

CONSERVATION STATUS OF THE BALKAN LYNX IN MACEDONIA

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The **Balkan Lynx Recovery Programme** is a partnership project between Macedonian, Albanian and international institutions¹, aiming to save the Critically Endangered Balkan lynx² with a three step approach: (1) Compile baseline data allowing to develop (2) a range-wide Conservation Strategy that will be implemented by means of (3) national Action Plans. The survival of the population of the Balkan Lynx should be secured through species conservation actions, a series of protected areas, and improved wildlife management within and outside protected areas.

Distribution and population size of the Balkan lynx

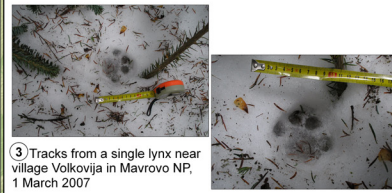
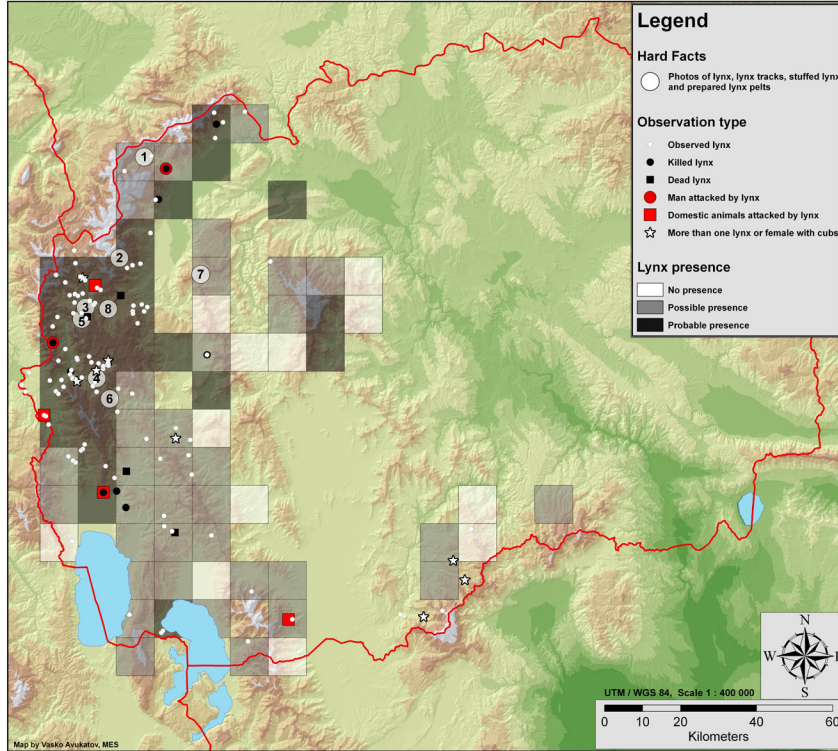
The main distribution area of the Balkan lynx population is along the mountain range that forms the border between Macedonia and Albania. A small part of the population is believed to live in Montenegro and Kosovo. The estimated size of the Balkan lynx population in all range countries is less than 100 mature individuals, making the Balkan lynx "Critically Endangered" according to IUCN Red List criteria. This is the most threatened autochthonous population of Lynx lynx (Breitenmoser et al. 2000). The population size of Balkan lynx in Macedonia was guessed to be 30-35 mature individuals (Hristovski 2001).

Method

The aim of the Baseline Survey was to assess the distribution and relative abundance of lynx and potential prey species in Macedonia by means of interview techniques. The potential lynx area in Macedonia was divided into 73 grid cells of 10 x 10 km. In each cell, at least one village was randomly selected to be visited. An average number of 8 people were interviewed per grid cell. In Macedonia, a total of 154 villages were visited and 553 people were interviewed according to an extensive questionnaire. Additionally, lynx observations such as sightings, tracks or kills were recorded in a special form. The results of the Baseline Survey are compiled in the large map.

Balkan lynx "Hard facts"

Seventy evidence indicating the presence of lynx, so called "hard facts", were collected during the Baseline Survey. These "hard facts" include: photos of lynx, lynx tracks, stuffed lynx and prepared lynx pelts (see numbers in the map and photos).



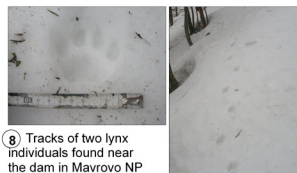
4 Lynx photo taken in village Lazaropole on Bistra Mt., Mavrovo NP in summer 1999



5 Tracks from one lynx individual found near village Sencop in Mavrovo NP on 20 February 2007



6 Two lynx cubs photographed at the locality Jama on Stogovo Mt. on 15 June 2003



8 Tracks of two lynx individuals found near the dam in Mavrovo NP on 25 March 2006



7 Pelt of lynx, shot on Suva Gora Mt., near Gostivar in October 2006

¹Project partners are the Macedonian Ecological Society (MES), the Society for Protection and Preservation of Natural Environment in Albania (PPNEA), the Coordinated Research Projects for the Conservation and Management of Carnivores in Switzerland (KORA), the European Nature Heritage Fund (Euronatur) and the Norwegian Institute for Nature Research (NINA). Main founders are the MAVA Foundation (Switzerland) and Norwegian Research Council, started in summer 2006 and it will last until the end of 2009.

²The Balkan lynx was first described as its own subspecies by Buresch in 1941 (*Lynx lynx balcanicus*). Later, Mirich made morphometric investigations on 29 lynx specimens from the Balkan Peninsula and proved that several characteristics distinguish the Balkan population from the nominal and Carpathian forms. He proposed to classify the Balkan lynx as its own subspecies and changed the name to *Lynx lynx martini*. Although this classification was arguable, recent preliminary genetic analyses (Breitenmoser-Würsten and Oberer-Ruff 2005) made on 11 samples show that the Balkan lynx is certainly distinct from other subspecies. These samples were taken from specimens from the Museum of Natural History in Skopje, Macedonia.

References

Breitenmoser U., Breitenmoser-Würsten Ch., Okarma H., Kaphaghi T., Kaphaghi-Wallmann, U. and Müller U. 2000. Action plan for the conservation of the Eurasian lynx (*Lynx lynx*) in Europe. Nature and environment No. 112, Council of Europe Publishing, Strasbourg, 1-70.

Bures, I. 1941. Risove v Makedonija [Lynx in Macedonia]. Priroda, 42 (3): 51-52 (in Bulgarian).

Hristovski M. 2001. On the status of the Balkan lynx in the Former Yugoslav Republic of Macedonia. Pages 8-11 in: Breitenmoser Ch. and Breitenmoser U. (eds) The Balkan lynx population - history, recent knowledge on its status and conservation needs. KORA Report 7e, Muri, Switzerland.

Mirich, D. 1978. *Lynx lynx martini* sp. nova (Carnivora, Mammalia). Neue Luchsarten von der Balkanhalbinsel. Bulletin de museum d'histoire naturelle, Belgrade, Serie B, Livre 33, 28-36.