

## The Rufford Foundation

### Final Report

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

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
<b>Your name</b>	Ghayet El Mouna Hajji
<b>Project title</b>	Prospection and restoration of Barbary deer habitat in some parts of its former distribution range in Tunisia: a tool for its conservation and monitoring
<b>RSG reference</b>	17119-2
<b>Reporting period</b>	September 2015- December 2016
<b>Amount of grant</b>	£ 5000
<b>Your email address</b>	<a href="mailto:gayahajji@hotmail.com/">gayahajji@hotmail.com/</a>
<b>Date of this report</b>	27 February 2017

**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
<p>Provide information about the release sites (within the four new protected areas) by making:</p> <ul style="list-style-type: none"> <li>- Evaluation of the vegetation cover.</li> <li>- Inventory of predators of the species.</li> <li>- Inventory of competitors of the species.</li> <li>- Inventory of water supplement.</li> </ul>				<p>This was the first study concerning these new protected areas. Our main task in this research study is to make an evaluation of those areas and choose the most adequate sites for a translocation purpose of Barbary deer in the near future. In fact we prospected four new protected areas created in 2010 and later (Jebel Chitana-Cap Négro national park (10122 ha); Oued Zeen national park (6700 ha); Bent Ahmed natural reserve (1541 ha) and Jebel El Ghorra natural reserve (2539 ha)). Some sites need restoration to be suitable for deer translocation to ensure its survival and development. However, further investigations should be carried out concerning the study of the vegetation cover of the concerned areas.</p>
<p>Provide basic information that could be applied to better manage translocated animals in the new habitats</p>				<p>The outcome of this work is further expected to provide baseline data to establish guidelines for an effective landscape and wildlife management, minimising the impact of human activities (e.g. deforestation for agricultural purposes) and for a long term monitoring program of Barbary deer population.</p>
<p>Provide information about the translocation (number of animals, season of release)</p>				<p>Measures should be taken in order to reduce the risk imposed on the population of El Feija by inbreeding, forest fires or diseases. Further</p>

			investigations should be done on animals (in progress) to achieve a translocation plan with all its components. The forestry department of Tunis will support translocations.
Create a starting point for further research involving Barbary deer in Tunisia and in Algeria.			This investigation is foreseen to consolidate the collaboration between wildlife researchers and the governmental body in charge of conservation represented by the forestry department in our case. This will strengthen links between different stakeholders and influence the local authorities to make decisions based on scientific data. We succeeded to create a common working group with mainly some conservationists working on wildlife management in the forestry department of Tunis and wildlife researchers. We recently implemented a new strategy for the conservation and rehabilitation of Barbary deer in Tunisia and in its whole distribution range in North Africa (in Algeria mainly). I prepared a multidisciplinary proposal for a long term project with all its components (infrastructure, research investigation, translocation, restoration of habitat and a follow-up phase). We have already submitted our proposal trying to find financial support.
Report the main results and conclusions of this project and to raise awareness about the importance of the translocation program.			I met the Director of the Forestry Department in Tunis and I discussed with him the strategy that should be undertaken to implement a management and rehabilitation plan for Barbary deer in Tunisia. I met also the Director of National Parks in Tunisia, he seems very enthusiastic to my plan with deer conservation, and he requested my expertise to

			<p>implement a big project dealing with Barbary deer conservation (it is already done as described above). The main results of my RSG projects have been compiled in five presentations (in a 2-day workshop in Algeria). I am also preparing a paper compiling our scientific findings.</p>
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**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

Our work plan was shifted and we have started the fieldwork two months after the presumed date. Hopefully, everything worked well after the start of the project; we made our last planned field excursion in December 2016. We visited also El Feija National Park, where the most important population of Barbary deer occurs.

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

We have, with the collaboration of foresters and a topographic map focused our efforts on some areas of the listed protected zones and proceeded, according to some evaluation criteria (access, topography, presence of roads...) to a selection of the two most adequate release sites. In a second step, we have refined our study and proceeded to an evaluation of those selected release sites (vegetation, seasonal variation of food supplements, water presence).

As a team leader, I coordinated the project at the scientific and logistic level. I settled the methodology of work and participated in almost all field excursions. I am also responsible for data analysis and reporting.

**3.1. Scientific results.**

We contributed through this second RSGF project to the elaboration of a basic database on Barbary deer potential habitat in the new network of protected areas in the northern part of Tunisia. This database will serve as guidelines for the species translocation, reinforcement and/or reintroduction. By the same way, we actualised some data about the species in its whole distribution range in Tunisia and about different threats hampering its progress. This information is essential to subsequent studies (ecology and census). Barbary deer does not exist outside the protected areas only few individuals are still free in the wild. These few deer escaped from poaching and took refuge in the mountainous inaccessible areas. The intentional destruction of the two most important deer reserve in the north of Tunisia (Mhibes Reserve in Sejnene delegation and Ain Bacchouche reserve in Tabarka) make its

management difficult. Some management actions taken by the forestry department have neither explanation nor justification.

The population number is still low to be overseen, so the official population size (estimated to be around 2000 animals) is overestimated. It is true that I have not done a census study but compared to the situation in the 2000 where I have been working on this species for many years till today, the population size in Tunisia seems to be low.

The RSGF allowed me to update my data on this species in its whole distribution range.

