

YU - Yugoslavia

Respondent: J. Cop

Status: Macedonia and Kosovo: Autochthonous population in reduced area, tendency unknown. Slovenia and Croatia: Re-introduced, increasing population.

Former presence and recent distribution: In historic times, the lynx was spread over the whole territory of Yugoslavia with the exception of the region around Belgrade (Kratochvil 1968b, Miric 1974, Cop 1977, Miric 1978b and Festetics 1980b). During the 19th and the first half of the 20th century, the area continuously decreased from north to south. In 1940, a few lynx remained along the Yugoslavian-Albanian border. Since World War II, the population has increased again, and the existence of the species seems to have recovered in the region of Macedonia, Kosovo and Montenegro (Miric 1974, Bojovic 1978, Cop 1989). The recent area of the autochthonous population is about 6000 km² with an estimate of 200 individuals (J. Cop).

In Slovenia, 700 km north of the autochthonous population, the lynx was re-introduced in 1973. Six individuals (1:1) originating from the Carpathian Mountains of Czechoslovakia were released in the Kocevje region. The re-introduction was very successful. The population₂ increased and spread out. Today, a central area of some 3500 km² is continuously reoccupied, but the total area of observations covers about double the space, and individuals have reached as far as Italy and maybe even Austria. The number of lynx is believed to be 300, but the personal estimate of J. Cop is only 150. For more detailed information on the Slovenian lynx re-introduction, we refer to Cop (1977), Cop (1980) and Cop (1989).

Legal situation, hunting: The autochthonous lynx population in southern Yugoslavia has been protected by law since 1951. Poaching may occur, but there are no data (J. Cop).

In Slovenia, within an area of 2500 km², the number of lynx that can be shot is fixed every year by the Ministry of Forestry. Outside this region, hunting of lynx is not restricted in number. The hunting season is from September 1st to March 1st. Hunting of the re-introduced population started in 1978. Since then, a total of 172 lynx has been shot (Slovenia 75, Croatia 94, Bosnia 3). J. Cop estimates an additional number of 10 - 20 lynx killed illegally.

Damage to livestock: Domestic animals killed by lynx were sheep, goats, dogs and cats. In the centre area of the lynx population, in Slovenia, there is only a little livestock and therefore there is no problem. In Croatia, about 100 sheep have been killed up to now, but the exact number is not known. Any livestock killed is examined by game wardens or a veterinary institute (at least in Slovenia) and in the case of lynx kills, compensation is paid by the state.

There was trouble with semi-domestic moufflons in two hunting enclosures in the central area. These enclosures provoked a concentration of lynx. Several lynx were shot within the enclosures. By 1982, the predator had wiped out the moufflon herd (Cop 1989).

Recommendation: The re-introduced population in Slovenia developed very well, but J. Cop doubts whether a further expansion will be possible if hunting pressure remains at the same level. He proposes stronger protection outside the central area, accompanied by public education and field research on the development of the lynx population.

Comments: The number given for the autochthonous population would represent a lynx density of one individual per 30 km². Bojovic (1978) hypothesises an even higher density. This indicates a remarkable high density compared with the results of radio-telemetric studies. We maintain that the area of a lynx population is easier to evaluate than the number of lynx. Therefore, the population could be weaker than expected. As this is the only remainder of the Balkan lynx (which is considered to be subspecies of its own - see Miric 1978a), the population should be given priority attention. It is important to know the status of the lynx on the Albanian side of the border.

Development of the re-introduced population in Slovenia was the most dynamic ever known. In comparison with the difficulties in re-introduction programmes in the Federal Republic of Germany, Switzerland, France and Austria, it is hard to believe that a population based on six released lynx can suffer a loss of more than 170 individuals by legal hunting and an unknown number of additional victims in only 16 years. For the sake of further re-introductions, it is important to carry out a field study to understand the dynamics of this population. For re-introduction programmes in the Alps, it is important that the expansion of the Slovenian lynx population towards Italy and Austria should not be stopped by too heavy hunting pressures. For the long-term preservation of the lynx in re-settled areas, a joining up of the Slovenian and the Alpine populations would be of first importance.

5. FUR TRADE

The international fur trade is large and has been one of the major threats to many cat species (McMahan 1986). Lynx lynx is not an endangered species, but all cats are listed in appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). CITES treats Lynx lynx, Lynx canadensis and Lynx pardinus as one species Felis lynx only. The fur trade is recorded by the Wildlife Trade Monitoring Unit (WTMU), located at the World Conservation Monitoring Centre, Cambridge, United Kingdom. WTMU reports for 1986 and 1987 respectively a total of 17,126 and 9,602 Felis lynx skins imported throughout the world. This does not equal the total production of lynx fur, because skins are often re-exported several times. It is almost impossible to evaluate the real size of the original harvest. As for the Union of Soviet Socialist Republics, the only European country with a considerable lynx harvest, for 1986 and 1987 respectively, a total of 2,485 and 2,762 skins was reported.

6. POPULATION ESTIMATE

To know the number of lynx in a certain population is an ultimate precondition for a good management. Direct counting of any game species is very difficult, but for the large predators, it is impossible. The only way is to make an indirect census e.g. by means of snow-tracking. A good method would be

- to monitor the occupied surface;
- to determine the individual home ranges by means of radio-telemetry; and
- to understand the structure and social organisation of the population.