**Annex**

# Range-wide Strategy for the Rescue and Conservation of the Balkan Lynx *Lynx lynx balcanicus* 2026–2035

## FINAL DRAFT VERSION SUBMITTED TO THE BONN AND BERN CONVENTIONS

**Balkan lynx in Mavrovo National Park, photo taken on 12th of April 2010**

**Photo credit: BLRP, Dime Melovski**

23 October 2025[1]

[1] This document is the last draft version, containing the revisions by the drafting committee while addressing the comments received from key stakeholders and concerned parties during the preparation and the open consultation period in August-October 2025; a version submitted to the Bonn and Bern Conventions

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## Abstract

According to the IUCN Red List, the Balkan lynx (*Lynx lynx balcanicus*) is classified as Critically Endangered, requiring range-wide, transboundary conservation efforts for its survival.

The Balkan lynx was listed in 2017 as a *strictly protected fauna species* in Appendix II of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).

And most recently, i.e. in February 2024, the Balkan lynx became part of Appendix I of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). The Conference of Parties furthermore adopted several Concerted Actions, among which, is the development of a Range-wide Conservation Strategy for the Balkan lynx.

In collaboration with representatives from the national environmental and nature protection authorities of the current and historical range and concerned parties, the Secretariat of the Carpathian Convention/United Nations Environment Programme (UNEP) Vienna Programme Office, the IUCN Cat Specialist Group and the Balkan Lynx Recovery Programme, have drafted this range-wide Strategy for the Rescue and Conservation of the Balkan Lynx.

Based on a comprehensive Status Report and Threat Analysis, 11 conservation Objectives were defined and further specified through corresponding Results and Actions. To facilitate implementation, this *Strategy* will be translated into National Action Plans, tailored to each range country's specific needs and prerequisites.

## Glossary

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|---|---|
| Action | LogFrame-element: Operation with a defined actor, method, and timeline to reach a Result, the Objectives and, ultimately, Goal and Vision. |
| Balkan Lynx Recovery Programme | Transboundary conservation initiative aiming to restore a viable Balkan lynx population through research and addressing its main threats. |
| Cat Specialist Group | Global network of leading scientists and conservationists focused on the conservation of wild cat species and their habitats. It is part of the Species Survival Commission of the International Union for Conservation of Nature. |
| Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) | International agreement that aims to conserve wild flora and fauna and their natural habitats and promote cooperation between countries. |
| Convention on the Conservation of Migratory Species of Wild Animals (CMS/Bonn Convention) | International agreement that aims to conserve migratory species throughout their ranges. |
| Constraint | Part of the Threat Analysis: Gap or shortcoming without direct impacts on the population but allows Threats to have such impacts. |
| Direct Threat | Part of the Threat Analysis: Any factor presently threatening the survival of the species with a direct impact on the population. |
| Driver | Part of the Threat Analysis: Cause of Direct Threat. |
| Goal | LogFrame element: A feasible, realistic and measurable long-term aim for the conservation of the species. |
| Indicator | LogFrame element: Parameter used to measure the achievement of a Result by implementing Actions. |
| International Union for Conservation of Nature | Global organization composed of both government and civil society organizations working to conserve nature and ensure the sustainable use of natural resources. |
| IUCN Green Status of Species Assessment | Assessment estimating the recovery of species' populations and their conservation success. |
| IUCN Red List Assessment | Assessment estimating the extinction risk of a species. Based on five quantitative Criteria, species are classified into one of nine Threat Categories. |
| Kunming-Montreal Global Biodiversity Framework | Global framework adopted in 2022 at the UN Biodiversity conference, setting targets and goals to halt and reverse biodiversity loss by 2050. |
| Logical Framework (LogFrame) | Table summarizing all elements of the ZOPP pyramid, developed using the Logical Framework approach; Tabulated Overview of the entire *Strategy.* |

| | |
|---|---|
| National Action Plan | Strategic document outlining in detail the Results and Actions needed within a country. Operationalizes the overarching *Strategy* according to national needs and prerequisites. |
| Objective | LogFrame element: A specific outcome to be achieved to address and overcome the Threats to achieve the Goal. |
| Opportunity | LogFrame element: Socio-political, economic, or cultural factors that favor the implementation of the Result. |
| Problem Tree | Presents all factors negatively affecting the species (Direct Threats, Drivers, and Constraints) in the past, present and future and how they are interlinked. |
| Range state | All countries where the Balkan lynx currently exists or historically existed. |
| Result | LogFrame element: Measurable step that describes what needs to be accomplished to meet the Goal or Objective. |
| Risk | LogFrame element: Negative factor, beyond the control of the Strategy that can hinder the achievement of a Result. |
| SMART | Criteria for the formulation of Results: *S*pecific, *M*easurable, *A*chievable, *R*elevant and *T*ime-bound |
| Strategy | This document - Strategic document developed using the Logical Framework approach, outlining the Vision, Goal, and Objectives, and defining the Results and Actions required at the level of the entire Conservation Unit. |
| United Nations Environment Programme | The United Nations' primary environmental authority, driving global efforts to address the triple planetary crisis i.e. climate change, biodiversity and ecosystem loss, and pollution. |
| Vision | LogFrame element: A "futuristic dream" describing the ideal situation (desired future state of the species) on a very long term. |
| Zielorientierte Projektplanung (ZOPP) | Project design methodology, widely used for project planning, monitoring and evaluation. It helps developing strategic elements in a logical hierarchy, summarized in the ZOPP pyramid. |

## Acronyms and Abbreviations

| | |
|---|---|
| BLRP | Balkan Lynx Recovery Programme |
| Cat SG | Cat Specialist Group |
| CMS | Convention on the Conservation of Migratory Species of Wild Animals |
| COP | Conference of the Parties |
| CPB | Capacity Building Programme |
| EIA | Environmental Impact Assessment |
| GBF | Global Biodiversity Framework |
| IUCN | International Union for Conservation of Nature |
| IUCN SSC | Species Survival Commission of the IUCN |
| LAG | Local Action Groups |
| MoU | Memorandum of Understanding |
| NAP | National Action Plan |
| NGO | Non-governmental organization |
| PA | Protected area |
| PR | Public Relations |
| SEA | Strategic Environmental Assessment |
| UNEP | United Nations Environment Programme |
| UNSCR | United Nations Security Council Resolution |

# 1 Introduction

The lynx population in the south-western Balkans has long been recognized as highly threatened, e.g. in the first report on the status of the Eurasian lynx (*Lynx lynx*) in Europe on behalf of the Council or Europe's Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (Breitenmoser & Breitenmoser-Würsten, 1990). The Balkan lynx is considered as a valid subspecies *Lynx lynx balcanicus* (e.g. Kitchener et al., 2017), listed as a *strictly protected fauna species* in Appendix II of the Bern Convention. In 2024, the Eurasian lynx has furthermore been listed under the United Nations' Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention or CMS): The species *Lynx lynx* to Appendix II (migratory species conserved through agreements), but the subspecies *Lynx lynx balcanicus* even to Appendix I (endangered migratory species), recognizing that this highly endangered taxon needs solemn range-wide transboundary conservation for its survival. The listing of the Balkan lynx under the two conventions is in line with the assessment of the International Union for Conservation of Nature (IUCN), which lists the Balkan lynx in the Red List of Threatened Species™ as Critically Endangered (see Chapter 2).

The listing proposal for the Eurasian lynx to the Conference of Parties (COP) to CMS was submitted by North Macedonia as proponent, as well as Albania, Bosnia and Herzegovina and Uzbekistan as co-proponents. Notably, three of the four proponents are Balkan lynx range countries[2], underlying the importance of lynx conservation in the south-western Balkan Peninsula. To back up the listing proposal, the IUCN SSC (Cat Specialist Group) and the Secretariat of the Carpathian Convention have submitted a Concerted Action proposal, which included the development of a range-wide conservation plan for the Balkan lynx. This proposal was approved by the CMS COP, and hence the proponents have, in consultation with the Secretariats of the CMS and the Bern Convention, and in close cooperation with the Balkan Lynx Recovery Programme (BLRP) and the Vienna Programme Office of the United Nations Environment Programme (UNEP) - Secretariat of the Carpathian Convention, convened a group of experts to draft a Range-wide Strategy for the Rescue and Conservation of the Balkan Lynx *Lynx lynx balcanicus* (the *Strategy*) to be submitted to and discussed with the Range States and the Conventions. The *Strategy* follows the standard approach for strategic planning in species conservation as recommended by the IUCN/SSC (2018) (see A-III for further details).

This *Strategy* gives an overall framework in the conservation of the Balkan lynx and the range-wide cooperation for about ten years (2026−2035). It is a guiding document for over-arching and range-wide activities for the maintenance of the remnant population and the recovery of the Balkan lynx across its historic distribution range. The present situation of the Critically Endangered Balkan lynx is very dangerous, and the longer the present critical status with a very limited distribution, low abundance and recruitment rate lasts, the more the genetic diversity of the Balkan lynx will deteriorate. It is hence of utmost importance to overcome this critical situation as soon as possible. The *Strategy* is expected to contribute to stabilizing and expanding the remnant nuclei to recolonize lost ground, but only if adequate conservation measures are initiated and implemented in each of the remnant and historic Range States immediately. As a range-wide, the *Strategy* cannot cover all national and local requirements, rather used as a blueprint for the development of more specific

[2] Range countries in the context of this *Strategy* embed both, the extant (Fig. 1) and historic range (Fig. 2) of the Balkan lynx.

National Action Plans (NAPs; see Chapter 5.3). The NAPs will also provide the opportunity to concretize and operationalize Results and Activities, e.g. to define timelines, actors and budgets.

Restoring nature and enabling biodiversity to thrive offers a quick and cheap solution to absorb and store carbon. This is one of the core pillars of the EU Green Agenda and the corresponding EU 2030 Biodiversity Strategy. The European Green Deal priorities include:

- protecting our biodiversity and ecosystems,
- reducing air, water and soil pollution,
- moving towards a circular economy,
- improving waste management,
- ensuring the sustainability of our blue economy and fisheries sectors.

Furthermore, the EU's biodiversity strategy for 2030 is a comprehensive long-term plan to protect nature and put Europe's biodiversity on the path to recovery, for the benefit of people, climate and the planet. The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030 and contains specific actions and commitments[3] including halt species extinction, as well as provide legal protection of a minimum of 30% of the EU's land area and 30% of the EU's sea area and integrate ecological corridors, as part of a true Trans-European Nature Network. In particular, the EU Nature Restoration Plan calls for restoration of 30% of the habitats and species that are currently not in favorable conservation status.

Moreover, this Strategy is also in line with the Vision and the Strategic Plan of the Bern Convention for the period to 2030. According to that Vision, by 2030 declines in biodiversity are to be halted, leading to recovery of wildlife and habitats, improving the lives of people and contributing to the health of the planet. In particular, Goal 2 of the Strategic Plan refers to improving the conservation status of threatened species, increasing the abundance of native species, and halting human-induced extinctions.

The Kunming-Montreal Global Biodiversity Framework (GBF) was adopted during the fifteenth meeting of the Conference of the Parties (COP 15) following a four-year consultation and negotiation process. This historic Framework, which supports the achievement of the Sustainable Development Goals and builds on the Convention's previous Strategic Plans, sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050. Among the Framework's key elements are 4 goals for 2050 and 23 targets for 2030.

In adopting the Kunming-Montreal Global Biodiversity Framework, all Parties committed to setting national targets to implement it (ongoing process), while all other actors have been invited to develop and communicate their own commitments. The Kunming-Montreal Global Biodiversity Framework has 23 action-oriented global targets for urgent action over the decade to 2030. The actions set out in each target need to be initiated immediately and completed by 2030. Together, the results will enable achievement towards the outcome-oriented goals for 2050. Actions to reach these targets should be implemented consistently and in harmony with the Convention on Biological Diversity and its Protocols, as well as other relevant international obligations arising from the ratified multilateral environmental agreements, considering national circumstances, priorities and socioeconomic conditions.

[3] https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

Both the implementation of the range-wide *Strategy* and the related National Action Plans for the conservation of the Balkan lynx, its prey and habitats will, for each Range State, contribute to reach the Kunming-Montreal Global Biodiversity Framework (GBF 2030) Targets to live up to the Convention on Biological Diversity and its Protocols (including alignment of other MEA's obligations) and, for the member states of the European Union, the European Union's biodiversity strategy for 2030. This relates foremost to the GBF 2030 Target 4: "Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts". This target has three distinct but related components:

(a) management actions need to be taken to halt human-induced extinctions by 2030 and to reduce extinction risk, in particular for threatened species.

(b) management actions need to be taken to maintain and restore genetic diversity, among all species,

(c) action needs to be taken to manage human-wildlife interactions to minimize human-wildlife conflict.

More details on other related targets are presented in Appendix I.

# 2 Status of the Balkan lynx *Lynx lynx balcanicus*

Since 2006, numerous measures for conservation of the Balkan lynx have been implemented mainly through the Balkan Lynx Recovery Programme. This international programme has so far been focusing on conserving the remnant population and occurrences and has laid the knowledge base through natural and social science research and a continuous monitoring programme. To assess the conservation status and extinction risk of the Balkan lynx, IUCN Red List Assessments were done in 2015 (Melovski et al., 2015) and again in 2025 (Chapter 2.1; Melovski et al., in preperation a) now supplemented with a Green Status of Species assessment (Melovski et al., in preparation b), which is evaluating the recovery potential of the Balkan lynx (Chapter 2.2).

## 2.1 IUCN Red List assessment for the Balkan lynx

According to the IUCN Red List criteria, the Balkan lynx is classified as Critically Endangered (CR) under criterion D in 2015 (Melovski et al. 2015), as well as in 2025 (Melovski et al., in preparation a), with the number of independent lynx (adults & subadults) identified from 01.05.2020-30.4.2025 of only 45 individuals. The population is fragmented, with the main core area in North Macedonia and several isolated individuals in Albania and Kosovo (under UNSCR 1244/99)[4], reflecting its patchy distribution.

In addition to threats such as illegal killing, habitat degradation, and prey depletion, recent genetic studies reveal alarmingly low nuclear genetic diversity—among the lowest recorded for any Eurasian lynx population—and a high inbreeding coefficient (Gonev, 2025). These findings underscore the urgency of conservation interventions, with population reinforcement emerging as a likely and necessary strategy. A detailed review of the threats is presented in Chapter 3.1.

