



Costa Rican Environmental and Educational Network

San José, Costa Rica

Progress Report:

**Sea Turtle Activity in an Approved Aquaculture Site, Mouth of the
Golfo Dulce, Costa Rica**

Project funding provided by:



INTRODUCTION

The project titled: *Sea Turtle Activity in an Approved Aquaculture Site, Mouth of the Golfo Dulce, Costa Rica*, was designed as a way to contribute to the local movement against an approved yellow fin tuna aquaculture initiative – or tuna farm – 3 km south of the Golfo Dulce’s mouth along Costa Rica’s Pacific coast. Because commercial tuna aquaculture threatens populations of endangered sea turtles, conflicts with Costa Rica’s commitment to protecting turtle populations, and has the local eco-tourism and artisanal fishing sectors concerned over its possible effects on the economy, it is the project team’s goal to contribute to the responsible management of the area’s marine resources by performing and divulging the results of this study.

Thankfully, governmental approval for the tuna farm was officially terminated by the Costa Rican Environmental Secretariat (SETENA) on 7 November 2011 (see Annex 1 for media coverage links). Since 2004, a foreign interest conglomerate termed Granjas Atuneras de Golfito S. A. has worked toward the development of an aquaculture site off the shores of Punta Banco. The project received environmental permits from the Costa Rican government in 2005 only to be suspended by a Supreme Court order in 2007 that ordered the company to conduct a marine current study to address the project’s environmental viability. Though no study was ever performed, the government re-approved the project in 2008. When attempts to continue with the approval process were met with strong opposition, the company asked for and received a one-year deferment in 2010.

SETENA’s 2011 resolution ended negotiations with Granjas Atuneras de Golfito S. A., sighting a lack of required environmental assessments pertaining to the earlier Supreme Court order against the project, intense community opposition, legal objections by NGOs, and the falsification of signatures and letters of support from local community members.

The announcement come as a relief to many interested parties, including all members of the sea turtle visual survey project, funded by the Rufford Small Grants Foundation, many of whom have contributed to the “No Tuna Farms Campaign” over the past years. However, it is widely accepted that recent free trade agreements with China will provide an economic catalyst for future aquaculture projects. China’s seafood imports have soared in recent years and its trade agreements with Costa Rica allow for the purchase of Costa Rican farm raised tuna. Because of this, conservation projects like this one that focus on the collection of information regarding endangered coastal species are becoming even more of a necessity in Costa Rica.

PROJECT TEAM MEMBERS

Andy Bystrom—codirector
Ingrid Rojas—codirector
William Mata—boat captain
Jose Cortez—research assistant
Jonathan Schrank—GIS expert

Andy Bystrom and Ingrid Rojas are the project's directors and original designers. On July 13, 2011 they legally established the Costa Rican Environmental and Educational Network (ARCAE), a not for profit association based in Costa Rica. The visual sea turtle survey has become a pilot project for ARCAE's work. The project's boat captain, William Mata, is the president of the Pavones Artisanal Fishers Association. Jose Cortez is a Punta Banco resident who has worked for the past 8 seasons on local sea turtle nesting beach projects. Jonathan Schrank is from the United States and will be volunteering with the project beginning in January. He will be assisting with data collection and analysis as he is skilled with the use of Geographic Information Systems.

BUDGET

At the present time, the Rufford Small Grants Foundation is the project's sole funder. The original project's budget called for \$5,000 worth of co funding by other international foundations, however, this was not approved. Since the project has become part of ARCAE's work, it is very possible that additional funding will become available through the association's fundraising efforts. In the meantime, appropriate steps have been taken to reduce travel expenses. This includes the acquisition of Jonathan's pro-bono, on-site services that will greatly offset the budget deficit. The only budget sacrifice has been the decision to not purchase a high quality camera for wildlife photography and species identification. Project members have other cameras at their disposal and even if no additional funding is secured, successful project completion is anticipated.

