



**CONVENTION ON
MIGRATORY
SPECIES**

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**CONCERTED ACTION FOR
THE EURASIAN LYNX (*Lynx lynx*)¹**

Adopted by the Conference of the Parties at its 14th Meeting
(Samarkand, Uzbekistan, February 2024)

(i). Proponent

IUCN SSC (Cat Specialist Group) and Secretariat of the Carpathian Convention

(ii). Target species, lower taxon or population, or group of taxa with needs in common

Eurasian lynx (*Lynx lynx*, Linneus, 1758), specifically the subspecies *Lynx lynx balcanicus* (Bureš, 1941), *Lynx lynx carpathicus* (Kratochvil & Štollmann, 1963), *Lynx lynx dinniki* (Satunin, 1915) and *Lynx lynx isabellinus* (Blyth, 1847).

Lynx lynx balcanicus is proposed to be listed under CMS Appendix I by COP14, while *L. l. carpathicus*, *L. l. dinniki* and *L. l. isabellinus* are included in *L. lynx* to be listed under Appendix II by COP14 in 2023.

(iii). Geographical range

The Eurasian lynx is a Palearctic species distributed from the Atlantic in Europe to the Pacific in northern Asia, but splits into several distinct subspecies of which four are target taxa of this proposal: *L. l. balcanicus* is today limited to a tiny population in the border region of North Macedonia and Albania; it inhabited historically the south-western Balkans. *L. l. carpathicus* was historically restricted to the Carpathian Mountains, but includes today several reintroduced populations in West- and Central Europe, where the lynx went extinct. *L. l. dinniki* is the Caucasus subspecies, which spreads from the Caucasus Mountains south and west to the Anatolian Peninsula, northern Iraq and Iran. *L. l. isabellinus* is the Central Asian subspecies, the mountain ranges of the Pamir, Hindukush, Tien Shan, and (partly) the Himalaya, assumedly including steppe areas such as the Dhungar Basin. These four subspecies are clearly separated from the large continuous distribution range of *L. l. lynx* and *L. l. wrangeli* in the boreal forest belt of Eurasia (Fig. 1). Range States for the four subspecies are listed in Annex I.

¹ The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CMS Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.



Fig. 1. Approximate distribution range of the subspecies of the Eurasian lynx according to Kitchener et al. 2017.

(iv). Summary of Activities

While the boreal distribution range of the Eurasian lynx is large, continuous and stable, the “southern” subspecies (Fig. 1) have lost most of their historic range (in Europe) or their conservation status including distribution range, population size and trend are largely unknown (in Asia). These four subspecies are conservation dependent and, as distributed over many range States, need transboundary cooperation for their long-term conservation. We here suggest (1) developing a spatially explicit conservation action plan for *L. l. balcanicus*, (2) a conservation strategy for the Carpathians, (3) recommendations for reintroduction, genetic remedy and sourcing animals for the realm of *L. l. carpathicus* in continental Europe, (4) and (5) performing a baseline survey for *L. l. dinniki* and *L. l. isabellinus*, allowing assessing their conservation status e.g. according to IUCN Red List standards. All these activities will be done in close cooperation with the respective Range States and with local experts and will be used to build capacity at various levels.

(v). Activities and expected outcomes

Results (expected outcome) and related Activities are tabulated in the Logical Framework given in Annex II. We here give a short narrative of each block.

- (1) The Balkan lynx *L. l. balcanicus* emerged from a glacial refuge in south-eastern Asia and was historically restricted to the mountain ranges of the southern Balkan Peninsula. It is today limited to the transboundary zone of North Macedonia and north-eastern Albania and is listed as Critically Endangered in the IUCN Red List. Its potential recovery area includes suited habitats in North Macedonia and Albania, but also in Greece, Montenegro, Bosnia-Herzegovina and the region of the Kosovo. Biology, ecology and conservation status are rather well known thanks to an ongoing research and conservation programme, but what is lacking is an institutional transboundary cooperation. We will, in tight cooperation with the governmental and scientific institutions of the present and former Range States and local NGOs, develop a spatially explicit conservation action plan according to IUCN recommendation to guide the stabilisation and recovery of the remnant population and then advise the Range States and other partners to implement the range-wide strategy through national action plans.
- (2) *Lynx lynx carpathicus* is restricted to the Carpathian Mountain Range. While the Romanian population is believed to be stable, the Slovak/Czech population seems to decline, and the Ukrainian population is likely to be so low that the continuous distribution may be disrupted. It is urgent to establish range-wide transboundary cooperation with regard to its monitoring and conservation. We will invite all Range Counties, regional conservation organisations and scientific institutions to develop a conservation strategy to guide the establishment and implementation of conservation activities through national action plans, according to the IUCN Guidelines for the

