Towards an integrated Balkan lynx conservation programme: What are the next steps for the recovery of the Balkan lynx population?

Christine Breitenmoser-Würsten¹ and Urs Breitenmoser^{1,2}

- ¹ KORA, Thunstrasse 31, 3074 Muri b. Bern, Switzerland, eMail ch.breitenmoser@kora.ch
- ² Institute of Veterinary-Virology, Veterinary Faculty, University of Bern, Länggass-Str. 122, 3012 Bern, Switzerland, eMail: breitenmoser@ivv.unibe.ch

The lynx population in the south-western Balkan would, after the population in the Pyrenees, be the first lynx population to go extinct in Europe after the Second World War. This extinction would not take place under a management philosophy aiming for the eradication of large carnivores, but in an era when nature conservation is broadly accepted and when large carnivores are protected by national laws and international treaties. This must not happen.

There can be no doubt that a recovery programme for the Balkan lynx population will be a long lasting and a complicated project, involving many governmental and private organisations and many scientific disciplines. And again, there can be no doubt that the political situation in the south-western Balkan is not favourable for such a process. In the light of the enormous socio-political changes, the ongoing wars, and the poor economic situation of the local people, the conservation of a species such as the lynx may seem to be a luxury. This is not so for several reasons: First, the eradication of a sub-species or a population is a irreversible fact. Second, the lynx will act as an umbrella species for the recovery of the ungulates (the lynx' main prey) and the forests (the lynx' habitat) and hence ameliorate the natural resources also for the local people. And third, a common nature conservation programme will help to reduce mistrust between estranged groups and will provide common goals for a better future.

The time might not yet have come for conservation actions in the countryside involving local administrations and the local people. But there is still a lot of preparatory work to be done. In a first Balkan lynx conservation meeting, held in Plitvice, Croatia, in spring 2000, it was agreed to apply a three-phase approach towards an integrated Balkan lynx conservation programme (Fig. 1). After each phase, a decision-making process must be inserted to decide about the next steps and to review the funding. With the publication of this first report, we have completed the first phase. The conclusions from this report is that there is indeed a need for more precise information on the status and the threats of the Balkan lynx population. Many of the factors important to consider for the design of a sound conservation strategy are unknown or guesses at best. Not only the accurate distribution and the heads of the lynx population are unknown, we also lack background information on the lynx' feeding ecology, habitat use, and threats.

These gaps in our knowledge should now be closed in the second phase (Fig. 1). The concrete tasks during the second phase can be summarised in four items:

- 1. Establish a network and build partnerships. Many organisations and individuals will have to contribute to a conservation programme. It is important to get these institutions involved at an early stage and to make use from their information and expertise also during the preparatory steps. Potential partners are: NGOs in charge of nature conservation, wildlife management and related fields; scientists working at nature museums, veterinary services, national parks, universities; zoos; hunter's organisation and taxidermists. All these individuals and institutions should be incorporated into a network on national and international level.
- 2. Conduct a field survey in each country by standardised methods in order to (1) define accurately the distribution of the Balkan lynx occurrences, (2) to have a reasonable estimation of the number of individuals, and (3) to know the recent trends in the population development. Such a survey will most likely be carried out by means of systematic interviews with local hunters, shepherds, foresters, veterinarians, etc., and will therefore allow for a first time to involve local people.
- 3. Identify the ecological and anthropogenic threats of the Balkan lynx population. We hypothesise that the lynx does not only suffer from direct persecution, but even more from the deterioration of its prey base and the habitat. However, little is known about the ecology and the environmental conditions of the remnant population. Such information must be gathered together with a survey of people's attitudes toward the big cat. Most of these data can be gained during the field survey, but specific information may be available form forest services, hunter's association and other institutions. In order to gain reliable data on the ecology and life history of the lynx, it would be welcome to run a limited field research project in one of the remaining nuclei of the Balkan lynx.
- 4. Review the recovery potential of the Balkan lynx population. The information gathered in steps 1-3 must be compiled in a feasibility study for a recovery programme. This study must especially address:

- 4.1. The potential range for a recovery programme or the best suited areas for a re-introduction or translocation project.
- 4.2. The genetic structure of the Balkan lynx population. Such research is needed to (1) evaluate the taxonomic status of this population or sub-species, respectively, and its genetic relationship to neighbouring populations in the Carpathians; and (2) analyse the level of relatedness and inbreeding in the Balkan lynx population. This knowledge will help to decide about the conservation strategy in regard to captive breeding, translocations, or reintroductions.
- 4.3. The readiness of all potential partners (GOs, NGOs, local people, international sponsors) to co-operate in an ongoing recovery programme.

Without a clear commitment of all partners needed in an ongoing programme, it will be useless to enter the third phase, which will be the actual recovery project. The second phase outlined here will last at least 2-3 years. It will not only allow to gain all data needed to develop a recovery programme, but also to build partnerships and to train people. The result of the second phase will be a more detailed report on the status of the Balkan lynx population, a network of partners, and a list of recommendations for the conservation actions to be implemented in phase 3.