OBJECTIVE SPECIFIC ACTIVITIES

Objective 1

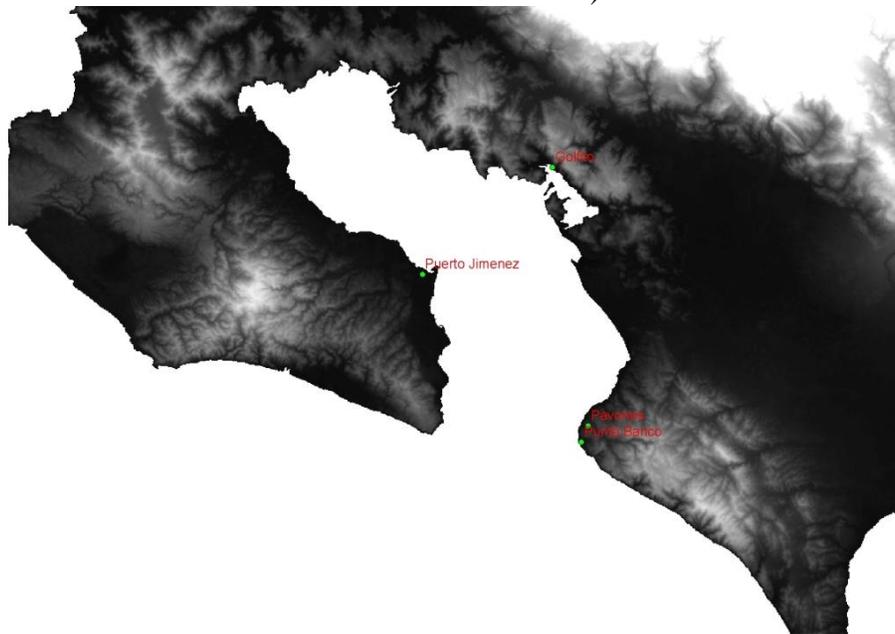
Determine the population composition of green and hawksbill sea turtles and the possible effects that a tuna aquaculture project would have on these turtles near the mouth of the Golfo Dulce, Costa Rica

Activities

Obtain project site maps

--Locally printed maps have been obtained and studied. In addition, Jonathan has created a Digital Elevation Model (DEM) base map of the area, including the Golfo Dulce's major towns, (figure 1). The Shuttle Radar Topography Mission (SRTM) data acquired to produce this map will also be used to create relief maps of the project's visual survey data.

Figure 1: DEM base map of site area and the Golfo Dulce's major towns (spatial resolution of SRTM data: 90 meter)



Meet with Pavones artisanal fishermen to compile their experience and knowledge of green and hawksbill sea turtles in and around the Golfo Dulce's mouth

--A meeting with Pavones fishers was held on October 5. Pertinent information regarding local marine fauna was obtained and William Mata was contracted as the project's boat captain (see Annex 2 for pictures).

Compile information and analyze

--This is a project long activity. Information for map generation is being analyzed and local fisher anecdotal information has also been obtained and is contributing to the visual survey strategy.

Obtain all necessary field supplies

--Supplies including 2 GPS units, dry bag, 2 headlamps, batteries, and computer cables have been purchased. Sufficient funding for a high quality camera to photograph wildlife was not obtained and the small amount of funding from Rufford that was allocated to this item will be used for contingency expenses.

Visually survey project area with boat captain (group member) during daylight hours, record all species, locations, photo evidence if possible, and additional relevant factors which may be identified as the project progresses.

--The project's visual survey will begin during the first half of December. This is a month later than anticipated because of continued heavy rains during October and November. The survey will be extended through May to compensate for this late start. While on-the-water data collecting activities have not begun, project members have added a sea turtle nesting beach survey (heavy rains have not deterred these activities) component that began in October within the site area. Jose has identified and GPS located 6 green sea turtle nesting events—something that has never been recorded for this species in this region of Costa Rica. Project members will continue these beach surveys throughout the entire project as this data will complement the project's in-water results. GIS maps will contain both data sets.

Objective 2

Strengthen the local and national stakeholder initiative to establish a marine reserve which will promote eco-tourism initiatives in addition to protecting the endangered turtles at the estuary's mouth

Activities*Identify and meet with local stakeholders who depend on the environmental viability of the Golfo Dulce*

--Stakeholders have been identified and various meetings with fishers, tourism operators, local hotel owners, managers, and staff have been held around the Golfo Dulce on June 26-27 and in San José on July 22 and September 21. Topics discussed included environmental protection and sustainable fishing/tourism strategies for the Golfo Dulce. A fisheries workshop is planned for the area's artisanal fishing associations by the international marine protection non-profit MarViva, and Andy has been invited to present ARCAE's work. ARCAE was also accepted as a member of the Eastern Pacific Hawksbill Initiative (ICAPO), an information sharing network of environmental non-profit organizations.