Strategic Planning of Species Conservation. The range-wide cooperation will be under the auspice of the Carpathian Convention and the Bern Convention.

- (3) The Eurasian lynx was widespread in continental Europe, but went extinct in the course of the 19th and early 20th century. Reintroduction of *L. l. carpathicus* in the mountainous areas of continental Europe started 50 years ago, using wild-caught lynx from Slovakia. The reintroduced populations are still very small and isolated, and the oldest of them suffer from inbreeding. In order to save extant populations and recover a viable metapopulation of lynx in West- and Central Europe, a tight transboundary cooperation is urgent. Extant populations need to be reinforced and new populations need to be established to improve connectivity. Sourcing lynx is challenging, as the availability of specimens from both natural source population and from conservation breeding programmes are limited and several release programmes are competing for lynx. Monitoring and genetic assessment need to be harmonised, and protocols for translocation, health monitoring, breeding and training need to be standardised and widely accepted by all decision-making national and sub-national authorities on continental Europe. We will, in cooperation with the Carpathian Lynx Working Group, develop guidelines for the recovery of the lynx in Central and Western Europe based on the “Bonn Recommendations” (e.g. [Recommendation No. 204 \(2019\)](#) of the Standing Committee of the Bern Convention) providing general guidance on the recovery of a metapopulation and provide concrete protocols for sourcing and management of translocations and reintroductions. These guidelines are meant to be reviewed and endorsed by the relevant bodies of the conventions.
- (4) The Central Asian subspecies *L. l. isabellinus* is distinct from other lynx subspecies in its appearance, but likely also with regard to its ecology. However, it is the least-known subspecies and information on distribution, abundance and trend are not available. Its conservation status has hence never been assessed according to the IUCN Red List procedures. Its range however overlaps largely with the Snow Leopard (a CMS-listed species considered under CMS CAMI), and we hope to profit from the network established for Snow Leopard conservation to compile data on the lynx, too. We will perform, in close cooperation with Range States scientific and conservation institutions, a baseline survey leading to a robust assessment of the conservation status of the Central Asian lynx. The survey will be based on (i) review of literature, (ii) compilation of all bycatch-data from camera trapping across the region and (iii) a fine-scaled questionnaire survey with stakeholders done by local (young) experts. This will not only allow compiling information to inform further conservation approaches, it will also offer the opportunity for awareness and capacity building and to establish a network for future cooperation.
- (5) The Caucasian subspecies *L. l. dinniki* is distributed across the Caucasus range and further south and south-west. There is more information available on its distribution range and ecology than from the Central Asian subspecies, but trend information is not available, and range-wide data are too sparse for a robust assessment of the subspecies’ conservation status. Hence the approach proposed will again include performing a baseline survey across the range, a first assessment of the conservation status, training of local (young) experts and establishing a network of institutional and private organisations.

(vi). Associated benefits

Generally, lynx are flagship and keystone species across their range. Hence their conservation has a high effect on awareness raising and includes conservation of habitats and prey populations. In Europe, this includes improving connectivity between larger habitat complexes

and management of roe deer populations (which is the main prey). Cooperation between scientific institutions and conservation NGOs is well-established, but conceptual and practical cooperation between conservation agencies at national and sub-national level needs being enhanced.

In Asia, the proposed lynx conservation activities will allow awareness raising, capacity building and fostering institutional cooperation. It is assumed that the habitat fragmentation is less prominent than in Europe, but border fences, infrastructure development and lack of transboundary cooperation bear the risk of future population fragmentation, which is potentially dangerous especially in Central Asia, where we assume to find an overall low density and a pronounced linear distribution, depending on dense-cover habitats available.

(vii). Timeframe

Activities 1 and 2: To be completed within a year in 2024.

