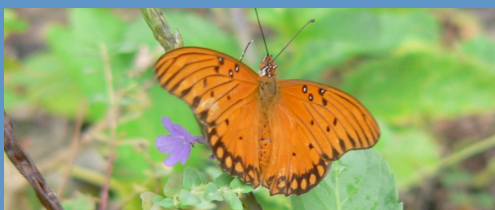


December 2008



## Belize Conservation Fund Newsletter



### Introduction

Belize is located on Central America's Caribbean coast, with the Maya Mountains running along the western side. It has the smallest population of any nation in Mesoamerica, yet the population is growing fast, and the country is facing increased pressure from timber companies, oil exploration companies, and cruise ships (for docking along the fragile mangrove shores), among others.

Mass Audubon is continuing our over 25-year history of conservation in Belize by working with our partners Toledo Institute for Development and Environment (TIDE) and the Programme for Belize (PFB) to help protect vitally important habitats. Our first project in Belize was the protection of over 260,000 acres in Rio Bravo Conservation Area in Belize's northern forest. The Programme for Belize (PFB) now operates this area.

Belize is home to over 3,000 plant species; 125 mammals including, Baird's Tapir, the Jaguar, and Ocelot; 356 species of birds such as the Keel-billed Toucan and the Ocellated Turkey; 107 reptiles; and 32 amphibians. With terrain ranging from swamp areas to pine, tropical, and broadleaf forests, mountains, savannas, and a rainy season averaging over 140 inches annually, Belize is highly conducive to species diversity.



Dear Friends, Conservation Partners, and Supporters,

To explore or not to explore: that is the dilemma faced by Programme for Belize (Pfb). In the past few years, the Government of Belize put most of the country under oil concession. Our Rio Bravo Conservation and Management Area was included in the concessions of four oil companies: the RSM Corporation; the Belize Natural Energy Limited; the Blue Creek Oil Explorations Limited; and the West Bay Limited.

We, the Programme for Belize, have been working to prevent or stop any oil exploration in Rio Bravo in order to ensure the protection of the biodiversity and the cultural resources of the area. In Belize, however, the mineral and oil rights are owned by the Government of Belize. We only own the surface rights, so it has been a tough battle. Programme for Belize was able to get some of the oil exploration companies to pay for the additional protection and monitoring cost that is being incurred by Pfb for a period of one year.

This, however, does not include payment for losses that may result from the loss of tourism including, research projects. Before petroleum exploration, for example, the Rio Bravo area was known to have the highest density of Jaguars in Belize. This year, researchers from Virginia Tech indicated that the oil exploration lines were affecting the results of their Jaguar research. If this is the case, it means that oil exploration may have an impact on the endangered Jaguar population in Rio Bravo. We are awaiting the results of this research to guide us in our decision. Furthermore, we are not sure what the impact of oil exploration would be on resident and migratory birds.

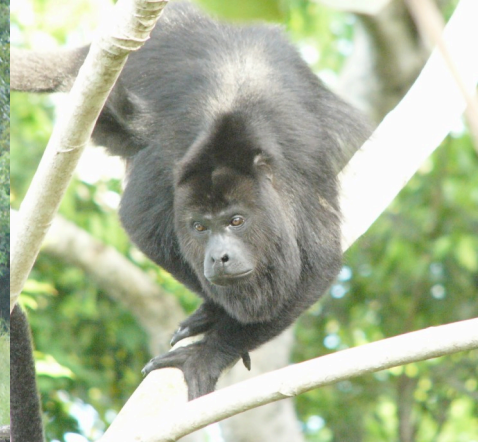
Programme for Belize will continue to gather information to justify our fight against oil exploration and, if it is inevitable, to at least guarantee that the environmental impact remains under acceptable levels and that the conservation of Rio Bravo benefits from the activity.

While Programme for Belize has not been able to stop oil exploration in Rio Bravo, despite our efforts and support from many friends, we have been able to ensure that the impact in Rio Bravo is minimal, and to require oil companies to pay for the monitoring of their activities and protection of opened lines in order to prevent illegal activities such as hunting, timber theft, etc. for at least one year. Any assistance and guidance that can be provided by our friends and supporters as we continue to fight this oil battle will be greatly appreciated.

