

EUROPEAN RECOMMENDATIONS AND HARMONISATION OF LARGE CARNIVORES BASED ON VALIDATED FINAL THEMATIC GUIDANCES

Final version

March 2026



Ministry of the Environment
of the Czech Republic





1. Introduction

This document presents European-level recommendations and harmonisation strategies for the conservation and management of large carnivores, focusing on three key species—the lynx, wolf, and brown bear—and structured around three fundamental pillars: harmonised monitoring, conflict prevention, and poaching prevention.

Large carnivores play a critical role in maintaining healthy and resilient ecosystems across Europe. However, their conservation poses complex challenges due to their extensive spatial requirements, transboundary movements, and frequent interactions with human activities. These challenges are further compounded by the diversity of landscapes, legal frameworks, and societal attitudes across European countries, making it difficult to ensure their long-term survival and coexistence with people.

Building on validated thematic guidance documents and the collective experience of international partners, this document aims to provide a coordinated framework to support the effective management of large carnivore populations at the European scale. The recommendations address the need for:

- 1) Consistent, science-based monitoring and cross-border data sharing to enable robust, evidence-based decision-making;
- 2) Practical and scalable measures to prevent and mitigate conflicts between large carnivores and human interests, fostering coexistence and acceptance among local communities;
- 3) Coordinated and harmonised approaches to prevent and combat poaching and other illegal activities, ensuring effective protection of these species across their entire range.

By integrating these three pillars, the document seeks to harmonise conservation practices, strengthen cross-border cooperation, and support the implementation of European and international commitments related to large carnivore conservation.

The recommendations are intended for policymakers, public authorities, and conservation practitioners involved in the management of large carnivore populations. The recommendations are expected to be used by relevant European, international and national bodies involved in large carnivore conservation, management and coexistence policy. At European level, they may support EU institutions, programme authorities and expert platforms working on biodiversity, wildlife management, rural development, stakeholder engagement and the implementation of nature conservation commitments (e.g. European Commission - Directorate-General for Environment or Group of Experts on the Conservation



of Large Carnivores of the Bern Convention). At international level, the recommendations are particularly relevant for the Carpathian Convention and the Alpine Convention, where they may contribute to further policy dialogue, harmonisation of approaches and the implementation or update of strategic documents on large carnivore conservation. At national level, the recommendations are intended for ministries responsible for environment, nature conservation and agriculture, protected area administrations, wildlife management authorities, law-enforcement bodies, research institutions and conservation organisations (e.g. the Ministry of Environment of the Czech Republic, Regional Directorates for Environmental Protection in Rzeszów and Kraków or Administration of Poloniny National Park).

The promotion and dissemination of the recommendations will build on the LECA project's transnational cooperation framework. The recommendations will be shared through project partner networks, Convention-level meetings and working groups, national roundtables, stakeholder platforms, public authorities, protected area administrations and conservation networks. They will also be promoted through final dissemination activities, project communication channels, educational and training materials, and direct communication with institutions responsible for large carnivore monitoring, conflict prevention and poaching prevention. In this way, the recommendations will remain available for practical uptake by authorities and stakeholders and will support more harmonised, evidence-based and transnationally coordinated approaches to large carnivore conservation across Europe.



2. Recommendations for Monitoring Harmonisation

1. Development of a centralised monitoring database and application system

The European Union should support the development and implementation of a centralised, EU-wide database integrated with a mobile field application for standardised recording of field signs, camera trap data, and other monitoring observations across Member States. This system would address current fragmentation in data collection by providing a unified platform that enables real-time data entry, cross-border sharing, and efficient analysis, ultimately improving the accuracy and comparability of large carnivore population estimates. Inconsistencies in national monitoring approaches hinder effective evidence-based management, particularly for transboundary species like large carnivores.

The process of developing such a central database and mobile field application reveals several key challenges. These include the need for sufficient financial resources, without which development timelines become significantly prolonged. Extensive pre-deployment testing of both the database and application is time-consuming and technically demanding. Different users often have different needs and preferences, which require regular updates and improvements to both the database and the application, and ongoing maintenance that requires dedicated funding, as voluntary efforts, such as those within NGOs without additional support, lead to considerably longer processes.

However, overcoming these challenges brings many benefits. The integration of the mobile application with the central database significantly reduces the time needed for field data entry. Time saved during data recording can be reallocated to other activities, such as data processing and analysis. Centralising data in one database simplifies data management, filtering, and analysis, as users can easily download and work with specific datasets and also facilitates data sharing with partner organisations, allowing datasets to be shared more efficiently. The use of a mobile application in the field accelerates data collection. Previously, data entry took approximately twice as long because field observations had to be manually entered into a web portal after completing field surveys.

