

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. 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	Dr. Edward Narayan
Project title	Annual assessment of Chytrid fungus prevalence amongst endangered native Fijian ground frog populations on Viwa – Fiji Islands
RSG reference	29.7.09
Reporting period	1 year (2010 Final Report)
Amount of grant	£6000
Your email address	edward_nryn@yahoo.com
Date of this report	24 th February 2011

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
1. To conduct annual FGF survey for Chytrid swabs on Viwa, Fiji Islands			Yes	Chytrid swabs were collected both during the breeding period and post-breeding period of the FGF with help of the local village members.
2. To conduct laboratory analysis of the 300 FGF chytrid swab samples collected from Viwa Islands in 2010.			Yes	Laboratory chytrid analysis was fully achieved using modern PCR technology at the Landcare Research Lab, Auckland, New Zealand.

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

There were no unforeseen difficulties faced during this project.

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

1. This was the first-ever annual field survey for Chytrid fungus assessment conducted on Viwa, Fiji Islands.
2. Laboratory PCR analysis for the detection of Chytrid fungus in the endangered Fijian ground frogs (FGF) was successfully achieved.
3. Results were negative for Chytrid fungus spores in FGF DNA samples. Thus the FGF population on Viwa Island was found to be free of this deadly disease.

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

The people of Viwa Island were very keen to take part in the field work. The people realised the importance of a Chytrid fungus survey as it was urgently needed for assessing the health status of the native and traditionally important amphibian species. Hence, the people of Viwa Island embraced the project objectives very strongly and participated actively in the field works.

The major benefits to the people of Viwa Island from this project were through income generated from field work participation. Furthermore, the population of FGF on Viwa Island is now known to be free of the deadly Chytrid fungus disease hence this creates opportunities for eco-tourism activities on Viwa Islands to showcase the healthy FGF population to tourists.

5. Are there any plans to continue this work?

Yes, definitely it would be worthwhile to conduct future Chytrid surveys in the next season and also create a strong bio-security program on Viwa Island to prevent any further entry of invasive species.

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

I am in the process of writing a manuscript entitled: "Has the invasive Chytrid fungus *Batrachochytrium dandrobatidis* yet reached the island of Viwa-Tailevu, Fiji?" for submission in the journal *Oryx*.

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

Actual length of project: 1 year (2010)

RSG grant used: 1 year (2010)

Thus the RSG grant was used throughout the period of this 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
Annual field Surveys for FGF Chytrid swabs on Viwa Island	£1000 (£1 = 2.99 FJD)	£1000	Nil	Full RGS amount used for field surveys.
Travel on mainland Fiji (taxi) and Viwa Island (boat)	£1000	£1000	Nil	Full RSG amount used for travel.
Food and accommodation on Viwa Island	£600	£600	Nil	Full RSG amount used for food and accommodation.
Laboratory Chytrid analysis	£3000	£3000	Nil	Full RSG amount used for laboratory analysis
Miscellaneous (sample packing, first-aid kit, printing)	£400	£400	Nil	Full RSG amount used for miscellaneous items.
Total	£6000	£6000	Nil used.	Full RSG amount

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

The FGF population on Viwa Island faces serious biological threats from the non-native cane toads (*Rhinella marina*) through competition for food, habitat space and predation of frogs.

Thus I plan to conduct a cane toad exclusion trial project on Viwa Island with potential assistance from a Booster RSG award.



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, the RSGF logo was used on the power point presentation done on Viwa Island. Yes, the RSGF received publicity with the community on Viwa, Fiji Islands.

11. Any other comments?

I would like to sincerely thank the RSGF for supporting this highly important work on Viwa, Fiji Islands. I look forward to your continuous strong support with my research in the future.