[4] All references to Kosovo, whether the territory, institutions or population, in this document shall be understood in full compliance with United Nations Security Council Resolution 1244/99 and without prejudice to its status

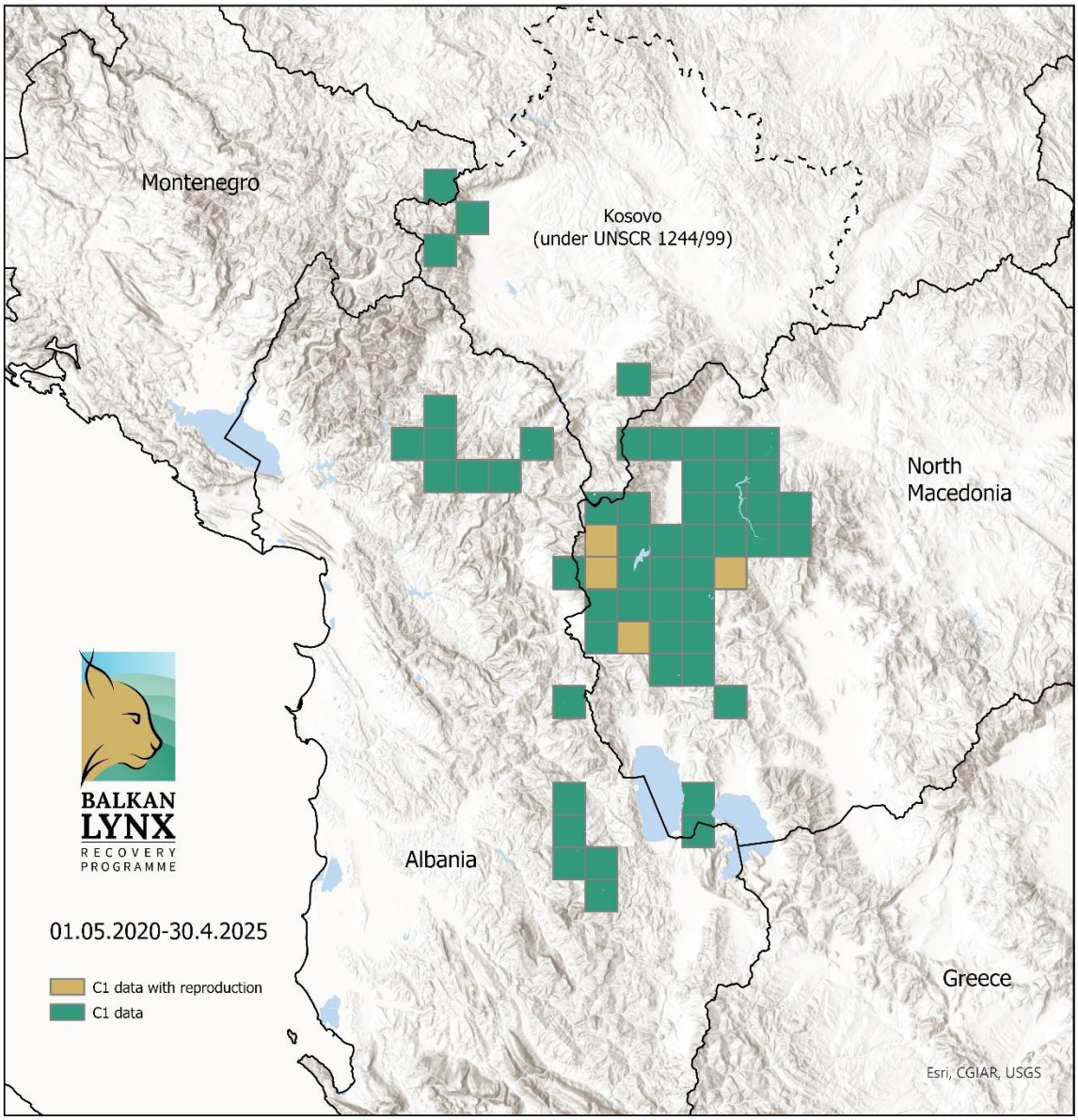


Fig. 1. Lynx presence was mapped using a 10 × 10 km grid for the period from 01.05.2020-30.4.2025. Category C1 represents verified ('hard fact') data, such as confirmed georeferenced lynx photos, genetic samples, records of captured and dead individuals. The map also incorporates telemetry data obtained from GPS-collared lynx.

## 2.2 IUCN Green Status of Species assessment for the Balkan lynx – preliminary results

The IUCN Red List of Threatened Species™ (Red List) provides a standardized measure of extinction risk. However, preventing extinction is not the only aim of conservation, beyond the objective is recovery; for viable subpopulations providing ecological functions at baseline levels to be restored across the entire indigenous (i.e. historical) range (Fig. 2). In 2021, the IUCN Green Status of Species (Green Status) was introduced to provide a standardized assessment of recovery status, complementing the Red List to provide a more complete picture of a taxon's status and to incentivize more ambitious conservation goals (IUCN Green Status of Species Working Group, 2024). The Green Status has two main aims: 1) to assess recovery status (considering viability, spatial representation, and ecological functionality) and 2) to measure and incentivize conservation impact (IUCN Green Status of Species Working Group, 2024).

A Green Status of Species assessment for the Balkan lynx is in preparation. However, a preliminary Green Status assessment of the current recovery status of the Balkan lynx found the subspecies to be **Critically Depleted** (Melovski et al., in preparation b). This preliminary result highlights the severe depletion and high extinction risk the Balkan lynx faces (in line with the Red List assessment of Critically Endangered - see Chapter 2.1). The preliminary assessment also considers the past, expected, and potential future impact of conservation on the subspecies. The assessment highlights that past conservation efforts have been key for the Balkan lynx – potentially even preventing the extinction of the subspecies (Melovski et al, in preparation b). Although the next 10 years is too short a timeframe to expect significant recovery, this will be an important period for Balkan lynx conservation. The Balkan lynx faces a critical situation; however ongoing and planned conservation actions are expected to prevent possible extinction and enable the Balkan lynx to persist through the upcoming decade (Melovski et al., in preparation b). Despite the highly Threatened status of the subspecies and the limited short-term recovery potential, in the long term, with continued and intensified conservation efforts, there is significant potential for Balkan lynx recovery. In the next 100 years, if all plausible conservation actions are applied with maximum efficacy, the Balkan lynx could increase in population size, return to large parts of its historical range, and even reach baseline levels of ecological functioning in parts of the range. Beyond this, with successful conservation of both the Balkan lynx and expanding Carpathian lynx populations in the region, the vital ecological functions of the Eurasian lynx can be ensured across the entire historical range of the Balkan lynx (Melovski et al., in preparation b). It is important to note that given several key ongoing and emergent threats (see Chapter 3.1), Balkan lynx survival and recovery is strongly dependent on successful conservation – highlighting the importance of effective strategic conservation planning and subsequent implementation of conservation actions for this Critically Endangered and Critically Depleted lynx subspecies.

The preliminary Green Status assessment was conducted using the assessment materials made available by the IUCN Species Survival Commission in parallel with the preliminary Red List assessment of the subspecies (Melovski et al., in preparation a). It should be noted that the Green Status assessment of the species is not final until it has been reviewed and published on the Red List website.

# 3 Range-wide Conservation Strategy

The Strategy consists of a set of ranked, goal-oriented planning elements (see A-III for details) from a wishful statement – the Vision – down to rooted, concrete outcomes – the Results – to be achieved by means of practical Actions.

The **Vision** for the conservation of the Balkan lynx is:

**The long-term existence of a viable Balkan lynx population in harmony with and supported by local communities.**

Which is approached through a more concrete **Goal**:

**By 2040, the Balkan lynx is down-listed at least to Endangered based on IUCN Red List criteria with an increasing population and expanding range.**

## 3.1 Threat Analysis and Problem Tree

To define sensible and inherent sub-goals, the Objectives (see Chapter 3.2), Threats and Constraints negatively affecting the Balkan lynx have been analyzed and visualized in a Problem Tree (Fig. 2).

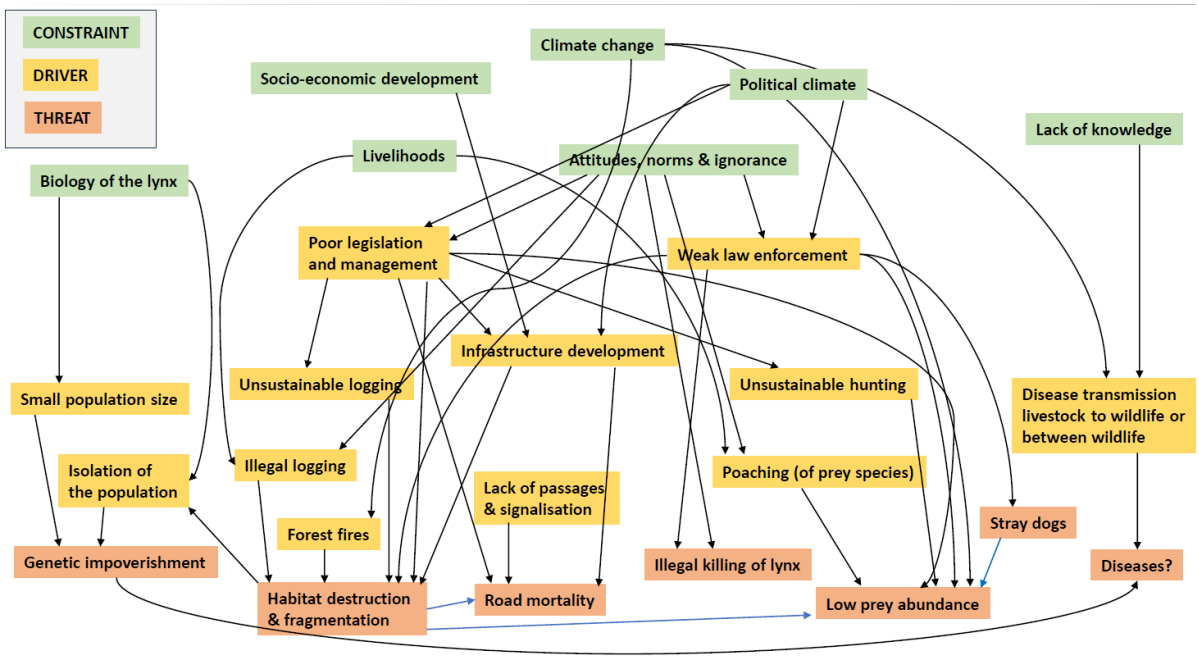


Fig. 2. Problem Tree summarizing the direct Threats, the Drivers behind these Threats and the Constraints limiting the impact of conservation interventions for the Balkan lynx. For more detailed explanations see text below and A-III.

This Problem Tree framework highlights that Threats to the Balkan lynx are not isolated, but rather emerge from a network of interacting biological, social, and institutional factors. Conservation strategies must therefore go beyond immediate Threat mitigation to address root causes − such as weak governance, insufficient public engagement, and socio-economic pressures − while reinforcing the population through targeted activities like habitat restoration, improved legal enforcement, prey

recovery, and possibly lynx population reinforcement. Recognizing and addressing these interconnected pathways is essential for ensuring the long-term survival of the Balkan lynx across its original and now highly reduced and fragmented range.

To facilitate addressing all adverse factors to the conservation of the Balkan lynx, it is helpful to differentiate between **Constraints**, underlying **Drivers**, and direct **Threats** impacting the lynx population:

Constraints are overarching contextual factors that shape the conditions in which Threats arise. For the Balkan lynx, key Constraints include:

- Biology of the lynx, particularly its life history and spatial organization, naturally limits population growth and expansion.
- Livelihoods of people and socio-economic development create land-use pressures and increase dependency on natural resources.
- Climate change intensifies habitat degradation and alters ecological dynamics.
- Political climate influences both prioritization of conservation efforts and capacity for effective governance.
- Attitudes, norms, and ignorance, affect tolerance towards wildlife and hinder the enforcement of conservation laws.
- Lack of knowledge limits effective management, especially regarding disease and ecosystem dynamics.

Drivers are more direct factors that may stem from the Constraints and generate specific threats to the lynx population:

- Small population size and isolation (biological drivers) increase vulnerability to inbreeding and local extinction.
- Illegal logging and poaching, often driven by livelihoods and reinforced by permissive social norms, reduce both habitat quality and wildlife survival.
- Infrastructural development, stemming from socio-economic and political priorities, fragments lynx habitat and creates mortality risks.
- Forest fires and disease transmission (from livestock to wildlife), both exacerbated by climate change, further degrade ecosystems and health.
- Weak law enforcement, influenced by political will and societal attitudes, enables illegal activities.
- Lack of wildlife passages and road signalization, largely ignored in infrastructural planning, contributes to road mortality.
- Poaching of prey species, unsustainable hunting, and unsustainable logging reduce food availability and compromise habitat integrity.
- Poor legislation and management, though not explicitly listed as a constraint, interacts with multiple drivers to enable threats.

These Drivers and Constraints result in concrete Threats impacting the lynx population and its viability:

- Genetic impoverishment, caused by the small and isolated population, reduces adaptive potential and overall resilience of the lynx.

- Habitat destruction and fragmentation, a result of illegal/unsustainable logging, infrastructure expansion, forest fires, poor land-use planning, and weak law enforcement.
- Road mortality, linked to infrastructure development and lack of wildlife-friendly planning measures.
- Illegal killing of lynx, enabled by weak law enforcement and social tolerance for such actions.
- Low prey abundance, due to poor wildlife management including overhunting and poaching of prey species, further diminishes lynx reproductive success and survival.
- Stray dogs, unmanaged due to weak institutional control, present potential for disturbance and competition.
- Disease, especially from domestic livestock or among wildlife, poses an emerging but poorly understood risk.

## 3.2 Objectives to achieve the Goal

Threats, Drivers and Constraints identified in the Problem Tree (Fig. 2; Chapter 3.1) were condensed in a series of Themes (Fig. 3; A-III for explanations) to identify groups of adverse factors to the conservation of the Balkan lynx.

