

The Rufford 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 honest as you can in answering the questions – remember that negative experiences are just 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	Mahmood Soofi
Project title	Effects of anthropogenic pressure on large mammals in the relict Hyrcanian forest, Iran
RSG reference	17489-1
Reporting period	
Amount of grant	£5000
Your email address	Mahmood.soofi@stud.uni-goettingen.de Msoufi1980@gmail.com
Date of this report	17.10.2016

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
To assess current human-related threats to medium and large mammalian species across the Hyrcanian forest.				Based on our results, there are three noticeable threats occurring in the region including: poaching, livestock grazing and logging. We conducted the seasonal occupancy-based monitoring by involving local rangers, poachers and volunteers, as such participatory monitoring approach allowed us to increase the detections of potential threats.
To prioritise conservation needs for targeted species, particularly for the threatened ones (Persian leopard and Caspian red deer) in different protected and non-protected reserves.				We covered 16 study sites, which cover approximately 40% of the existing Protected Areas in the Hyrcanian forest. We believe that the outcome of our intensive field survey potentially provides a representative conservation needs for wildlife managers upon their decision-making.
To establish the cost-effective and robust wildlife monitoring method with local community-based approach				Historically, there is a weak linkage and/or negative attitudes between park staff and poachers; we attempted to rectify relationships among these people. However, we believe that such a deeply rooted negative perception may not be resolved in a very short term. Constant involvement of these stakeholders is essential in local and

			<p>international projects. To keep constant contact with local community, we used a popular cell-phone application that is widely and formally used by people in Iran. It is so called "Telegram". We took this opportunity as our communication tools with stakeholders.</p>
--	--	--	--

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

During the course of field research we faced with few unpredicted difficulties. Firstly, traditional culture of wildlife monitoring was challenging issue, for instance, the park staff had less understanding in sampling theory and wildlife monitoring in general. Therefore, to tackle this challenge, we implemented meetings with local rangers who are not properly trained in method accuracy, thus we trained and involved local communities with the scientifically robust, double occupancy monitoring method to familiarise them to the field protocol (i.e. occupancy method, camera trapping and GPS etc.).

Secondly, there is historically a weak linkage and/or negative attitudes among park staff and local communities. Thus, such perception among these stakeholders was influential to implementation of community based monitoring. As an example, park managers were not content to involve poachers in monitoring. Thus, we had appeared as an intermediary or independent party - not as government and not local people, so that we then engaged poachers to the project. We attempted to rectify relationships between these parties.

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

Three important outcomes of our research are as follows:

1. It provides a general pattern of occupancy, assemblage and distribution of medium and large mammals across the Hyrcanian forest.
2. Our research further addresses the first-hand information of human threats (i.e. poaching, logging and livestock grazing) to medium and large mammal species. Thus, wildlife managers can prioritize the conservation needs for

targeted species particularly the threatened ones (e.g. Persian leopard and Caspian red deer) in different reserves and unprotected area.

3. We implemented participatory based monitoring in the region. That allows to wildlife managers to get closer to local people and engage them into their conservation programmes, particularly, where the human resources and budget is low. However, we believe that making this engagement sustainable it surely requires constant involvement of local communities in monitoring project and principally this may not be achieve in a short-term period.

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

One of the main objectives of our project was to conduct a participatory based wildlife monitoring. Thus, we involved local villagers in our wildlife monitoring including; herdsman, poachers, park staff and volunteers, during which, we trained all these parties and paid off per diem for each field personnel. Regarding the local students, we have given ideas and advices to their thesis subject within our project framework. As well as the park staff had benefitted from our research results, for instance, they can potentially prioritise the conservation needs based on information and experience obtained upon our monitoring project.

5. Are there any plans to continue this work?

Yes, we have planned to continue the project (please see reasons) below at the question 9.

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

In order to share our results, we planned to publish the data in peer reviewed journals. Furthermore, we are also keen to share the outcomes of our research with Iranian "Department of Environment". The result (e.g. study design, produced maps, threats and species records) can also be applied for the prioritisation of conservation actions in each wildlife reserve, where actually our research has being conducted. We also intend to share our data by publishing it in peer-reviewed journals (please see question 10). As we already got acceptance for our paper in 'Wildlife Biology'.

