

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	Katharine Lowrie
Project title	Survey Boat for Seabird Breeding Atlas of the Lesser Antilles
RSG reference	13.11.09
Reporting period	Field work and outreach: February-July 2009 and January-July 2010. Atlas write up: August- September 2010 and May 2011
Amount of grant	£5879
Your email address	landy@lisatlight.co.uk
Date of this report	June 22 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
Breeding seabird surveys of all islands capable of supporting seabirds within the project area.			YES	All islands were surveyed.
Use the dinghy funded by RSGF to access islands more safely.			YES	The dinghy transformed the surveys, allowing surveys to be conducted safely, efficiently, effectively and rapidly, greatly boosting the project results.
Use the dinghy funded by RSGF to access remote islands by night to survey for Audubon's shearwaters.			YES	The dinghy allowed the survey range to be greatly increased, with eight new shearwater colonies revealed to science.
Record all non-breeding seabirds observed at sea or on land.			YES	
Record any signs of threats to seabirds (development, pollution, invasive species, hunting etc.)			YES	
Ascertain whether rats are present on islands, where unknown, using traps.		YES		It was not always possible to land on all islands to set traps, nor time permitting to leave traps for extended durations.
Input all data into Excel spreadsheets.			YES	
Obtain permits from appropriate government agency for each country/territory within the survey area.			YES	Ascertaining the correct agency responsible for seabird conservation was difficult. Seabird work typically fell between the Fisheries and Forestry Departments, with the Forestry Department usually assuming responsibility. Sint Maarten does not have a government agency which oversees the natural environment.
Meet with applicable government agency in countries/territories where field work is undertaken.			YES	All appropriate government agencies were met (excepting Sint Maarten). The meetings included a presentation, discussion, videos, survey

				methods and training. A second meeting to discuss results, threats and future conservation was also achieved in 73% of the countries/territories
Present to over 2000 people in the Caribbean on seabird conservation (including seabird identification, survey method training, conservation and threats).			YES	2148 people were met and presented to. These included: general public (341 people), government agencies (102 people), NGOs (225 people), Primary schools (667 people), secondary schools (793 people) and the University of Grenada (20 people). 89 presentations were achieved over the two year survey season.
100 media releases			YES	Media included T.V., radio, newspaper, magazines and internet.

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

Challenge

- Seabirds were not a priority of the government agencies within the countries/territories of the study area. Marine life (underwater) and terrestrial life were generally considered, but seabirds were outside of their 'radar'. This likely explains why the islands were not fully surveyed prior to this project. Finding the correct department to oversee the project was consequently difficult and inciting email responses to applications for permits/presentations/training workshops also problematic. One government agency even prevented the project from undertaking outreach, unless organised by 'in house' staff, which they sadly they failed to achieve.

Overcoming the challenge

- In 91% of the countries/territories visited we held an introductory presentation to the relevant government agency and in 64% of countries/territories we hosted a follow-up meeting, to ensure the objectives of the study could be met with the support of the governments. The additional meeting allowed us to discuss interim findings and press home the message of the importance of seabirds as indicator species to the marine environment and ultimately to livelihoods. Presentations were tailored to provide training and relevance to each country/territory: three films were made, sound effects were used, photos and feathers were displayed and the dialogue focused on enthusing and inciting interest. A key point was, 'WHY?' Explaining why seabirds should be conserved and how the governments could obtain economic benefits from their presence (tourism, healthy marine ecosystems and fish stocks etc.). Emails were sent months in advance at the start of the survey season and the media was used in each country/territory to maintain interest in the project.

Challenge

- Dangerous survey conditions: the survey boat grounded on uncharted rocks and anchor lines were sheared through whilst anchoring off seabird cliffs in 2009.

Overcoming the challenge

- The RSGF grant greatly reduced the danger of the surveys in 2010, specifically by allowing the survey boat to be anchored in safe waters, whilst the surveyors used the dinghy to access seabird colonies (low draft, allowing close access to islands and much greater fuel efficiency).

Challenge

- The need for consistent methods to allow analysis of data:- seabird data have been treated variously in the Caribbean and further afield, inhibiting comparisons between colonies and over time. This is relevant to comparisons of data for year-round breeders; analysis of data for cavity nesting species (e.g. tropicbirds) and when counts are based on flushed individuals, rather than nest units.

Overcoming the challenge

- The Atlas provides full details of survey methods and analysis and highlights the need for research into affective methods for future studies. New research into the importance of surveying red-billed tropicbirds at the correct time of day is presented in the Atlas. Interpolation factors were devised for *Laridae* species where survey methods were based on counts of individuals.

Challenge

- The lack of interest in the natural world and culture for attending presentations in the Caribbean. Attendance of presentations, open to the general public, overwhelmingly comprised ex-pats.