To address these challenges, the EU should:

- establish uniform technical standards and best practices for the implementation of the centralised database at the national level in each Member State;
- ensure multi-annual financial commitments through dedicated EU programmes to ensure timely development and ongoing maintenance;
- facilitate user training and feedback mechanisms to streamline updates and meet the diverse needs in each Member State.



2. Introduction of standardised methods for monitoring

The European Union is encouraged to prepare and disseminate standardised guidance materials that describe a common monitoring workflow for large carnivores, covering spatial design, data collection, data handling, analysis, and reporting. The materials should reflect a stepwise process that supports comparability of monitoring approaches and outputs across countries and facilitates consistent application at national and cross-border levels.

It is not necessary to invest in the development of entirely new materials. Instead, the guidance should be built as a synthesis of results, methodologies, and tools developed within European projects focused on large carnivore conservation and population management.

The guidance materials should describe, in a structured manner:

- the definition of the monitoring area and the use of a standard spatial grid (e.g. 10 × 10 km);
- monitoring and data collection based on a combination of opportunistic and systematic approaches, including non-invasive monitoring methods and, where applied, invasive monitoring (e.g. GPS telemetry);
- data documentation, storage, and validation using dedicated IT tools, including mobile applications, occurrence records with photo or video documentation, and validation according to SCALP criteria (C1-C3);
- data processing and analyses, including database exports and analytical steps using spreadsheet and GIS tools, and the application of SPDS and SCALP methodologies;
- presentation of results in the form of validated SCALP occurrences and distribution maps;
- individual examples of good practice for monitoring of individual species.

The application of such standardised guidance materials will support the collection of high-quality, harmonised data across countries. Comparable and validated data will provide a robust basis for effective evidence-based management of large carnivore populations, improving the consistency, transparency, and credibility of conservation and management decisions at national and transboundary levels.



3. Recommendations for Conflict Prevention

1. Improvement of the monitoring of damages caused by LCs and data collection systems / Strengthening monitoring of damages and data systems

The European Union should promote the establishment of harmonised and standardised national protocols for the collection, reporting, and verification of data on large carnivore occurrences and livestock damages across all Member States.

Current inconsistencies and gaps in data collection lead to underreporting, misidentification of conflict hotspots, and limited comparability between regions, ultimately weakening evidence-based decision-making. The lack of reliable and transparent data also undermines public trust and reduces the effectiveness of compensation and management systems.

To address these challenges, the EU should:

- support the development of centralised, interoperable, and open-access databases integrating monitoring and damage records;
- ensure the implementation of mandatory reporting mechanisms carried out by trained field personnel;
- require the regular publication of harmonised summary statistics at national and regional levels.

Strong coordination between environmental authorities, wildlife management bodies, and research institutions is essential to ensure data quality, consistency, and usability.

2. Ensuring stable and long-term financial support for preventive measures

The European Union should ensure the establishment of stable, long-term, and legally anchored financial mechanisms to support preventive measures aimed at reducing conflicts between large carnivores and human activities. Funds for preventive measures to minimise conflicts with large carnivores should be ensured within national programs and programs co-financed by the EU, including the Rural Development Program, ensuring broad access to these programs for potential stakeholders. Mechanisms for ecological subsidies/special funding for municipalities to increase the frequency of waste collection from municipalities/implementation of preventive measures where brown bears occur, should also be established.

Financial and organisational resources should also be provided for the development and testing of new technical and organisational solutions aimed at expanding the set of proven preventive measures that minimise conflicts with LCs.



The current absence or insufficiency of state-funded schemes places a disproportionate economic burden on livestock owners, limiting the uptake of preventive tools such as electric fencing and livestock guarding dogs. This contributes to increased conflict frequency and growing negative perceptions of large carnivores.

To mitigate these risks, the EU should:

- promote multi-annual funding commitments, ensuring continuity of support;
- encourage co-financing mechanisms combining EU, national, and regional resources;
- Simplify administrative procedures to improve accessibility for beneficiaries.

Compensation schemes and preventive subsidies should be integrated into coherent national policy frameworks, implemented by ministries and regional administrations, with the active involvement of livestock breeders and local authorities.

