

The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Deniz Mengüllüoğlu
Project title	Management of the conflict between hunters and Eurasian lynx in northwestern Turkey
RSG reference	11447-1
Reporting period	
Amount of grant	4800£
Your email address	denizmengulluoglu@gmail.com
Date of this report	27.12.2015

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Estimation of the hunting pressure on the prey source			yes	The number of registered formal hunters in the district of Nallihan (study area) is only 145. However, much more poaching of brown hares occur in the area. Therefore, an average harvesting number (30 individuals/per village/per year) was used to estimate the total annual harvest (2250 individuals/per year) of brown hares by hunters. Predation rate by lynx on hare prey estimated from lynx collared during this project period (for solitary adult/sub-adult lynx 0.25 hare per day, for family groups 0.75 hare per day, for dispersing juveniles 0.125 hare per day). In total suitable lynx habitat (1.260 km ²) of Nallihan district with 60 lynx individuals (territorial adults + floating subadults and newly dispersing juveniles) brown hare kill rate is 7528 hare per year in average.
Lynx Monitoring			Yes	Camera trapping along with genetic analyses revealed the number and density of lynx and the core lynx habitats in the study area. From the genetic samples collected (isolated from scat samples), 29 lynx individuals has been identified through genetic analyses (microsatellites) and 18 individuals identified through camera trapping. Other lynx records, such as camera trap pictures, sight records were also collected to estimate the total lynx habitat and elevational gradient where lynx permanently occur in Nallihan district.
Prey density estimation			Yes	The new methodology of Kusak <i>et al.</i> (2015) applied to estimate the brown hare densities in the study area using camera trap capture rates of this species. (35 hare per one km ²)
Meetings with the officials of General		Yes		Could not be fully achieved in the planned schedule due to political

Directorate of Nature Conservation and National Parks and Central hunting Commission for Hunting Area Management				instability in the country.
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Regulation in hunting management could not be fully achieved in the planned schedule due to political instability in Turkey. Turkey has experienced two problematic elections and many explosions in the public areas in 2015. After the first election government could not be established and all the bureaucracy has stopped for 6 months. Due to political concerns officials of the General Directorate of Nature Conservation and National Parks refused to take any new decisions on hunting area management and wanted to postpone the meetings on management of the area to the hunting year 2016. Meanwhile, a documentary film about the lynx research, monitoring and conservation was proposed and supported by the directorate to raise awareness among the youth not only in the local area but also in the country wise scale. Filming has already started in the study area on this research. Recording will be finished at the end of spring 2016 and published in "TRT Belgesel" (Turkish Radio and Television Documentary Channel).

3. Briefly describe the three most important outcomes of your project.

- During the course of the project period the awareness of the local community (mostly hunters and villagers) about the lynx increased tremendously. Spring 2016 will be a period where local schoolchildren will also be informed about the lynx and local wildlife.
- Being the first definitive study (including diet, spatial ecology, genetics and conflict with human) about Eurasian lynx in Turkey this project attracted the attention of wildlife officials and will serve as a start for the conservation of the species in the area. A documentary film about the ecology, conservation and monitoring of Eurasian lynx in here has already started which will hopefully raise country wide awareness among people.
- For the hunting year 2016-2017 the core lynx habitat in the study region will be proposed as a wildlife conservation reserve (discussions has already started with the wildlife officials) and there will be measures like a wildlife passage bridge and signs on the highways points which are used by juvenile dispersing lynx.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

- During the camera trapping and live trapping surveys villagers were also included in the field work and informed about the biology and habitat of the lynx. Several meetings were held in the villages inside the study area to inform the residents about the status of lynx in the area, importance of hare in its diet and negative effects of excessive hunting on prey and carnivore populations.

- Several lynx pictures, as a flagship species of the district, are being exhibited in a famous local hunter restaurant (İpekyolu Lokantası) which is also being regularly visited by the hunters coming from big cities such as İstanbul and Ankara. A local café (Juliopolis Café) is also exhibiting camera trap pictures of the project to the customers and informing them about the lynx and ongoing study.
- Along with the local wildlife department, Nallihan Municipality and local forestry department has supported the project providing logistic support several times and Nallihan Tourism Society provided free accommodation in the periods of live capture surveys.
- A meeting was held with the Nallihan Education Directorate and a presentation about the lynx will be presented in ten pilot schools in March 2016.
- Three master's students and many nature volunteers were educated about lynx and other wildlife's monitoring (camera trapping, scats, footprints, live trapping and tracking) in practice in the study area.

5. Are there any plans to continue this work?

Since a short term study (or project) is not enough to totally understand the lynx and prey dynamics together with conflict dynamics with humans, I want to continue researching in this area and set the start of a long term monitoring program. The area will be proposed to be the first carnivore and prey monitoring area in Turkey.

6. How do you plan to share the results of your work with others?

After being completed, I want to share the results of this project with a multi-language documentary film, presentations in the Ministry of Forestry and Water Affairs and presentations in Turkish and international conferences.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

I could not completely use the RSG fund due to problems mentioned at question 2. Meetings with Wildlife Department, Hunting Department and Central Hunting Commission had to be postponed due to political instability. At 2016 winter season a comprehensive exhibition and meetings will be organised to present the results of the project and conflict mitigation solutions will be discussed in collaboration with all stakeholders taking place in management and usage of the project area. Therefore, £1000 which was allocated for organisation of meetings and £350 which was allocated for publishing purposes, are still not used.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Performing interviews	630	630		
Pellet counts and camera trapping	1.120	1.120		
Buying camera traps	1.470	1.470		

Arranging meetings and printing sources and publishing results	1450	100	1.350	
TOTAL	4800	3550	1350	

9. Looking ahead, what do you feel are the important next steps?

The first important step is the change in regulations and management of the lynx habitat in the study area in the shade of results of this research. Another important step is to continue this research for longer time periods as a monitoring program and share the results with all stakeholders and decision makers in the related ministry.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

I used the RSGF logo on a poster presentation at 10th International Conference on Behaviour, Physiology and Genetics of Wildlife. The presentation was on the unusual marking behaviour of Eurasian lynx in Anatolia.

11. Any other comments?

I would kindly ask to elongate the project period to the end of April 2015 in order to achieve all of the objectives which were proposed in my RSGF application. The most important step which is the changing of the hunting management of the farea is still needed to be discussed with the General Directorate of Nature Conservation and National Parks and Central hunting Commission.