

National Fish and Wildlife Foundation

Coral Reef Conservation Fund 2013 - Submit Final Programmatic Report (New Metrics)

Grantee Organization: Toledo Institute for Development and Environment

Project Title: Financial Sustainability of the Port Honduras Marine Reserve in Belize

Project Period	10/01/2013 - 12/31/2014
Project Location	Port Honduras Marine Reserve, in southern Belize, is 100,000 acres of coastal and marine habitat, including coral reefs.
Description (from Proposal)	
Project Summary (from Proposal)	Develop a paying volunteer program to provide sustainable financing for the Port Honduras Marine Reserve and human resources for biodiversity monitoring and coral reef conservation. Project will improve human resources for biodiversity monitoring and coral reef conservation.
Summary of Accomplishments	NFWF enabled the Toledo Institute for Development and Environment (TIDE) to launch a paying volunteer program called Ridge to Reef Expeditions. Through this project, TIDE created the Ridge to Reef Expeditions brand and marketed the new program through numerous channels, including a website (www.fromridgetoreef.com), trade shows, university and high school presentations, and “voluntourism” travel companies. TIDE developed the program staff, physical assets and operational procedures to run volunteer expeditions and ran a pilot expedition. TIDE introduced a new product – individual placements – to give customers more choice and obviate the need to recruit at least six customers at one time to run at a profit (which is the case with group expeditions). All of this has resulted in sales of US\$36,000 to date plus \$46,000 of sales booked, and the beginnings of relationships with several potentially very valuable long-term partners; not to mention the benefits to the local economy, TIDE’s conservation programs and the volunteers themselves.
Lessons Learned	<p>To overcome having to attract 6 customers at once to run a profitable expedition, we introduced individual placements where volunteers shadow TIDE staff. Volunteers can be incorporated at low cost and placements have been popular.</p> <p>University presentations were most successful at the start of academic year.</p> <p>R2R merchandise is popular and a great way to promote the program and make money.</p> <p>Trade shows result in valuable contacts. The Education Travel Community conference was the best as it caters for exactly the niche market that R2R supplies.</p> <p>Having former volunteers promote the program at universities was effective – prospective customers trusted the product more – but it was difficult to arrange and we were unable to pay them due to Belizean employment law. Instead, they are now helping in simpler ways that do not require compensation but still allow prospective customers to speak with them, such as participating in webinars and a Facebook group.</p> <p>For insurance, a PADI dive master must accompany volunteers on dives. The expedition manager was the only dive master so she had to be on every dive, neglecting other duties. We plan to train more staff to dive master.</p> <p>For health and safety, there should always be a vehicle with expeditions. This was not always possible due to limited # vehicles and insured personnel. In future, R2R will have its own vehicle and multiple staff insured.</p>

Activities and Outcomes

Funding Strategy: Capacity, Outreach, Incentives

Activity / Outcome: Coral - Building institutional capacity - # FTE with sufficient training

Description: Enter the number of staff or full-time equivalents with sufficient training and skills engaged in conservation activities

Required: Recommended

FTE with sufficient training - Current: 19

FTE with sufficient training - Grant Completion: 25

Notes: We trained three of our community researchers in boat handling (RYA Powerboat Level 2), SCUBA diving (PADI Advanced Open Water) and emergency first response. They are also currently undergoing training to become licensed tour guides. They also honed their skills in the various ecological methods that were used on expedition (in which they were already trained), such as beach profiling, conch surveys, coral health surveys, water quality monitoring, lionfish culling, etc.

We also trained 12 volunteers in ecological survey methods and SCUBA.

Funding Strategy: Habitat Conservation

Activity / Outcome: The secondary indicator of the success of this project is the amount of useful data produced by the volunteer program. For instance, the number of acres of marine habitat mapped will be an indicator.

Description: Other Metric

Required: Optional

Other Metric - Description: Volunteer activities were many and varied. Some of the accomplishments they achieved in terms of data collection are described under Summary of Accomplishments above. Perhaps the simplest measure of this impact of the project is the number of days of volunteer labour provided, which is approximately 460 to date.

Notes:

Funding Strategy: Habitat Conservation

Activity / Outcome: The primary indicator of the success of this project is the amount of earned income generated from the sustainable financing mechanism.

