ALBANIA, AN IMPORTANT ROOSTING SITE FOR LESSER KESTREL (*FALCO NAUMANNI*)

Klea Duro[1], Erald Xeka[1], Besjana Shehu[1], Kristi Bashmili[1] & Taulant Bino[1]
[1]Albanian Ornithological Society

Introduction

The Lesser Kestrel (*Falco naumanni*) is a colonial migratory bird which breeds in the Mediterranean region, as well as in the Western Europe, Central Asia, to Mongolia and China (BirdLife International 2022). During the second half of the 20th century, its population underwent some significant decline. The main cause of its decline was habitat loss and degradation in the Western Palearctic breeding grounds, mainly as a result of agricultural intensification (BirdLife International 2022). Same factors have contributed also to a decline in Balkan population (Minias, *et al*., 2009). Nevertheless, nowadays the species appears to be stable or increasing in many parts of its range (BirdLife International 2022).

The importance of Albania for the Lesser Kestrel population was unclear until 2015 when regular monitoring of roosting sites and site visits to potential breeding sites were carried out in the country (Bino *et al*. 2018). Before that, information was limited to data on morphology, distribution, phenology, diet, location of roosting sites (Zeko 1963) and quantitative information of only one roosting site (Minias *et al*. 2009). In addition, its breeding status was unclear due to lack of sufficient breeding evidences despite former reporting as a breeding bird in Albania by Zeko 1963 and BirdLife International (2004, 2016).

Considering the lack of evidences on the importance of Albania for the Lesser Kestrel, the Albanian Ornithological Society undertook in 2016-2022 systematic surveys from June to September, each year, in order to determine the breeding status of the species in Albania as well as the relative importance of Albania, the relative importance of different distribution areas within Albania and the trend of the Lesser Kestrel in those areas, aiming the proposal of long-term conservation measures.

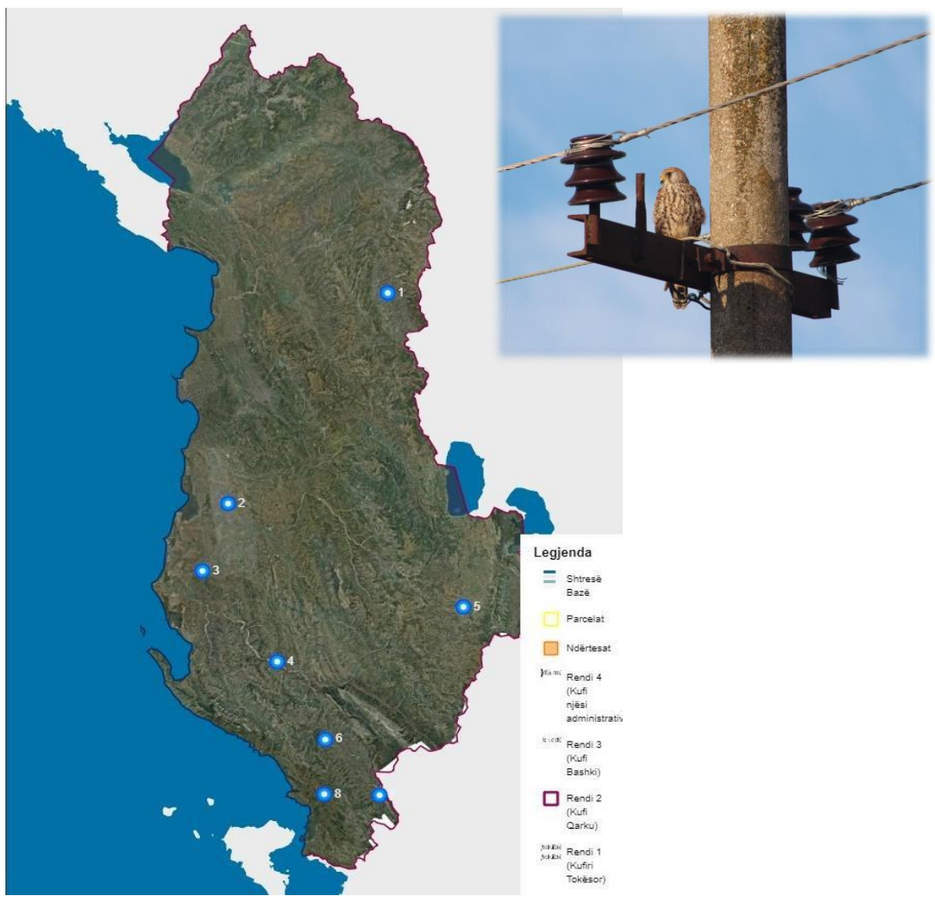

Figure 1: Roosting sites of Lesser Kestrel in Albania (1-Peshkopi; 2-Plug, 3-Fier; 4-Qesarat; 5-Mollas; 6-Gjirokaster; 7-Jergucat; 8-Delvine).

Methods

Annual monitoring of the Lesser Kestrel in Albania has been carried out from May to September (2016-2022). Our surveys have included step habitat types that match with the habitat requirements of the species as well as roosting sites known before or discovered during the early years of the study period.

We have checked for breeding evidences areas in southern Albania, mostly in the Vjosa river basin as well as other areas in the north, including Koplik plain.

We checked also 8 known roosting sites of the Lesser Kestrel in Albania, including Peshkopi, Plug, Fier, Qesarat, Gjirokastër, Jergucat, Delvinë, and Mollas. Not all roosting sites have been monitored annually, but most of them have been checked on a regular basis.

