



### From Chiriquí Beach

Symbiosis between indigenous people and turtles
 Indigenous initiative attains governmental agreement
 Turtle monitoring conveys community benefits

### Protagonists

A native with a biologist shellA life dedicated to sea turtles

## In Brief

International recognition
 Future Development and Conservation Plan





Edition: Cinthya Flores Mora Communications Officer cflores@wwfca.org

**Technical Supervison:** Sandra Andraka Species Officer sandraka@wwfca.org

Production: Brenna Ruiz Gordon Communications Collaborator bruiz@wwfca.org

Sergio Pacheco Communications Assistant spacheco@wwfca.org

> Design and layout: Priscila Coto priscilacoto@gmail.com

#### Photographs:

**©WWF/Sandra ANDRAKA ©WWF/Carlos DREWS ©WWF/Gabriel FRANCIA OWWF/Tanya PETERSEN** ©WWF/Natalia DECASTRO @Coope SoliDar R.L. ©CCC



### Contents

#### Presentation

Chiriquí Beach Cultural tradition and conservation harmony	 	1
From Chriquí Beach		

Symbiosis between indigenous people and turtles2
Indigenous initiative attains governmental agreement
Turtle monitoring conveys community benefits

#### Protagonists

Genaro Castillo:	
A native with a biologist shell	8
Cristina Ordóñez:	
A life dedicated to sea turtles	

### In Brief

	0
International recognition	4
Request your video 1	
Future Development	
and Conservation Plan is certified by the Comarca1	3

#### For their support, the project thanks:





( Sala

ECKERD









UNEP













This publication has been financed by Manfred-Hermsen-Siftung

PRESENTATION



## Chiriquí Beach Cultural tradition and conservation harmony

Ngöbe-Buglé territory, Panama-December 2006. The Chiriquí Beach sea turtle research and protection project advances at a strong pace, showing the world that community will, scientific knowledge and respect for nature and the indigenous culture are vital elements of a successful conservation mission.

This publication presents the progress of the sea turtle protection initiative that the inhabitants of the Ngöbe-Buglé territory have achieved thanks to the alliance and support of the *Caribbean Conservation Corporation* (CCC), WWF, the global conservation organization, and its partners in the region such as the National Environmental Authority of Panama, CEASPA, STRI, Coope SoliDar R.L. and Wildlife Conservation Society (WCS).

The project, whose official name is "Research and recovery of the hawksbill population at Chiriquí Beach, Ngöbe-Buglé territory /Escudo de Veraguas and Isla Bastimentos National Marine Park", is led by CCC and executed in accordance to the community's traditions and needs, strengthening the Ngöbe-Buglé people's conservationist calling.

At Chiriquí Beach the inhabitants of the Río Caña and Río Chiriquí communities, located in the Ño Kribö, region lead the sea turtles and natural resources protection initiatives. Their effort has gained the formal support from Panamanian government authorities, while they move towards the development of new and sustainable income sources.

The symbiotic relationship between the communities and the turtles, support for nesting sea turtle monitoring and protection on the beach, the contribution of a biologist whose life has been dedicated to conservation, and the leadership of a native man who has witnessed the impact that hunting has on the species, are some of the stories that WWF Central America would like to share with you in this issue.





From 1950 to the 1990s, the international trade of turtle shells, meat and eggs consumption, and natural depredation reduced the hawksbill nesting population at Chiriquí Beach by 98%.

### FROM CHIRIQUÍ BEACH

# Symbiosis between indigenous people and turtles

- Indigenous communities lead a sea turtle conservation initiative on Panama's Caribbean Coast.
- The region progresses on a Development Plan that integrates natural resource conservation with the local development perspective.

With a sustainable development perspective based on conservation, an important component of the Ngöbe-Buglé inhabitants' philosophy on subsistance, the community is working on an integral Development Plan for natural resource use and sea turtle protection at Chiriquí Beach.

Historically, Chiriquí Beach in the Ño Kribö region of Panama's east coast has been considered the most important nesting beach on the Caribbean for hawksbill turtles (*Eretmochelys imbricata*). It is the most important nesting zone in Central America for leatherback turtles (*Dermochelys coriacea*). Both species are critically endangered.

From 1950 through the end of the 1990s, international trade of hawksbill turtle shells, meat and egg consumption, and natural depredation had reduced the nesting population at Chiriquí Beach by 98%. As a result, sea turtle conservation strategies and sustainable socioeconomic activities for the indigenous communities are of great relevance.

Ngöbe-Buglé is one of the indigenous territories with major historic and

The sea turtle conservation initiative at Chiriquí Beach is being development in accordance to the community's needs and traditions.





cultural significance in the region. Traditionally, its people have based their subsistence on natural resources. Aware of the impact that certain commercial activities have on the sea turtle population, the Ngöbe community had initiated an independent conservation strategy.