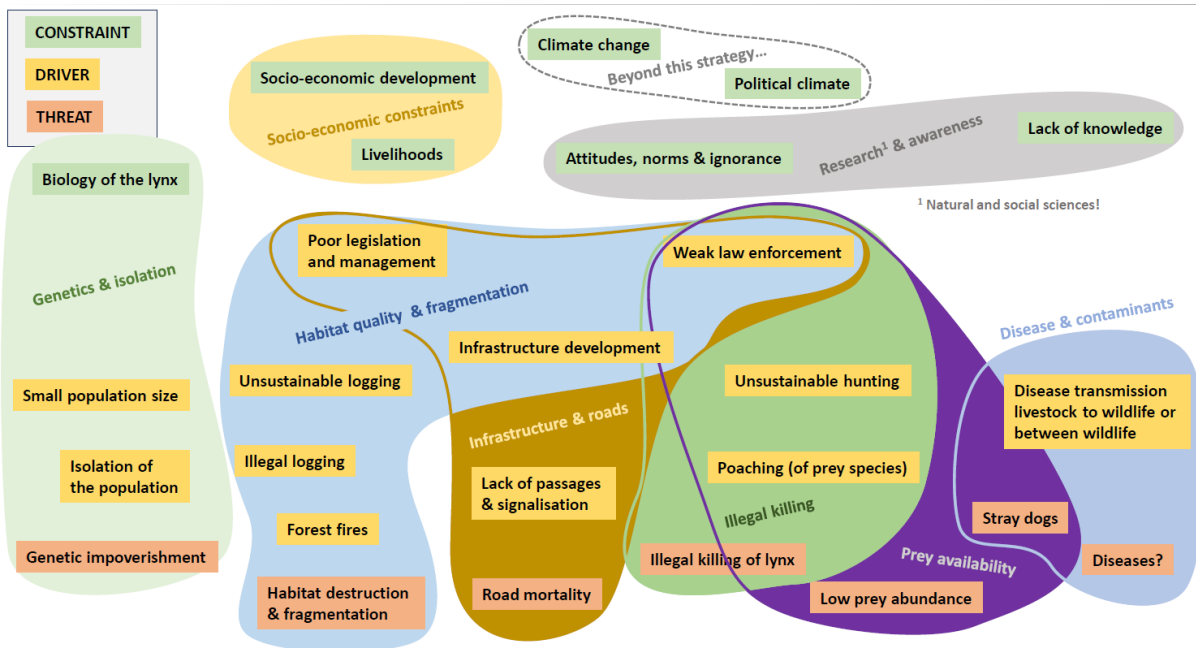


Fig. 3. Themes (bubbles of same color) as compiled by means of the Problem Tree presented in Chapter 3.1. These Themes are translated into Objectives to structure the efforts to conserve the Balkan lynx (see text below and A-III).

Based on these Themes, eleven Objectives have been formulated for the *Strategy*. The Objectives were proposed by several working groups and discussed in the plenary during the workshops. The order of the Objectives was defined by the workflow during the workshops and does not indicate any prioritization or chronological order. To facilitate the overview, cross-references (→/see) to related Objectives, Results, and Actions are given throughout the *Strategy*.

The Objectives to reach the Goal of the *Balkan Lynx Strategy* are defined as follows:

**Objective 1**: To promote sustainable socio-economic development that considers conservation needs in planning and implementation, mitigating negative impacts on lynx populations and their prey and habitats.

**Objective 2**: To consider and support local people's needs and livelihoods to secure their support for reducing harmful or illegal practices hindering lynx conservation.

**Objective 3**: To raise awareness of the Balkan lynx's status and to increase scientific and local knowledge and understanding of the species, sustaining its positive perception.

**Objective 4**: To increase international support, strengthen range-wide (transboundary) cooperation, and secure funding for implementing this Conservation Strategy through coordinated National Action Plans.

**Objective 5**: To understand and mitigate the Drivers of illegal killing of lynx and poaching of key prey species.

**Objective 6**: To ensure sufficient prey across the Balkan lynx's present and future distribution range.

**Objective 7**: To prevent and mitigate habitat degradation and fragmentation and enhance habitat quality for the Balkan lynx and its prey.

**Objective 8**: To minimize habitat fragmentation caused by current and future infrastructure developments, ensuring connectivity across the historic range, and enabling lynx recolonization, dispersal, and gene flow between subpopulations.

**Objective 9**: To build baseline knowledge on Balkan lynx disease prevalence and prevent disease outbreaks.

**Objective 10**: To mitigate effects of inbreeding through genetic rescue to create a genetically viable population of the Balkan lynx.

**Objective 11**: To establish and continuously apply demographic, health and genetic monitoring of the Balkan lynx and maintain a favorable conservation status.

## 3.3 Results and Actions per Objective

**Objective 1. To promote sustainable socio-economic development that considers conservation needs in planning and implementation, mitigating negative impacts on lynx populations and their prey and habitats.**

Result 1.1. By 2029, criteria addressing the needs of lynx, their prey, and habitats are integrated into the legal frameworks for Strategic and Environmental Impact Assessments in all range countries (including transboundary context).

Action 1.1.1. Analyze the existing national SEA, EIA, Environmental Reports, Laws on Environmental Protection, and other relevant national legislation to identify gaps.

Action 1.1.2. Prepare draft amendments to the analyzed legislation, proposing the inclusion of criteria that specifically address the needs of lynx, their prey, and habitats.

Result 1.2. By 2035, spatial plans (at national, local, PAs level) of the range countries integrate Balkan lynx conservation needs (see R 6.2).

Action 1.2.1. Develop and conduct tailor-made capacity building programmes on eco-connectivity for spatial planners and decision makers (see A 6.2.3).

Action 1.2.2. Revise the local and PAs-level spatial plans (where existing) to integrate lynx conservation needs.

Result 1.3. By 2035, the management plans of important Balkan lynx (protected) areas (see A-IV) integrate Balkan lynx conservation considerations, and sustainable wildlife management is ensured.

Action 1.3.1. Update (or develop new) management plans of PAs integrating Balkan lynx conservation considerations and support implementation of specific Balkan lynx conservation actions (see A 7.2.4).

Action 1.3.2. Assess the effectiveness of management plan implementation using standardized tools (e.g., METT), and propose revisions where necessary (see O 4).

Result 1.4. By 2028, a review on the positive or negative impact of tourism on the Balkan lynx conservation is done, and recommendations on sustainable tourism furthering wildlife conservation is produced and distributed.

Action 1.4.1. Compile a report on the impact of increasing tourism on wildlife in regions important for the Balkan lynx, including an overview of recommendations on wildlife friendly tourism.

**Objective 2. To consider and support local people's needs and livelihoods to secure their support for reducing harmful or illegal practices hindering lynx conservation.**

Result 2.1. By 2035, financing mechanisms are in place that support and preserve traditional livestock protection practices.

Action 2.1.1. Develop and promote locally adapted livestock emergency protection measures in collaboration with local communities.

Action 2.1.2. Develop a Small Grants Programme to support local communities in the implementation of identified livestock protection measures (see A 2.2.3).

Action 2.1.3. Implement the Small Grants Programme in emergency areas.

Result 2.2. By 2030, Local Action Groups[5] are established in important lynx areas to strengthen local people's stewardship over natural resources.

Action 2.2.1. Establish at least one Local Action Group e.g. per (protected) area relevant for lynx conservation.

Action 2.2.2. Local Action Groups develop their specific work programmes.

Action 2.2.3. Local Action Groups apply for funding to implement their programmes.

Result 2.3. By 2030, collaboration with hunting societies is strengthened and expanded to align hunting practices with lynx conservation goals and promote sustainable game management.

Action 2.3.1. Organize regular workshops and awareness-raising events with hunting societies to promote sustainable hunting practices and the importance of the Balkan lynx as part of the ecosystem.

Action 2.3.2. Develop joint monitoring and reporting protocols with hunters to improve data collection on prey species and lynx sightings.

Action 2.3.3. Propose/provide incentives (e.g. recognition, co-management opportunities, or equipment support) for hunting groups that actively contribute to lynx conservation and comply with sustainable hunting agreements.

**Objective 3. To raise awareness of the Balkan lynx's status and to increase scientific and local knowledge and understanding of the species, sustaining its positive perception.**

Result 3.1. By 2035, knowledge about Balkan lynx is integrated into the official school curriculum.

Action 3.1.1. Draft school curriculum that integrates knowledge about Balkan lynx.

Action 3.1.2. Conduct training for schoolteachers on introducing and implementing the school curriculum.

Action 3.1.3. Implement the school curriculum through supported actions (mainly in primary schools).

[5] Local Action Group (LAG) is a local partnership based on the European Union LEADER method, a concept based on rural development models, to establish links between citizens, activities, and rural areas. It unites local players around joint projects and common, cross-sectoral actions, representing the interests of local socio-economic groups and communities and the different sectors and associations concerned by the environment, the heritage, social and cultural integration, etc. with the aim to achieve the critical mass or threshold needed to improve the area's economic competitiveness (European Commission, n. d.)

Action 3.1.4. Monitor and evaluate the effectiveness of the curriculum implementation.

Result 3.2. By 2030, capacity building programmes (CBP) tailored for specific stakeholder groups are developed and implemented.

Action 3.2.1. Develop capacity building programmes for specific stakeholders' groups (hunters, livestock farmers, journalists, rangers, foresters, tourism sector, and others).

Action 3.2.2. Implement capacity building programmes.

Result 3.3. By 2035, public awareness of Balkan lynx is enhanced through different communication channels.

Action 3.3.1. Conduct regular human dimension survey and develop five-year communications plan.

Action 3.3.2. Implement specific actions to raise awareness of the Balkan lynx, its value, and conservation in collaboration with different stakeholders.

Action 3.3.3. Develop and release media information packages.

**Objective 4. To increase international support, strengthen range-wide (transboundary) cooperation, and secure funding for implementing this Conservation Strategy through coordinated National Action Plans.**

Result 4.1. By 2027, National Action Plans to implement the Regional Conservation Strategy are adopted by the range countries and revised every 5 years.

Action 4.1.1. Establish an expert group and identify key national authorities (line ministries and other relevant institutions) for developing and coordinating the implementation of the NAPs.

Action 4.1.2. Draft the NAP, including expert and public consultation.

Action 4.1.3. Refine, finalize and implement NAPs according to national needs/legislation.

Action 4.1.4. Promote and raise awareness of the NAPs, particularly among local communities, target municipalities, and managing authorities of key Balkan lynx (protected) areas.

Result 4.2. Every five years thereafter, the progress of implementation of the National Action Plan is tracked by national expert teams and authorities.

Action 4.2.1. Five years after the adoption of the NAPs, prepare a progress report on its implementation to serve as a baseline for updating the NAPs.

Action 4.2.2. Revise the NAPs based on the findings of the progress report.

Result 4.3. By 2027, a transboundary (range-wide) Coordination Committee for the implementation of the Strategy is established and operational (see Chapter 5).

Action 4.3.1. Establish a Balkan lynx Coordination Committee, if possible, under existing platforms and define its structure (e.g. secretariat) and modus operandi.

Action 4.3.2. Develop a Balkan lynx portfolio (with tentative budgets, including funding for the activities of the coordination committee and for range-wide tasks), involving government agencies, NGOs and academia, incorporating existing transboundary initiatives where feasible.

Action 4.3.3. Organize yearly meetings of the coordination committee to review the progress made.

**Objective 5. To understand and mitigate the Drivers of illegal killing of lynx and poaching of key prey species[6].**

Result 5.1. By 2027, Drivers of illegal killing of lynx and poaching of prey species are identified.

Action 5.1.1. Prepare (incl. identifying target groups) and conduct surveys.

Action 5.1.2. Produce and share reports based on the survey results.

Result 5.2. By 2035, society is aware of the impact of illegal killing of Balkan lynx and poaching of prey species and the reporting of wildlife crime cases is improved.

Action 5.2.1. Conduct awareness raising campaigns with a call to action.

Result 5.3. By 2035, the impact of illegal killing of lynx and poaching of key prey species is reduced across the current and potential future distribution areas of the lynx.

Action 5.3.1. Establish an official Wildlife Crime Unit in each range country and enhance the cooperation.

Action 5.3.2. Conduct training workshops on assessing and recording wildlife crime cases (police), and on how to effectively present such cases in court (lawyers).

Action 5.3.3. Establish a wildlife crime reporting system with a defined protocol for responsibilities, including a hotline to the Wildlife Crime Unit.

Action 5.3.4. Monitor and prevent wildlife crime cases related to lynx and prey species.

**Objective 6. To ensure sufficient prey across the Balkan lynx's present and future distribution range.**

Result 6.1. By 2035, robust, scientifically based population monitoring of key prey species in their habitats is established and ongoing.

Action 6.1.1. Agree and adopt scientifically based, joint monitoring methods and implement them in all range countries.

Action 6.1.2. Conduct regular standardized monitoring of prey species.

Action 6.1.3. Publish monitoring reports.

[6] The most important prey species for the Balkan lynx are roe deer and chamois (see A-II), but a well-preserved and diverse composition of indigenous wildlife species should be a conservation goal in general.

Result 6.2. By 2030, sustainable wildlife management and prey habitat management is established.

Action 6.2.1. Develop and/or revise wildlife management plans to include sustainable hunting regulations and prey species conservation targets.

Action 6.2.2. Integrate prey species needs in habitat management and land use planning.

Action 6.2.3. Conduct training workshops in "conservation friendly" habitat management and land use planning (see A 1.2.1).

Result 6.3. By 2035, competition and predation pressure from unrestrained dogs is reduced.

Action 6.3.1. Develop national strategies for the management of unrestrained dogs (or integrate it into National Action Plans see O 4).

Action 6.3.2. Organise and implement awareness raising events.

Action 6.3.3. Implement NAPs concerning lynx and prey to deal with unrestrained dogs (see A 9.2.3).

**Objective 7. To prevent and mitigate habitat degradation and fragmentation and enhance habitat quality for the Balkan lynx and its prey.**

Result 7.1. By 2035, key threats to current and potential Balkan lynx habitat are identified and prevention measures to safeguard habitat quality are implemented.

Action 7.1.1. Develop a network to monitor and evaluate existing and potential threats (e.g. logging, hydropower, mining, infrastructure projects, fire) to lynx habitat.

Action 7.1.2. Strengthen the institutional capacity for threat detection, evaluation, data management, and reporting/communication through proper training.

Action 7.1.3. Document the key threats to the Balkan lynx and compile them into a standardized transboundary database.

Action 7.1.4. Based on the assessment of identified threats, risk maps (such as fire risk maps) are created, and appropriate measures are implemented.

Result 7.2. By 2030, new protected areas are declared, and existing ones are expanded to safeguard key Balkan lynx habitats[7].

Action 7.2.1. Identify well-connected priority areas for Balkan lynx conservation.

Action 7.2.2. Develop Biodiversity Assessment for at least one priority area per country and justification for their protection.

Action 7.2.3. Initiate steps for declaring new protected areas to close gaps in the present network of PAs.

[7] See also GBF Targets presented in A-I and overview of existing protected areas in A-IV.

Action 7.2.4. Develop/update management plans for core Balkan lynx habitat areas, especially for relevant PAs (see A 1.3.1) and ensure implementation of the plans.