Activity 3: Draft recommendations to be available by end of 2023, revised version by March 2024.

Activity 4 and 5: Each of these blocks will take a year of preparation (establishing partnership and fundraising) and a year of implementation. Both activities are foreseen to be completed by end of 2025.

Each of the Activities will result in Outcomes (e.g. Action Plans, Conservation Strategies, Conservation Assessments) that will inform subsequent projects and continuous works.

(viii). Relationship to other CMS actions

The proposed Concerted Action would be the first conservation initiative for terrestrial species under CMS in Europe, where transboundary cooperation is a *conditio sine qua non* for wide-ranging species such as the Eurasian lynx with mostly transboundary populations. In Central Asia, the CMS CAMI programme facilitates the conservation of listed species and transboundary conservation. We will therefore encourage the Range State Parties to CMS to propose the inclusion of *Lynx lynx isabellinus* into the CAMI Programme of Work. This may, after successful completion of the baseline survey, lead to the development of a range-wide conservation strategy (similar to the one recently completed for the Persian leopard *Panthera pardus tulliana/saxicolor*).

(ix). Conservation priority

The urgency of improved conservation of the Critically Endangered *Lynx lynx balcanicus* is undisputed; the subspecies is at the verge of extinction. Only concerted transboundary actions can save it. The knowledge base is available, but the commitment of the Range States was so far limited. We hope that the listing proposal to COP14 together with the here proposed Concerted Action will facilitate the cooperation between the Range States. The two Activities (2, 3) for the Carpathian lynx are also urgent as several projects are proposed, but need to be coordinated under one common approach and based on agreed conservation principles. With regard to Activities 4 and 5, it is difficult to assess their urgencies; we simply lack reliable information to assess status and trend of these two subspecies. But considering the fast and vast development in the regions concerned, we believe that providing such baseline information to inform subsequent conservation approaches must have high priority.

(x). Relevance

Like other large cats, Eurasian lynx were found to live at low densities wherever robust studies were executed. All viable populations outside the enormous belt of the boreal forest are transboundary, and are increasingly suffering from fragmentation. While, at least in Europe, national awareness is mostly given and conservation activities are in place, the crucial transboundary cooperation is only exceptionally established. This is mainly a shortcoming of institutional awareness and priority setting. Support from an international convention is therefore most welcome.

(xi). Absence of better remedies

Lynx lynx (Appendix II) and *Lynx lynx balcanicus* (Appendix I) are proposed to be listed by COP14 on CMS Appendices. The listing, if accepted, should be supported by further activities. For *L. l. balcanicus*, *L. l. carpathicus* and *L. l. dinniki*, we consider a Concerted Action under CMS – in cooperation with other conventions and initiatives wherever available – an additional strong instrument for the cooperation between the Range States. For *L. l. isabellinus*, inclusion into the CMS CAMI would be an option, but we see this rather as an additional than an alternative approach; the proposed activities – compiling baseline information informing a robust assessment – will be needed to define targeted activities also under the CAMI Programme of Work, if the species would be included in the Initiative.

(xii). Readiness and feasibility

For Activities 1–3, leadership is available through IUCN institutions (e.g. several Specialist Groups), a sound scientific understanding provided by several universities and other scientific institutions involved, and the engagement of several large conservation organisations involved into the activities at various levels. Fundraising will be needed to organise the workshops needed for the south-western Balkans and the Carpathians, but most of the work will be done by the experts and conservationists in the frame of their employments or projects.

For the two baseline surveys in Asia, fundraising will be needed. We expect the participating (scientific) institutions to provide their support in the frame of a project MoU, but funds will be needed to train and support the project executives in the various Range States. No detailed work plan and budgeting is available at this point, but from former similar experiences, we do not expect excessive project costs for such baseline surveys.

(xiii). Likelihood of success

All methods and concepts proposed here are standard, established and widely tested and bear no methodological risk. The promised output will be achieved. With regard to the participation of the Range States and their subsequent engagement, we assume an improved cooperation among all Parties to CMS and the Range States participating in the CMS CAMI.

