

Final Project Evaluation Report

Your Details	
Full Name	Krishna Chaitanya
Project Title	Conservation of herpetofauna of the Meghamalai Wildlife Sanctuary – through assessment of species diversity and awareness
Application ID	19322-1
Grant Amount	£ 5,000
Email Address	mmoojjoo@gmail.com
Date of this Report	03 October 2018

1. 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
1) Fieldwork in the form of herpetofaunal surveys each month for an entire year starting from March 2016.				We completed fieldwork in the Meghamalai Wildlife Sanctuary in November 2017, a delay of about 6 months due to changes in forest department hierarchy and issues arising out of permits to enter the protected areas.
2) Mapping different microhabitats for conservation.				Microhabitats such as cluster bamboo forests, swampy grasslands and rocky outcrops were demarcated and GPS coordinates provided to the forest department for implementing conservation actions. Specific animals inhabiting these microhabitats were also indicated for targeted conservation plans. At least four species of herpetofauna were shown to be endemic to the Meghamalai Wildlife Sanctuary as part of this exercise.
3) Communicating our finding with the forest department.				A preliminary report was provided to the forest department in early 2016 based on preliminary field surveys. The final report is pending and will be presented to the department before December 2018. The softcopy of the first draft of the report is attached. A hard copy of the report will be despatched to the Rufford Foundation once the formalities of sharing it with the forest department is concluded. All the important results of our work is communicated in this report which includes the rediscovery of a snake after 140 years and the first report of a caecilian from the Meghamalai landscape.
4) Education and awareness programs for the local populace				We conducted awareness programmes for the forest staff twice during the duration of the project and

			<p>photographs of these events have been shared previously. The training programmes focussed on sensitising forest staff about the herpetofaunal diversity in the Meghamalai landscape. We also conducted snake handling workshops for the forest staff during this time. This included training in safely capturing venomous and non-venomous snakes and releasing them in suitable habitat.</p>
<p>5) Publishing our results</p>			<p>A research paper titled "A new cryptic, rupicolous species of Hemidactylus Oken, 1817 (Squamata: Gekkonidae) from Meghamalai, Tamil Nadu, India" was published in the journal Zootaxa in January 2018. This paper was a result of this project and The Rufford Foundation has been duly acknowledged. The paper is attached with the email herewith. Our research as a result of the project funded by Rufford Foundation was compiled as a research paper titled "The herpetofauna of the Meghamalai wildlife sanctuary, southern Western Ghats, India: an updated checklist with partial annotations on taxonomy and nomenclature" has been accepted for publication in the Journal of the Bombay Natural History Society (JBNHS) and is due to be published in the next month or so. The edited final draft of this manuscript is attached along with this email. All the important results of our work are published in this paper along with the final report to be presented to the forest department.</p>

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

There were structural changes in the staff of the Forest Department during our project tenure that impeded fieldwork. We had to postpone visits to the wildlife sanctuary due to instability in the departmental ranks.

There were delays in visiting due to an increase in the density of the elephant population (due to migration) in the sanctuary and an advisory was issued against anyone visiting the forests.

Towards the later stages, there were delays in designing the final report for the forest department and obtaining appointments with the Chief of Wildlife (ongoing) to present our work.

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

1. We compiled the first comprehensive inventory of the reptiles and amphibians of the Meghamalai Wildlife Sanctuary (research paper in press, JBNHS, 2018; Final report due to Forest Department before December 2018).
2. The discovery of new species (*Hemidactylus vanam*, published, *Zootaxa* 2018; *Dravidogecko* sp., in prep), the first report of a caecilian and the rediscovery of a snake, *Xylophis indicus* (in press, JBNHS, 2018) will elevate Meghamalai as a herpetofaunal biodiversity hotspot in Peninsular India.
3. Our team sensitised the forest department and local communities about the rich biodiversity in Meghamalai and instilled a sense of pride in them about the fauna their landscape possesses. We conducted awareness programmes and snake handling workshops. These workshops included safety protocol in the eventuality of a snakebite and safe handling protocols in snake infested areas.

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

Our team constantly conversed with the local communities about the importance of the bio-diversity harboured in Meghamalai Wildlife Sanctuary. We sensitised them about the importance of conserving this landscape and its enigmatic herpetofauna. We conducted snakebite awareness workshops emphasising the need to reach a hospital and anti-venom being the only cure for snakebite. The region is medically backward and people rely on quacks to cure snakebite. We will be distributing stickers and labels with enigmatic animals from the landscape and the Rufford logo to local schoolchildren to further involve them in the conservation of Meghamalai.

5. Are there any plans to continue this work?

Beyond the scope of this project, our involvement will only be reactive. We will oblige the local forest department and the NGOs in the region by helping them organise awareness programmes, especially regarding snakebite mitigation.

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

The results will be presented as a report to the Tamil Nadu forest department before December, 2018. We are also in the process of publishing our results in a reputed

international journal (Journal of the Bombay Natural History Society). Once these documents are published we intend to involve the press to share our findings to a broader audience through popular articles.

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

The fund from the RSG was used through June 2016 to the present (printing of reports and distributable labels are pending). In addition the funds helped the project team to carry out essential activities during the actual length of the project.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Lodging	1,230	1,010	220	
Food	1,230	1,126	4	
Fuel/transportation costs	970	1,117	(35)	
Personnel charges	750	783	(33)	
Lab work	750	762	(12)	
Total	4,930	4,716	214	

Note: We had not included printing costs for this project, as adding it would have exceeded £5,000. The printing costs we would incur are approximately £400. We could return the difference £214 back to The Rufford Foundation or alternatively use this fund to help print the final report and distributable labels. We would like you to revert to us on this so we can proceed accordingly.

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

Though we don't intend to actively continue the project in The Meghamalai Wildlife Sanctuary, an important next step for this project would be to see our proposals for conservation implemented by the Forest Department of Tamil Nadu. We will put forth our concerns during our meeting with the Principal Chief Conservator of Forests and recommend possible changes to the forest laws in Meghamalai.

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

Yes. The Rufford Foundation has been acknowledged in all the research papers that have been published (or that are in press) as the sole funding agency for this work (papers attached). The final report being presented to the forest department in December 2018 will have the Rufford logo printed in the front page (first draft of report attached). The labels/stickers we intend to print will have the Rufford logo in them. We will acknowledge The Rufford Foundation as the sole funding agency for this project in popular articles published in print media. The research papers and the final report are attached in the same email as this evaluation report.

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

Dr Varad Giri -

Dr Varad Giri helped with conceptualizing the project, preparing the final report for the forest department, writing research papers.

Dr Deepak Veerappan –

Dr Deepak Veerappan helped with fieldwork and lab work. He could not participate during the later stages as he had to depart to the U.K for a change in employment.

Mr Caleb Daniel -

Caleb Daniel helped with fieldwork, photography, education session for the locals and forest department staff.

Mr Krishna Chaitanya -

Krishna Chaitanya helped conceptualize the project, applied and obtained permits from the forest department to conduct fieldwork, organized and participated in the fieldwork, prepared reports for the forest department, conducted workshops and education sessions, lead two papers that came out as a result of this project.

12. Any other comments?

We are indebted to The Rufford Foundation for funding this project, which has led to significant herpetofaunal discoveries in the Meghamalai landscape. We look forward to future synergy in some of our forthcoming projects related to herpetofaunal conservation.