Result 7.3. By 2035, habitat quality and connectivity are improved through restoration of core population habitats and key ecological corridors.

Action 7.3.1. Develop guidelines for habitat restoration for Balkan lynx at national and range wide level.

Action 7.3.2. Assess habitat condition of core lynx areas and ecological corridors and identify degraded areas in need of restoration.

Action 7.3.3. Develop and implement habitat restoration plans together with relevant stakeholders and local communities.

**Objective 8. To minimize habitat fragmentation caused by current and future infrastructure developments, ensuring connectivity across the historic range, and enabling lynx recolonization, dispersal, and gene flow between subpopulations.**

Result 8.1. By 2027, all the existing, ongoing and upcoming development projects across key ecological corridors for Balkan lynx are identified and the impact is assessed (see R 1.1, 7.1).

Action 8.1.1. Identify and map existing and planned barriers within Balkan lynx core and potential habitats across all range countries and inform the relevant agencies.

Action 8.1.2. Assess the impact of main infrastructure projects on Balkan lynx habitats (see A 1.1.1, A 1.1.2).

Result 8.2. By 2028, existing guidelines on improvement of connectivity for wildlife across infrastructure projects are reviewed, adapted and shared among the range countries (see O 4).

Action 8.2.1. Review the existing guidelines for large carnivore connectivity and develop and share specific recommendations for the Balkan lynx.

Action 8.2.2. Support the integration of Balkan lynx needs into the National Biodiversity Strategies or NAPs (see O 4, R 9.2).

Action 8.2.3. Ensure the inclusion of mitigation of barriers and the maintenance of corridors into the National Action Plans (see A 4.1.1 & A 4.1.5).

Result 8.3. By 2030, construction plans are available, and funding is secured to mitigate existing barriers to lynx dispersal and ensure safe wildlife crossings.

Action 8.3.1. Produce construction plans incl. budgets to mitigate identified barriers to lynx/wildlife movements and implement the plans.

Action 8.3.2. Identify potential funding mechanisms / sources and develop a fundraising plan.

Result 8.4. By 2035, main Balkan lynx corridors are mitigated and protected.

Action 8.4.1. Prevent the construction of new barriers within critical Balkan lynx habitats and key ecological corridors.

Action 8.4.2. Maintain the permeability of existing corridors by legal protection of crucial corridors and improve their functionality (see R 7.2).

**Objective 9. To build baseline knowledge on Balkan lynx disease prevalence and prevent disease outbreaks.**

Result 9.1. By 2028, a comprehensive study on disease prevalence in the Balkan lynx population is carried out and a long-term monitoring scheme is established.

Action 9.1.1. Conduct a pathogen analysis in collaboration with the veterinary faculty in Skopje and other veterinary institutions.

Action 9.1.2. Based on this survey (see A 9.1.1), develop, share and implement a long-term health monitoring protocol for Balkan lynx.

Result 9.2. By 2035, the diseases outbreaks connected to the Balkan lynx are effectively mitigated and controlled.

Action 9.2.1. Investigate the risk of disease transmission from stray dogs and cats (wildcats and feral domestic cats).

Action 9.2.2. Conduct specialized training for veterinarians in rural areas for diseases in wild animals (where possible, intervention teams will be established separately or forming part of the bear/wolf intervention teams).

Action 9.2.3. Implement measures to prevent the spread of infectious diseases.

Action 9.2.4. Enforce and support sanitary hunting of foxes with mange.

**Objective 10. To mitigate effects of inbreeding through genetic rescue to create a genetically viable population of the Balkan lynx.**

Result 10.1. By 2026, a roadmap for genetic rescue of the remnant Balkan lynx population is developed, presented to, and endorsed by relevant authorities.

Action 10.1.1. Conduct a feasibility study and present the findings to all relevant institutions.

Action 10.1.2. Conduct an expert workshop to draft the genetic rescue roadmap.

Action 10.1.3. Model the lynx population development based on different management scenarios.

Action 10.1.4. Meet with authorities to discuss, endorse, and implement the roadmap.

Action 10.1.5. Engage with institutions in countries of source populations and the Linking Lynx platform to facilitate the implementation of the roadmap.

Result 10.2. By 2035, lynx individuals from the identified source population are successfully integrated in the Balkan lynx population.

Action 10.2.1. Based on the genetic rescue roadmap, release a sufficient number of lynx in multiple stages, starting with a pilot release by 2028 with the aim of achieving demographic integration by 2035.

Action 10.2.2. Update the reinforcement strategy based on new information (obtained through post-release monitoring).

Action 10.2.3. Proceed with population reinforcement according to the identified scenario (adaptive management).

**Objective 11. To establish and continuously apply demographic, health and genetic monitoring of the Balkan lynx and maintain a favorable conservation status.**

Result 11.1. By 2030 national bodies for Balkan lynx monitoring are established and maintained and monitoring activities are coordinated between range countries[8].

Action 11.1.1. Hold annual meetings of monitoring teams and partners.

Action 11.1.2. Share monitoring data through a common database (see R 7.1.2)[9].

Result 11.2. Knowledge and monitoring results are shared between lynx experts, relevant stakeholders and made publicly available (see R 4.3).

Action 11.2.1. Hold regular range-wide meetings between lynx experts and relevant stakeholders.

Result 11.3. Balkan lynx distribution, abundance, trends, reproduction, health and genetic status is known (see R 10.3).

Action 11.3.1. Continuously monitor the distribution, abundance, trend, reproduction, health status, genetic status of the Balkan lynx.

Action 11.3.2. Continuously collect opportunistic data throughout the whole Balkan lynx range.

Action 11.3.3. Establish year-round camera trap monitoring in collaboration with relevant stakeholders, where lynx have been detected in previous years.

Action 11.3.4. In three-year intervals, estimate the Balkan lynx density in core areas by means of Spatial Capture Recapture.

Result 11.4. Monitoring results are publicly available to track population development and provide feedback to interest groups.

Action 11.4.1. Produce and publish annual reports about the distribution, abundance, reproductions, and health and genetic monitoring results (see O 9).

[8] Such a scheme exists already for the countries with extant lynx populations but is kept here for reason of completeness.
[9] A database compiling Balkan lynx observations and related geo-references information exists and is maintained by the Balkan Lynx Recovery Programme.

Result 11.5. Monitoring results are recurrently integrated into the range-wide Strategy and the National Action Plans.

Action 11.5.1. Review the effectiveness of the range-wide Strategy, NAPs and in-situ conservation projects based on the monitoring reports.

Action 11.5.2. Adapt the range-wide Strategy, the NAPs, or the in-situ conservation projects if the monitoring results suggest a change in the approach (see O 4).

## 4. Logical Framework (LogFrame) for the Strategy

In the tabulated form of the LogFrame, Results are concretized by adding Indicators and define Outputs and possible Risks and Opportunities with regard to achieving the Result are considered.

Table 1. Results per Objective with control parameter.

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| **Objective 1** To promote sustainable socio-economic development that considers conservation needs in planning and implementation, mitigating negative impacts on lynx populations and their prey and habitats. | | |
| **Result 1.1** By 2029, criteria addressing the needs of lynx, their prey, and habitats are integrated into the legal frameworks for Strategic and Environmental Impact Assessments in all range countries (including transboundary context). | Adopted legislation texts | EU accession process, Greece and Bulgaria could provide input |
| **Result 1.2** By 2035, spatial plans (at national, local, PAs level) of the range countries integrate Balkan lynx conservation needs (see R 6.2). | Spatial Plans integrating lynx conservation needs | |
| **Result 1.3** By 2035, the management plans of important Balkan lynx (protected) areas integrate Balkan lynx conservation considerations, and sustainable wildlife management is ensured. | PAs Management plans integrating specific lynx conservation needs, increasing lynx and prey populations | Lack of commitment of PA management |
| **Result 1.4** By 2028, a review on the positive or negative impact of tourism on the Balkan lynx conservation is done, and recommendation on sustainable tourism furthering wildlife conservation is produced and distributed. | Review produced and distributed | |
| **Objective 2** To consider and support local people's needs and livelihoods to secure their support for reducing harmful or illegal practices hindering lynx conservation. | | |

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| **Result 2.1** By 2035, financing mechanisms are in place that support and preserve traditional livestock protection practices. | Financial mechanisms introduced | |
| **Result 2.2** By 2030, Local Action Groups (LAGs) are established in important lynx areas to strengthen local people's stewardship over natural resources. | Number of Local Action Groups | Local action groups recognized by EU, EU funding for rural development |
| **Result 2.3** By 2030, collaboration with hunting societies is strengthened and expanded to align hunting practices with lynx conservation goals and promote sustainable game management. | Number of hunting societies participating in joint training or awareness programs on lynx conservation and sustainable hunting | Changes of ownerships/presidenships of hunting societies might abruptly cease collaboration (as is the case with national parks).<br><br>Expand the monitoring areas beyond the capacities of BLRP members.<br>Better protection of the Balkan lynx and its prey species. |
| **Objective 3** To raise awareness of the Balkan lynx's status and to increase scientific and local knowledge and understanding of the species, sustaining its positive perception. | | |
| **Result 3.1** By 2035, knowledge about Balkan lynx is integrated into the official school curriculum. | Official school curricula | No interest, political changes<br>Exchange visits, already in place in Kosovo[10] |
| **Result 3.2** By 2030, capacity building programmes (CBP) tailored for specific stakeholder groups are developed and implemented. | CBP developed and implemented | |

[10] All references to Kosovo, whether the territory, institutions or population, in this document shall be understood in full compliance with United Nations Security Council Resolution 1244/99 and without prejudice to its status

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| **Result 3.3** By 2035, public awareness of the Balkan lynx is enhanced through different communication channels. | Repeat Human dimension survey to measure effect | Existing BLRP communication plan |
| **Objective 4** To increase international support, strengthen range-wide (transboundary) cooperation, and secure funding for implementing this Conservation Strategy through coordinated National Action Plans. | | |
| **Result 4.1** By 2027, National Action Plans to implement the Regional Conservation Strategy are adopted by the range countries and revised every 5 years. | National Action Plans developed | CMS Concerted Action |
| **Result 4.2** Every five years thereafter, the progress of implementation of the National Action Plan is tracked by national expert teams and authorities. | Progress report of NAPs | |
| **Result 4.3** By 2027, a transboundary (range-wide) Coordination Committee for the implementation of the Strategy is established and operational (see Chapter 5). | Coordination Committee established & MoU signed | Connection to Carpathian Convention Secretariat, Dinaric-Balkan-Pindos Large Carnivore Platform/EU Platforms, Bern Convention and its Group of Experts on Large Carnivores, BLRP |
| **Objective 5**: To understand and mitigate the Drivers of illegal killing of Balkan lynx and poaching of key prey species. | | |
| **Result 5.1** By 2027, Drivers of illegal killing of Balkan lynx and poaching of prey species are identified. | Report based on surveys | Reluctance to share true drivers of illegal killing/poaching, challenges in interpreting actual motivations, identifying the “right” people<br>Leverage existing networks, tailored actions based on the identified drivers |
| **Result 5.2** By 2035, society is aware of the impact of illegal killing of Balkan lynx and | Number of awareness raising activities | Awareness ≠ Behavior change, need for ongoing activities, corruption |

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| poaching of prey species and the reporting of wildlife crime cases is improved. | | Lynx as a charismatic species, pride can motivate protection, hunters benefit from sustainable populations |
| **Result 5.3** By 2035, the impact of illegal killing of lynx and poaching of key prey species is reduced across the current and potential future distribution areas of the lynx. | Number of prosecuted wildlife crime cases and lynx killed per year decrease relative to population size. | Underreporting of wildlife crimes, loss of trust if cases go unprosecuted, corruption<br>Increased trust in police/authorities - snowball effect, successful cases as precedent for other wildlife crimes |
| **Objective 6**: To ensure sufficient prey across the Balkan lynx's present and future distribution range. | | |
| **Result 6.1** By 2035, robust, scientifically based population monitoring of key prey species in their habitats is established and ongoing. | Standardized monitoring protocols, peer-reviewed scientific paper published. | Lack of trained people and capacity, resistance to new methods, lack of trust in collected data<br>Decision-making based on scientific data and international experience, trust-building with key stakeholder groups |
| **Result 6.2** By 2030, sustainable wildlife management and prey habitat management is established. | Wildlife management plans updated (including lynx & prey) and effect on populations is monitored<br>Number of trained people in “conservation friendly” habitat management and land use planning | Lack of trained people and capacity, lacking political will, resistance to new approaches, mistrust<br>International cooperation and examples |
| **Result 6.3** By 2035, competition and predation pressure from unrestrained dogs is reduced. | Number of unrestrained dogs removed or castrated/sterilized, number of awareness raising events | Lack of ownership/responsibility, low priority<br>Improved animal welfare, other country`s experiences, collaboration with diverse organizations |
| **Objective 7** To prevent and mitigate habitat degradation and fragmentation and enhance habitat quality for the Balkan lynx and its prey. | | |
| **Result 7.1** By 2035, key threats to current and potential Balkan lynx habitat are identified and | List of threats to Balkan lynx for each area. | Reformation of land use legislation in several countries, engaging with range countries |

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| prevention measures to safeguard habitat quality are implemented. | | Lack of the Management Plan for the (new) Protected Areas, unclear institutional responsibilities |
| **Result 7.2** By 2030, new protected areas are declared, and existing ones are expanded to safeguard key Balkan lynx habitats. | Number of expanded and new protected areas | |
| **Result 7.3** By 2035, habitat quality and connectivity are improved through restoration of core population habitats and key ecological corridors. | Reports on status and enhancement of national and where needed transboundary corridors available and shared. | Local communities and institutions support habitat restoration efforts |
| **Objective 8** To minimize habitat fragmentation caused by current and future infrastructure developments, ensuring connectivity across the historic range, and enabling lynx recolonization, dispersal, and gene flow between subpopulations. | | |
| **Result 8.1** By 2027, all the existing, ongoing and upcoming development projects across key ecological corridors for Balkan lynx are identified and the impact is assessed (see R 1.1, 7.1). | Map of development projects, impact assessment | Greater priority of economic development over nature conservation, lack of institutional responsibility, lack of knowledge |
| **Result 8.2** By 2028, existing guidelines on improvement of connectivity for wildlife across infrastructure projects are reviewed, adapted and shared among the range countries (see O 4). | Standardized methodologies/guidelines | Delay in adopting standardized guidelines by all countries |
| **Result 8.3** By 2030, construction plans are available, and funding is secured to mitigate existing barriers to lynx dispersal and ensure safe wildlife crossings. | Number of obstacles mitigated via green bridges/passages | |
| **Result 8.4** By 2035, main Balkan lynx corridors are mitigated and protected. | Number of protected corridors | |

