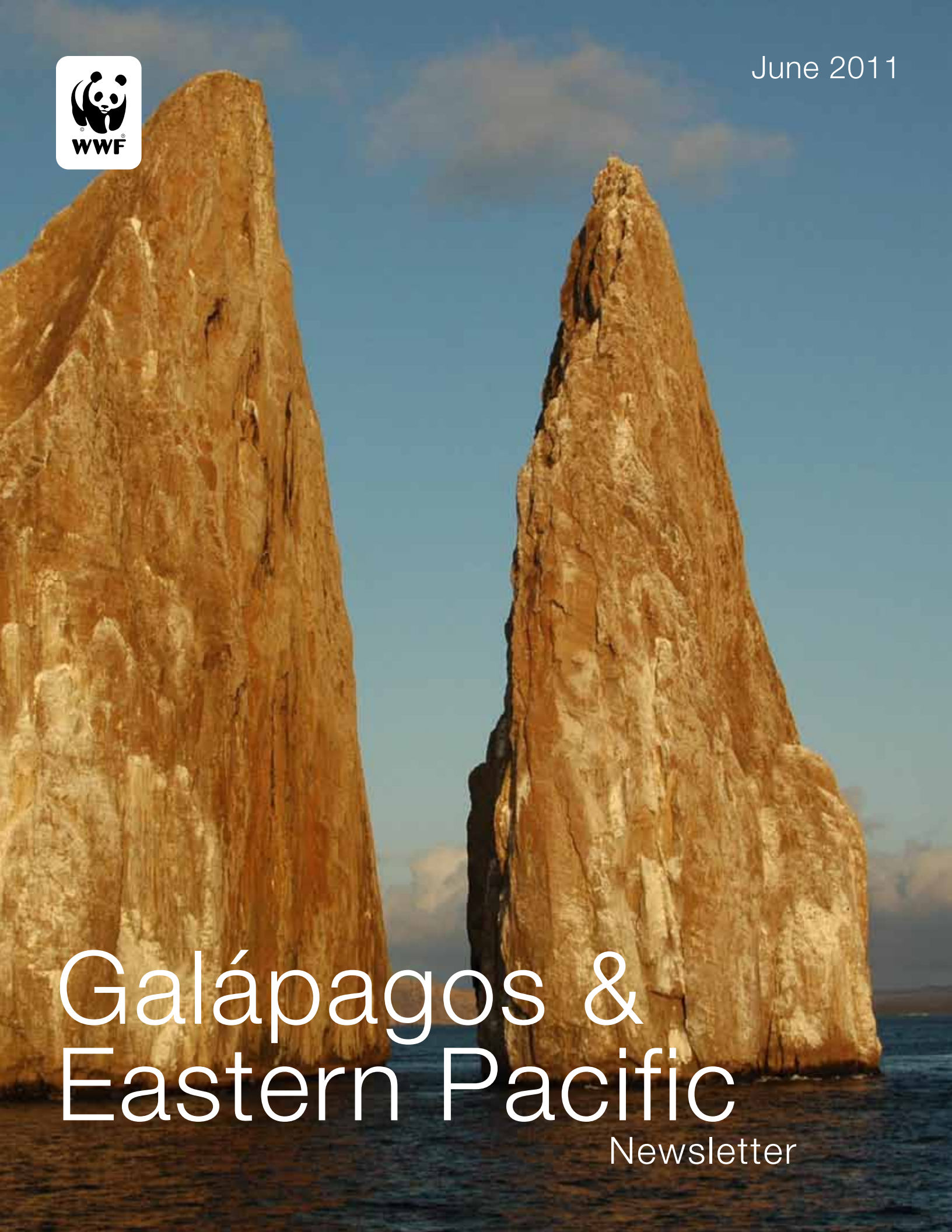

June 2011

Galápagos & Eastern Pacific

Newsletter

Letter from the Field

Dear Friends of the Galápagos:

Ten years ago, on January 16, 2001, an oil spill in the Galápagos Islands resulted in approximately 240,000 gallons of oil and bunker fuel being dumped into the ocean near San Cristobal Island. WWF asked Toyota to help us evaluate the overall impact of fossil fuels in the islands—the risks of using and transporting them, as well as ways to avoid future oil spills. This marked the beginning of a unique partnership.

