

The Rufford Foundation

Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Firas Hayder
Project title	Distribution, status and conservation of the Libyan Striped Weasel (<i>Ictonyx libycus</i>) in Tunisia
RSG reference	0c8161-1
Reporting period	1 year
Amount of grant	£5000
Your email address	firasecologie@gmail.com
Date of this report	14.02.2019

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
Estimating the relative abundance of Libyan Striped Weasel in Tunisia				To better determine the relative abundance of Libyan striped weasel, field work was conducted (through direct observation and trapping) in areas where the interviews have confirmed the presence of the species. These data were complemented with records of field signs (burrows, latrines, pugmarks) and road kills.
Questionnaire survey				A preliminary survey was carried out in order to identify potential occupancy of <i>Ictonyx libycus</i> of each grid cell considered, as well as to collect data on the socio-economic profile of the human communities, human–Libyan striped weasel conflicts, traditional uses, population trends and local attitudes towards this small carnivore. More precise data on the geographic distribution limits of this species in Tunisia were also obtained.
Awareness program				<p>During direct discussions with farmers, I informed them of the ecological role of this species in order to increase local awareness and the importance of <i>I. libycus</i>.</p> <p>This work will hopefully draw the attention of ecologists and those who are interested in the protection of nature. This project has some echo in the whole country, and as result we are in contact with naturalists, and they are waiting for the scientific paper related to the work.</p> <p>In addition, the Director of Forest Conservation promised to discuss about the threats to this species with me.</p>

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

I indicated in my application that the research would run from October 2017 to September 2018. As planned, I started the field work in October 2018. However, as I explained in the application, the Libyan striped weasel has not been studied previously. After doing preliminary field work and surveys, it turned out that this species is less active during the "cold season", and therefore running the project between November and March would not have been beneficial. After discussing with my supervisor, Prof. Do Linh San, we decided to do adjustments to the project timescale, with research now running from April 2018 to February 2019, in order to obtain sound and informative results.

I also experienced difficulties in working in military areas and where there is terrorism.

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

Determination of the geographic distribution limits of this species in Tunisia.

Determination of the threats to, and conservation status of, *I. libycus*.

Based on this study I succeeded in selecting a study area where I will start the second step of my PhD project, and which will involve radio-tracking and collecting scats for 12 months.

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

As mentioned above, I discussed with the local communities on the the ecological role of the *I. libycus* in particular, and small carnivores in general. In addition, they enthusiastically assisted us with fieldwork in many regions.

5. Are there any plans to continue this work?

The next study (2nd study year) will provide insight into the spatio-temporal ecology of a weasel population living in a semi-natural habitat, with the aim to later infer whether the species is affected by human activities.

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

I intend to submit a paper as soon as possible to a Conservation journal (e.g. *Small Carnivore Conservation* or *Oryx – The International Journal of Conservation*). The results of this research will also be presented in different university seminars, as well as at a national and/or international conference (e.g. 13th African Small Mammal Symposium to be held in Ethiopia in 2019).

Furthermore, I managed to collect information on the distribution and the threats of least weasel (*Mustela nivalis*); therefore, I will work on this paper when I am done preparing the first paper.

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 grant was mostly used from April 2018 to December 2018. I also used some of the money in October–November 2017 when doing preliminary surveys and when I realised that the start of the field work should be postponed to April 2018. The periods from December 2017 to March 2018 and January–February 2019 was used to do some literature survey, data analyses and write the Rufford report as well as a first draft of the scientific paper.

Kindly note that your foundation was the main source of our financial support to conduct the fieldwork. However, in order to reach our objectives, the IdeaWILD equipment grant has helped us to obtain eight box traps to carry out the field survey.

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
Vehicle rent	2500	3000	+500	
Fuel	800	1000	+200	
Communication	150	160	+10	
Awareness program	350		-350	We postponed the awareness posters and gifts with logo (e.g. T-shirt and pens) to the end of my PhD studies.
Accommodation and food	900	1300	+400	
Survey forms and field equipment	250	200	-50	We bought a GPS (Garmin) and spotlight (Varta).
8 traps box		286	+286	Traps from IdeaWILD
Total	4950	5946	+996	

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

It is necessary to carry out advanced ecological studies that include radio-telemetry in order to determine optimal habitats, interactions with other predators, activity

periods and how these animals behave to avoid human disturbance (if happening at all).

Hence, the launching of the first scientific study on the ecology, behavior and conservation of Libyan striped weasel in Africa, and more specifically in Tunisia, will certainly contribute toward filling a part of this gap, as well as enrich our general knowledge on African biodiversity.

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

I put the logo on the field car; also I will insert the logo on both the cover and final slides in the PowerPoint presentations to be given during university seminars and scientific conferences.

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

Prof. Emmanuel Do Linh San: PhD Supervisor

Mr Youcef Mazigh: Driver and guide in the Sahara.

12. Any other comments?

My supervisor and I would like to deeply thank the RF for giving me the opportunity to conduct this field-based project. Your support was crucial to launching a first scientific study on the distribution and threats to Libyan striped weasel in Tunisia. You really assisted me in making my dream come true; and now I am eager and excited to study further!