(xiv). Magnitude of likely impact

The total number of countries to be involved in/affected by these activities is 35 (A-1, 5; A-2, 5 (1 overlap with A—1); A-3, 8; A-4, 7; A-5, 11), of which only 5 are not Parties to CMS. As a large (Europe) or medium-sized (Asia) carnivore species, lynx act as flagship for habitat and prey (Europe: small ungulates, Asia: likely mostly lagomorphs) species. Outreach to stakeholders is crucial. On the one hand, cats are charismatic species, on the other hand, lynx may be considered a threat to (domestic) prey species. However, considering that anthropogenic mortality is likely a considerable threat throughout the range, such communication is important.

(xv). Cost-effectiveness

The costs for Activities 1 to 3 will be low and are well-justified compared to the expected outcome. Costs for Activities 4 and 5 need to be estimated after establishment of the partnership needed. However, labour costs are expected to be moderate and the capacity-building and awareness-raising effect large.

(xvi). Consultations-Planned/Undertaken

We have established long-term contacts to scientific and conservation institutions in all countries considered for Activities 1–3, and furthermore institutional contacts in most of the Range States. With regard to the Asian project areas (Activities 4–5), we have been in contact with Range States institutions through diverse activities and projects in the frame of IUCN SSC work, and more specifically with the CMS related authorities through CAMI-related work (e.g. the development of a Conservation Strategy for the Persian Leopard as a contribution to the CAMI Programme of Work). The IUCN SSC Cat Specialist Group has started to establish contacts with scientific institutions and experts in the Range States of *L. l. isabellinus* and *L. l. dinniki*.

ANNEX 1

RANGE STATES, COOPERATION AND POSSIBLE PARTNERSHIP

The following compilation provides an overview of the international conventions and Range States to be involved through their agencies in charge of nature conservation, and a preliminary list of possible partners, mainly institutions with which the proponents have been working on Lynx or related issues before.

International conventions and unions :

- [Convention on the Conservation of Migratory Species of Wild Animals](#) (CMS) and (for *L. l. isabellinus*) its [Central Asian Mammals Initiative](#), specifically national Focal Points
- [Convention on the Conservation of European Wildlife and Natural Habitats](#) (Bern Convention; covering *L. l. balcanicus*, *L. l. carpathicus*, and *L. l. dinniki*)
- [Carpathian Convention](#) (covering *L. l. carpathicus*, original range²)
- [Alpine Convention](#) (covering *L. l. carpathicus*, reintroduction range³)
- European Union/Commission⁴

Range States and possible regional partners:

Lynx lynx balcanicus

Range States: Extant: Albania, North Macedonia, region of the Kosovo; possibly extinct, but potential recovery area: Bosnia-Herzegovina, Bulgaria, Greece, Montenegro.

Possible partners: [Balkan Lynx Recovery Programme](#): MES (North Macedonia), PPNEA (Albania), ERA (Kosovo), EuroNatur (Germany), KORA (Switzerland); Aristotle University of Thessaloniki, Callisto (Greece), Sofia University (Bulgaria)

Lynx lynx carpathicus

Range States autochthonous population: Czech Republic, Hungary, Poland, Romania, Serbia, Slovakia, Ukraine, (Bulgaria)

Possible partners: Carpathian Lynx Conservation Group⁵, IUCN SSC LCIE, WWF, Zoo Bojnice (Slovakia), several scientific institutions and NGOs

Lynx lynx isabellinus

Range States: Afghanistan, Bhutan, China, India, Kazakhstan, Kirgizstan, Mongolia, Nepal, Pakistan, Uzbekistan, Tajikistan, (Turkmenistan),

Possible Partners: [Institute of Zoology](#) of the Republic of Kazakhstan (N. Bizhanova), Institute of Zoology of the Academy of Sciences of Uzbekistan (E. Bykova), local and international NGOs

Lynx lynx dinniki

Range States: Armenia, Azerbaijan, Georgia, Iran, (Iraq), Russia, Turkey, (Turkmenistan)

Possible Partners: Scientific institutions, national and international NGOs.

² The Carpathian Convention has developed, with the support of many partners, the [International Action Plan on Conservation of Large Carnivores and Ensuring Ecological Connectivity in the Carpathians](#), on which a more specific Conservation Strategy for the Lynx will build. The Carpathian Convention will furthermore facilitate the implementation of the Strategy, e.g. through the [LECA](#) Interreg project.