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| **Objective 9:** To build baseline knowledge on Balkan lynx disease prevalence and prevent disease outbreaks. | | |
| **Result 9.1** By 2028, a comprehensive study on disease prevalence in the Balkan lynx population is carried out and a long-term monitoring scheme is established. | Published reports and publications | Lack of funds, insufficient sample size<br>First insight into Balkan lynx health |
| **Result 9.2** By 2035, the diseases outbreaks connected to the Balkan lynx are effectively mitigated and controlled. | Healthier Balkan lynx population through responsible dog/cat ownership | Lack of support by the authorities and hunters/veterinarians |
| **Objective 10:** To mitigate effects of inbreeding through genetic rescue to create a genetically viable population of the Balkan lynx. | | |
| **Results 10.1** By 2026, a roadmap for genetic rescue of the remnant Balkan lynx population is developed, presented to, and endorsed by relevant authorities. | Roadmap presented | Roadmap not accepted<br>A more streamlined approach for the genetic rescue |
| **Result 10.2** By 2035, lynx individuals from the identified source population are successfully integrated in the Balkan lynx population. | Lynx released | Resistance to genetic rescue by authorities and the public. Released lynx don't integrate into the population. |
| **Objective 11**: To establish and continuously apply demographic, health and genetic monitoring of the Balkan lynx and maintain a favorable conservation status. | | |
| **Result 11.1** By 2030 national bodies for lynx monitoring are established and maintained and monitoring activities are coordinated between range countries. | National monitoring for lynx is established | Governmental obstacles, lack of interest<br>Research larger areas and constant presence on the field; more focus on concrete conservation topics (e.g. genetic rescue) and science |
| **Result 11.2** Knowledge and monitoring results are shared between lynx experts, relevant stakeholders and made publicly available (see R 4.3). | Held workshops, published reports | Lack of interest by the governmental stakeholders<br>More streamlined and coordinated work |

| Objective/Result | Indicator/Output | Risks and Opportunities |
|---|---|---|
| **Results 11.3** Balkan lynx distribution, abundance, trends, reproduction, health and genetic status is known (see R 10.3). | Reports, (accepted) publications, conference participations (presentations, proceedings) | Increased knowledge |
| **Result 11.4** Monitoring results are publicly available to track population development and provide feedback to interest groups. | Monitoring results published and shared | |
| **Result 11.5** Monitoring results are recurrently integrated into the range-wide Strategy and the National Action Plans. | Monitoring results are used to improve the conservation plans | Lack of structures and means to respond to alarming monitoring results<br>Consistent monitoring allows for an adaptive management of Balkan lynx |

For the Actions per Result, the tabulated LogFrame includes the definition of Actors, Indicators, Timeline and a tentative Budget, wherever possible. Some of these parameters may have to be discussed and defined at national level and then integrated into the National Action Plans (see Chapter 5), so the following table has some gaps at the range-wide level.

Table 2. Action per Result and Objectives, including control parameters for the Actions.