Overcoming the challenge

- The main focus of the project to combat this apathy was to engage school/college children and the media to reach the general populous. Over 2000 people were directly engaged in 89 presentations and outreach sessions. Audiences ranged from 150+ school groups (schools accounted for 69% of the total audience figures) to intimate methods workshops with local NGOs with five attendees. Presentations made use of Audio Visual slides and films, as well as hands-on training where applicable.

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

- The creation of a complete baseline data set for breeding seabirds in the Lesser Antilles, which has never before been undertaken. This allowed analysis of the key breeding sites for seabirds across the region and will prioritise and guide conservation action. It also shed light on tens of unknown breeding colonies that were previously unrecorded, including twelve new Audubon's Shearwater colonies and a colony on Montserrat, long believed extirpated.
- Presenting to 2149 people during the busy survey season, increasing awareness in seabirds and the need to conserve them and the wider natural environment. One student said he would like to become an ecologist after a presentation!

- Introducing 'seabirds' into government agency agendas and particularly the need to conserve them. Field work training was accepted by government personal and NGOs on: Anguilla, St. Maarten, St. Eustatius, Saba, Montserrat, Antigua and St. Vincent. Hunting of eggs, chicks and adult seabirds was revealed as a significant threat to seabirds across the region, with Grenada and St. Vincent and the Grenadines most affected. The extent of this threat was previously unknown to the scientific community and believed unimportant by most government departments. The results of the project are motivating campaigns to combat hunting of declining seabird populations.

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

Local communities were targeted through: school/college and university presentations; media releases/interviews/articles in newspapers, TV, radio and internet. Public presentations were held throughout the project area, with interactive presentations even extended to a local police cadet group and a church congregation! Power-point presentations, project videos, photo, tattoos and stickers were shared during presentations. A seabird poster competition was launched across the region, entitled, 'Why are seabirds important?', to raise interest in seabirds and the need for their conservation. Media releases and prizes followed.

The goal of the public awareness programme was to link the health of seabird populations to the health of local communities in the long term. Preserving seabird colonies will lead to future opportunities for tourism (a good example is the magnificent frigatebird colony in Barbuda which attracts thousands of visitors annually), as an indicator of the health of the oceans upon which they depend and a symbol of their tropical environments. Every country/territory has a national bird, with seabirds very popular amongst the island nations/territories of the Lesser Antilles (e.g. the Audubon's Shearwater is Saba's national bird).

5. Are there any plans to continue this work?

Environmental Protection In the Caribbean (EPIC) is investigating several projects to sustain momentum and interest in seabird conservation in the Caribbean. The Tobago Cays Marine Park is gazetting Catholic Island as a bird reserve and the Saba Conservation Foundation (SCF) is investigating designating Green Island as a bird reserve, both initiatives are in response to the project's proposals. SCF are instigating a Red-billed Tropicbird monitoring programme that we created and Antigua bird groups are continuing our seabird survey work.

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

The Atlas is in the closing stages of being published. Aside from the book itself, the data base will inform the Society for the Conservation and Study of Caribbean Seabirds (SCSCB) Waterbird Conservation Plan and be submitted to the World Birds Database. Interactive online maps will be available at:

- West Indian Breeding Seabird Atlas at www.wicbirds.net
- Ocean Biogeographic Information System/Spatial Ecological Analysis of Megavertebrate Populations (OBIS/SEAMAP) at <http://seamap.env.duke.edu/datasets/detail/418>

- The first year's project findings were presented to the SCSCB in July 2009 and the full project findings will be presented at the SCSCB conference in July 2011
- A hard copy of the Atlas will be given to each relevant government agency/NGO in each country/territory in the study area

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

The grant was used during the 2010 survey season, amounting to half of the project's duration.

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
Hard Dinghy - AB Inflatable RIB/Hard Bottom, deep 'vee' for ocean work	£3350	£3350		
Outboard – 40 HP 4-Stroke (low emission engine)	£2415	£2415		
Outboard Lock	£60.25	£60.25		
Outboard hoist	£30.11	£30.11		
Lettering – "Seabird Breeding Atlas of the Lesser Antilles 2010"	£23.58	£23.58		
Total	£5879	£5879		

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

Maintain interest in seabird conservation in the study area. We are at the final editing stage of the Atlas after peer reviews and will publish and disseminate the findings throughout the Caribbean and internationally before the end of 2011. Local, regional and international media releases will raise awareness of seabird conservation, on the publication of the Atlas. The Atlas details the relevance of the seabird colonies in the area at a global, Caribbean and Lesser Antilles scale. It highlights the importance of the colonies for the individual nations/territories and should motivate them to conserve the remaining colonies.

The discovery by the project of widespread hunting of seabird adults, chicks and eggs has shocked the regional and international community of seabird conservationists. Work to address this unnecessary activity upon declining seabird populations should be addressed.

A follow-on seabird conservation education project. This would involve my creating and disseminating seabird teaching aids, in the form of workbooks and presentations, to all schools in the region to further promote interest and conservation in seabirds and their marine environment.

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 is acknowledged in the Atlas which will be published in 2011. The RSGF also received publicity through articles published online and in local media.