³ The Alpine Convention maintains the [Platform Large Carnivores, Wild Ungulates and Society \(WISO\)](#) to coordinate the cooperation and foster the coexistence with large carnivores in the Alps.

⁴ The European Union maintains the [Platform on Coexistence between People and Large Carnivores](#), which will be helpful to disseminate the outcomes of this Concerted Action.

⁵ The Carpathian Lynx Conservation Group includes some 50 experts working on the recovery and conservation of the Carpathian lynx in West- and Central Europe. The group formed in 2019 to draft the "[Bonn Recommendations](#)" and is developing the protocols to inform Results 1.2 and 1.3 in the LogFrame (Annex I). Members of the group are scientists, representatives of NGOs and related institutions such as zoos, national parks, etc.

LOGICAL FRAMEWORK FOR THE PROPOSED ACTIVITIES UNDER THE CMS CONCERTED ACTION FOR THE EURASIAN LYNX (*Lynx lynx*)

Goal: Improve the knowledge base and strengthen the transboundary cooperation for the conservation of the four southern subspecies of the Eurasian lynx (*Lynx lynx*) in Europe and Asia.

Objective/Result/Activity (A)	Indicator	Timeline	Actor	Funding
Objective 1: To develop concepts and recommendations guiding the transboundary cooperation in the conservation and recovery of the Balkan lynx (<i>Lynx lynx balcanicus</i>) and the Carpathian lynx (<i>Lynx lynx carpathicus</i>) in Europe				
Result 1.1: Develop, endorse and implement a spatially explicit conservation action plan (a Strategy) for the range-wide conservation and recovery of the Balkan lynx in cooperation with the extant and historic Range States under the auspices of international conventions				
A.1.1.1: Produce a report on the conservation status of the Balkan lynx.	Report produced and distributed	March 2024	BLRP6	BLRP
A 1.1.2: Agree with the Range States on the development of a Conservation Strategy under the auspices of international conventions such as the Carpathian Convention, Bern Convention, CMS and with the support from IUCN and the Secretariat of the Carpathian Convention.	Consensus on approach with Range States	March 2024	RS, Conventions, BLRP, IUCN, Carpathian Convention	n.a.
A 1.1.3: Organise and perform participatory workshops for the development of the Conservation Strategy.	Venue, participants, and approach agreed	Fall 2024	BLRP, Cat SG	\$10-20k
A 1.1.4: Draft, review, revise and submit the Conservation Strategy.	Strategy endorsed by RS and Conventions	January 2025	BLRP, Cat SG, RS, Conventions	\$5k
Result 1.2: Develop, endorse and implement a Strategy for the conservation of the autochthonous population of the Carpathian lynx in Europe in close cooperation with the Range States to inform the development and implementation of related National Action Plans				
A.1.1.1: Produce a summary report on the conservation status of the Carpathian lynx as an input document to the strategy workshop.	Report produced and distributed	May 2024	CLWG7, Cat SG	t.b.d.
A 1.1.2: Agree with the Range States on the development of a Conservation Strategy under the auspices of the Carpathian Convention, the Bern Convention, and CMS.	Draft Strategy produced and distributed	May 2024	RS, Conventions, CLWG, Cat SG	n.a.

⁶ [Balkan Lynx Recovery Programme](#), a joint project from EuroNatur (Germany) and KORA (Switzerland), implemented by ERA in Kosovo, MES in North Macedonia and PPNEA in Albania.

⁷ The Carpathian Lynx Working Group is an expert group formed based on the Recommendation No. 204 (2019) of the Standing Committee of the Bern Convention.