Within seven months, that partnership produced the Galápagos Energy Blueprint, aimed at transforming the islands' energy systems from traditional fossil fuel-based systems to a system based on sustainable energy sources and clean technologies.

Since 2001, WWF and Toyota have worked together to implement the Blueprint and transform the Galápagos into a model of community-based conservation and sustainable development. Key accomplishments include the design and renovation of the islands' primary fuel-handling facility; implementation of a solar energy project which meets most of the electricity needs on Floreana Island; consolidation of an oil recycling project on Santa Cruz Island and establishment of a similar project on San Cristobal; and the start of a renewable energy education campaign.

The partnership has evolved to address "footprint" issues related to waste management and recycling. Toyota provided the technical expertise to develop the Waste Management Blueprint for the Galápagos Islands. WWF and Toyota, in partnership with the local municipality, have designed and implemented a comprehensive recycling program on Santa Cruz and provided technical expertise to create a Municipal Environmental Department. Through the ongoing recycling education campaign, WWF has reached 99 percent of the island's population. Nearly 50 percent of the overall waste generated is being recycled, and the system has become a model that can be replicated in other places.

During our 10-year partnership, Toyota's financial support and the vision of Toyota's engineers have been paired with WWF's capable field-based team and solid working relationships with stakeholders. The combination has allowed the partnership to achieve big results that WWF could not have achieved alone.

Lauren Spurrier
Managing Director

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Photo Credits – Cover: Galápagos landscape – © Lesley Weller / WWF. **Page 1:** Lauren Spurrier – © WWF. **Page 2:** All images of participants, "Shared Vision of the Sustainability of the Galápagos Islands" workshop – © Juan Carlos García / WWF. **Page 3:** Isabela Island, Galápagos © Ulf Hardter / WWF. **Page 4:** Tourists walking towards Alcedo Volcano, Isabela Island, Galápagos – © Juan Carlos García / WWF. **Page 5:** All pictures of the solar boat visit to the Galápagos Islands – © WWF / Jean Claude Constant. **Page 6:** Luis Guadarrama holding a blue shrimp – © Laura Rodríguez / EDF-Mexico; fishermen from the Gulf of California, Mexico – © Laura Rodríguez / EDF-Mexico.

1 Sustainable Development Must Be a Joint Venture

Eliécer Cruz, M.Sc., Ecoregional Director, WWF Galápagos Program

Good progress was made on inclusive discussions of sustainability in the Galápagos during a workshop held aboard the National Geographic *Endeavour,* November 28 - December 3, 2010. The workshop, "Shared Vision for the Sustainability of the Galápagos Islands," gathered local, national, and international stakeholders to collaborate on a vision for the sustainable development of the Galápagos Islands and to identify key fundraising needs.

A shared vision is of vital importance if we are to ensure that Galápagos remains one of the most pristine archipelagos in the world—one that continues to sustain its key biological, ecological and evolutionary processes in the presence of development for human enterprises. Only by means of cooperative work among all stakeholders (authorities, communities, and businesses) can this vision be achieved. The cruise on board the *Endeavour* provided the right venue for involving stakeholders in securing a vision for Galápagos 2030, while appreciating the beauty and the fragility of the islands.

Workshop participants visited the islands and took part in talks and working groups which addressed six major topics: (1) Biosecurity; (2) Good Governance and Territorial Planning; (3) Good Living: Education, Health and Culture; (4) Ecotourism Model; (5) Mobility and Change in the Energy Source; and (6) Marine Management.

The *Endeavour* was at maximum capacity, carrying a cross-section of those with an interest in how the islands are developed. Attendees included 18 representatives from the Ecuadorian government, 16 from local governments, 5 from the fishing sector, 5 from the tourism sector, 18 from the conservation sector, 8 from Galápagos National Park, and 17 potential donors.

The workshop was convened by the Ministry of Heritage, the Ministry of Environment, and the Galápagos Government Council. The organizing committee was lead by WWF with support from Conservation International, the Charles Darwin Foundation, and the Galápagos National Park. WWF secured the donation of the five-day cruise from Sven-Olof Lindblad. Additional funds to cover the costs associated with the workshop were provided by the Leona M. and Harry B. Helmsley Charitable Trust and the Walton Family Foundation.