Sincerely, Edilberto Romero, Executive Director, Programme for Belize







## Projects at Programme for Belize

### **Climate Action Project: Rio Bravo Conservation and Management Area, Belize**

The Rio Bravo Conservation and Management Area is 260,000 acres of mixed lowland, and moist subtropical broad-leaf forest. It is part of a million-acre corridor that is key to biodiversity conservation in Central America. The area is home to the endangered Black Howler Monkey, Jaguar, and numerous migratory birds, as well as Mahogany and other important tree species. It contains forest cover types protected nowhere else in Belize.

The Programme for Belize Carbon Sequestration Project site was under imminent threat from agriculture. The Rio Bravo climate action project involves the conservation and sustainable management of more than 153,000 acres of forest in northwestern Belize.

It is estimated that the project will reduce, avoid or mitigate up to 8.8 million tons of carbon dioxide in the atmosphere over 40 years by preventing deforestation and ensuring sustainable forest management. The project is one of the first fully funded forest sector projects implemented under the U.S. Initiative on Joint Implementation. Programme for Belize manages the project and private reserve overall. A number of energy producers provided \$5.6 million in funding for the first 10 years of the 40-year project. Investors include Cinergy, Detroit Edison, Nexen, PacifiCorp, Suncor, UtiliTree Carbon Company, and Wisconsin Electric Power Company.

**Net Carbon Benefits:** The project will reduce, avoid, or mitigate an estimated 8.8 million tons of carbon dioxide through the following two primary approaches.

- **Prevention of deforestation.** Pfb purchased 33,000 acres of upland forest and added it to the existing protected area. Estimated carbon emissions avoided from this component are up to 7.2 million tons of carbon dioxide over 40 years.
- **Sustainable forest management and regeneration.** On approximately 90,000 acres of land, a combination of improved timber operations and ecosystem management practices, will sequester more than 600,000 tons of carbon. Management practices include creation of undisturbed buffer areas and protection zones; reduced-impact harvesting techniques; and enhanced fire management and site security. Programme for Belize will certify the sustainable harvesting of timber in its 236,000-acre forest. Diverse tree types in the forest include Billy Webb, Black Cabbage Bark, Breadnut, Bullet Wood, Chicle Macho, Jesmo, Mahogany, Nargusta, Sapodilla and Tzalam.

### **Mass Audubon Certificate in Bird Ecology Program in Belize**

Over the past two years, Massachusetts Audubon Society and the Programme for Belize (Pfb) collaborated on a new education initiative: The Certificate

Program in Bird Ecology. Initially developed at Mass Audubon's Joppa Flats Education Center in Newburyport, the program is designed to teach Belizean naturalists, educators, conservationists, and representatives from Belize tourism agencies about bird ecology and conservation. The program includes fieldwork and classroom instruction, as well as field trip leadership skills.

The training is conducted in two sessions: The first session includes modules on Avian Systematics, Biogeography, Flight and Migration, Anatomy, Leadership Skills, and Bird Conservation in Belize. During the spring sessions students learn about Feeding Ecology, Breeding Behavior, Leadership Skills, and participate in an off-site birding field trip to practice the leadership skills they've learned in class. The students also design and complete conservation/education projects where they apply what they've learned to their organizations or to projects in their local communities.

The Certificate Program in Bird Ecology training fills a real need and has been well received. For many of the participants, this is their first formal training in ornithology. For Mass Audubon staff, Bill Gette and David Larson, the Program is a rewarding experience. They are inspired by the commitment of the participants and that the Programme for Belize has taken an important leadership role in environmental education.





## Success Stories

Programme for Belize recently completed our project titled, *Mainstreaming Biodiversity Conservation into Tourism through the Development and Dissemination of Best Practices*. The goal of this project was to develop ecosystem-specific best practices, and establish and implement a training program.

Over the two-year period, Pfb completed the following activities.

- A baseline analysis of the tourism impact in the Mountain Pine Ridge and Chiquibul Forest.
- Workshops and seminars held countrywide to build awareness of the project and its goals.
- Several Train the Trainers workshops and seminars.
- A Certification Workshop and a Marketing Workshop specifically for tourism entrepreneurs in the country.

The Belize Hotel Association (BHA) was selected as the host organization for the Best Practice Implementation Programme and is now working with Rainforest Alliance to set up the mechanisms for its implementation as a follow up to the project work.