| **Objective/Result/Action** | **Actor** | **Indicator** | **Timeline** |
|---|---|---|---|
| **Objective 1** To promote sustainable socio-economic development that considers conservation needs in planning and implementation, mitigating negative impacts on lynx populations and their prey and habitats. | | | |
| **Result 1.1** By 2029, criteria addressing the needs of lynx, their prey, and habitats are integrated into the legal frameworks for Strategic and Environmental Impact Assessments in all range countries (including transboundary context). | | | |
| **Action 1.1.1** Analyze the existing national SEA, EIA, Environmental Reports, Laws on Environmental Protection, and other relevant national legislation to identify gaps. | Legal experts, Ministries | Assessment reports | 2026-29 |
| **Action 1.1.2** Prepare draft amendments to the analyzed legislation, proposing the inclusion of criteria that specifically address the needs of lynx, their prey, and habitats. | Legal experts, Ministries | Draft amendments | 2029 |
| **Result 1.2** By 2035, spatial plans (at national, local, PAs level) of the range countries integrate Balkan lynx conservation needs (see R 6.2). | | | |
| **Action 1.2.1** Develop and conduct tailor-made capacity building programmes on eco-connectivity for spatial planners and decision makers (see A 6.2.3). | Donors, Experts, National authorities | Implemented capacity building programmes | 2027 cont. |
| **Action 1.2.2** Revise the local and PAs-level spatial plans (where existing) to integrate lynx conservation needs. | Local authorities, PA managers, BLRP | Revised spatial plans | 2035 |
| **Result 1.3** By 2035, the management plans of important Balkan lynx (protected) areas integrate lynx conservation considerations, and sustainable wildlife management is ensured. | | | |
| **Action 1.3.1** Update (or develop new) management plans of PAs integrating Balkan lynx conservation considerations and support implementation of specific Balkan lynx conservation actions (see A 7.2.4). | PA managers, BLRP, NGOs | Increase/decrease or | 2028 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| | | presence/expansion of Balkan lynx | |
| **Action 1.3.2** Assess the effectiveness of management plan implementation using standardized tools (e.g., METT), and propose revisions where necessary (see O 4). | NGOs, PA managers, BLRP | Evaluation Report | 2032 cont. |
| **Result 1.4** By 2028, a review on the positive or negative impact of tourism on the Balkan lynx conservation is done, and recommendation on sustainable tourism furthering wildlife conservation is produced and distributed. | | | |
| **Action 1.4.1** Compile a report on the impact of increasing tourism on wildlife in regions important for the Balkan lynx, including an overview of recommendations on wildlife friendly tourism. | NGOs, BLRP, Local Communities, Tourism operators | Report on impact of increasing tourism on wildlife regions | 2028 |
| **Objective 2** To consider and support local people's needs and livelihoods to secure their support for reducing harmful or illegal practices hindering lynx conservation. | | | |
| **Result 2.1** By 2035, financing mechanisms are in place that support and preserve traditional livestock protection practices. | | | |
| **Action 2.1.1** Develop and promote locally adapted livestock emergency protection measures in collaboration with local communities. | Experts, NGOs, BLRP, National authorities, Local communities | Manual for application of measures<br>Emergency livestock kits | 2027 |
| **Action 2.1.2** Develop a Small Grants Programme to support local communities in the implementation of identified livestock protection measures (see A 2.2.3). | Donors, Experts, NGOs, National authorities, BLRP | Developed programme (with indicators to measure the efficiency) | 2028 |
| **Action 2.1.3** Implement the Small Grants Programme in emergency areas. | Donors, Local communities | Number of implemented actions | 2035 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| | | SGP effectiveness evaluation report | |
| **Result 2.2** By 2030, Local Action Groups (LAGs) are established in important lynx areas to strengthen local people's stewardship over natural resources. | | | |
| **Action 2.2.1** Establish at least one Local Action Group e.g. per (protected) area relevant for lynx conservation. | Local communities, PA managers, Municipalities, (NGOs) | Number of established Local Action Groups | 2030 |
| **Action 2.2.2** Local Action Groups develop their specific work programmes. | LAGs | Developed operational programme | 2030 |
| **Action 2.2.3** Local Action Groups apply for funding to implement their programmes. | LAGs, Donors | Number of funded initiatives | 2030 |
| **Result 2.3** By 2030, collaboration with hunting societies is strengthened and expanded to align hunting practices with lynx conservation goals and promote sustainable game management. | | | |
| **Action 2.3.1**. Organize regular workshops and awareness-raising events with hunting societies to promote sustainable hunting practices and the importance of the Balkan lynx as part of the ecosystem. | NGOs, BLRP, Hunting associations | Number of workshops/events<br>Number of hunting associations participating | 2030 |
| **Action 2.3.2.** Develop joint monitoring and reporting protocols with hunters to improve data collection on prey species and lynx sightings. | NGOs, BLRP, Hunting associations | Joint monitoring protocol | 2030 |
| **Action 2.3.3.** Propose/provide incentives (e.g. recognition, co-management opportunities, or equipment support) for hunting groups that actively contribute to lynx conservation and comply with sustainable hunting agreements. | NGOs, BLRP, Hunting associations | Number of hunting groups receiving incentives<br>Number of joint monitoring or conservation activities conducted | 2030 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| | | with incentivized groups | |
| **Objective 3** To raise awareness of the Balkan lynx's status and to increase scientific and local knowledge and understanding of the species, sustaining its positive perception. | | | |
| **Result 3.1** By 2035, knowledge about Balkan lynx is integrated into the official school curriculum. | | | |
| **Action 3.1.1** Draft school curriculum that integrates knowledge about Balkan lynx. | Experts, Education authorities, Environmental authorities, BLRP, Schools, NGOs | Developed school curriculum | 2027-28 |
| **Action 3.1.2** Conduct training for schoolteachers on introducing and implementing the school curriculum. | Experts, National authorities, Schools, BLRP, NGOs | Number of conducted trainings | 2028 cont. |
| **Action 3.1.3** Implement the school curriculum through supported actions (mainly in primary schools). | Donors, Schools, BLRP, NGOs | Number of implemented actions | 2035 |
| **Action 3.1.4** Monitor and evaluate the effectiveness of the curriculum implementation. | Schools, National authorities, BLRP, NGOs | Effectiveness report | 2035 |
| **Result 3.2** By 2030, capacity building programmes (CBP) tailored for specific stakeholder groups are developed and implemented. | | | |
| **Action 3.2.1** Develop capacity building programmes for specific stakeholders' groups (hunters, livestock farmers, journalists, rangers, foresters, tourism sector, and others). | Experts, National authorities, Specific group leaders, BLRP, NGOs | CBP developed | 2028 |
| **Action 3.2.2** Implement capacity-building programmes. | Experts, National authorities, Stakeholder groups, BLRP, NGOs | Implemented CBP | 2035 |
| **Result 3.3** By 2035, public awareness of Balkan lynx is enhanced through different communication channels. | | | |
| **Action 3.3.1** Conduct regular human dimension survey and develop five-year communications plan. | Experts, BLRP, National authorities (PR), NGOs | Communication plan | 2027 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 3.3.2** Implement specific actions to raise awareness of the Balkan lynx, its value, and conservation in collaboration with different stakeholders. | Experts, National authorities (PR), BLRP, NGOs | Number of promo events/social media promo | 2027-2035 |
| **Action 3.3.3** Develop and release media information packages. | BLRP, National authorities (PR), NGOs | Number of media releases addressing lynx conservation<br>Media information developed | 2035 |
| **Objective 4** To increase international support, strengthen range-wide (transboundary) cooperation, and secure funding for implementing this Conservation Strategy through coordinated National Action Plans. | | | |
| **Result 4.1** By 2027, National Action Plans to implement the Regional Conservation Strategy are adopted by the range countries and revised every 5 years. | | | |
| **Action 4.1.1** Establish an expert group and identify key national authorities (line ministries and other relevant institutions) for developing and coordinating the implementation of the NAPs. | Expert WGs (incl. BLRP), Line ministries | Established WGs | 2027 |
| **Action 4.1.2** Draft the NAP, including expert and public consultation. | Expert WGs (incl. BLRP), Line ministries | First draft NAP | 2027 |
| **Action 4.1.3** Refine, finalize and implement NAPs according to national needs/legislation. | Expert WGs (incl. BLRP), Line ministries, Relevant institutions | Implemented NAP | 2029 |
| **Action 4.1.4** Promote and raise awareness of the NAPs, particularly among local communities, target municipalities, and managing authorities of key Balkan lynx (protected) areas. | Relevant national authorities, BLRP | Number of awareness raising campaigns and events | 2029 cont. |
| **Result 4.2** Every five years thereafter, the progress of implementation of the National Action Plans is tracked by national expert teams and national authorities. | | | |
| **Action 4.2.1** Five years after the adoption of the NAPs, prepare a progress report on its implementation to serve as a baseline for updating the NAPs. | Expert WGs (incl. BLRP), Line ministries | Progress report | 2035 *depending |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| | | | on the NAP adoption |
| **Action 4.2.2** Revise the NAPs based on the findings of the progress report. | Expert WGs (incl. BLRP), Line ministries | Revised NAP adopted | 2035 |
| **Result 4.3** By 2027, a transboundary (range-wide) Coordination Committee for the implementation of the Strategy is established and operational (see Chapter 5). | | | |
| **Action 4.3.1** Establish a Balkan lynx Coordination Committee, if possible, under existing platforms and define its structure (e.g. secretariat) and modus operandi. | UNEP/Carpathian Convention, Bern Convention, CMS, BLRP | Established Coordination Committee | 2026-2027 |
| **Action 4.3.2** Develop a Balkan lynx portfolio (with tentative budgets, including funding for the activities of the coordination committee and for range-wide tasks), involving government agencies, NGOs and academia, incorporating existing transboundary initiatives where feasible. | Coordination Committee | Developed BL portfolio | 2027 |
| **Action 4.3.3** Organize yearly meetings of the coordination committee to review the progress made. | Committee coordinator | Meeting reports distributed | Yearly |
| **Objective 5** To understand and mitigate the Drivers of illegal killing of lynx and poaching of key prey species. | | | |
| **Result 5.1** By 2027, Drivers of illegal killing of lynx and poaching of prey species are identified. | | | |
| **Action 5.1.1** Prepare (incl. identifying target groups) and conduct surveys. | BLRP | Conducted surveys in North Macedonia, Albania, and Kosovo (under UNSCR 1244/99) | 2027 |
| **Action 5.1.2** Produce and share reports based on the survey results. | BLRP | 3 Country specific reports & 1 regional summary report | 2027 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Result 5.2** By 2035, society is aware of the impact of illegal killing of Balkan lynx and poaching of prey species and the reporting of wildlife crime cases is improved. | | | |
| **Action 5.2.1** Conduct awareness raising campaigns with a call to action. | BLRP, National authorities, Hunting Associations | Where possible (due to data sensitivity), published wildlife crime cases<br>1 international & 3 national campaigns & 1 campaign hunting associations | 2028 cont. |
| **Result 5.3** By 2035, the impact of illegal killing of lynx and poaching of key prey species is reduced across the current and potential future distribution areas of the lynx. | | | |
| **Action 5.3.1** Establish an official Wildlife Crime Unit in each range country and enhance the cooperation. | National authorities | 1 Unit in each range country | 2030 |
| **Action 5.3.2** Conduct training workshops on assessing and recording wildlife crime cases (police), and on how to effectively present such cases in court (lawyers). | National authorities, BLRP, Interpol | Number of conducted training workshops for police & lawyers | 2026 cont. |
| **Action 5.3.3** Establish a wildlife crime reporting system with a defined protocol for responsibilities, including a hotline to the Wildlife Crime Unit. | National authorities | National reporting systems established | 2030 |
| **Action 5.3.4** Monitor and prevent wildlife crime cases related to lynx and prey species. | National authorities, PA managers, hunting associations, BLRP | Annual wildlife crime report (including recommendations for changes in legislation, where necessary) | 2027 cont. |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Objective 6** To ensure sufficient prey across the Balkan lynx's present and future distribution range. | | | |
| **Result 6.1** By 2035, robust, scientifically based population monitoring of key prey species in their habitats is established and ongoing. | | | |
| **Action 6.1.1** Agree and adopt scientifically based, joint monitoring methods and implement them in all range countries. | BLRP, National authorities, PA managers, hunting associations, Wildlife management authorities | Approved national monitoring protocols | 2027 |
| **Action 6.1.2** Conduct regular standardized monitoring of prey species. | BLRP, National Authorities, PA managers, hunting associations, wildlife management authorities | Prey population data available in all range countries. | 2027 cont. |
| **Action 6.1.3** Publish monitoring reports. | BLRP, National authorities, PA managers, Hunting associations, Wildlife management authorities | Reports from each country | 2028 cont. |
| **Result 6.2** By 2030, sustainable wildlife management and prey habitat management is established. | | | |
| **Action 6.2.1** Develop and/or revise wildlife management plans to include sustainable hunting regulations and prey species conservation targets. | BLRP, National authorities, PA management, Hunting associations, Wildlife management authorities | Revised national wildlife management plans | 2030 |
| **Action 6.2.2** Integrate prey species needs in habitat management and land use planning. | National authorities, PA managers | Environmental impact assessments include prey targets | 2030 |
| **Action 6.2.3** Conduct training workshops in “conservation friendly” habitat management and land use planning (see A 1.2.1). | National authorities, BLRP, PA managers | Number of professionals (planners, foresters, municipal staff) trained per country | 2027 cont. |
| **Result 6.3** By 2035, competition and predation pressure from unrestrained dogs is reduced. | | | |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 6.3.1** Develop national strategies for the management of unrestrained dogs (or integrate it into National Action Plans see O 4) | National authorities, Veterinary institutions, PA managers, Animal welfare/rights organizations, BLRP | Adopted NAPs | 2028 |
| **Action 6.3.2** Organise and implement awareness raising events. | BLRP, National authorities, Animal welfare/right organizations, Municipalities | Number of awareness raising events | 2027 cont. |
| **Action 6.3.3** Implement NAPs concerning lynx and prey to deal with unrestrained dogs (see A 9.2.3). | Vets, National authorities, BLRP, Municipalities | Number of unrestrained dogs castrated/sterilized or removed | 2030 |
| **Objective 7** To prevent and mitigate habitat degradation and fragmentation and enhance habitat quality for the Balkan lynx and its prey. | | | |
| **Result 7.1** By 2035, key threats to current and potential Balkan lynx habitat are identified and prevention measures to safeguard habitat quality are implemented. | | | |
| **Action 7.1.1** Develop a network to monitor and evaluate existing and potential threats (e.g. logging, hydropower, mining, infrastructure projects, fire) to lynx habitat. | National authorities, local communities and NGOs, BLRP | Established network | 2028 |
| **Action 7.1.2** Strengthen the institutional capacity for threat detection, evaluation, data management, and reporting/communication through proper training. | PA managers, Forest agencies, Municipalities, NGOs, IUCN WCPA, BLRP | Conducted Trainings | 2030 |
| **Action 7.1.3** Document the key threats to the Balkan lynx and compile them into a standardized transboundary database. | PA managers, Forest agencies, Municipalities, NGOs, BLRP | Number of registered threats | 2035 |
| **Action 7.1.4** Based on the assessment of identified threats, risk maps (such as fire risk maps) are created, and appropriate measures are implemented. | PA managers, Forest agencies, Municipalities, NGOs, IUCN WCPA, BLRP | Maps, Report on implemented measures | 2035 |
| **Result 7.2** By 2030, new protected areas are declared, and existing ones are expanded to safeguard key Balkan lynx habitats. | | | |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 7.2.1** Identify well-connected priority areas for Balkan lynx conservation. | BLRP, Protected Area Agency, NGOs | List of priority areas | 2026 |
| **Action 7.2.2** Develop Biodiversity Assessment for at least one priority area and justification for their protection. | BLRP, Universities, NGOs, Experts, Municipalities, Ministries | Evaluation reports published | 2028 |
| **Action 7.2.3** Initiate steps for declaring new protected areas to close gaps in the present network of PAs. | Governments, Local communities, NGOs, BLRP | Listing proposals and declaring legislation | 2028 |
| **Action 7.2.4** Develop/update management plans for core Balkan lynx habitat areas, especially for relevant PAs (see A 1.3.1) and ensure implementation of the plans. | PA managers, NGOs, BLRP | Number of new Management Plans, Number of updated MPs | 2030 |
| **Result 7.3** By 2035, habitat quality and connectivity are improved through restoration of core population habitats and key ecological corridors. | | | |
| **Action 7.3.1** Develop guidelines for habitat restoration for Balkan lynx at national and range wide level. | National authorities, Municipalities, NGOs, Forest Agencies, Agriculture University, PA managers | Developed guidelines | 2028 |
| **Action 7.3.2** Assess habitat condition of core lynx areas and ecological corridors and identify degraded areas in need of restoration. | NGOs, Forest agencies, Agriculture University, PA managers | Reports | 2028 |
| **Action 7.3.3** Develop and implement habitat restoration plans together with relevant stakeholders and local communities. | National authorities, Municipalities, NGOs, Forest agencies, Agriculture University, PA managers, Local communities | Hectares (ha) of restored habitat | 2030 |
| **Objective 8** To minimize habitat fragmentation caused by current and future infrastructure developments, ensuring connectivity across the historic range, and enabling lynx recolonization, dispersal, and gene flow between subpopulations. | | | |
| **Result 8.1** By 2027, all the existing, ongoing and upcoming development projects across key ecological corridors for Balkan lynx are identified and the impact is assessed (see R 1.1, 7.1). | | | |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 8.1.1** Identify and map existing and planned barriers within Balkan lynx core and potential habitats across all range countries and inform the relevant agencies. | National authorities, Legal experts, NGOs, BLRP | Map of development projects, report shared | 2027 |
| **Action 8.1.2** Assess the impact of main infrastructure projects on Balkan lynx habitats (see A 1.1.1, A 1.1.2). | BLRP, Experts, NGOs, Ministries | Assessment Report produced and shared | 2027 |
| **Result 8.2** By 2028, existing guidelines on improvement of connectivity for wildlife across infrastructure projects are reviewed, adapted and shared among the range countries (see O 4). | | | |
| **Action 8.2.1** Review the existing guidelines for large carnivore connectivity and develop and share specific recommendations for the Balkan lynx. | National authorities, Legal experts, NGOs, BLRP | List of the management recommendations provided and included to the EIA's, Spatial plans and National Action Plan | 2028 |
| **Action 8.2.2** Support the integration of Balkan lynx needs into the National Biodiversity Strategies or NAPs (see O 4, R 9.2). | National authorities, Legal experts, NGOs, BLRP | Consideration of Balkan lynx needs are integrated | 2028 |
| **Action 8.2.3** Ensure the inclusion of mitigation of barriers and the maintenance of corridors into the National Action Plans (see A 4.1.1 & A 4.1.5). | National authorities, Legal experts, NGOs, BLRP | Number of advocacy meetings<br>Number of stakeholders involved | 2028 |
| **Result 8.3** By 2030, construction plans are available, and funding is secured to mitigate existing barriers to lynx dispersal and ensure safe wildlife crossings. | | | |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 8.3.1** Produce construction plans incl. budgets to mitigate identified barriers to lynx/wildlife movements and implement the plans. | National authorities, NGOs | Construction plans (including budget plan)<br>Number of mitigated barriers | 2030 |
| **Action 8.3.2** Identify potential funding mechanisms/sources and develop a fundraising plan. | National authorities, NGOs, Donors | Fundraising plan | 2030 |
| **Result 8.4** By 2035, main Balkan lynx corridors are mitigated and protected. | | | |
| **Action 8.4.1** Prevent the construction of new barriers within critical Balkan lynx habitats and key ecological corridors. | National authorities, Legal experts, Justice institutions, NGOs, relevant conventions for Balkan lynx protections, EU institutions | Inventory of planned infrastructure threatening the connectivity | 2028 |
| **Action 8.4.2** Maintain the permeability of existing corridors by legal protection of crucial corridors and improve their functionality (see R 7.2). | National authorities, Donors, Legal experts, Developers | Legislation, bylaw | 2028 cont. |
| **Objective 9** To build baseline knowledge on Balkan lynx disease prevalence and prevent disease outbreaks. | | | |
| **Result 9.1** By 2028, a comprehensive study on disease prevalence in the Balkan lynx population is carried out and a long-term monitoring scheme is established. | | | |
| **Action 9.1.1** Conduct a pathogen analysis in collaboration with the veterinary faculty in Skopje and other veterinary institutions. | Veterinary Faculties of Skopje, Tirana, Zagreb; BLRP | Report/publication | 2028 |
| **Action 9.1.2** Based on this survey (see A 9.1.1), develop, share and implement a long-term health monitoring protocol for Balkan lynx. | Vet Faculty Skopje; Vet Faculty Zagreb; BLRP, National vet. Agencies | Health monitoring protocol available and used | 2028 |
| **Result 9.2** By 2035, the diseases outbreaks connected to the Balkan lynx are effectively mitigated and controlled. | | | |
| **Action 9.2.1** Investigate the risk of disease transmission from stray dogs and cats (wildcats and feral domestic cats). | Vet Faculties, Municipalities, BLRP | Report | 2027 |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 9.2.2** Conduct specialized training for veterinarians in rural areas for diseases in wild animals (where possible, intervention teams will be established separately or forming part of the bear/wolf intervention teams). | Vet Faculties, BLRP, Ministries of environment, other relevant state authorities | Conducted training/s | 2027-28 cont. |
| **Action 9.2.3** Implement measures to prevent the spread of infectious diseases. | Municipalities, Ministry of Agriculture (forest department. In KOS and hunting sector in MKD), Hunters, BLRP | Balkan lynx disease prevalence | 2030 cont. |
| **Action 9.2.4** Enforce and support sanitary hunting of foxes with mange. | Hunting Federation; hunting societies; Food and Veterinary Agency | Number of foxes with mange on camera-traps | 2035 |
| **Objective 10** To mitigate effects of inbreeding through genetic rescue to create a genetically viable population of the Balkan lynx. | | | |
| **Results 10.1** By 2026, a roadmap for genetic rescue of the remnant Balkan lynx population is developed, presented to, and endorsed by relevant authorities. | | | |
| **Action 10.1.1.** Conduct a feasibility study and present the findings to all relevant institutions. | Relevant central and local institutions, BLRP, NGOs, Ministries | Endorsed feasibility study | 2026 |
| **Action 10.1.2** Conduct an expert workshop to draft the genetic rescue roadmap. | Relevant central and local institutions, BLRP, NGOs | Roadmap | 2026 |
| **Action 10.1.3** Model the population development based on different management scenarios. | BLRP | Best scenario for future management identified | 2026 |
| **Activity 10.1.4** Meet with authorities to discuss, endorse, and implement the roadmap. | Relevant central and local institutions, BLRP, NGOs, Ministries | held meetings | 2025 cont. |
| **Activity 10.1.5** Engage with institutions in countries of source populations and the Linking Lynx platform to facilitate the implementation of the roadmap. | Relevant central and local institutions, BLRP, NGOs, Ministries | held meetings | 2026 |
| **Result 10.2** By 2035, lynx individuals from the identified source population are successfully integrated in the Balkan lynx population. | | | |

| Objective/Result/Action | Actor | Indicator | Timeline |
|---|---|---|---|
| **Action 10.2.1** Based on the genetic rescue roadmap, release a sufficient number of lynx in multiple stages, starting with a pilot release by 2028 with the aim of achieving demographic integration by 2035. | Ministries, BLRP | Number of newly integrated lynx with reproduction | 2035 |
| **Action 10.2.2** Update the reinforcement strategy based on new information (obtained through post-release monitoring). | BLRP | Annual/biannual update of the reinforcement strategy | 2035 |
| **Action 10.2.3** Proceed with population reinforcement according to the identified scenario (adaptive management). | Ministries, BLRP | Population expansion, number of reproductions | 2035 cont. |
| **Objective 11** To establish and continuously apply demographic, health and genetic monitoring of the Balkan lynx and maintain a favorable conservation status. | | | |
| **Result 11.1** By 2030 national bodies for lynx monitoring are established and maintained and monitoring activities are coordinated between range countries[11]. | | | |
| **Action 11.1.1** Hold annual meetings of monitoring teams and partners. | BLRP, National authorities | Meeting notes | 2030 cont. |
| **Action 11.1.2** Share Monitoring data through a common database (see R 7.1.2). | BLRP | Shared data | 2030 cont. |
| **Result 11.2** Knowledge and monitoring results are shared between lynx experts, relevant stakeholders and made publicly available (see R 4.3). | | | |
| **Action 11.2.1**. Hold regular range-wide meetings between lynx experts and relevant stakeholders. | Relevant central and local institutions, BLRP, NGOs | Meeting notes, reports | 2030 cont. |
| **Result 11.3** Balkan lynx distribution, abundance, trends, reproduction, health and genetic status is known (see R 10.3). | | | |
| **Action 11.3.1** Continuously monitor the distribution, abundance, trend, reproduction, health status, genetic status of the Balkan lynx. | BLRP | Reports and/or publications | 2030 cont. |

[11] Such a scheme exists already for the countries with extant lynx populations but is kept here for reason of completeness.

| **Objective/Result/Action** | **Actor** | **Indicator** | **Timeline** |
|---|---|---|---|
| **Action 11.3.2** Continuously collect opportunistic data throughout the whole Balkan lynx range. | BLRP | Collected data | 2030 cont. |
| **Action 11.3.3** Establish year-round camera trap monitoring in collaboration with relevant stakeholders, where lynx have been detected in previous years. | BLRP, Hunting associations, PA managers | Collected data | 2030 cont. |
| **Action 11.3.4** In three-year intervals, estimate the Balkan lynx density in core areas by means of Spatial Capture Recapture. | BLRP | Lynx population density estimates | 2030 cont. |
| **Result 11.4** Monitoring results are publicly available to track population development and provide feedback to interest groups. | | | |
| **Action 11.4.1** Produce and publish annual reports about the distribution, abundance, reproductions, and health and genetic monitoring results (see O 9). | BLRP | Annual Reports | Ongoing |
| **Result 11.5** Monitoring results are recurrently integrated into the range-wide Strategy and the National Action Plans. | | | |
| **Action 11.5.1** Review the effectiveness of the range-wide Strategy, NAPs and in-situ conservation projects based on the monitoring reports. | BLRP, Coordination Committee, National authorities | Comparative review reports | Ongoing |
| **Action 11.5.2** Adapt the range-wide Strategy, the NAPs, or the in-situ conservation projects if the monitoring results suggest a change in the approach (see O4). | Coordination Committee and all implementing institutions | All plans and programmes adapted to new findings | Ongoing |

# 5 Implementation and Revision of the Strategy

The **Range-wide Strategy for the Rescue and Conservation of the Balkan Lynx *Lynx lynx balcanicus*** has a lifespan of 10 years, up to 2035. The *Strategy* is implemented by and in the Range States, best according to a National Action Plan (see Chapter 5.2), by the governmental agencies involved, but also through projects and programmes of community organizations, NGOs, or scientific institutions. All partners involved in the implementation are responsible for the monitoring and evaluation of their projects with regard to achieving the Results and Objectives. The Coordination Committee (see Result 4.3) must be informed on the progress of the implementing projects or should actively request information from any implementing partner. The Coordination Committee is also the body to discuss with all partners if any adaptation or amendment of the *Strategy* is needed. A mid-term evaluation is recommended in five years after the endorsement of the *Strategy*, and after ten years, the *Strategy* should be revisited and revised. During the ten years of implementation of this version, regular and timely reporting and mutual information (see LogFrame above for details) must facilitate the implementation of the *Strategy* and all related work plans and projects.