2 WWF Building Management Capacity on Isabela

Maximilian Martin, M.Sc., Program Officer, and Ulf Hardter, Ph.D., Program Officer, both of the WWF Galápagos Program

The growing numbers of tourists and inhabitants have slowly but severely affected the Galápagos Islands over the years, mainly because of deficient infrastructure and limited environmental management. To ensure the long-term conservation of the Galápagos, it is necessary to strengthen the existing structures and involve the local community in the process.

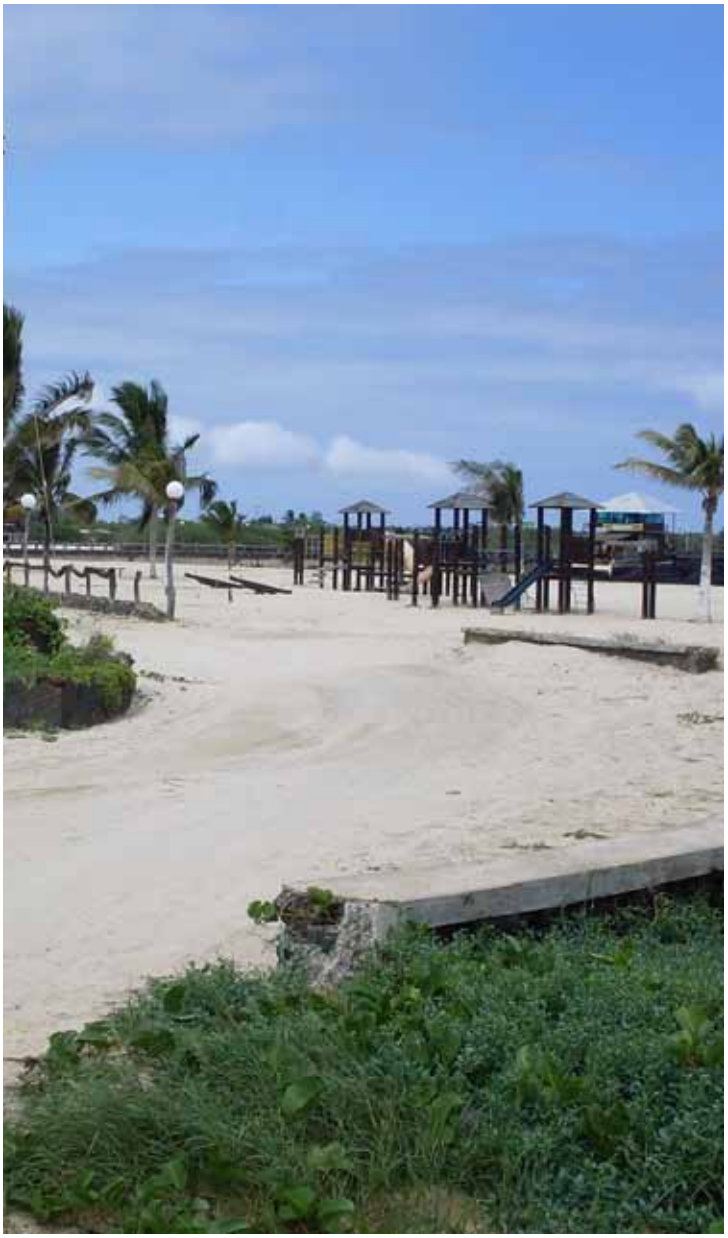
Isabela Island faces the same issues as the other three inhabited islands in Galápagos. One of these problems is waste management. Household waste gets deposited in the streets and there are unacceptable dump sites where waste is burned in the open air. A considerable amount of plastic rubbish gets blown into the sea and affects the fragile Galápagos marine ecosystems as species ingest harmful trash.

To strengthen Isabela's environmental department, WWF is currently supporting the municipality in comanaging its waste management and recycling project and improving its environmental performance. The goal is to lessen the pressure on Isabela's unique terrestrial and marine ecosystems by reducing pollution and contamination. To reach this goal, we aim to encourage a change of behavior in the local community, backed up by environmental policy changes.