Attend Golfo Dulce Management Commission meetings regarding development of a marine reserve and eco-tourism opportunities

--ARCAE was invited by the Environmental Ministry's Osa Conservation Area (ACOSA) and National System of Protected Areas (SINAC) to present the project's work at their Marine Coastal Workshop on September 7 in Golfito. Ingrid attended and presented. A four page project description was included in the workshop's printed agenda (see agenda cover page in Annex 2).

Hold a workshop to present the project's results and to discuss strategies to effectively implement the use of the information

--Project results workshop is scheduled for June 2012.

Objective 3

Contribute to school childrens' knowledge and understanding of the area's marine ecosystem

Activities

Identify local area schools

--Local schools have been identified. In addition, a children's library in Punta Banco has been recently established and project members have been invited to contribute to the resources it provides to the public as well as use its facilities for the project's educational activities.

Obtain materials for educational presentations and design educational presentation for school children

--Ingrid will spend the month of January at the project site, preparing this project component

Make presentations at local schools regarding the area's marine animals

--January-June

Objective 4

Contribute to national and international awareness of the conflict between sea turtle protection and unsustainable aquaculture initiatives

Activities

Compare research project's results with Costa Rican obligations as established by international conventions with the recent decision to approve industrial tuna aquaculture

--June. However, free trade agreement information between Costa Rica and China is already being obtained and studied to understand the country's possible reliance on aquaculture as a form of international commerce in the near future.

Produce final report with recommendations for the sustainable management of the Golfo Dulce's green and hawksbill turtle populations

--June

Present final report to Environmental Ministry officials

--June

Hold a workshop to present project results, conclusions, and recommendations to all project stakeholders

--June

Distribute a press release explaining the project's results

--May-June. A press release was written and distributed by Andy on November 10 detailing the tuna farms project termination (see Annex 1 for link).

Establish social networks (Facebook, blogs, etc.) and update members with research project information

--Project information and a link to its description on the Rufford Small Grants Foundation's website were posted on the Costa Rican Conservation Network's blog: <http://costaricanconservationnetwork.wordpress.com/2011/05/20/introducing-arcae-coastal-conservation-and-education/>

ARCAE is also featured on Challenge Your World's website: <http://www.challengeyourworld.com/opportunity/conservation-education-and-development-costa-ricas-south-coast> Project member plan on creating a webpage and Facebook group for ARCAE.

ANNEX 1

Tuna farm media coverage

Press release:

<http://costaricanconservationnetwork.wordpress.com/2011/11/10/tuna-farm-aquaculture-project-stopped/>

Online articles:

<http://semanario.ucr.ac.cr/index.php/noticias/pais/4855-la-setena-archiva-proyecto-de-granjas-atuneras-sin-investigar-anomalias.html>

<http://www.diarioextra.com/2011/noviembre/12/nacionales07.php>

<http://www.noticias-cr.com/ultima-hora/archivan-proyecto-de-granjas-atuneras.html>

Radio Interview with Andy Bystrom:

<http://www.radioreloj.co.cr/noticia/archivan-proyecto-de-granjas-atuneras>

ANNEX 2

William Mata, project boat captain, with site map



(left to right) William Mata, Andy Bystrom, and Jose Cortez



SISTEMA NACIONAL DE ÁREAS DE CONSERVACIÓN
 ÁREA DE CONSERVACION OSA
 Programa Marino Costero de ACOSA (PROMACOSA)



MEMORIAS DEL TALLER ACCIONES MARINO COSTERAS EN ACOSA



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Golfito, 7 de setiembre del 2011

«Proyecto BID-SINAC-MARVIVA» y el ACOSA

Instituciones participantes:



FUNDACIÓN
 CORCOVADO

ARCAE
 AMBIENTE - EDUCACIÓN

MISIÓN TIBURÓN

ACOSA's and SINAC's marine coastal workshop, Golfito, Costa Rica (full workshop pdf available upon request)