaires and observations from hunters.

The national presentations were followed by the case studies of large carnivores' management.

Mr. Filippo Favilli and Mr. Isidoro De Bortoli, Eurac Research, presented issues of the human – wildlife conflict in the Alps, as well as the ALPBIONET2030 project with a special focus on South Tirol.

Mr. Martin Strnad, Nature Conservation Agency of the Czech Republic, presented the 3Lynx project focused on improving lynx conservation capacities of responsible stakeholders through experience, data and tool sharing and by implementing a harmonised lynx monitoring at population level.







Ms. Sarah Davidson, The Ohio State University, remotely presented the Movebank platform, which is a global database for animal movement and a tool that work with the data throughout its lifecycle.

Ms. Manon Dene, Humane Society International/Europe, presented the outcomes of the US/Romania workshop on brown bear conflict mitigation strategies.

All the presentation are available on the Carpathian Convention website*

Recommendations:

Base on the presentation and the discussion the following draft recommendation were made:

- elaboration of a report presenting the population status of large carnivores and monitoring methods in every Carpathian country;
- elaboration of joint guidelines on standardized methods estimating population status and promoting common standards;
- better stakeholder involvement in monitoring and transboundary coordination;
- common action preventing illegal activities especially in the border areas;
- standardization/integration of the microsatellite markers and protocols
- reciprocal exchange and access to DNA samples to determinate the geographical and populations;
- accessible online database for the Carpathian countries;
- improvement of educational programs.

The results of the workshop will be submitted to the Carpathian Convention Working Group on Biodiversity for its consideration and further actions.

^{*} http://www.carpathianconvention.org/eventdetailothers/events/id-5th-conference-of-the-forum-carpaticum.html