

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. 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.

Thank you for your help.

Josh Cole Grants Director

Grant Recipient Details	
Your name	C. Justin Proctor
Project title	The Natural History And Breeding Biology Of The Hispaniolan
	Golden Swallow (Tachycineta Euchrysea Sclateri)
RSG reference	13346-1
Reporting period	April 2014 – April 2015
Amount of grant	£ 5093
Your email address	cjp252@cornell.edu
Date of this report	May 5 th 2015



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
Collect detailed information on the survival, demographics, morphology, and behaviour of the species by routinely visiting actively occupied nest boxes. The data we gather annually, ranging from parental provisioning strategies to recruitment rates into the population, allow us to comprehensively analyse the determinants and limitations to the species' reproductive success, ultimately providing us the information needed to make well-informed decisions on where to focus conservation efforts			X	A full, 3-month field season spanning the breeding season of the species was successfully carried out. All life history data was collected, analysed, and is currently in prep to produce three separate publications.
With the help of Fundacion Moscoso Puello and Fundacion Jose Delio Guzman, we will erect a series of new nest box sites in regions where golden swallows are conglomerating in the summer months and where we can logistically develop future long-term monitoring and outreach programmes. By amplifying the coverage of nest boxes, we can make comparisons in life history strategies between populations while additionally recruiting involvement from new communities.			X	We added 15 new nest boxes at four novel sites across the National Park. As the 2015 breeding season begins, that number of nest boxes will double again with efforts currently underway by local groups to do so.
The effort continues, now with the help of the Sociedad Ornitológica de la Hispaniola and the NGO Grupo Jaragua, to protect some of the last known breeding sites for golden swallows in the Sierra de Bahoruco. We are arranging an open-door meeting involving local biosphere officials, ornithologists, and representatives from the Ministry of Nature to discuss the management of increased pressures on avifauna from increasing invasive predators, refining and		Х		The execution of this meeting turned out to be more politically complicating than we had originally speculated. Smaller, more intimate meetings were held with various organisations on this list; however, we were unable to get all the interested parties under the same roof at the same time. We continue pushing for the open-door meeting and certain parties that were originally resistant are slowly coming around to the idea, especially in the



practicing techniques for attracting golden swallows to artificial nest boxes, and developing a functional, community-driven, long-term nest box monitoring programme in this region. We will implement methods of vocal playback as well as wooden decoys to advertise new and existing nest boxes, two tactics that have worked well with congeners. If results are poor, we will return later in the breeding season and attempt to relocate fledging golden swallow chicks from adjacent cliff cavity nests into nest-boxes. In this way the chicks will imprint upon and potentially return to the boxes as adults, at the same time that the adults feeding chicks in the boxes will come to view the boxes as prime nesting sites. We have partnered with Fundacion Propagas to develop educational and outreach materials that use golden swallows (and other Dominican endemic birds) to teach a variety of topics ranging from ecology to conservation which are presented and disseminated to school teachers and	x	x	light of new information we are disseminating on the extinction of the Jamaican subspecies of golden swallow, putting more (and much needed) pressure on specific groups to acknowledge the loss of avian diversity Caribbean-wide. The methodology stated was implemented, however, this unique population of golden swallows continues to be resilient towards using artificial nest boxes for breeding, despite devastating depredation pressures from invasive mammals occurring in their current nesting locations. Grupo Jaragua continues to implement various versions of the methodology to try and find a short-term solution that will work. The education portion of the project is strong and continues to grow in the Educational branch of Fundacion Propagas, to whom we provide new and engaging information on the species when it becomes available.
community leaders around the country. I will be working alongside the Smithsonian's Curator of Birds, Gary Graves, who is the local expert on the historical range of golden swallows in Jamaica, to survey the last tracks of unsearched land on the island for extant populations. Simultaneously, I will collaborate with key institutions to begin exploring whether a reintroduction is appropriate and viable, and if so, where geographically a nest box programme could be successful.		X	Two months were spent censusing rural Jamaica for the critically endangered golden swallow. These surveys piggy-backed an 18-year effort covering the rest of the island. The consensus now is that the Jamaican golden swallow is extinct. Beyond the implications for the remaining subspecies on Hispaniola and the conservation plans in effect there, our field crew is contributing extensive knowledge on other Jamaican aerial insectivores that was gleaned during the expeditions. I will be hosting a round-table



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

In August of 2014, just a few weeks after the end of the golden swallow breeding season in Parque Valle Nuevo, Dominican Republic, one of the largest forest fires on record ravaged through the area. Despite the assumed vulnerability of the wood nest-boxes, most remained unscathed because of their placement in open grass fields, where the fire burnt through low to the ground. The fire, though a somewhat natural part of the high-elevation pine forest regime, may affect the return rates of golden swallows for the 2015 breeding season this summer. Though the science involved with studying the changes in diet, foraging, breeding success and other life history characteristics of the bird are intriguing and important, the effort to 'build up' larger breeding populations that we could protect may have taken a considerable hit. We are monitoring the return and behaviour of nesting birds closely as the 2015 breeding season commences. More information on our blog here: http://thegoldenswallow.org/2014/08/06/a-new-start-for-much-of-valle-nuevo/