We expect to develop further capacity in the municipality's environmental department in order to implement projects dealing with other environmental issues such as water quality, sewage treatment, and energy sources. Additionally, WWF is supporting the development of a strategic environmental plan for Isabela, applying best practices learned from the system we helped create on Santa Cruz Island.

Our Santa Cruz experience has given us much success to replicate on Isabela. WWF created Santa Cruz Island's first environmental department in 2007. We worked in close cooperation with the municipality to improve the environmental situation there. Providing technical equipment and expertise, WWF set up an environmental unit capable of managing what has become one of the most efficient recycling projects in Ecuador. Recycling has become an accepted part of daily life in Santa Cruz, and both human and wildlife populations are benefiting from this behavioral change.

These same opportunities are now opening up on Isabela. The introduction of a waste management system is a starting point. Once the new environmental department is established, it can become a solid platform for addressing many pressing issues. And the already-funded strategic plan will be another crucial step toward creating a sustainable future on Isabela.



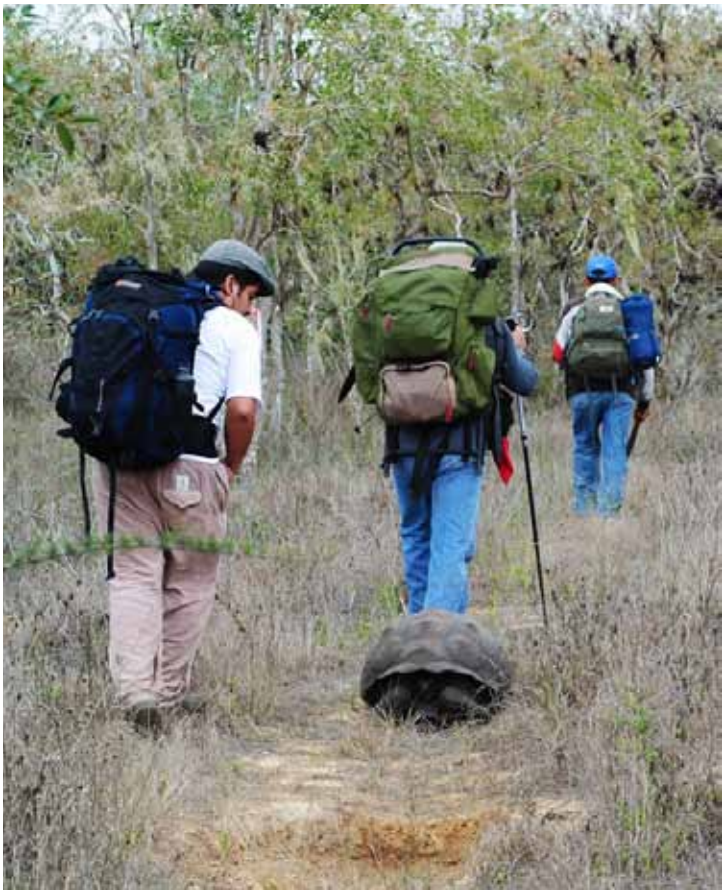
3 Implementing the New Tourism Model for Galápagos

Juan Carlos García, Program Officer, Sustainable Management, WWF Galápagos Program

The Galápagos Government Council formally adopted ecotourism as the new tourism model for Galápagos on December 31, 2010, in order to guarantee biodiversity conservation and local participation, and to develop sustainable products and services.

The new tourism model consists of four components: governance, product reengineering, market positioning, and a tourism monitoring system. WWF's assistance in the implementation of this model includes various work areas and strategic partnerships with public, private and community actors. Here are our most important actions and achievements to date.

Governance. WWF works with all levels of the Ecuadorian government in order to guide the management of Galápagos tourism. We provide permanent technical assistance to the Ministry of Tourism, the institution in charge of the Provincial Tourism Technical Committee and public policy for tourism.



In addition, we are supporting the Galápagos National Park in developing the proposal for the new Tourism in Protected Areas Regulation System, a process that started in January 2011 and is now in its final phase.

A significant effort has been made to work with the three local municipalities. We have helped establish the three Tourism Councils, which offer opportunities for stakeholder participation in tourism planning and management. We have also helped the municipalities of Santa Cruz and Isabela develop their strategic tourism plans and draft tourism regulations and ordinances.

