



December 2011



Galápagos & Eastern Pacific

Newsletter

Letter from the Field



Dear Friends of the Galápagos:

Fifty years ago, Julian Huxley, Peter Scott and Guy Mountfort, among others, created an organization the main purpose of which was the conservation of nature. WWF was established in 1961 in Switzerland, and it became one of the first international conservation organizations. Today we are in more than 90 countries and work with public and private sectors and civil society to confront threats to the environment.

Much has been achieved. For example, along with the Ramsar Convention, wetlands protection has been increased, reaching 100 million hectares in 2010. We were involved in the creation of the Forest Stewardship Council (FSC), which has promoted the certification of over 120 million hectares. Our work has also been crucial in protecting the world's oceans, including coral reefs, sea grass beds, mangroves, fish breeding areas and deepwater habitats.

For more than 40 years we have been committed to conserving the Galápagos. We have built a solid reputation as a result of our collaborative and science-based approach. This has enabled us to play a strategic role in policy issues. In 1998, we participated in the creation of the Galápagos Special Law, which is the framework for the protection of the islands and was central to the designation of the world's third-largest marine reserve. We work with local, provincial and national authorities, providing technical advice and articulating strategies for responsibly managed fisheries, migratory species protection, sustainable tourism, waste management and marine reserve management.

Since 2003, we have been working in the Eastern Pacific with industrial and artisanal fishermen, traders, NGOs and government authorities toward sustainable fisheries and ecosystem management, and the incorporation of sustainability criteria in local and regional markets. We have been part of the transformation of the longline fleets to sustainable fisheries, acting directly against one of the threats affecting sea turtles.

The future of Earth's biodiversity demands concerted action. Our work in Galápagos and in the Eastern Pacific is based on this principle. We, as part of civil society, need to communicate with the corporate and public sectors and share the responsibility for achieving lasting change. The celebration of this 50th anniversary is well-earned, but we must also continue our commitment to building a future that is truly in harmony with nature.

Mary Louise Higgins
Regional Representative
WWF Northern Amazon & Chocó-Darién Program

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1 Evaluation Begins for Marine Reserve's Management System

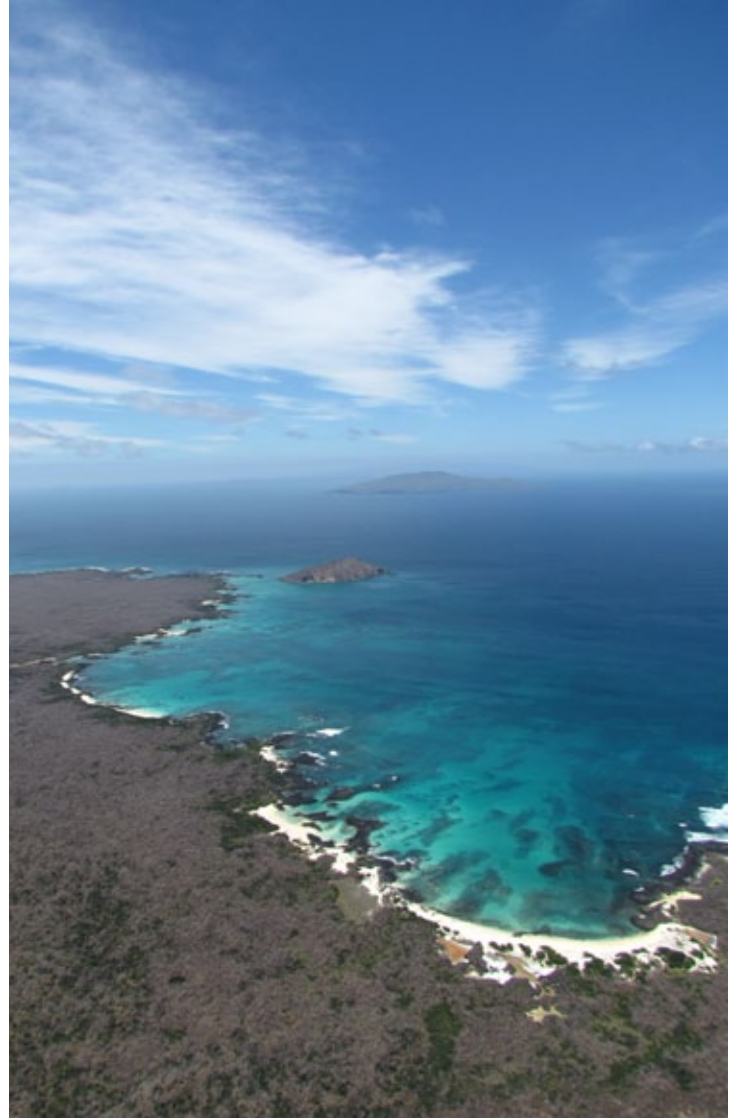
Eliécer Cruz, Ecoregional Director, WWF Galápagos Program