Description: Other Metric

Required: Optional

Other Metric - Description: Ridge to Reef Expeditions has generated approximately \$36,000 in revenue to date. We have bookings for sales worth another \$46,000. We are on target to become profitable by the end of 2016.

Notes:

The following pages contain the uploaded documents, in the order shown below, as provided by the grantee:

Final Report Narrative - Marine

Other Documents

Other Documents

Other Documents

Other Documents

Photos - Jpeg

Photos - Jpeg

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The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.



NFWF

Final Programmatic Report Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the online final programmatic report task as instructed. **Please note** that this narrative will be made available on NFWF's Grants Library and therefore should provide brief context for the need of your project and should not contain unexplained terms or acronyms.

Financial sustainability of the Port Honduras Marine Reserve (project #38678)

Brief context: One of the international priorities of the NFWF Coral Reef Conservation Fund is to increase management capacity in 27 select Caribbean MPA, one of which is the Port Honduras Marine Reserve in southern Belize. A 2011 capacity needs assessment guides the investments made by NFWF and NOAA in building the capacity of these MPA (<http://campam.gcfi.org/CapAssess/CaMPAMCapacityAssessment2011.pdf>). For the Port Honduras Marine Reserve, financial sustainability was identified one of the top three priority capacity needs. To build capacity in this area, this project set out to develop and market a paying volunteer program as a sustainable financing mechanism for the marine reserve and the NGO that co-manages it, the Toledo Institute for Development and Environment (TIDE, www.tidebelize.org).

1. Summary of Accomplishments: In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured. This can be duplicative to the summary provided in the reporting 'field' or you can provide more detail here.

NFWF enabled the Toledo Institute for Development and Environment (TIDE) to launch a paying volunteer program called Ridge to Reef Expeditions. Through this project, TIDE created the Ridge to Reef Expeditions brand and marketed the new program through numerous channels, including a website (www.fromridgetoreef.com), trade shows, university and high school presentations, and "voluntourism" travel companies. TIDE developed the program staff, physical assets and operational procedures to run volunteer expeditions and ran a pilot expedition. TIDE introduced a new product – individual placements – to give customers more choice and obviate the need to recruit at least six customers at one time to run at a profit (which is the case with group expeditions). All of this has resulted in sales of US\$36,000 to date plus \$46,000 of sales booked, and the beginnings of relationships with several potentially very valuable long-term partners; not to mention the benefits to the local economy, TIDE's conservation programs and the volunteers themselves.

2. Project Activities & Outcomes

Activities: Describe the primary activities conducted during this grant and explain any discrepancies between the activities conducted from those that were proposed.

Activity 1.1 Market the pay-to-participate program internationally and recruit volunteers

TIDE created a brand for the program, including the name "Ridge to Reef Expeditions", a logo, and a brand promise: "Reef to Reef Expeditions provides life-changing volunteer experiences that make a real difference in one of the most pristine environments on Earth." TIDE created marketing materials, including: a website (www.fromridgetoreef.com), Facebook fan page (<https://www.facebook.com/RidgeToReefExpeditions?ref=hl>), promotional videos (see website), an e-brochure, printed fliers, business cards, a banner and T-shirts.

TIDE marketed Ridge to Reef Expeditions via several channels. They registered the program on volunteer referral websites, such as SEE the WILD (<http://www.seethewild.org/belize-ridge-to-reef-tide-belize/>). They gave presentations at 20 high schools and universities in the USA and UK.¹ They disseminated the e-brochure via listservs, university mailing