## 5.1 Budget and funding for the implementation of the Strategy

The implementation of the Strategy will require adequate funding to carry out the Actions defined. Generally, the Actions as defined in the LogFrame (Table 2) come with a tentative budget. However, as this is a range-wide strategic plan including several countries with considerable differences regarding the status of the Balkan lynx, wildlife and habitat conservation in general, but also with regard to the already ongoing lynx conservation efforts, the participants of the workshops for the development of the *Strategy* concluded that the detailed planning and the identification of the financial needs has to be done at national or transboundary level. The allocation of budgets should happen at three levels:

- Each National Action Plan (NAP - Chapter 5.3) should come with an implementation plan including an estimation of the financial requirements,
- At the range-wide and international level, a common plan to implement the range-wide and over-arching Results of the *Strategy*. This planning is best done by the Coordination Committee as soon as it is established (see Result 4.3, Action 4.3.2),
- Many of the Results listed above can be defined and implemented as stand-alone projects, which will ease both the planning and the fundraising.

Certain Results (e.g. those related to general wildlife management, spatial planning or infrastructure development) are clearly in the responsibility of the national institution and agencies and may need to be considered under broader national plans and budgets. However, international cooperation will allow a synergistic approach reducing costs. Results requiring research are best implemented by institutions with scientific expertise—such as universities, research institutes, or conservation programmes engaged in field-based research. Conservation projects based on Results in the Strategy are typically implemented by NGOs, Local Action Groups or partnerships.

Funding may be asked for from institutional donors in the frame of biodiversity conservation projects, from commercial or private donors, or from research grants. As the Balkan lynx is a Critically Endangered species, there are also species conservation grant opportunities available, which are restricted to threatened species.

## 5.2 Priority Results by the Range States

To inform the development of National Action Plans (see Chapter 5.2), the representatives of the Range States and all participants of the workshop to finalize the Strategy (2−3 June 2025, Skopje, North Macedonia - see A-V) have prioritized the Results per country:

Table 3. Prioritization of Results per range Country.

| Objective/Result | North Mace-donia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herze-govina | Monte-negro |
|---|---|---|---|---|---|---|---|---|
| **Objective 1** To promote sustainable socio-economic development that considers conservation needs in planning and implementation, mitigating negative impacts on lynx populations and their prey and habitats. | | | | | | | | |
| **Result 1.1** By 2029, criteria addressing the needs of lynx, their prey, and habitats are integrated into the legal frameworks for Strategic and Environmental Impact Assessments in all range countries (including transboundary context). | 2 | 1 | 1 | 1 | NA | 3 | NA | NA |
| **Result 1.2** By 2035, spatial plans (at national, local, PAs level) of the range countries integrate Balkan lynx conservation needs (see R 6.2). | 1 | 2 | 2 | 2 | NA | 3 | NA | NA |
| **Result 1.3** By 2035, the management plans of important Balkan lynx (protected) areas integrate Balkan lynx conservation considerations, and sustainable wildlife management is ensured. | 1 | 1 | 2 | 3 | NA | 3 | NA | NA |
| **Result 1.4** By 2028, a review on the positive or negative impact of tourism on the Balkan lynx conservation is done, and recommendation on sustainable tourism furthering wildlife conservation is produced and distributed[12]. | 2 | 2 | 1 | / | / | / | / | / |
| **Objective 2** To consider and support local people's needs and livelihoods to secure their support for reducing harmful or illegal practices hindering lynx conservation. | | | | | | | | |

[12] The missing prioritization is to be further discussed at national level

| Objective/Result | North Mace-donia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herze-govina | Monte-negro |
|---|---|---|---|---|---|---|---|---|
| **Result 2.1** By 2030, financing mechanisms are in place that support and preserve traditional livestock protection practices. | 3 | 1 | 2 | 3 | NA | 3 | 1 | NA |
| **Result 2.2** By 2030, Local Action Groups (LAGs) are established in important lynx areas to strengthen local people's stewardship over natural resources. | 2/3 | 3 | 1 | 3 | NA | 1 | 2 | NA |
| **Result 2.3** By 2030, collaboration with hunting societies is strengthened and expanded to align hunting practices with lynx conservation goals and promote sustainable game management[13]. | 1 | 1 | 1 | / | / | / | / | / |
| **Objective 3** To raise awareness of the Balkan lynx's status and to increase scientific and local knowledge and understanding of the species, sustaining its positive perception. | | | | | | | | |
| **Result 3.1** By 2035, knowledge about Balkan lynx is integrated into the official school curriculum. | 2 | 1 (in place) | 1 | 3 | NA | 3 | NA | NA |
| **Result 3.2** By 2030, capacity building programmes (CBP) tailored for specific stakeholder groups are developed and implemented. | 1/2 | 2 | 1 | 1 | NA | 1 | NA | NA |
| **Result 3.3** By 2035, public awareness of Balkan lynx is enhanced through different communication channels. | 1 | 1 | 2 | 1 | 3 | 1 | NA | NA |
| **Objective 4** To increase international support, strengthen range-wide (transboundary) cooperation, and secure funding for implementing this Conservation Strategy through coordinated National Action Plans. | | | | | | | | |
| **Result 4.1** By 2027, National Action Plans to implement the Regional Conservation Strategy are adopted by the range countries and revised every 5 years. | 1 | 1 | 1 | 3 | NA | 3 | NA | 2 |

[13] The missing prioritization is to be further discussed at national level

| Objective/Result | North Mace-donia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herze-govina | Monte-negro |
|---|---|---|---|---|---|---|---|---|
| **Result 4.2** Every five years thereafter, the progress of implementation of the National Action Plan is tracked by national expert teams and authorities. | 1 | 2 | 1 | 3 | NA | 3 | NA | 2 |
| **Result 4.3** By 2027, a transboundary (range-wide) Coordination Committee for the implementation of the Strategy is established and operational (see Chapter 5). | 1/2 | 1 | 2 | 1 | 2 | 1 | 1 | 3 |
| **Objective 5**: To understand and mitigate the Drivers of illegal killing of Balkan lynx and poaching of key prey species. | | | | | | | | |
| **Result 5.1** By 2027, Drivers of illegal killing of Balkan lynx and poaching of prey species are identified. | 1/2 | 1 | 2 | 1 | 1 | 1 | NA | NA |
| **Result 5.2** By 2035, society is aware of the impact of illegal killing of Balkan lynx and poaching of prey species and the reporting of wildlife crime cases is improved. | 1 | 1 | 1 | 1 | 1 | 1 | NA | NA |
| **Result 5.3** By 2035, the impact of illegal killing of lynx and poaching of key prey species is reduced across the current and potential future distribution areas of the lynx. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | NA |
| **Objective 6**: To ensure sufficient prey across the Balkan lynx's present and future distribution range. | | | | | | | | |
| **Result 6.1** By 2035, robust, scientifically based population monitoring of key prey species in their habitats is established and ongoing. | 2 | 1 | 1 | 1 | NA | 1 | 2 | 1 |
| **Result 6.2** By 2030, sustainable wildlife management and prey habitat management is established. | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 1 |
| **Result 6.3** By 2035, competition and predation pressure from unrestrained dogs is reduced. | 2/3 | 1 | 3 | 2 | 3 | 1 | 3 | NA |

| Objective/Result | North Macedonia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herzegovina | Montenegro |
|---|---|---|---|---|---|---|---|---|
| **Objective 7** To prevent and mitigate habitat degradation and fragmentation and enhance habitat quality for the Balkan lynx and its prey. | | | | | | | | |
| **Result 7.1** By 2035, key threats to current and potential Balkan lynx habitat are identified and prevention measures to safeguard habitat quality are implemented. | 3 | 1 | 1 | 1 | 2 | 1 | NA | NA |
| **Result 7.2** By 2030, new protected areas are declared, and existing ones are expanded to safeguard key Balkan lynx habitats. | 1 | 1 | 2 | 3 | 3 | 3 | NA | NA |
| **Result 7.3** By 2035, habitat quality and connectivity are improved through restoration of core population habitats and key ecological corridors. | 1 | 1 | 1 | 1 | 2 | 3 | 1 | NA |
| **Objective 8** To minimize habitat fragmentation caused by current and future infrastructure developments, ensuring connectivity across the historic range, and enabling lynx recolonization, dispersal, and gene flow between subpopulations. | | | | | | | | |
| **Result 8.1** By 2027, all the existing, ongoing and upcoming development projects across key ecological corridors for Balkan lynx are identified and the impact is assessed (see R 1.1, 7.1). | 1/2 | 1 | 1 | 2 | 1 | 1 | NA | NA |
| **Result 8.2** By 2028, existing guidelines on improvement of connectivity for wildlife across infrastructure projects are reviewed, adapted and shared among the range countries (see O 4). | 2 | 1 | 2 | 1 | 3 | 1 | 1 | NA |
| **Result 8.3** By 2030, construction plans are available, and funding is secured to mitigate existing barriers to lynx dispersal and ensure safe wildlife crossings. | 1 | 2 | 2 | 1 | 2 | 3 | 1 | NA |
| **Result 8.4** By 2035, main Balkan lynx corridors are mitigated and protected. | | 2 | 1 | 1 | 1 | 3 | NA | NA |

| Objective/Result | North Mace-donia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herze-govina | Monte-negro |
|---|---|---|---|---|---|---|---|---|
| **Objective 9:** To build baseline knowledge on Balkan lynx disease prevalence and prevent disease outbreaks. | | | | | | | | |
| **Result 9.1** By 2028, a comprehensive study on disease prevalence in the Balkan lynx population is carried out and a long-term monitoring scheme is established. | 1 | 2 | 1 | 3 | NA | 3 | NA | NA |
| **Result 9.2** By 2035, the diseases outbreaks connected to the Balkan lynx are effectively mitigated and controlled. | 2/3 | 2 | 2 | 2 | 3 | 3 | NA | NA |
| **Objective 10:** To mitigate effects of inbreeding through genetic rescue to create a genetically viable population of the Balkan lynx. | | | | | | | | |
| **Results 10.1** By 2026, a roadmap for genetic rescue of the remnant Balkan lynx population is developed, presented to, and endorsed by relevant authorities. | 1 | 1 | 1 | 1 | 3 | NA | NA | NA |
| **Result 10.2** By 2035, lynx individuals from the identified source population are successfully integrated in the Balkan lynx population. | 1 | 1 | 1 | 1 | NA | NA | NA | NA |
| **Objective 11**: To establish and continuously apply demographic, health and genetic monitoring of the Balkan lynx and maintain a favorable conservation status. | | | | | | | | |
| **Result 11.1** By 2030 national bodies for lynx monitoring are established and maintained and monitoring activities are coordinated between range countries. | 1 | 1 | 1 | 1 | 1 | 1 | NA | 1 |
| **Result 11.2** Knowledge and monitoring results are shared between lynx experts, relevant stakeholders and made publicly available (see R 4.3). | 1/2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| **Results 11.3** Balkan lynx distribution, abundance, trends, reproduction, health and genetic status is known (see R 10.3). | 1 | 1 | 2 | 1 | 2 | 1 | NA | NA |

| Objective/Result | North Mace-donia | Kosovo (under UNSCR 1244/99) | Albania | Greece | Serbia | Bulgaria | Bosnia and Herze-govina | Monte-negro |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **Result 11.4** Monitoring results are publicly available to track population development and provide feedback to interest groups. | 2 | 3 | 2 | 3 | 1 | 1 | 1 | NA |
| **Result 11.5** Monitoring results are recurrently integrated into the range-wide Strategy and the National Action Plans. | 1 | 1 | 1 | 2 | 2 | 1 | NA | NA |

## 5.3 National Action Plans

An effective instrument for the implementation of the **Range-wide Strategy for the Rescue and Conservation of the Balkan Lynx *Lynx lynx balcanicus*** is the development of a National Action Plan informed by the *Strategy*, but considering national priorities, legislation, conservation situation, and traditions. IUCN strongly recommends developing species conservation strategies in a participatory approach including local communities and stakeholders (IUCN/SSC, 2018). However, for a species distributed across many countries, this is not practicable. It is therefore recommended to use this *Strategy* as a basic document to develop related National Action Plans (NAPs), which can be done in a process using the national/local languages and involving key national and local stakeholders. The *Strategy* provides the conceptual frame, the over-arching, international perspective, and the range-wide needs for the conservation of the Balkan lynx. It is important that during the development of NAPs, the range-wide situation and especially in the adjacent countries is considered, because all present and future populations of the Balkan lynx will need to be transboundary to reach and secure their viability and long-term conservation.

The process and procedure for the development of a NAP can be the same as used for the development of the range-wide *Strategy* (see A-III), but local traditions and customs of political participation should be considered. It goes without saying that workshops for the development of a NAP should be held in national/regional languages and that the NAP must be published in all national languages, and recommendable in English to be shared with the other Range States.