The 52,900-square-mile Galápagos Marine Reserve ("the reserve") is one of the largest and best managed MPAs in the world and is recognized as an icon of marine conservation. The reserve operates under a participatory management process that ensures the conservation of biodiversity and the sustainable development of local communities. It does so by managing resources in a way that meaningfully involves local constituencies such as fishers, tourism operators, environmentalists and naturalist guides. WWF supported the establishment of the reserve in March 1998 and continues to support the management process that helps the reserve succeed.

In 2009, WWF supported the Galápagos National Park in updating the fishing chapter of the Galápagos Marine Reserve Management Plan. The chapter was unanimously approved by the Participatory Management Board and included in an updated version of the plan. This encouraged the park to carry out an evaluation of the effectiveness of the reserve's management system, from its creation in 1998 to the year 2010.

The reserve's management system has always included the tourism, fishing, naturalist guide, science, conservation and education sectors as major stakeholders in the decision-making process. This system aims to ensure the conservation and sustainable management of the reserve's many resources. However, despite progress in certain areas, this system has not been completely successful in optimizing the use of certain resources and securing the livelihoods of Galápagos fishers. As a way forward, it was deemed appropriate to evaluate the management effectiveness in the reserve and identify key bottlenecks and lessons learned.

In October 2010, WWF, together with the Galápagos National Park, established a multidisciplinary working group to assess the effectiveness of the reserve's management. Under the leadership of Marc Hockings, vice chair of IUCN on marine protected areas, the working group focused on five areas: legal and policy context, biophysical, socioeconomic, management and planning, and governance analysis. Specific information was gathered on endangered species, the costs related to control and surveillance of the reserve, tourism indicators, threats and pressures on the reserve, and management tools effectiveness. This information was compiled from existing



databases, direct interviews, workshops, and participatory fora. The users provided valuable information on their perception of reserve management and how it might be improved.

The methodology was presented at a meeting of the Participatory Management Board (the local decision-making body) to engage them in the process. A final report is currently being drafted. It includes both problems and recommendations identified by the board. The report will help to initiate a management plan revision process for the reserve.

2 Ecotourism Pilot Project Under Way in Santa Cruz

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

The long-term vision for tourism development approved for Galápagos in January 2011 relies on ecotourism to turn the Galápagos Islands into a world class destination while guaranteeing environmental conservation, local welfare, and visitor satisfaction.

According to the International Ecotourism Society, ecotourism is a “responsible trip to natural areas that preserves the environment and improves the well-being of local populations.” It is based on three key principles: 1) environmental conservation; 2) local benefits and participation; and, 3) environmental and social responsibility of the tourism industry, visitors, community, and all actors involved.

In practice, the principles of ecotourism translate into management methods aimed at minimizing the negative impacts and maximizing the benefits generated by the tourism activity. In order to support the implementation of ecotourism in Galápagos, WWF has identified two key lines of intervention: to promote the implementation of best practices among businesses, and to develop new sustainable tourism products and services based on the key principles of ecotourism.

In order to promote ecotourism’s best practices, WWF works together with the Galápagos Tourism Chamber, the Galápagos National Park, the Ministry of Tourism, and the Municipality of Santa Cruz implementing the Pilot Project for Best Practices in Sustainable Tourism. Through technical assistance and advice, businesses offering land accommodation, restaurant, and live-aboard services adopt sustainable management practices that are awarded on a yearly basis with the Galápagos Quality Seal. This project, currently being implemented in Santa Cruz Island, has over 40 participating businesses, with an objective of 80 businesses at the end of the second year, and with expectation for replication in the other inhabited islands.

WWF also promotes the development of new ecotourism-based products and services under the Experimental Ecotourism Project (EEP). The project, implemented together with the Galápagos National Park, the Charles Darwin Foundation, and the Ministry of Tourism, will design and develop new ecotourism products in each of the four inhabited islands. Currently, we have finalized the research phase in order to identify viable sites and activities, after which we will move on to the next phase to design and implement new ecotourism options in Galápagos.