¹ In the USA: University of California at Santa Barbara, University of California at Los Angeles, University of Houston, Nova Southeastern University, University of Miami, Yale University, Cornell University, University of Maine, Colorado State University, Massachusetts Audubon Society. In the UK: University of Hull, Bangor University, University of Leeds, University of York, University of Chester, University of Exeter, University of Kent, University of Edinburgh, Cheadle Hulme Secondary School, Stockport Grammar School. And in Belize: The Consortium for Belize Education Coalition (COBEC).
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lists, partners' newsletters and their network of contacts. They attended three trade shows in the adventure travel and educational travel markets, namely: a) the Travel and Adventure Show in San Diego, March 2014; b) the Belize Tourism Board European Road Show in London, Paris, Frankfurt and Amsterdam, September 2014; and c) the Educational Travel Community Conference in Boston, February 2015. They hosted travel company representatives and university professors, giving them familiarisation tours and designing service-learning programs. They hired a marketing professional with several years' experience marketing volunteer expeditions in Belize to market Ridge to Reef Expeditions via social media and volunteer travel companies. At the time of writing, the remaining project funds had been used to pay for travel expenses for a marketing trip to promote Ridge to Reef Expeditions to tour operators and explore the possibility of partnerships with other educational tour providers in Belize, with this activity due to take place in May 2015.

There were some differences between the marketing activities proposed and those actually carried out, as follows. TIDE had planned to contract former TIDE volunteers to promote Ridge to Reef Expeditions via presentations at schools and universities in the USA, Canada and the UK. However, it proved difficult to organize this, firstly because several former volunteers cancelled at the last minute, but mainly because it turned out that Belizean employment law requires all foreign contractors to have work permits (with a minimum cost of US\$500) whether the work is performed in Belize or abroad. Hence, TIDE was unable to pay former volunteers for the work. Instead, TIDE used its own staff to give presentations, piggy-backing on trips abroad that they were making anyway, and reallocated the savings to other activities, such as the trade shows and hiring the marketing professional. Former Ridge to Reef customers are now helping to market the program in other ways (see lessons learned).

Activity 1.2 Developing the program operating systems and infrastructure

TIDE hired an expedition manager as a full-time permanent member of staff, and 12 other temporary staff for the duration of the pilot expedition (five field scientists, two cooks, two boat captains, one dive instructor, one tour guide, and one driver).

The expedition manager created expedition itineraries, and other documents needed to run the program, such as customer application forms and medical forms, a kit list, accident and emergency procedures, and so on. TIDE made use of a volunteer with several years' experience in health and safety to conduct risk assessments for volunteer activities. The expedition manager and TIDE's science director created volunteer training materials for the environmental surveys that the volunteers carried out.

The expedition manager collected structured feedback from expedition participants via an online questionnaire and is using this information to improve the program. For instance, she and the science director are improving the ecological methods training to ensure trainees get a sense of how their work fits into the bigger picture of TIDE's mission. The expedition manager also conducted a debrief with the staff immediately after the expedition and documented the lessons learned to improve the program (see lessons learned).

TIDE obtained equipment (e.g. a dive compressor, diving gear, a generator, kitchenware, furniture, etc.), infrastructure (e.g. toilets, shower block, and solar system at the visitor centre at Payne's Creek National Park, and repairs to the road and building at TIDE's property in Big Falls village) and liability insurance necessary to run volunteer expeditions.

Activity 1.3 Build staff capacity

Although this activity was removed from the final proposal (it had been included in the pre-proposal), TIDE trained staff members in SCUBA diving (PADI Rescue Diver, one person), boat handling (RYA Powerboat Level 2, two people) and tour guiding (Belize Tour Guide Certificate, three people).

Activity 1.4 Running pilot expeditions

TIDE proposed to run one small-scale pilot expedition and two full-scale pilot expeditions within the project timeframe. An initial pilot, scheduled for October 2013, was cancelled due to lack of customers (there was only one booking). At this point, TIDE introduced individual volunteer placements, in which volunteers shadow TIDE staff as they go about their regular scheduled activities. This enabled TIDE to host smaller numbers of volunteers, overcoming the need to attract a minimum of six customers at one time. Individual placements proved popular and TIDE hosted five individuals during the project timeframe. TIDE ran a full-scale, eight-week pilot expedition from July to September 2014 with seven customers. They used the pilot expedition to create photos, video and customer testimonials for marketing, and to test out the program operating procedures.

Outcomes: Describe progress towards achieving the project outcomes as proposed and briefly explain any discrepancies between your results compared to what was anticipated. Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

The intended outcomes of the project were:

1. TIDE has greater financial sustainability through a paying volunteer program that breaks even by the end of year 3, generates \$12,000 in year 4, \$44,000 in year 5 and is on target to generate \geq \$85,000 per annum by year 7.
2. Data collected by paying volunteers is used to inform adaptive management.