### 3.2. Public awareness.

Apart from the intrinsic goals, the project had additional and subsequent outcomes. Thanks to the Rufford Small Grant, we had the opportunity to work closely with some conservationists; through this project, we have established a network of collaboration between academics and governmental body in charge of nature conservation. This has strengthened links between us (researchers) and local authorities since they are now inviting us in their different workshops and all national manifestations concerning Barbary deer, they are also more cooperative and helpful.

I am now in constant contact with people who works for the recovery and conservation of Barbary deer in Tunisia and in Algeria. An educational programme is prepared in order to warn people to the need to conserve and protect Barbary deer. In December 2016, I was invited as a wildlife expert by the Algerian forestry department to give six presentations (the Tunisian experience with Barbary deer conservation, the conservation plan, translocation, alimentation and a management plan) in a 2-day workshop dealing with Barbary deer conservation. This workshop was totally supported by the Algerian Government and was organised within the framework of the Tunisian-Algerian cooperation programme on wildlife conservation. The Tunisian forestry department nominated me as their "Ambassador". On this occasion, I have discussed with all the stuff working on wildlife management concerning their problems with Barbary deer conservation and management plan. I identified the main difficulties encountered by the "point focal Barbary deer" and their lack of experience concerning wildlife conservation and management.

I used Rufford Logo in all my presentations and I introduced my projects with the Rufford Foundation and explained its role in the conservation of threatened animals and their habitats with emphasis on the necessity of conservation of this species

hoping that during this process the potential of the species as a flagship for North African forests conservation will be perceived.

### 3.3. Collaboration and network.

Beyond the scientific results, the most important outcome of my project on this North African flagship species is the extent to which conservation action in Tunisia and recently Algeria can be achieved and the involvement of different stakeholders. Thanks to this RSGF projects, I have maintain and consolidate my conservationist and wildlife researcher skills to be considered the first deer conservationist expert in North Africa. The Algerian Ministry of Agriculture invited me through its wildlife department to discuss a strategy for a common conservation program on the species.

As I explained previously, I wrote a proposal for a long-term project on the conservation of Barbary deer in its whole distribution range in Tunisia. We are looking for sponsors.

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

Regarding to our planned project to reintroduce and translocate deer into new areas considered as its historical distribution range. We should think to implement an educational programme involving the local community in the conservation matter of this flagship species. This is what we intend to do with our future project with the DGF (forestry department) of Tunis.

## **5. Are there any plans to continue this work?**

Our work on Barbary deer has started many years ago in the Tunisian side and will concern in the future the whole distribution range of this species. We would like that our new data and finding in this project will serve to consolidate the population of Barbary deer and contribute to its progress. In fact, Barbary deer is the only and last deer species in Africa and its maintenance constitute a challenging mission for all conservationists.

The scientific work (ecology, biology, and census) will be continued and enhanced with the collaboration of foresters. We are preparing an action plan to ensure the viability of this species. To reach this goal we will collaborate respectively, with the Tunisian and Algerian forestry departments.

We finally, succeeded to create a common working group with mainly some conservationists working on wildlife management in the forestry department of Tunis. We recently implemented a new strategy for the conservation and rehabilitation of

Barbary deer in Tunisia and in its whole distribution range in North Africa (in Algeria mainly). I prepared a multidisciplinary proposal for a long-term project with all its components (infrastructure, research investigation, translocation, restoration of habitat and a follow-up phase).

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

Apart from the Rufford Small Grant Foundation website, a series of communications in a 2-day workshop on the conservation of Barbary deer has been held in Tlemcen (Algeria) in December 2016. Scientific results are compiled in one publication (in preparation). Many articles have been published in local newspapers about our workshop event in Tlemcen. "Le Quotidien" has published a paper on my work on Barbary deer and on my expertise in wildlife conservation issues (see attached documents).

**7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?**

The Rufford Small Grant was used over the period of 15 months. The intended period was 12 months but as I explained in point 1, my plan was shifted and I have started the fieldwork 2 months after the presumed date. Hopefully, everything worked fast and good after the start of the project.

**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
Gasoline for Pick up (£0,80* 1200 Litters; 8000 Km)	955	1200	-245	Has costed more than expected (117£*25 days) this is due to gasoline expenses
Food for a 3 Person-Team (£10* 3* 64 days)	1920	1600	320	The team managed to save on food to compensate the higher expenses in Gasoline
Shelter for a 3 Person-Team (£15* 3* 48 nights)	2160	2000	+160	We used the rest (£200) to pay some people (field guide) who helped us essentially in collecting data.
<b>TOTAL</b>	<b>5035</b>	<b>4800</b>	<b>+235</b>	

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

A common working group is going to be established in order to coordinate all projects and actions to be executed in order to enhance the protection of this threatened species and ensure its recovery and long-term viability. A concrete project is actually being discussed with the forestry department of Tunis and has been submitted to some international organisations to find financing. Many actions have been done but still a lot to do. I am trying to implement the first important initiative concerning the rehabilitation and conservation of Barbary deer in Tunisia.

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

The RSGF logo has been used in my PPT presentation as oral communications in the workshop on Barbary deer conservation held in Tlemcen (Algeria, 2016).

**11. Please provide a full list of all the members of your team and briefly what was their role in the project.**

**12. Any other comments?**