3 Recycling Outreach Campaign Yields Strong Results

Ulf Hardter, Program Officer, Waste Management and Renewable Energies, WWF Galápagos Program

Over the last five years, WWF has continuously broadened our scope of work and deepened our knowledge in the field of environmental management in Galápagos. This involvement aims to mitigate the human footprint on the islands. In order to battle the negative trends that have occurred over the last two decades, such as exponentially increased energy consumption and gradual contamination around the human settlements, we identified one key element of the utmost importance to drive a profound change toward a sustainable future: building the human capacity to deal with recycling and a sustainable way of life on the islands. As a consequence, education and outreach became one of our priorities for our mission in the Galápagos.

Since 2006, WWF has been cooperating with the Municipality of Santa Cruz to create and implement a sustainable waste

management and recycling system on this, Galápagos' most populated island. WWF, with Toyota funding, is supporting Santa Cruz with ongoing technical assistance and state-of-the-art equipment. In addition, WWF and the Environmental Department of the municipality are implementing a successful recycling outreach campaign to create a culture of best recycling practices and a responsible way of consumption among the local community.

The environmental education campaign started in February 2007 and focused on different target groups and key audiences. To date, we have carried out training visits to over 90 percent of the households on Santa Cruz Island. We also addressed successfully the commercial and tourism sectors, including most of the tourism boats as well as all the public institutions on Santa Cruz and Baltra Islands. We put special emphasis on the educational sector, as we are convinced that young people will make a difference for a sustainable future in the Galápagos. We have conducted training sessions at the schools in the urban and rural areas of the island, and organized visits to the Municipal Recycling Center to help students understand why separating waste and recycling are so important for a healthy Galápagos.

We are currently recycling about 50 percent of the overall waste generated on Santa Cruz Island. In order to replicate this outstanding result we will now gradually expand the recycling outreach campaign to Isabela and Floreana Islands within the next months. Our mission is that no waste will be left behind in the Galápagos. If you come to Galápagos, please help us achieve this ambitious goal!

In 2011, the Waste Management and Recycling Project on Santa Cruz Island was awarded first place in the category Best Environmental Management Practices of the 4th edition of the Best Practices in Public Administration Award. The contest was organized by the Association of Ecuadorian Municipalities, the United Nations Development Program, the U.S. Agency for International Development, the German Agency for International Development, and the Spanish Agency for International Development. The award recognizes that the waste management and recycling system on Santa Cruz Island is currently the best of its kind in Ecuador and sets an example of efficiency and quality for all other municipalities in the country.



4 Scholarships Build Local Professional Capacity

Verónica Toral, Program Officer, WWF Galápagos Program

As part of WWF's commitment to conserve the Galápagos Islands, we believe in building local capacity to work toward sustainable development. In 2006, WWF joined with Galápagos tourism operator Ecoventura to create the Galápagos Marine Biodiversity Fund ("the fund"). The Ecuadorian Airline AEROGAL joined this effort in 2007. The fund supports education and marine conservation projects benefiting the Galápagos Marine Reserve, with special emphasis on providing scholarships to local young people.

Building the ability of local people to fill professional jobs on Galápagos actually addresses one of the islands' conservation issues: overpopulation. Because the lack of skilled professionals is a constant in Galápagos, available positions have often been promoted to people on mainland Ecuador. The resulting influx of skilled workers has contributed to the population increase in Galápagos, one of the top threats to island conservation.

To date, with help from the Galápagos Marine Biodiversity Fund, nine students have graduated from the Universidad San

Francisco de Quito. Fourteen more will receive their university diplomas in December 2011. Graduates have already entered the work force in the islands: three in tourism-related activities; three in public institutions, including Galápagos National Park; and one, teaching, in a local high school. Two other graduates have decided to pursue further degrees.

In June 2011, for the fourth consecutive year, WWF awarded scholarships from the fund to local students to pursue undergraduate degrees at San Francisco de Quito University, San Cristobal Island Campus. After a careful selection process, 10 students were chosen from among 37 young adults from the three inhabited islands. They will focus on environmental management and tourism administration.

The scholarship covers tuition for 4.5 years, the full length of the academic career. The students chosen were Isaac Altamirano, Omar Coello, Rebeca Díaz, Allison González, Nataly Llerena, Yessenia Martínez, Génesis Ponce, Cindy Ramírez, Ivette Yagual and Silvia Zambrano.