Toward outcome #1, Ridge to Reef Expeditions hosted 12 paying volunteers within the project timeframe, generating approximately \$36,000 revenue. At the end of the project (March 2015) Ridge to Reef Expeditions had another 24 bookings, worth approximately \$46,000. This includes 20 students on Drake University's three-week International Environmental Seminar in January 2016, which could become a bi-annual or annual program. TIDE and Global Leadership Adventures are planning to carry out a pilot trip for around 20 students in summer 2016, which again, could become a long-term partnership. TIDE is also in communication with Earth Native Wilderness School, Personal Overseas Development, Book My Dive, Animal Expeditions International, GoVolunteer, and other travel companies with a view to forming partnerships. Ridge to Reef Expeditions has received glowing feedback from every customer so far, and, thanks to the marketing tools and contacts that this project has enabled TIDE to make, the program is on target to break even by the end of year 3 and become profitable thereafter.

Toward outcome #2, the volunteers hosted by TIDE to date have contributed 460 person days of labor, collecting data and carrying out conservation interventions. Their main accomplishments include satellite tagging a hawksbill turtle, identifying hawksbill nesting sites, planting >500 trees to protect riverbanks and the downstream environment, building a pond for captive rearing critically endangered Central American river turtles (*Dematemys mawii*), building a boardwalk for tourism in TIDE's Private Protected Lands, painting nine signs for TIDE's education centre, conducting a manatee survey that indicated the population is recovering (based on the high proportion of calves in the population), and surveys of lionfish, conch and sea cucumber. Some of the data collected by volunteers are being used to inform adaptive management. For instance, lionfish surveys indicated that lionfish in Port Honduras Marine Reserve are too small and have too low a population density to support a viable fishery, whereas those at Sapodilla Cayes Marine Reserve are large and in much high density. Thus, as TIDE promotes targeting of lionfish by fishers, the organization will be recommending that fishers target Sapodilla Cayes. Identification of turtle nesting sites will guide future monitoring activities and protection efforts. Population trends for queen conch will be used to help justify the expansion of replenishment zones in the Port Honduras Marine Reserve.

Other benefits of the project include employing 12 local people, several of whom are from fishing households, and inspiring at least five young people to pursue careers in conservation, including one Belizean.

3. Lessons Learned: Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt similar strategies to build upon some of these key lessons about what worked best and what did not?

Marketing

University presentations were most successful at attracting customers at the beginning of the academic year.

Trade shows resulted in extremely valuable contacts. The Education Travel Community Conference was the best for Ridge to Reef Expeditions, as it caters for exactly the niche market that the program supplies.

Merchandise, such as T-shirts and caps with the R2R or TIDE logos, was popular among volunteers. This was a great way to make a little extra money and promote the program at the same time.

Having former volunteers promote the program at universities and one of the trade shows was effective – prospective customers trusted the product more when they could speak with former participants – but it was very difficult to arrange and TIDE was unable to pay them because of Belizean employment law. However, there are other ways in which former volunteers and employees can promote this document and project. The authors do not intend to use the information provided to represent the opinions or policies of the National Fish and Wildlife Foundation. Mention of trade names or commercial products does not constitute their endorsement by the National Fish and Wildlife Foundation.

volunteers can communicate with prospective volunteers in ways that are easy for them and do not require compensation. These include writing blogs, and participating in webinars and a Facebook group in which prospective volunteers can ask questions.

TIDE conducted a crowd-funding campaign to fundraise for an expedition place for a Belizean student. The initial motivation for this was to fill the final place necessary to run the expedition at a profit. However, this also turned out to be a really great way to: a) train and inspire a Belizean to pursue a career in conservation; b) win support from the local community; c) enhance the experience of the international volunteers; and d) get word out about the program.

Running expeditions

As mentioned above, a minimum of six paying volunteers was required to run a profitable expedition. In the early stages of marketing a program such as this, it is challenging to attract six customers at the same time, and an initial pilot expedition had to be cancelled because of a lack of customers. A solution to this problem was to introduce individual placements, whereby one or two volunteers shadow NGO staff as they go about their regular scheduled activities. This proved highly effective. Small numbers of volunteers could be incorporated into the activities of TIDE's research and education departments at little extra cost, and individual placements have been popular among customers.

