

Evidences for the Lynx recovery in Bulgaria: the Lynx discovered in Western Rhodopes

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Abstract. On photographs taken by a camera trap in the region of Yagodina village, Western Rhodopes, (Bulgaria) the presence of the Eurasian Lynx *Lynx lynx* L. has been registered in the summer of 2014. This is the most reliable to date argument for the presence in Rhodope mountains of this critically endangered species in Bulgaria and for its gradual dispersal from the western mountainous border region of Bulgaria to more appropriate country habitats inland.

Key words: lynx recovery, Bulgaria, Rhodopes.

Introduction

The Lynx, *Lynx lynx* (Linnaeus) was assumed to be extinct in Bulgaria at the beginning of the 40s of the previous century (Spiridonov & Spassov 1985). After this period reports of its appearance appear for the Central Balkan range, Rila mountain, the Western Rhodopes (Dobrostan and Dabrash), the valley of the river Danube and the Ludogorie region, the river Ropotamo, Strandzha, and the Western border mountains (Spassov & Spiridonov 2011). These reports are mentioned and discussed in details in Spassov *et al.* (2006) and Spassov (2007) but they represent unconfirmed data. The presence of the species was proved in the region of the Hunting reserve of Stakevtsi, the Western Balkan in 2004/5 (Spassov *et al.* 2006) where year after, a lynx was found killed illegally. In 2008 it was detected by a camera trap (photo of Zlatanova & Racheva) (Zlatanova *et al.* 2009) in Osogovo mountain and after it was captured on photo twice again in the same mountain till 2011. Obviously, these lynxes are part of the population formed in the last 20-25 years in Eastern Serbia by animals that settled on their own from the Carpathian Mountains (Grubač 2000, Spassov *et al.* 1999, Spassov 2007). Now the lynx is included in the Red book of Bulgaria (second edition) as critically endangered (Spiridonov & Spassov 2011).

It could be considered that the species is entering to more appropriate mountainous biotopes of the country but evidence has not been found so far. Until now, certain evidences were known only for the western mountainous border region of Bulgaria. In the report for *Lynx lynx* in the project of the consortium Natura Bulgaria for mapping and determining the

conservation status of habitats and species (D. Zlatanova) data about the presence of the species inside the country was published. However the presence of lynx in Strandzha seems doubtful and that in Rila and Central Balkan Mountains - uncertain. The pugmarks photographed in Bulgarka Natural Park (Middle Stara Planina) by Al. Dutsov in 2011 (pers. comm.) are very similar to the lynx, but the prints of toes are slightly larger and less oval than in cats. In some cases, hunting dogs have the same size and proportions of traces and the nails are not always printed in the pugmark (personal photo library of authors - NS). For the Rhodopes, although some existing information, there is no credible evidence for lynx presence.

On 09.08.2014, in the region of Western Rhodopes, between Trigrad and Yagodina (the GPS data are at disposal in the authors' data base), two photos were made with embedded camera traps (Fig. 1 and 2) which provide new data on lynx entry into the country. The pictures are unclear and were taken in bad weather conditions, deformed by movement and the slow speed of shooting. Even so, there are some clear identification features that distinguish the animal from the wild cat, the Shepard dog with cut tail (often Asian Shepherd is used in the Rhodopes) and the other mammals: the body has markedly long legs, spotted coloration can be seen on the back, the tail is quite short but not that short as in Central Asian Shepherd, dark end on the tail (especially visible on the second photo). All features of the posture, movement, stride and the general constitution show that this is lynx.



Fig.1. A night picture of a lynx photographed (V.P.) in August, 2014 by a camera trap in the region between Trigrad and Yagodina.



Fig.2. A second photo of the same animal made by the camera trap an hour after the first one. The dark end of the tail is visible.

After the witness evidence of the Director of the hunting husbandry “Izvora”, Stefan Manolov, he has seen a lynx near the Kastrakli Natural reserve (Devin region) in 1975. In 2007, after other evidence, the hunter Mustafa Tair from Borino noticed a lynx at about 5 km to the west of Borino. About a year earlier, again in this region (Muglenska River) were observed traces similar to the lynx ones. In 2012, according to G. Spiridonov (pers. comm.) a team for study of bear in the above mentioned project of Natura 2000 (G. Spiridonov & L. Asenov) found excrements very similar to the ones of lynx, containing hairs from chamois. The location of the find is about 10 km from the place where the pictures were taken. All these observations are from the region of the camera-trap registration.

The recent pictures are the strongest argument to date for the presence of lynx in the Western Rhodopes. It is difficult to say whether it is a local nucleus or single entry. The species (individual animals) apparently moves to the inland of the country in more appropriate mountain habitats. However, cannot be stated so far that there is a presence of a real lynx population in the country. Cases of reproduction could be registered till now only in the west border area. In 2009, the trail of male and female lynx was detected in the breeding season by Dr. Vassil Ivanov (pers. comm.) in the high mountain zone of Osogovo.

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