5 Ecuador Adopts Plan to Protect Mahi Mahi

Pablo Guerrero, Marine Coordinator, WWF Galápagos Program



After a long process that WWF helped to facilitate, Ecuador finalized its National Plan of Action (NPOA) for mahi mahi. The plan has its origins in a fishery improvement project, and aims to ensure the conservation and sustainable use of the mahi mahi in Ecuador. This fishery is very important to Ecuador from a socioeconomic viewpoint because it generates numerous sources of employment and income as exports proceed.

The mahi mahi NPOA was officially adopted by the Ecuadorian government on February 14, 2011, with the signing of Ministerial Agreement # 023. At the same time, Ministerial Agreement # 055 established a mahi mahi Advisory Council, which will advise the minister of agriculture, livestock, aquaculture and fisheries in formulating strategies and policies to strengthen the management and sustainable use of the resource. This council is composed of the undersecretary of fisheries, the Fresh Fish Exporters Association, and the National Federation of Fisheries Cooperatives of Ecuador. The National Fisheries Institute and WWF act as advisory bodies to the council.

As a result of the participatory strategic planning process, an important management measure was also agreed among the stakeholders: the annual closure of the mahi mahi fishery that was implemented in Ministerial Agreement # 070.

The mahi mahi NPOA was introduced internationally in March 2011 at the International Boston Seafood Show, and nationally in April 2011 at a huge event at the Fishing Cooperative in Santa Rosa-Salinas.

The NPOA has five components: (i) management, governance and financial sustainability; (ii) control and surveillance; (iii) education, outreach and communication; (iv) monitoring and scientific research; and (v) reduction of impact to ecosystem.

Within the framework of the mahi mahi NPOA, several projects are now being executed with the goal of improving the knowledge of the status of the stock and better positioning the fishery in relation to international standards of sustainability. Among the most notable projects currently being carried out are a genetic study to identify different populations of mahi mahi in the Eastern Pacific Ocean and a study to determine the population dynamics of the species using data collected during four years of monitoring. Additionally, there is intense work going on along the Ecuadorian coastline on issues related to training fishers on best fishing practices.



6 Protection of Cabo Pulmo Benefits Both Fish and People

Karen Douthwaite, Senior Program Officer, Latin America and Fisheries Program, WWF-US
Helen Fox, Senior Marine Scientist, Conservation Science Program, WWF-US

Overfishing is a problem around the world. For decades, we have been taking fish out of the ocean at a rate faster than they can reproduce, pushing many commercially important species into steep declines. An obvious solution to this problem is simply to take less fish over a long period of time—something that opponents of fisheries regulation say will destroy jobs and cause economic hardship in areas where fishing is a principal source of income.

However, a new scientific study, published in the journal *PLoS ONE* (<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0023601>), shows that protecting an area can bring the fish back while also increasing economic revenue for the communities around it. Results of a 10-year analysis of Cabo Pulmo National Park, in Mexico's Gulf of California, indicate that the total amount of fish in the reserve ecosystem grew by more than 460 percent from 1999 to 2009, making it the world's most robust marine reserve. Citizens living around Cabo Pulmo established the park in 1995 and have firmly enforced its fishing restrictions to stop the depletion of fish.

The study was carried out by Octavio Aburto-Oropeza, a WWF Kathryn Fuller Fellow, post-doctoral researcher at the Scripps Institution of Oceanography, and lead author of the paper. "The study's results are surprising in several ways,"

said Aburto-Oropeza. "A biomass increase of 463 percent in a reserve as large as Cabo Pulmo (27 square miles) represents tons of new fish produced every year. No other marine reserve in the world has shown such a fish recovery." Significant increases in both species richness and the diversity of top predators were also observed. He adds that "the ecological successes of [the park] are steadily translating into economic benefits within the small rural village of Cabo Pulmo and the surrounding areas."

The paper notes that factors such as the protection of spawning areas for large predators have been key to the reserve's richness. Most important, local leadership, self-policing, and broad support from the community have been major factors in the park's success. Boat captains, dive masters and local people work together to enforce the park's regulations and coordinate surveillance activities, wildlife protection (including turtle nesting areas), and beach and ocean clean-up programs.

These results are encouraging, as WWF continues to work to identify the keys to designing Marine Protected Areas that benefit both people and nature.



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