3. Enhancing institutional stability and legal anchoring

The European Union should encourage Member States to embed key elements of large carnivore management—such as monitoring systems, compensation mechanisms, and preventive measures—within binding legislative frameworks to ensure long-term stability and continuity.

Political turnover and institutional restructuring currently pose significant risks, including the discontinuation of established programmes, disruption of management systems, and loss of technical expertise. These factors undermine the sustainability of coexistence strategies and weaken governance structures.

To address this, the EU should:

- support the establishment of independent scientific advisory bodies;
- promote formalised inter-institutional cooperation agreements;
- strengthen multi-level governance alignment, particularly in relation to existing EU directives.

Ensuring continuity and resilience of governance systems is critical for maintaining effective, adaptive, and evidence-based management

4. Strengthening public communication and stakeholder engagement

The European Union should prioritise the development of comprehensive communication and stakeholder engagement strategies to address the increasing politicisation of large carnivore management and the spread of polarised or negative narratives.



Large carnivores are often at the centre of social and political tensions, which can undermine evidence-based policymaking, reduce public support for conservation measures, and exacerbate conflicts.

To address these challenges, the EU should:

- support continuous and structured public engagement initiatives;
- ensure transparent communication of monitoring data and management decisions;
- Promote the establishment of inclusive advisory platforms involving key stakeholders.

Cooperation with educational institutions, local communities, media, and non-governmental organisations is essential to improve awareness, build trust in institutions, and foster informed and balanced public discourse.



4. Recommendations for Poaching Prevention

1. Regulatory harmonisation and cross-border coordination

The European Union should promote the harmonisation of legal and regulatory frameworks related to large carnivore protection and anti-poaching measures across Member States.

Current fragmentation and inconsistencies between national systems undermine policy coherence, delay implementation, and increase administrative complexity, ultimately reducing the effectiveness of anti-poaching efforts.

To address these challenges, the EU should:

- support the development of common guidelines and minimum standards for anti-poaching regulations and enforcement;
- facilitate cross-border coordination mechanisms, particularly in shared large carnivore populations;
- strengthen cooperation between ministries, enforcement agencies, and regional authorities.

Improved alignment of legal frameworks will enhance enforcement capacity and ensure more consistent protection across the EU.

2. Ensuring financial stability and adequate resource allocation

The European Union should ensure predictable, long-term, and sustainable financial support for anti-poaching initiatives.

Funding volatility and insufficient resources can lead to interrupted operations, reduced enforcement capacity, and weakened long-term planning, significantly limiting the effectiveness of anti-poaching strategies.

To mitigate these risks, the EU should:

- promote multi-annual funding frameworks and long-term budget commitments;
- encourage diversification of funding sources, including EU, national, and regional contributions;
- support the establishment of contingency reserves and financial risk management mechanisms;
- require regular monitoring and evaluation of resource allocation and effectiveness.



Strengthening financial planning will enable more resilient and operationally effective anti-poaching systems, supported by ministries of finance, programme authorities, and oversight bodies.

3. Strengthening stakeholder coordination and governance

The European Union should enhance coordination and alignment among stakeholders involved in large carnivore management and anti-poaching efforts.

Diverging priorities and limited coordination between key actors—such as public authorities, law enforcement bodies, NGOs, private sector stakeholders, and local administrations—can delay decision-making processes and weaken implementation.

To address these challenges, the EU should:

- support systematic stakeholder mapping and role clarification;
- promote the organisation of regular coordination platforms and workshops;
- facilitate the establishment of formal cooperation mechanisms and joint operational frameworks..

Strengthened governance structures will improve information exchange, operational coordination, and policy coherence, leading to more effective implementation.

4. Investment in technology, infrastructure, and public awareness

The European Union should support targeted investments in technology, infrastructure, and capacity building to improve the effectiveness of anti-poaching measures.

Existing gaps in equipment, surveillance tools, and operational infrastructure limit detection, response time, and enforcement efficiency, while increasing operational costs.

To address these limitations, the EU should:

- promote the deployment of appropriate monitoring and enforcement technologies (e.g. camera systems, telemetry, forensic tools);
- provide technical assistance, training, and capacity-building programmes for enforcement personnel;
- Support pilot projects and innovation testing, enabling scalable solutions;

In parallel, public awareness and community engagement initiatives are essential to reduce social tolerance of poaching, counter misinformation, and strengthen public support for conservation efforts.



Active involvement of civil society, media, and community leaders is critical to ensure broader acceptance and long-term effectiveness of anti-poaching measures.