Objective/Result/Activity (A)	Indicator	Timeline	Actor	Funding
A 1.1.3: Organise and perform participatory workshops for the development of the Conservation Strategy, facilitated by IUCN	Strategy endorsed by RS and conventions	Fall 2024	Cap. Conv., IUCN, local organisers	\$10-20k
A 1.1.4: Draft, review, revise and submit the Conservation Strategy.	Strategy endorsed by RS and Conventions	Jan 2025	BLRP, Cat SG, RS, Conventions	\$5k
Result 1.3: Develop guidelines for the recovery of the Carpathian lynx in the mountainous region of West- and Central Europe to coordinate reintroductions, reinforcements, and connectivity, and to organise the sourcing and agree on common principles and protocols				
A 1.3.1: Develop guidelines based on the “Bonn Recommendations” and the Protocols presently being developed by the CLWG.	Guidelines drafted	Deadlines for submission	IUCN and CLWG	\$10k
A 1.3.2: Submit the draft guidelines to the Standing Committee of the Bern Convention and the Scientific Council of CMS for review.	Guidelines submitted	Convention bodies meetings	IUCN and CLWG	n.a.
A 1.3.3: Revise the draft version and submit final version to the Conventions and to all Range States concerned.	Guidelines finalised	Summer/fall 2024	IUCN and CLWG	t.b.d.
Objective 2: To perform baseline surveys and a robust assessment of the conservation status for the two Asian subspecies of the Eurasian lynx, <i>L. l. isabellinus</i> (Central Asia) and <i>L. l. dinniki</i> (Caucasus and SW Asia) and prepare the ground for the range-wide conservation of these subspecies through building networks and develop the local capacities needed				
Result 2.1: Compile the baseline information needed for the conservation of the Central Asian Lynx <i>L. l. isabellinus</i> and use these activities for networking and building local capacities				
A 2.1.1. Contact Range States with regard to submitting a proposal to include <i>L. l. isabellinus</i> into the CMS Central Asian Mammal Initiative.	<i>L. l. isabellinus</i> listed under CMS CAMI	March 2024	IUCN	n.a.
A 2.1.2. Build a network of scientific institutions and other organisations across the range and train the network members in survey technique and RL assessment.	Network functional	March 2024	IUCN Cat SG and NGOs	\$5k
A 2.1.3. Perform a review of scientific literature, unpublished reports, media articles and social media contribution with regard to the species’ presence and perception.	Review report available	End 2024	Network experts, IUCN, NGOs	t.b.d.
A 2.1.4. Scan all available sources for pictures of <i>L. l. isabellinus</i> (e.g. camera-trapping projects, wildlife photography platforms, social media).	Picture data base compiled, gaps identified	End 2024	Network experts, IUCN, NGOs	t.b.d.
A 2.1.5. Perform a survey by means of questionnaires based on a regular grid or on adequate management units in all Range States.	Survey completed, gaps identified	June 2025	Network experts, NGOs	t.b.d.

<i>Objective/Result/Activity (A)</i>	<i>Indicator</i>	<i>Timeline</i>	<i>Actor</i>	<i>Funding</i>
A 2.2.6. Compile information from A 2.1.2–4 into a review report on <i>L. l. isabellinus</i> and perform a Red List Assessment and, if possible, a Green Status Assessment according to IUCN protocols in cooperation with the Range Country experts.	Report available, RLA and GSA done and submitted	End 2025	Network experts, IUCN, NGOs	t.b.d.
Result 2.2: Compile the baseline information needed for the conservation of the SW Asian Lynx <i>L. l. dinniki</i> and use these activities for networking and building local capacities				
A 2.2.1. Build a network of scientific institutions and other organisations across the range and train the network members in survey technique and RL assessment.	Network functional	March 2024	IUCN Cat SG and NGOs	\$5k
A 2.2.2. Perform a review of scientific literature, unpublished reports, media articles and social media contribution with regard to the species' presence and perception.	Review report available	End 2024	Network experts, IUCN, NGOs	t.b.d.
A 2.2.3. Scan all available sources for pictures of <i>L. l. dinniki</i> (e.g. camera-trapping projects, wildlife photography platforms, social media).	Picture data base compiled, gaps identified	End 2024	Network experts, IUCN, NGOs	t.b.d.
A 2.2.4. Perform a survey by means of questionnaires based on a regular grid or on adequate management units in all Range States.	Survey completed, gaps identified	June 2025	Network experts, NGOs	t.b.d.
A 2.2.5. Compile information from A 2.1.2–4 into a review report on <i>L. l. dinniki</i> and perform a Red List Assessment and, if possible, a Green Status Assessment according to IUCN protocols in cooperation with the Range Country experts.	Report available, RLA and GSA done and submitted	End 2025	Network experts, IUCN, NGOs	t.b.d.