For health and safety, there should always be a vehicle with expedition groups. This was not always possible due to the limited numbers of vehicles and staff members insured to drive them. In future, Ridge to Reef Expeditions aims to have its own vehicle and multiple staff insured to drive it.

A number of lessons were learned relating to the smooth logistical operation of the program. The essential lessons for organizations intending to replicate this initiative are: i) ensure that all staff involved are briefed about their responsibilities well ahead of time so that they can incorporate them into their schedules; ii) if changing sites frequently, ensure that each site has its own set of kitchenware, furniture, etc. to avoid having to carry everything between sites; iii) online banking can enable the expedition manager to track expenditure in real time; iv) ensure sufficient staff are trained to dive master level. In TIDE's case, insurance required a PADI dive master to accompany volunteers on all dives. Since the expedition manager was the only dive master, she had to participate in every dive at the expense of other duties.

TIDE has a pool of 10-15 community researchers that it has trained in SCUBA diving, boat captaining, and various environmental monitoring methods, and employs on a free-lance basis. This pool of local talent proved extremely valuable in running expeditions. TIDE was able to easily recruit local personnel with the right skills and knowledge to assist on expeditions on a temporary basis. The community researchers are a similar age to the majority of the international volunteers and so this proved a great source of cultural exchange and interest for everyone involved.

4. Dissemination: Briefly identify any dissemination of project results and/or lessons learned to external audiences, such as the public or other conservation organizations. Specifically outline any management uptake and/or actions resulting from the project and describe the direct impacts of any capacity building activities.

TIDE shared the Ridge to Reef Expeditions program with partners at eight other MPA in the MAR region, all of which are among the 27 Caribbean MPA prioritized for capacity building support (see context above). These MPA are participating in an NOAA Cooperative Agreement for the Wider Caribbean (a project administered by the Gulf and Caribbean Fisheries Institute titled "*Building MPA Management Capacity and Coral Reef Resilience in the Caribbean's Mesoamerican Reef Region*"). TIDE shared the Ridge to Reef program with these partners and others at a workshop under that project titled "*MPA management challenges through a climate change lens*", held at TIDE in February 2015.

As mentioned above, some of the outputs produced by the Ridge to Reef volunteers are helping to inform management. Most notably, the location of hawksbill turtle nesting sites will be used to inform future monitoring and protection efforts. Results of satellite tracking an adult hawksbill are being used for public awareness and may, in future, inform management and policy (http://www.seaturtle.org/tracking/index.shtml?tag_id=117995). Results of a lionfish survey are being used to inform management approaches, as described above. Results of conch and sea cucumber surveys, which indicated that those fisheries are being overfished, have been relayed to the Belize Fisheries Department and may inform their management and policy decisions.

5. Project Documents: Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi. For each uploaded photo, provide a photo credit and brief description below;
- Report publications, Power Point (or other) presentations, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- Any project deliverables per the terms of your grant agreement.

The uploads associated with this report are as follows:

1. Ridge to Reef Expeditions logo.
2. Ridge to Reef Expeditions e-brochure.
3. Ridge to Reef Expeditions Power Point presentation that was used during university presentations.
4. Photo of the first expedition group. Credit TIDE.
5. Photo of the first expedition group underwater. Credit TIDE.
6. Photo of volunteers participating in a beach clean-up at Hunting Caye. Credit TIDE.
7. Photo of volunteer helping construct a boardwalk at TIDE's Private Protected Lands. Credit TIDE.
8. Photo of volunteers building a pond for captive rearing of endangered Central American river turtles (*Dermatemys mawii*). Credit TIDE.
9. Photo of volunteers reconstructing a goliath grouper skeleton for an educational display. Credit TIDE.
10. Photo of volunteer helping teach local children about the environment. Credit TIDE.
11. Photo of Belizean volunteer Javier Alegria thanking those who funded his expedition place via a crowdfunding campaign. Credit TIDE.
12. Photo of expedition manager Caroline Oliver at the Adventure Travel Trade Show in San Diego. Credit TIDE.
13. Photo of expedition manager Caroline Oliver with R2R promotional materials. Credit TIDE.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection.*