- 3. Briefly describe the three most important outcomes of your project.
 - 1. Successfully adding a third breeding season's worth of data to our understanding of the breeding biology of the threatened Hispaniolan golden swallow. This knowledge is directly translated to short and long term conservation management plans for the species.
 - 2. The successful training of five local Dominicans to continue carrying out the monitoring of the 200 nest boxes in Parque Valle Nuevo. These men and women will care for the boxes while recording relevant data from each. These individuals are leaders in their respective communities and are active in drawing awareness and stewardship around the science and conservation in which they are involved.
 - 3. Developing a strong link between aerial insectivore communities in Hispaniola and Jamaica. The declined of aerial insectivores in the Western Hemisphere has become a pertinent issue, and the Caribbean ornithological scene needs to be involved in addressing the problems that have been identified. I am helping to lead efforts that will help to better link researchers on different islands under the common initiative to better understand and formulate strategies to counter the losses in bird populations that are happening at alarming rates.



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

Local communities are the driving force behind this project. The amount of support and interest we have received from local communities has gone far beyond our expectations. We were able to continue connecting with local schools and designing educational materials focusing on local bird species. We gave presentations and continued to hammer home concepts of conservation, community involvement, and the recording of observations. However, our big task this year was training. We needed to make sure that as many elements of the project could run themselves via local hands for future years when we can't guarantee the presence of a full-time field team. And so much of our time was spent developing training materials, holding hands-on workshops, and bringing more people on board with the project.



5. Are there any plans to continue this work?

Yes. The work doesn't stop here. Beyond the aforementioned roles being fulfilled by local communities and organizations, I'm able to continue expanding the project from my office back here at Cornell University. I am currently collaborating closely with the NGO BirdsCaribbean to develop advanced guide training in Parque Valle Nuevo, while also integrating an expansive network of interpretive signs for birding trails. Meanwhile, I am working alongside the local Fundacion Propagas to create more outreach for the Park's Visitor Center. Collectively, we are all laying down the early stages of a set of blueprints, so to speak, that would involve erecting a series of three observation towers across the span of the park that would become focal points for birding activities and bird-related education.

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

I am a strong advocate for disseminating ALL scientific knowledge back to the source so that it can be used by the people to which it most directly applies. Every year, I write a full season report that is then translated to Spanish and disseminated across Hispaniola. All of my writings and all of my data are available to be seen and used online at www.thegoldenswallow.org. Furthermore, I am currently working on three publications that will take all of the information gathered and make it available to the scientific community, specifically in the Caribbean, but also worldwide.



I take pride in giving a lot of presentations at many different venues, from classrooms here at Cornell to schools in the Dominican Republic, to larger symposia. At the end of July 2014, I will be giving two oral presentations at the 20th International BirdsCaribbean Conference in Jamaica, as well as hosting a round-table on the status of Jamaica's aerial insectivores.

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

Monies from the RSG were used between April 2014 and April 2015, which I do believe meshes closely with the original proposed timeline.

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	Budgete d Amount	Actual Amount	Difference	Comments
Flights from Ithaca to Santo Domingo	336	336	0	accurate estimation
Truck rental for field work	2166	2300	-134	slightly higher fees than estimated
Fuel	382	350	32	
Field site accommodations	1100	1100	0	accurate estimation
Food for field crew	763	900	-200	addition of extra interns and field workers at times
Stipends for interns	382	400	-18	
Hispaniola project costs	490	550	-60	unforeseen costs for nest-box repair after forest fire
Educational materials	138	138	0	
Meetings	92	150	-58	Several meetings held with
Jamaica transportation	375	375	0	fewer stakeholders
Jamaica food	550	600	-50	compared to one meeting
TOTAL	6774	7199	-425	with all stakeholders originally planned slightly over-budget, but was able to bring some funds from other sources in to cover the difference.
			total costs;	ortant to note that these are the original Rufford Budget ~60% of the total costs of the ork.



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

- 1. Continuing our monitoring programme, year after year, with consistency to establish a very powerful long term data set that can help identify threats to the species (mortality on wintering grounds, low fledging success, etc).
- 2. Student involvement we continue to push for more LOCAL student involvement. The stage is set for a lifetime worth of further scientific investigation on the species. Migration, social behaviour, and long-term demographics, to name but just a few, are waiting to be explored. We are working with local foundations to consider the benefits of fundraising and allocating more money towards scholarships and fellowships that would be available for Dominican students interested in pursuing higher education and local thesis research.

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?

The RSGF logo was included (and verbally mentioned) in all presentations, on all reports, on our website, and will be in the acknowledgment section of each publication related to golden swallows.

11. Any other comments?

Hands-down, I can't thank Rufford enough for their support. The backing of the RSGF took the project and put it on the map. We were able to finally see many of our main goals through to fruition by having the time and energy to focus on the work ahead of us. Thank you!