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# Appendix I – Global Biodiversity Targets (GBF 2030) relevant in the context of the conservation of the Balkan lynx *Lynx lynx balcanicus*

The Convention of Biodiversity Conservation's Kunming-Montreal Global Biodiversity Framework provides a plan to implement broad-based action to bring about a transformation in our societies' relationship with biodiversity by 2030. The European Union is implementing the GBF 2030 through the EU's biodiversity strategy for 2030. Several of the 23 Targets of the GBF 2030 are relevant to the Balkan lynx range-wide conservation *Strategy*, or, in turn, the implementation of the *Strategy* and the related National Action Plans will contribute to reaching these Targets. The relevant GBF 2030 Targets are:

TARGET 1: Plan and manage all areas to reduce biodiversity loss

TARGET 3: Conserve 30% of land, waters and seas

TARGET 4: **Halt species extinction, protect genetic diversity, and manage human-wildlife conflicts**

TARGET 5: Ensure sustainable, safe and legal harvesting and trade of wild species

TARGET 8: Minimize the impacts of climate change on biodiversity and build resilience

TARGET 9: Manage wild species sustainably to benefit people

TARGET 10: Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry

TARGET 14: Integrate biodiversity in decision-making at every level

TARGET 20: Strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity

TARGET 21: Ensure that knowledge is available and accessible to guide biodiversity action

# Appendix II – Summary of biology and ecology of the Balkan lynx

The Balkan lynx (*Lynx lynx balcanicus*) is a medium-sized, solitary and territorial felid, recognizable by its short tail with a black tip, tufted ears, and dense, fur. Its coat varies from reddish-brown to golden and may be spotted, uniform or with rosettes (Darul et al., 2022). Adult males are larger, averaging 21.4 kg, while females average 16.6 kg.

This lynx subspecies primarily inhabits dense forests and transitional woodland-shrub areas, with around 80% of its home range covered by these habitats. In North Macedonia, nearly half of its range consists of non-degraded forests (Melovski et al., 2022). Males typically occupy home ranges of approximately 400 km², while females hold smaller territories averaging 115 km² (Melovski et al., 2020). Territorial marking is a key part of their behavior, especially during the mating season from February to April. Its density in the stronghold of the population ranges from 1.3 to 1.4 individuals per 100 $km^2$ (Melovski et al., 2025).

The Balkan lynx primarily preys on ungulates such as roe deer and Balkan chamois, which make up around 75% of its diet. The brown hare is an important secondary prey species, especially in more open or fragmented habitats (Melovski et al., 2022). Lynx in this region have a notably low annual kill rate—about 34 ungulates per year—and a long inter-kill interval averaging 9 days. Handling time at kills is typically 2 to 2.5 days but is often reduced by competition from scavengers like brown bears, wild boars, foxes, and increasingly, stray dogs (Melovski et al., 2020). The growing impact of stray dogs is linked to rural depopulation and poses a rising threat to lynx foraging success.

Reproduction results in litters of 1–4 kittens, usually 1–2 on average. Kittens stay in the den for up to three months and become independent at 10–11 months. Females often settle near their birthplace, while males disperse to establish new territories (Mattisson et al., 2022).

The Balkan lynx has a complex evolutionary history, shaped by long periods of isolation since the Late Pleistocene. Genetic studies show it shares a common ancestor with the Caucasian lynx, diverging nearly 100,000 years ago, with gene flow persisting until approximately 20,000 years ago (Lucena-Perez et al., 2020; Mengüllüoğlu et al., 2021). Postglacial contact with the Carpathian lynx led to nuclear genome mixing, though the mitochondrial genome remains deeply distinct (Bazzicalupo et al., 2021; Mengüllüoğlu et al., 2021). The population is now highly inbred, with the lowest genetic diversity recorded among Eurasian lynx, likely suffering from inbreeding depression due to accumulated deleterious mutations (Gonev, 2025).

This unique ecological profile, coupled with severe genetic risks and prey scarcity, makes the Balkan lynx one of the most endangered felids in the world (Melovski et al. in preparation a).

## Appendix III – Process Summary

For the development of range wide Conservation Strategies and National Action Plans, the IUCN SSC Cat Specialist Group (Cat SG) follows the IUCN Guidelines for Species Conservation Planning (IUCN/SSC, 2018) and, more specifically, the Strategic Planning Cycle as explained in the Cat SG's Cat Conservation Compendium (Mattenklodt et al., 2025), which are both based on the same principles (Fig. 1).

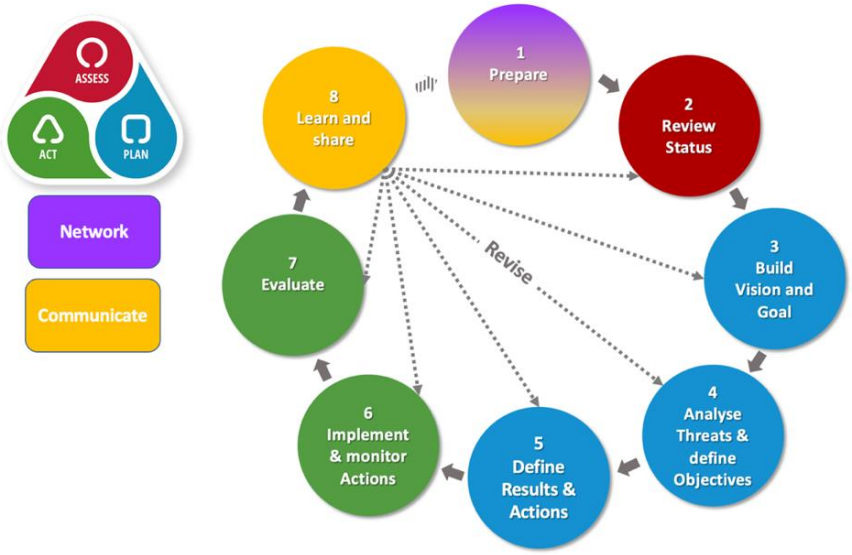



**Fig. A-III 1:** The Cat SG Strategic Conservation Planning Cycle

After a preparatory phase (Step 1), the conservation status and the state of knowledge of the target (sub)species is assessed by experts from all Range States (Step 2). This can be done through updating the IUCN Red List and Green Status of Species assessments. For widely distributed species, regional status reports instead of one range-wide review may be more practical. The status report(s) serve(s) to inform the development of the range-wide strategy for the conservation of the (sub)species (Steps 3-5). The Strategy is created in a participatory, multiple-step approach according to the "Zielorientierte Projekt Planung" (ZOPP Pyramid; Fig. 2) concept, which includes 5 strategic elements as well as an Analysis of the Threats, Risks and Opportunities:

**Vision**: Futuristic Dream" describing the ideal situation (desired future state of the species) on a very long term.

**Goal**: Concrete, realistic, measurable, and time-bound expression of the Vision.

**Objectives**: Outcomes to be achieved to overcome Threats and reach the Goal. Directly address Themes as identified in the **Threat Analysis**:

The **Threat Analysis** identifies obstacles and shortcomings hindering the achievement of the Goal. All factors negatively affecting the species in the past, present and future are arranged into a **Problem Tree**, including **Direct Threats** (Any factors with a direct negative impact on the species), **Drivers** (Causes of Direct Threats), and **Constraints** (Shortcomings without direct impacts on the population but allow Threats to have such impacts). Based on the Problem Tree, Threats, Constraints and Drives are grouped into general **Themes**.

**Results**: Concrete achievements, necessary and sufficient to meet an Objective. They should be S.M.A.R.T. (Specific, Measurable, Achievable, Relevant and Time-bound) and their achievement is

controlled through **Indicators**. Any potential **Risks** and **Opportunities** related to the Results should be identified:

**Risks**: potential obstacles, beyond the control of the Strategy that can hinder the achievement of the Result.

**Opportunities**: socio-political, economic, or cultural factors supporting the implementation of the Result and often present good entry points for conservation Actions.

**Action**: Clear and concrete operations to reach a Result. With defined actor and timeline, Indicator and rough budget.

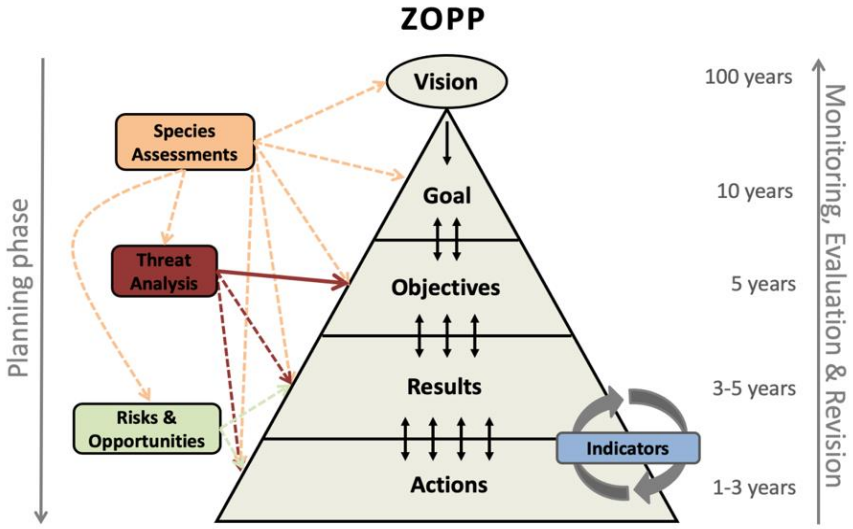



**Fig. A-III 2:** ZOPP pyramid as a scheme to explain the planning process in a participatory workshop.

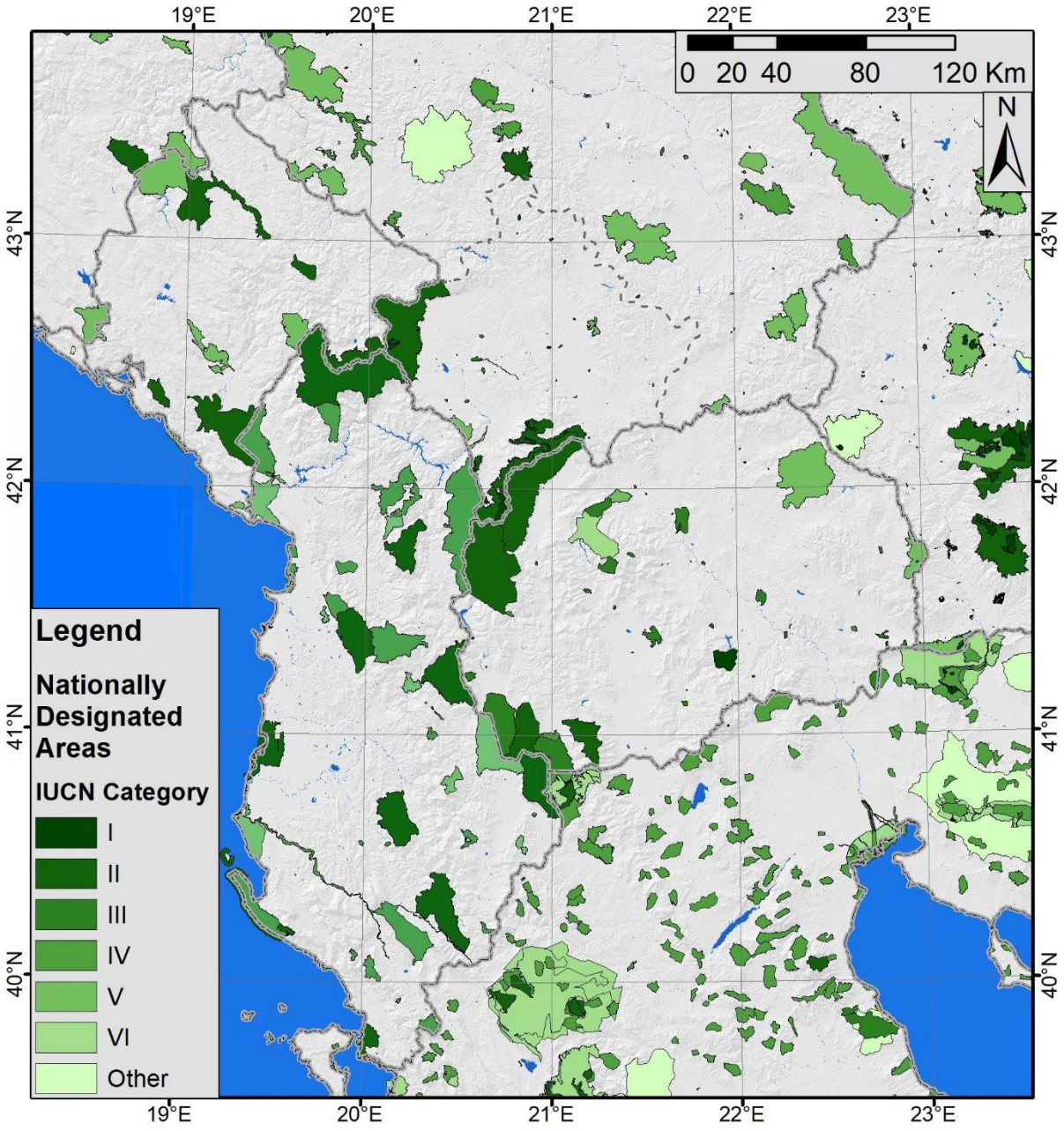
The Strategy is finally summarized in a **Logical Framework (LogFrame) matrix**, providing a short, tabulated overview of the elements and facilitating the monitoring and evaluation of the Strategy`s implementation.

For the practical implementation of a range-wide Conservation Strategy, **Regional or National Action Plans** should be developed to concretize the conservation measures according to national needs and prerequisites in collaboration with local stakeholders. NAPs are then implemented through various projects with specific **Work Plans** that define the Actions much more in detail and serve as a control tool during the work of the team and the wider partnership Step 6).

Rigorous planning takes some time and effort, but it will allow saving time and funding during the implementation, and it allows streamlining conservation measures across vast ranges. Generally, not all information needed is available for sensible planning at the beginning of such a process. Therefore, instead of rigidly sticking to a fixed plan, conservation strategies must be organized as adaptive processes, allowing adjustments to new developments and insights as they come up. Consequently, the implementation of Actions needs to be monitored, and progress regularly evaluated (Step 7). According to the findings of the evaluation, the plans may have to be revised. This iterative cycle of Implementation, Monitoring and Revision continues until the Objectives are achieved and the Goal is reached. By capturing and sharing the lessons learned (Step 8) conservation projects can have an impact beyond their immediate scope.

# Appendix IV – Protected areas in the range of the Balkan lynx

Nationally designated areas - source European Environment Agency (CDDA Database, July 2025). IUCN Categorization I to VI.



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