At present, they are executing the "Hawksbill Population Research and Recovery at Río Chiriquí Beach, Ngöbe-Buglé Territory / Escudo de Veraguas and Isla Bastimentos National Marine Park project" The strategy is the outcome of a joint effort between indigenous communities, NGOs like the *Caribbean Conservation Corporation* (CCC), WWF, WCS, STRI and Coope SoliDar R.L., and the Panamanian government.

The alliance stemmed from the WWF – CCC partnership to complement their conservation work, seeking a vision for community development that is harmonious with nature, in accordance to the community's needs and traditions.

CoopeSoliDar R.L. joined the project during its first phase to develop the document "*Contributions for*  a Sea Turtle Conservation and Development Plan at Río Caña, Chiriquí Beach-Panama", its main goal was to strengthen the community participation component.

Analysis of ecological tourism as an economic alternative, the incorporation of children, youth and women into community training events, handicrafts manufacture, and turtle monitoring, as well as the empowerment of indigenous leadership are key factors in the initiative that is already showing signs of success.



This turtle population recovery program at Chiriquí Beach builds upon an ongoing research project carried out since the 1980s by Drs. Anne and Peter Meylan. After conducting initial surveys of turtle nesting in the area, the Meylans helped assemble a network of organizations and funding institutions to launch the project.



# Indigenous initiative attains governmental agreement

- The initiative stems from the strong environmental and social awareness of the Chiriquí Beach communities.
- Indigenous people and state authorities signed a five-year agreement to concentrate efforts on the protection of hawksbill turtles on Panama's Caribbean coast.

Sea turtle protection as a key component of the Sustainable Development Plan is one of the main objectives sought by the indigenous communities of the Ngöbe-Buglé territory located on Panama's eastern coastal region.

Through a conservation education and training process, a species monitoring program and the search for sustainable economic activities, the Río Caña, Chiriquí Beach and Río Diablo communities have attained governmental recognition and support.

The agreement, signed last June, formalizes a five-year alliance

between the Ño Kribo Congress, the National Environment Authority (ANAM) and CCC to improve turtle monitoring on the beach, support sea turtle protection against illegal hunting and egg extraction, and encourage guidance and training activities on specific environmental topics.

"This agreement conveys hope, from now on we will have improved assistance from the national authorities for our natural resource protection initiatives," explained Cristina Ordóñez from the *Caribbean Conservation Corporation* (CCC). Ordóñez, amongst other activities,

At Río Caña, 18.5% of the population obtains income from sea turtle conservation activities.





has worked on strengthening the community's participation in the sustainable use of sea turtles at Chiriquí Beach.

The initiative is part of the "Research and Recovery of the Hawksbill Population at Chiriquí Beach, Ngöbe-Buglé territory/ Escudo de Veraguas and Isla Bastimentos National Marine Park" project, which is led by CCC, supported by WWF, and during it's first phase, by Coope SoliDar R.L.. The project has had a positive impact on socioeconomic activities in the indigenous territory. A study carried out at the end of 2005 showed that 18.5% of Río Caña's population obtains their income from sea turtle conservation. Through the interviews with Ngöbe-Buglé inhabitants, researchers concluded that this community has a high level of appreciation for it's natural resources: the turtles, the ocean, the beach, along with their characteristic social traits: peace, solidarity, and a solid cultural identity.

The work of the NGOs involved has been fostered by the conservation leadership and dedication of the Ngöbe-Buglé population. This was expressed in the Conservation and Development Plan proposed by Coope SoliDar R.L., which integrates natural resource conservation topics with the local development vision based on an equitable use and distribution of benefits.

"This agreement is extremely important for the community, which since the beginning has shown a great deal of interest in undertaking the sea turtle and beach conservation mission," said CCC research coordinator Cristina Ordóñez.



Peace, solidarity, mutual cooperation and a solid cultural identity characterize the inhabitants of the Ngöbe-Buglé territory.



By the end of this year's first semester, 2,435 leatherback (Dermochelys coriacea), 51 hawksbill (Eretmochelys imbricata) and 3 green turtle (Chelonia mydas) nests had been counted.

6

# Turtle monitoring conveys community benefits

• Leatherbacks and hawksbill monitoring provides reliable and useful information for the conservation of these species.

Patrolling the beach, counting and measuring female turtles, quantifying and checking the nests, estimating egg pillaging, and identifying each individual, are the monitoring tasks that the indigenous people and a female biologist carry out on a daily basis at Chiriquí Beach.