Product Reengineering. Under a three-year agreement signed in October 2010, we are working with the Galápagos National Park and the Charles Darwin Foundation to develop new tourism products and services according to the principles of ecotourism. We are currently completing the fieldwork needed to identify product and service options that can best support biodiversity conservation while generating local participation and benefits.

WWF is also working with the Galápagos Provincial Tourism Chamber to improve the management capacity of local tourism businesses and to support the implementation of best practices for sustainable tourism. Forty businesses in Santa Cruz are participating currently, and we will replicate this project on San Cristobal and Isabela in the next few months.

Market Positioning. We are finalizing the design of a communications campaign aimed at improving awareness of ecotourism as the new tourism development model for Galápagos. Our aim is to communicate the principles behind the new ecotourism model to the local population, to local business owners and operators, and to visitors.

Tourism Monitoring System. The tourism monitoring system is a technical tool for analyzing the impact of tourism in Galápagos. The first such system in Ecuador, it has generated a lot of expectation among local actors and institutions. At this time, we are conducting the final phase of identifying and selecting all of the tourism, social, and environmental indicators the system will use. Together with the Ministry of Tourism and the Galápagos Government Council, we plan to implement the system at the end of June 2011.

4 World's Largest Solar-Powered Boat Visits Galápagos

Verónica Toral, M.Sc., Program Officer, WWF Galápagos Program

During a stop on its voyage around the globe, the *Tûranor PlanetSolar* gave the people of the Galápagos a chance to experience the world's largest solar-powered boat. Running on an electric motor that is silent, pollution-free, and fueled entirely by solar energy, the *Tûranor PlanetSolar* is on a mission to create awareness of the advancement of solar technology and the application of this renewable energy source.

Together, the Galápagos National Park (GNP), the Galápagos Government Council, and WWF arranged the boat's stay from January 25 to February 7, 2011. In both San Cristobal and Santa Cruz islands, approximately 800 people attended the information sessions and visited the boat. Logistical support for visits to the boat was provided by the Ecuadorian Navy and the GNP.

In welcoming the boat's crew to Galápagos, the mayor of San Cristobal kindly acknowledged WWF's role in pursuing more sustainable alternatives for the islands' tourism industry. Skipper Raphael Domjan, initiator of the PlanetSolar project, said he was happy to see the political will of the local community move toward sustainability.

Powered by a massive array of photovoltaic solar panels covering 500 square meters, the *Tûranor PlanetSolar* travels at 6 to 8 knots, a speed similar to that of most tourist boats currently operating in the Galápagos Marine Reserve. It is hoped that the boat has inspired new steps toward the use of clean technology, the minimization of human impact, and the implementation of renewable energy in tourism practices—all important aspects of creating a sustainable environment on the Galápagos Islands.

5 Catch Shares in the Gulf of California

Luis Guadarrama, Coordinator, Catch Shares Project, Marine Program, WWF-Mexico

The Catch Shares Project in the Gulf of California (GOC) was created in 2008 based on this basic notion: that in order to effectively conserve the gulf, it would be imperative to take into account issues of sustainable fisheries management. The project has been carried forward by an unprecedented collaboration among WWF, Environmental Defense Fund (EDF), the local NGO Noroeste Sustentable (NOS), and two federal agencies for fisheries, the National Commission of Aquaculture and Fishing (CONAPESCA) and the National Fishing Institute (INAPESCA).

Fisheries management by catch shares is a system in which a scientifically established maximum catch (Total Allowable Catch) is assigned to the economic agents (normally the fishermen) involved in a certain fishery. This is intended to give the economic agents the certainty of their source of income that will enable them to make the best long-term management decisions for the resource.

During the first phase of the project, the partners worked to establish the technical and institutional capacities within the federal government to effectively consider catch share management. Subsequently, in December 2008 CONAPESCA announced its decision to implement a catch share management system for the blue shrimp fishery in the Mexican state of Sinaloa in time for the opening of the 2009-2010 fishing season in September 2009.