In each of the roosting sites, the observers have counted the total number of individuals twice per day, in the evening when Lesser Kestrels go back to roosting place and in the morning when they leave, and then the numbers from the evening counts and the morning counts have been compared in order to make an assessment closer to the truth.

In our experience, the most effective and accurate counts are those early in the morning. During our observations it was noticed that the individuals that leave the roosting place in the morning will not return to the roosting place for a long time during the day, thus avoiding double counting.

Results

Surveys (2016-2022) in potential breeding sites provided no breeding evidence for the Lesser Kestrel in Albania despite the existent of good breeding and feeding habitats for the species. Indeed, Lesser Kestrels are observed in small flocks by May each year, they disappear in late May and June and they start to show up by mid-July each year. Our inventories in June and phenology of their presence in Albania provide strong evidence for the non-breeding status of the Lesser Kestrel in Albania. The study confirms the species only as a passage migrant in these recent years.

5,600-11,480 individuals of Lesser Kestrel were registered in Albania in eight different locations, mostly in the southern part of the country, during their pre-migration movements.

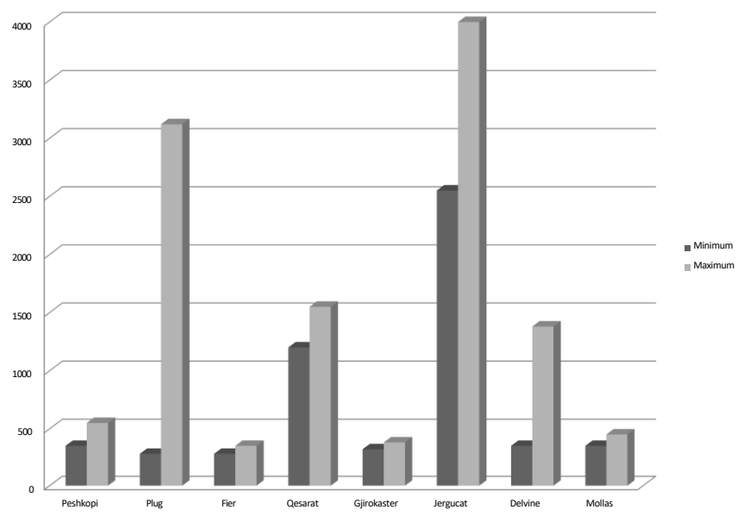

Figure 2: Graphical distribution of Lesser Kestrel by roosting sites.

Table 1: Minimum and maximum numbers of individuals recorded in each roosting site since 2016.

Nr.	Sites	Min	Max
1	Peshkopi	350	550
2	Plug	280	3,120
3	Fier	280	350
4	Qesarat	1,200	1,550
5	Gjirokaster	320	380
7	Jergucat	2,550	4,000
8	Delvine	350	1,380
9	Mollas	350	450
Total Albania		**5,600**	**11,480**

The largest known roosting site in Albania is the one in Drino Valley where circa 2,500-4,000 individuals are counted there each year.

The roosting site in Plug (Lushnje) has increased in importance during the last years, with the highest figure recorded in 2022 (3,120 individuals).

Whilst in most of the roosting sites, there are small fluctuations in the number of individuals counted each year, there are also sites where we have recorded significant increase or decrease in the number of individuals compared to the figures recorded in the beginning of this study, such as the case of Jergucat and Plug roosting sites.

The earliest record in Jergucat within this study was in 2016 when 3,500-3,800 individuals were recorded. While in the following years the numbers remain more or less the same, with small fluctuations from year to year, in the recent years we have noticed a significant decrease, with the lowest figure 2,550 individuals (2022).

While, in Plug, we have a different situation where the number of individuals counted each year is growing progressively since 2016. The roosting site has increased from 280-320 individuals in 2016 to 3,120 individuals in 2022.

Conclusions

Despite the lack of breeding evidences, Albania remains important for the Lesser Kestrel. Individuals counted in roosting sites represent roughly 3.5-7.2% of the global population considering that BirdLife International reports the global population in the band of 120,000-200,000 individuals.

Every year thousands of individuals from breeding populations in North Macedonia, Greece, Italy, Bulgaria, etc, use valleys and plains in Albania as roosting sites during their pre-migration movements (Bounas 2018). The presence each year of large pre-migratory flocks of Lesser Kestrel shows the importance of Albania for the global survival and conservation of the species. Therefore, annual monitoring of the roosting sites and site-specific conservation measures should be undertaken in order to provide safe roosting sites for the species.

The importance of the Albania for the pre-migratory Lesser Kestrels emphasizes the need to undertake specific conservation measures in this area in order to mitigate any possible threats to the species. This need becomes even more urgent in these last years when we are facing a significant decrease in the number of individuals in Drino valley which we is very likely attributed to the intensification of agriculture in the area in these recent years.

Finally, a national action plan for the species should be in place in order to provide long-lasting, effective, coordinated conservation measures in a national level.

Acknowledgements

We thank Gentjan Hyka, the staff of RAPA Gjirokaster, and all the people and volunteers who have joined us during these years in the field work for the annual monitoring of Lesser Kestrel roosting sites.

PROJECT • **LIFE FOR LESSER KESTREL** • LIFE19 NAT/BG/001017 • IMPLEMENTED WITH THE SUPPORT OF PROGRAMME LIFE OF THE EUROPEAN UNION