Programme for Belize would like to extend our thanks to the Global Environment Fund (GEF)/ United Nations Environment Fund (UNEP) and Rainforest Alliance (RA) of Costa Rica for providing the funding to accomplish the goals set out in the project.

## What's New?

### LA MILPA HAS A NEW STATION MANAGER

Mr. Freddie Bladimir Rodriguez has taken over the helm at the La Milpa Field Station, replacing long-time stalwart Ramon Pacheco, who has now taken up a new post at the head office in Belize City. Since May 1, 2008, Mr. Rodriguez (Bladimir) transitioned into the post and has been managing the La Milpa Field Station on the Rio Bravo Conservation and Management Area (RBCMA).

Bladimir first became acquainted with Programme for Belize (Pfb) when he was in high school and heard a presentation given by the then Station Manager, Bart Romero. He subsequently was a scholarship recipient in a two-week ecology course sponsored by Pfb on the RBCMA and South Water Caye in 1994. Bladimir joined Pfb in an official capacity as Field Guide in November 1999 and served in that capacity for over 8 years.

Bladimir brings enthusiasm and experience to La Milpa. He has an Associate's Degree in Sciences with a concentration in Chemistry and Biology from the Corozal Junior College. Prior to joining Pfb, Bladimir worked with Birds without Borders Belize, Raleigh International Belize, and Wild Tracks in the Shipstern Lagoon. During his tenure as Field Guide, Bladimir participated in several training opportunities such as the Wild Side Birding Tour bird watching tour of the US Atlantic coast in 2002 and The British Bird Fair in 2004.

We look forward to the contributions that Bladimir will make in his new post as Manager.







# Make a Donation

To make a donation to the Programme for Belize (PFB) or to The Toledo Institute for Development and Environment (TIDE), please complete this form and return to:

**Massachusetts Audubon Society  
Belize Conservation Fund**  
208 South Great Road  
Lincoln, MA 01773

## MEET THE NEW TECHNICAL COORDINATOR

In April, 2008, Mr. Ramon Pacheco took on the post of Technical Coordinator for the Programme for Belize. Mr. Pacheco transferred from La Milpa where he held the post of Station Manager since August 1997. As Technical Coordinator, he will supervise the Forestry Operations and oversee the Carbon Sequestration Project and all research activities on Rio Bravo.

Mr. Pacheco arrives with 10 years of experience and intimate familiarity with the Rio Bravo Conservation and Management Area. He previously worked as Coastal Planner at the Coastal Zone Management Project; managed the Five Blues Lake National Park, and was a Biology and Chemistry Teacher for several years at the Orange Walk Technical High School. His background makes him an ideal match for the Technical Coordinator. We are confident that Mr. Pacheco will continue to be a tremendous asset to our organization.

“Sustainable use of our resources must be at the forefront of all our activities. Programme for Belize, through its Sustainable Timber Programme, Carbon Sequestration Project, and its Ecotourism Programme, is leading the way to ensure that our resources are not exploited,” Mr. Ramon notes. “As the technical coordinator, strong emphasis will be placed on ensuring that the field operations are efficient, producing timely and reliable data resulting in smooth implementation of yearly objectives. I am prepared to deal with many challenges, with support from the main office staff and the commitment of the field crews.”



Name \_\_\_\_\_

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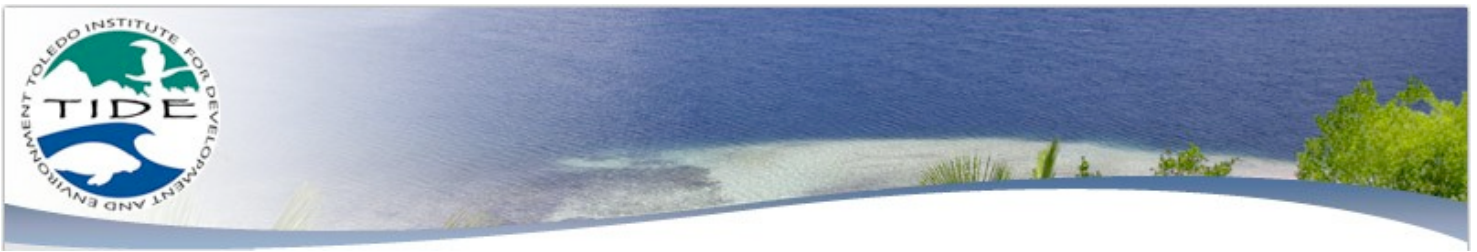
Yes, I would like to make a donation