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

Indeed, the RSG was used over three different field sessions; for example, we allocated a quantity of budget for each round of the fieldwork and the expenses of each round was proportionally varying with the change in number of the days spent in the field, number of surveyed cells, car hire and car maintenance etc. However, we had rather a mismatch in budgeted amount for some items, minus or surplus. There were various reasons for which we provided in comments section below for each difference in actual and predicted budget, e.g. the major minus difference was related to field personnel's per diem and local transportation. In contrary, the equipment and food related budgets had surplus difference. However, we saved money from items with greater difference and used them in items as appropriate as possible. Eventually, however, we were able to make a balanced budget to fulfil our planned objectives in a best possible way. (Please see the comments in table below).

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.

The exchange rate is 50000 Ruils = 1 GBP, however, this rate is varying in between 45000 to 50000

Item	Budgeted Amount	Actual Amount	Difference	Comments
Camera trap	1530	760	770	We did our camera trapping jointly with other projects in the region (e.g. Persian leopard project, Hyrcan project). Therefore, we saved the half of the budgeted amount for other expenses.
International travel	710	803	- 93	Our travel dates were already set and was not flexible, so we had to purchase tickets on certain dates and unexpected ticket prices increased the predicted budget.

Food	1500	1206	474	Sometime local guides had their own food in the field, so we had a mismatch in our expected budget for the food.
Per diem for field personnel	500	1085	- 585	We surveyed 16 study areas - that was more than planned. For our monitoring project we needed to involve numerous local guides and rangers. Local people are supportive and their skills are comparable to those game rangers. This would surely strengthen our reputation in the future conservation projects. So, we paid per diem for field personnel, which increased the budgeted amount by 100%.
Local transportation	760	1102	- 342	As mentioned above comment, we covered 16 study areas, as travelling within and among the distant areas have increased the costs of fuel (fuel price locally increased) and car hire. In some cases we also had car maintenance expenses. However, to make a balanced of our budget, we used money from the saved money from other item budgets.
TOTAL	5000	4956	44	

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

Yes, the challenges we identified in this study, was endemic within many of Hyrcanian wildlife reserves, as it is probably also the case elsewhere where resources and technical capacity are in limited supply. When viewing to our project achievements, there are several major conservation considerations that need to be urgently tackled and implemented in research and conservation framework projects to boost the current conservation practices.

Here we propose few conservation implications for future projects are as follows:

- To conduct socio-economic studies to unveil the potential reasons for poaching as to reverse alarming population declines of the ungulate species in the region

- To conduct monitoring of the Persian leopard and its prey population in the Iranian lesser Caucasian part (transboundary wildlife corridor).
- Urgent reintroduction programs is needed for the threatened Caspian red deer in the region in order to reverse its declined populations
- Such monitoring projects would promote our understanding about interconnection of wildlife between Iranian lesser Caucasus to the Talish Mountain in Azerbaijan; mutually cooperative initiatives need to be taken by the countries, sharing transboundary populations, this can be done by establishing 'Peace Parks'.
- Last but not the least, participatory monitoring is gaining popularity as a way of engaging local people in the management of their natural resources, while also producing valuable ecological information. The public engagement aspect is of high important, for wide ranging mammalian species threatened with intensive poaching, because, often protected areas fail to hold animals inside, as they are forced to occur in large populations outside the reserves. Participatory monitoring approach may secure wildlife populations not only inside reserves but also in non-protected areas. Consequently, it's recommendable, that policy-makers should give greater role for the stakeholders to safe wildlife populations at the scale of landscape.

**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?**

Yes, I have presented (*in Persian*) my project achievement to wildlife experts and managers in Iranian "Department of Environment". We used RSGF logo in presentation and meetings.

Newly, we got an acceptance for our paper from "Wildlife Biology", titled "Precision and reliability of indirect population assessments for the Caspian red deer (*Cervus elaphus maral*)". The name of the Rufford is being mentioned in the acknowledgment section of the paper.

11. Any other comments?

We would keep informed the Rufford Foundation about our other paper publications.