

Brief notes on the status and problems of the lynx in Bulgaria

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1. Prehistoric and historic data on the presence of the species

Sub-fossil lynx remains dating back to the Neolithic and the Halcolithic periods exist in some Bulgarian archaeological sites like Salmanovo, Goliamao Delchevo, Ovcharovo, and Dolnoslav.

2. Current status of the species

According to historical data, the lynx has inhabited forests throughout the country. At present, it is accepted that the species has disappeared from the Bulgarian fauna. Its status in the Red Data Book of Bulgaria is extinct (Spiridonov & Spassov 1985). The data for its latest known habitats (Atanassov 1968, Spiridonov & Mileva 1988, unpubl. questionnaire, Spiridonov & Spassov 1985, 1998) indicate the following:

- At the beginning of the century the species still existed in the largest Bulgarian mountains;
- The lynx disappeared from the Eastern Stara Planina Mountain during the thirties of the last century;
- The last data for the presence of the species from the regions of Sredna Gora and Strandja Mountains also date back to the thirties of the last century;
- The last reliable data for lynx occurrence in Pirin are from 1935;
- The last observation of the species in Stara Planina Mountain dates back to 1940 from the region above the town of Karlovo;
- The last report of the species in Bulgaria (1941) is from Rila Mountain – the Parangalitsa Nature Reserve.

There is one more observation of lynx from the Uzunbudjak Nature Reserve in the Strandja Mountain from 1952, but the information is not very reliable.

3. Analysis of the current data for the occurrence of the species

It is interesting to note that for lynx occurrence in Bulgaria – as in northwestern Greece (Komninos & Panagiotopoulou 1991) – a number of unconfirmed reports exist. They refer to the whole territory of the country and date back from the 1960s until now.

During the 1960s and the 1970s some unreliable information about observations and lynx attacks on herds of sheep in the mountains of Rila and Central Stara

Planina, as well as in their geographical link with the ridge of Eledjic, were collected by N. Boev. Similar information was gathered for the region along the Danube (the Silistra and the Russe Districts) by G. Spiridonov, T. Michev and N. Spassov (lynx that swim across the Danube?).

The possible presence of the species in the Djen-dema Nature Reserve in the Stara Planina Mountain in the 1970s and the first half of the 1980s has been reported by N. Spassov, Ts. Petrov and V. Ivanov, according to communications by shepherds and poachers who state they have witnessed lynx. In the mid-1980s scats resembling lynx's were found in the Stara Reka Nature Reserve in the Stara Planina Mountain (above Karlovo town) by G. Spiridonov and in the mid-1990s tracks similar to lynx's were observed in the same region by K. Georgiev. In 1998, G. Spiridonov discovered what were probably lynx scats on Rila Mountain, in the Rila Monastery Forest Nature Reserve. An attack by a lynx on a young cow was reported from the region of Apriltsi in Central Stara Planina Mountain in 1998 (a subsequent inspection by Wilderness Fund experts could not substantiate the information). Soon after this case, a „strange“ animal was noticed crossing the motorway in the same region. The people observing it described it as a lynx immediately after seeing samples in the National Natural History Museum.

Last winter (1999) the press released information about a lynx seen by a group of hunters in the region of Balchik, on the northeastern coastline of the Black Sea. Our additional inquiry did not substantiate the information. The lynx killed by a passing car close to Sofia in the Pernik region also turned out to be a mistake; the animal was a wild cat. In recent years, the skin of a lynx killed in Strandja Mountain was shown to experts, but it is not certain if the animal was really shot in Bulgaria.

Most of this information – at least 30 reports known to us – could hardly be referred to as reliable. The reasons for the existence of so many unconfirmed data can be different; many of them are connected with the fact that the wish to meet this secretive carnivore has become part of the mythology.

However, part of the information, even though it is not fully reliable, deserves attention. It is not very probable that the species has been preserved for dozens of years in separate wilderness areas without being discovered or without having animals shot. Still it is possible to have some natural remigration of the species from the west (Spassov *et al.* 1999). The data from

western Bulgaria from recent years deserves special interest (see the above mentioned scats from the Rila Mt.). This information is worth considering given the data for the remigration of lynx across the Iron Gates (on the Danube) from Romania to Serbia and the reliable data for lynx killed in Serbia in the outer areas of the Western Stara Planina Mountain on the border with Bulgaria (Mirić & Paunovic 1992). An animal described as a lynx has been observed in the Rui Mountain (western Bulgaria) close to the Macedonian border by an amateur ornithologist in 1997. There are also some very recent data for an animal killed in the Western Stara Planina Mountain and in the Trun region, western Bulgaria, whose skin is preserved.

4. Problems of lynx conservation in the Balkans

Two problems form the basis of the strategy for the conservation of the lynx in the Balkans:

- The possibility that it forms a separate sub-species (Mirić 1981), which is arguable, but cannot be excluded;
- The lack of information about the population. Most probably it is fragmented into a number of comparatively small sub-populations. Each of them faces serious threats to its long-term survival.

Despite the fact that there are no proofs for the existence of separate sub-species, it is desirable that this possibility be considered in plans for future re-introductions or for supporting a natural re-colonization. Taxonomic surveys (including DNA analysis) of native lynx are needed to clarify the taxonomic status and population affinities of the Balkan population, and to determine its conservation importance. It is also recommendable to include sub-fossil remains, such as are available in Bulgaria. In addition, in Bulgaria there is a well-equipped laboratory ready to take part in such surveys.

The beginning of any program for preservation of the lynx in the Balkans should include a serious study of its status in Albania, Serbia and Macedonia, as well as an assessment of possible and favorable ecological corridors for the local micro-populations. Special attention should be paid to the possibility of migrations across the Danube and the natural re-colonization of the Balkans by the Carpathian lynx.

Given the unclear status of the Balkan lynx, all efforts should be made to preserve and stabilize the already existing native sub-populations and then to look for opportunities to reintroduce it to its former habitats. Of course it is desirable that an assessment of the habitats as well as a feasibility study are carried out so that efforts are focused on areas that may ensure the long-term survival of the species. Such an assessment may even require a redirection of efforts to more promising habitats or to supporting the natural re-colonization.

Such a case is possible for Bulgaria, where natural re-colonization is possible if the Serbian or the Macedonian populations increase their numbers, as well as if a migration from the Carpathian population occurs. There are already data for this (Spasov et al. 1999). During recent years reports of observations of the species in Bulgaria have become more and more regular. Only a small part of them deserve more serious attention and there is no serious proof for the presence of the lynx in Bulgaria. However, the possibility for a natural re-colonization should not be excluded.

Some years ago, the Wilderness Fund developed an idea for the re-introduction of the lynx in Bulgaria. An assessment of the habitats and a feasibility study were made in 1992 with the assistance of an expert of the French National Hunting Service. The results were rather positive. This and the experience gained may serve as a basis for future work. Yet the fact that the prey base has changed shows that a new study is needed for the Bulgarian situation.

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