*The Caribbean Conservation Corporation* (CCC), supported by WWF and others, monitors the beach's 24 km to gather scientific information on the turtles that nest there. The main goal is to contribute to the implementation of the species recovery strategies, as well as the community's sustainable development.

This has been possible thanks to support from the Ngöbe-Buglé communities of the area, which, after being trained in monitoring techniques, prepared high quality semester reports for the biologists working in the area. Cristina Ordóñez, a marine biologist and CCC's research coordinator, supervises the monitoring tasks directly, "We are working side by side with the communities, we are building a shelter for the patrollers and we are placing satellite transmitters on leatherbacks and hawksbills to follow their behavior in the sea around the world." (See page 7)

Monitoring has helped Chiriquí residents understand the turtles' life cycle, by observing how they travel the world and return to nest at the same beach every year. To date, eight paid positions for "monitors" have been formalized, representing a new and sustainable source of income for the inhabitants of the Ngöbe-Buglé territory.

"We hope to continue this work, to ensure that the communities remain involved in the scientific component of the project, and that they maintain an interest in conserving the sea turtles that nest on their coasts," Ordónez stated.



### Beyond borders

The discovery of Chiriquí Beach's historic relevance as the most important hawksbill nesting site led CCC and WWF scientists to begin a turtle monitoring project using satellite telemetry technology. The initiative revealed that Chiriquí Beach is also the most important nesting site for leatherback turtles in Central America; more than 2500 nests per year have been identifyed. CCC, WWF, and their conservation allies monitor the oceanic journeys of turtles equipped with satellite traking devices. The indigenous communities have been able to observe the route taken by each turtle around the planet and therefore are widely aware of the importance that conserving this shared resource has, for its ambit extends beyond territorial boundaries.



### **Global Monitoring**



Map does not constitute publication of data researchers who contributed this data retain all intellectual property rights.



"The fruits of conservation take time, but the longer we work, the more opportunities we will have to grow. We must take care of our resources in order to leave something for our descendants".



## Genaro Castillo A native with a biologist shell

• *"The longer we work on this, the more benefits we will bring to our community."* 

As a witness to the reducing number of sea turtle nesting at Chiriquí Beach, consequence of meat, eggs, and shell exploitation, as well as oceanic pollution, Genaro Castillo took on the role of community leader to change the destiny of the turtles, his land and his people.

With the *Caribbean Conservation Corporation's* (CCC) support,Castillo carries out different scientific and social tasks for the conservation of coastal resources that are administered by the indigenous Ngöbe-Buglé people of Río Caña. The community had the initiative to organize their own conservation organization called "Association for the Protection of Ngöbe-Buglé Natural Resources" (APRORENANB for it's abbreviation in spanish). Genaro assures that during the 1940s and 50s, more than three kilometers of beach would be teeming with turtles during the nesting season, the authorities granted permits to foreigners to exploit hawksbills for their meat and carapaces which were then sold in the market for a few dollars. "The community realized that the turtles were disappearing and decided to organize themselves to protect them" Genaro explained.

To provide the communities with scientific support for their conservation mission, the CCC is implementing the project "*Research* and Recovery of the Hawksbill Population at Río Chiriquí Beach, Ngöbe-Buglé Territory / Escudo de Veraguas and Isla Bastimentos National Marine Park."





For several years, Genaro has been serving as a research assistant and member of APRORENANB. He works with the community and coordinates conferences with the traditional territorial authorities. Another of his tasks is providing training events on turtle monitoring, conservation, and their economic benefits.

Regarding his work, Genaro says that the experience has been very interesting and beneficial. "Before, we did not know what it meant to work with a turtle, to know her and understand her; now I have a lot of experience with community work, informing people about turtle protection and how this can bring us more resources and improve our lives." "Genaro has been a great collaborator, he takes the time to work with the communities, educate people and shows great leadership, he attracts people and they participate. He is always very interested in learning and improving his work," assures Cristina Ordóñez, project coordinator, for whom Genaro is a key player in the success that the initiative has had so far.

In the words of the indigenous leader, the importance of his mission centers on "the community receiving benefits from handicrafts sales and from foreigners' visits interested in learning about the conservation project. The longer we work on this, the more benefits there will be for the community, and the people can see this." His mission and interest have led him to participate in global activities related to the subject; he was invited to last year's "Annual International Symposium on Biology 2005" held in Savannah, Georgia (US) . During the meeting Genaro was able to report on the work the Ngöbe-Buglé communities execute at Chiriquí Beach, a shining example for Latin America.

Genaro's future plans include extending his conservation mission to other populations on Panama's Caribbean coast. Along with other colleagues, monitors and activists, Genaro hopes to take his sustainable development message around the country to halt the extinction of the species.





