

## 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Lucia Hechavarria Schwesinger
<b>Project title</b>	The vascular epiphytes of Guamuhaya range, Central Cuba. Local empowerment on sustainable use of biodiversity: the Community La 23 epiphytic garden study case
<b>RSG reference</b>	18196-B
<b>Reporting period</b>	September 2015- December 2016
<b>Amount of grant</b>	£10000
<b>Your email address</b>	<a href="mailto:lhschwesinger@gmail.com">lhschwesinger@gmail.com</a> ; <a href="mailto:lhechavarrias@ecologia.cu">lhechavarrias@ecologia.cu</a>
<b>Date of this report</b>	31/10/2016

**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
<p>The capacity building training organised in five workshops.</p>				<p>1. The capacity building training programme to empower community people on the conservation of biodiversity and other environmental issues related was imparted successfully. The communitarian inquiry cycle to capacitate in the finding of solution to common environmental problems revealed the concern of the community on climatic change, especially water availability, the change of fruit tree phenology that delays the harvest season of their fruit production, including coffee, the main economic source of the community (May 2016). The guidance inquiry cycle to enhance sustainability, diversifying recreational options and services, and compatibility economic benefits and biodiversity conservation was successfully imparted and generated a set of activities to develop with the different kind of visiting public of the epiphytic garden. (June 2016).</p> <p>3. The monitoring vascular epiphytes protocol was produced to impart the training course addressed to protected area personnel in the management of determined as conservation target species in Guamuhaya protected areas management plans. (September 2016)</p>

				4. The training on the elaboration of projects for the improvement of the local development and the elaboration of microenterprises were imparted and as result there were produced three projects proposals that will be summarised next year different financial mechanisms existing in Cuba. (November 2016)
- The production of Integrated, didactical and practical training modules to support the capacitating workshops, including a monitoring protocol for vascular epiphytes emphasizing endangered species, in protected areas.				-The following products were made under this objective: - Three documentary audiovisuals were made by the children of Community La 23: "Las epífitas"; "Lazarito y las cotorras", "Las abejas del Escambray". These audiovisuals were produced in the summer camp designed for children at the epiphytic garden. - The booklet and photo guide of Cuban bromeliads. -The vascular epiphyte monitoring protocol for protected areas. -Brochure to promote the Epiphytic Garden Molino de Café.
- The designing and equipment of a capacitate classroom for the reinforcement of the Communitarian Centre mission.				From September 2015 to March 2016, we were involved in the full restoration of the Epiphytic Garden Molino de Café Visit centre. The restoration consisted of roof renewal, floor restoration, painting the walls, building a kitchen and bathroom, also fitted with the required equipment. The capacitate classroom was inaugurated in April 2016, celebrating the Earth international day.
- The elaboration of the visual identity manual of the epiphytic garden.				- The visual identity document of the Epiphytic Garden Molino de Café.

- The designing of a permanent show room in the epiphytic garden where visitors can learn about the communitarian initiative.				
- The production of promotional brochures to insert the epiphytic garden into local tourism initiatives.				

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

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

- The capacity building training programme was a great opportunity to know how the peasants of Community La 23 care about the environment and how they recognise the biodiversity as a great value of their community. The feedback after training courses revealed the enormous common sense and wisdom of peasants, how they recognise the changes of their environment, and how they tell about their experiences, sharing success practices or failures to the other community neighbors.
- The capacitate classroom became as a place that also has served for community meetings, environmental lessons and summer camp weeks. It is considered as a capacity center for environmental issues in the community.
- The monitoring protocol for Cuban vascular epiphytes emphasising the endangered species is the first one produced adapted to the Cuban vegetation characteristics. It is a great tool to address the management of natural population of vascular epiphytes in protected areas as a target group as conservation task in the management plan of protected areas, enhancing their effectiveness in the conservation of vascular epiphytes, not commonly include or recognised as conservation targets. This protocol has already a national scope and will be used in the national system of protected areas.

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

All the building work to become the Epiphytic Garden Molino de Café Visitor Center in a suitable one to impart the capacity training courses were done with the voluntary help of the community people who made the building work, specially Alfredo, the cultural promoter, who was the work master. The women and children helped at the end of the building work cleaning to improve the appearance of the visitor center. Also they were the public assisting the different training courses.

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

Yes, we are planning to extend the experience to community Los Hondones in National Park Ciénaga de Zapata where a similar situation with vascular epiphytes conservation problems exists.

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

The results of this project year were share as:

- November 2015. "*Vascular epiphytes of Guamuhaya, Central Cuba. Ecological bases, conservation strategy and promotion of their sustainable use*". A conference addressed to the students of the Environmental Sciences career of ENES-Morelia, Mexico.
- May 2016. "The family Bromeliaceae in Guamuhaya". Presentation of the III Encuentro científico sobre diversidad biológica BiodiverSOS 2016" Sancti Spiritus Botanic Garden.
- August 2016. "Festival de las Bromeliáceas". A socio-cultural Festival at the National Botanic Garden (Attached). The festival took place from the 17<sup>th</sup> to 21<sup>st</sup> August. There were an exposition of live plants, hand crafts, and floral arrangements using bromeliads. In the festival were free delivered the booklet and photo guide of Cuban Bromeliads as promotional material.
- Hechavarria, L. 2016. Conservación de las epífitas vasculares en Guamuhaya. *Bissea* 10 (NE 1): 84.

- Hidalgo-Ceruto, Y. 2016. Ecology and Society. Comunidad La 23: Conservación del medio ambiente y desarrollo local. Rev. Flora y Fauna Mayo: 44-47.

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

The RSG was used in the period of the actual project length: September 2015-December 2016. The amount covered all the items needed for the project achievements and guaranteed the success of the project implementation.

**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
Computer, accessories and informatics supplies	1000	670	330	
Office and scholar materials	400	470	-70	
Designing & Printing posters, brochures, guided track panels, workshop manuals, epiphytic plants monitoring protocol	2000	1600	400	
Classroom furniture (10 sets) and board	1000	820	180	
Digital Photo and Video Camera	300	590	-290	The prices were higher in the market
Data show	400	400	0	
Electro domestic equipment to support workshops meals	500	700	-200	The prices were higher in the market
Food to support workshops meals	800	920	-120	The prices were higher in the market
Lodging accommodation and	500	420	80	

personal articles to support workshops				
Transportation rent to support workshops	800	800	0	
Tools and gardening supplies to reinforce epiphytic garden functionality	300	300	0	
Tents (5) and camping supplies to support summer camp for children	700	500	200	
Communications to support project monitoring and management	400	300	100	
Fuel, Maintenance and auto spare parts to support project monitoring and management	800	1460	-660	We also had to repaired the project car: starting engine, clutch, electric generator
Miscellanea	100	50	50	
<b>TOTAL</b>	<b>10000</b>	<b>10000</b>		

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

I think that the next step is to extent the experiences to other Cuban regions with similar conservation problems.

**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, we use the RSGF logo in all of the produced materials.

**11. Any other comments?**

Sincerely, we are very grateful to the possibility that the financial support of RSG gave us to develop the conservation program of vascular epiphytes in the mountain range Guamuhaya, central Cuba. This local approach will served to extend the experiences to other regions of Cuba, and, why not also to other Caribbean islands.