In Mexico as a whole, and in Sinaloa itself, the blue shrimp fishery is one of the most valuable fisheries—the total national blue shrimp catch makes up more than half the national fisheries production.

Historically, there has been some social conflict surrounding the fishery, mainly due to the division between the politically important artisanal fishing sector and the economically important industrial fleet. There are nearly 10,000 artisanal fishermen in the Sinaloa part of the fishery, and they produce less than 20 percent of the value derived from the Sinaloa blue shrimp fishery. In contrast, there are nearly 600 industrial ships, and they produce more than 80 percent of the total catch.

In spite of this context of tension and economic disparity, and after much consideration, the partners of the Catch Shares Project team decided to support the government initiative to implement this new fishing management system. Support from the project came mainly in the form of technical assistance and outreach to the fishermen, though some political advocacy was done with fishermen's organizations on both the artisanal and industrial sides.

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During the first two seasons of catch share implementation, there have been several important advances toward strengthening the management system, such as (1) full identification of the legal fishing effort—that is, how much fishermen are really involved in the fishery, and where they are; (2) establishment of a Total Allowable Catch for the artisanal effort within coastal lagoons and estuaries; (3) training regarding Catch Shares for all leaders of cooperatives; (4) third party monitoring of all legal landing sites, with results in real time on the CONAPESCA website; and (5) establishment of a Community Surveillance and Control system in the Navachiste and Altata bays. This has had an impact on the volatility of the fishery, as no major conflict has been identified in the last two seasons.

The current situation in the fishery is much better than before, but there are still problems that not only affect the potential for catch share consolidation in Sinaloa shrimp, but also jeopardize management efforts in the fishery. Here are some of the challenges we still have to overcome:

- Illegal fishing is still prevalent in this fishery, although there is a sense that the situation is better than it was.
- The legal framework still does not allow for transfer of quotas.
- Catch shares apply only to the artisanal fishery; we still need to implement catch shares in the industrial sector.

6 Fishing Smarter to Save Turtles

Moisés Mug, Program Leader, Sustainable Fisheries, and Sandra Andraka, Manager of the Bycatch Program, both of the LAC Secretariat

Marine turtle conservation is at the heart of marine biodiversity conservation, and it inspires many thousands of supporters all over the world. People love marine turtles, and there are many reasons to save them. The health of turtle populations reflects the way we use marine resources and the way we develop our fisheries. Investment in marine turtle conservation reflects how society sees and values these ancient animals and ocean biodiversity in general.

The relationship between fisherman and marine turtle is as old as the relationship between fisherman and fish. For countless years, the marine turtle has been a victim of incidental catch as fishermen pulled in their targeted fish catch. Turtle bycatch greatly threatens marine turtle populations. However, if we look at the bycatch problem through the lens of "smart fishing," the triangle of fisherman-fish-marine turtle provides an opportunity to restore marine biodiversity at a bigger scale.

Let's look at tuna fisheries as our example. As in the case of marine turtles, several tuna stocks are in peril. The status of the bluefin tuna and the bigeye tuna are clear examples of ineffective fishery management and a reflection of how shortsighted economics can overrun scientific advice. Can we restore healthy tuna fisheries by convincing fishermen to shift to smarter fishing methods—methods that also decrease turtle bycatch? Yes, we can, by employing pragmatic arguments based on sound scientific advice, long-term economic benefits, and stronger management regimes. But ultimately, the transformation needs to be a little more profound: it needs to touch the inner cords that affect how fishermen, as harvesters of the oceans, appreciate and value ocean life.

For six years, WWF has worked with artisanal longline fishermen in the Eastern Pacific Ocean on ways to solve marine turtle bycatch. We have taken the pragmatic approach of technological solutions such as circle hooks and fishing gear modifications, and testing and showing results. And we have learned that this is only part of the solution. The rest comes from the fishermen—from when, and why, they make the decision to fish smarter in order to save turtles.

This learning has opened a window through which we can look at our goal of promoting smarter tuna fishing. It is the tuna business we want to change to save tuna fisheries, and in doing so we should also aim at transforming how the fishing industry, consumers, and society itself see and value our marine realm. The lengths to which we are willing to go to conserve marine turtles are a measure of our willingness to change whatever we must in order to maintain healthy oceans and ocean populations.

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