"Being a woman and entering an indigenous community to carry out monitoring, direction and administrative tasks has been a great challenge."

# Cristina Ordóñez A life dedicated to sea turtles

"Raining or not, you always have to work and they have seen that we woman can do this too, showing that we are responsible and efficient in conservation work."

Six years ago, biologist Cristina Ordóñez left Mexico and arrived at Chiriquí Beach where she encountered a community deeply interested in halting the marine turtle disappearance from their beaches.

Her scientific knowledge, respect for nature and dedication to community service pushed her to stay in Panama. "When I got to Chiriquí, I found a community interested in protecting turtles, but with no scientific assistance to do so; that is why I decided to stay and help them with their conservation mission," Ordóñez explained.

Cristina arrived at Río Caña in 1999 and discovered that, despite the importance of Chiriquí Beach for hawksbill and leatherback (know as "canal" in Panama) tutles, there was no conservation and management project. Her prior experience with turtles and the community's warm reception contributed to the establishment of a trustful relationship between Cristina and the residents of the Ngöbe-Buglé territory.

Every two weeks, Cristina travels to Río Caña to supervise and carry out the turtle monitoring work, train people, answering, and solving their questions and problems. "In the beginning, it was difficult to change the turtle consumption culture and commercial exchange, but little by little, we are observing a change in the people from the benefits the project brings them," says Ordóñez.





Her hard-working spirit never rests and she confesses that even though they have seen a great deal of progress, they must continue to work with neighboring communities and educate the younger generations, whose future lays on the protection of natural resources.

As research coordinator for the *Caribbean Conservation Corporation (CCC)*, the organization that began the project on Chiriquí Beach in 2003, Ordóñez has led conservation initiatives in the indigenous territory. This region is an exceptional example for other nesting sites of endangered species around the world.

Being a woman and entering an indigenous community to carry

out monitoring, direction and administrative tasks has been a great challenge. However, with dedication, problem solving capacity and a strong will to serve humanity, Cristina has earned the respect of all the residents.

"Whether it's raining or not, you always have to work and the people have seen that women can do it too, showing that we are responsible and efficient in conservation work," commented Cristina about her work along the 24 kilometers of beach.

"Cristina's energy and leadership, her commitment, courage and professionalism have made this project a reality," said Sandra Andraka, Species Officer for WWF Central America, which along with other organizations supports CCC's work in the area.

Today, Cristina is focused on her work with the Ngöbe-Buglé communities. Her mission is to provide as much support as possible, participating, educating, and learning. WWF and CCC's other partners at Chiriquí Beach admire and are grateful for her work, which has made progress on sea turtle conservation possible.



# International recognition



The leatherback (*Dermochelys coriacea*) and hawksbill (*Eretmochelys imbricata*) conservation project at Chiriquí Beach has received international recognition as a conservation example for indigenous communities.

At the Global Symposium: Genaro Castillo, indigenous leader, Caribbean Conservation Corporation (CCC) research assistant and member of APRORENANB, participated as a guest speaker in the 2005 *"Annual International Symposium on Sea Turtle Biology and Conservation"*, held in the United States. Chiriquí was a successful example of turtle conservation in Latin America.

On global television: The renown **Discovery Channel** program, Animal Planet visited Chiriquí Beach and documented the scientific and community work that has managed to slow down the disappearance of the species.

# **Request your video**



# Future Development and Conservation Plan is certified by the Comarca

During 2005, WWF and CCC, with the support of Coope SoliDar R.L., a Costa Rican cooperative with community work experience, executed a communication, education, scientific and social need evaluation in order to execute the "Río Caña Marine Turtle Development and Conservation Plan," Chiriquí Beach, Panamá.

Consultation workshops were carried out with community members, official institutions and nonprofit organizations involved in the initiative. An additional study on environmental education helped determine five key action principles, guaranteed by the community:

- Respect for the culture
- Sustainable tourism perspective
- Equal benefits distribution
- Integrated process perspective

Based on the principle of respect and conservation of the Ngöbe-Buglé cultural and environmental values, the Plan was presented the Ñö Kribo Congress in March 2006. At the moment the Plan is being translated to ngöbe for its later distribution amongst the communities.

For more information: David Godfrey Executive Director Caribbean Conservation Corporation Tel: +352 373-6441 email: david@cccturtle.org

WWF is the largest and most experienced independent conservation organization in the world. WWF was funded in 1961 and is known by its panda logo. WWF is supported by more than 5 million people and its global network works in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by:

- conserving the world's biological diversity
- WWF
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption

#### WWF Central America

Phone: +506 234 8434 Fax: +506 253 4927 Email: cflores@wwfca.org P.O.Box: 629-2350 San Francisco de Dos Ríos, San José, Costa Rica