### Donation Information

- Enclosed **check** \_\_\_\_\_  
Checks should be made payable to  
**Mass Audubon –Belize Conservation Fund**
- or please **charge** my credit card for the amount of \_\_\_\_\_

VISA\_\_MC\_\_ Card Exp: \_\_\_\_\_

Signature \_\_\_\_\_



Dear Friends, Conservation Partners, and Supporters,

The **Toledo Institute for Development and Environment (TIDE)** is a nongovernmental organization that fosters community participation in resource management and sustainable use of ecosystems within southern Belize to benefit present and future generations.

The protected areas comanaged by TIDE (Port Honduras Marine Reserve with the Fisheries Department, Payne’s Creek National Park with the Forestry Department and the TIDE Private Protected Lands) offer natural and cultural amenities unparalleled in the region. TIDE offers unique contact in protected areas to researchers and ecotourists. Infrastructure plans include ranger stations, education centers, seaside campgrounds, and interpretive signs to increase understanding flora and fauna. The plans facilitate enjoyment of protected areas, protect buffer communities, and incorporate existing carrying capacity studies.

**The Port Honduras Marine Reserve** is 160 square miles recognized for high biodiversity, with a robust belt of unaltered mangroves and sandy coasts, providing a critical link between terrestrial and marine environments. The crystal clear blue Caribbean waters are home to endangered and vulnerable species. Approximately 4,500 people live in adjacent communities, with additional fishing pressure stemming from poachers. The reserve encompasses estuarine near-shore habitats and extends to protect fringing reefs. There are over 100 small mangrove-lined cayes and benthic habitats composed of soft-bottom seagrass beds, reefal bank, and coral reefs unique to the country.

**Payne’s Creek National Park** covers 36,420 acres in southern Belize—north to the Deep River Forest Reserve; east to Monkey River; the Caribbean Sea, and Punta Negra; south to Port Honduras; and west to the bank of the Deep River. The park systems are a matrix of broadleaf forest, short grass and pine savannah, and herbaceous and mangrove swamps. The park protect a great diversity of species more than twenty-two of which are endangered or vulnerable: manatee, goliath grouper, Belize’s five species of cat (Jaguar, Ocelot, Margay, Puma, and Jaguarondi), Howler Monkey, White Ibis, Jabiru Stork, and Yellow-headed Parrot. Three hundred species of birds live or winter in the park. Within the park’s boundaries, archaeologists have uncovered four ancient Mayan sites, now submerged under water in the Y’cacos lagoon.

Improvements to the Southern Highway of Belize make for easy access to once-remote areas; massive bulldozers clear forests for agriculture, shrimp farms, and logging operations. The majority of TIDE’s private lands are located on the banks of the **Rio Grande River**, a riparian corridor where visitors can spot the endangered West Indian manatee and the endangered hicatee turtle. The lands are part of a block of large, unfragmented, moist tropical forest that serves as a biological corridor for Jaguars, Pumas, Margays, Ocelots, and Jaguarondi. Rangers patrol more than 20 miles of coastal forest land and over 30 miles of riverfront.

Recognizing the precious nature of southern Belize's waterways, TIDE focuses time on monitoring freshwater resources. Human impacts frequently noted are increased road access to the river, thin or no riparian buffer, pump houses, in-stream gravel mining, drainage ditches, and grazing. These human impacts in turn, cause increased sedimentation and nutrient loading, causing reef damage and algal blooms. Integration of rivers and streams with the marine environment makes protecting our rivers one of our top priorities.

Community education and outreach work at TIDE includes conservation education in schools, clean-ups of coastal and inland areas, an annual Summer Camp, Ms. Conservation Competition, and a Fish Fest.

I am delighted to report that TIDE won the **social innovation competition** and the **first prize** of US \$30,000 with the Freshwater Cup project. This program has been implemented at TIDE for the past 4 years and uses the power of football to get both kids and adults involved in designing and implementing environmental projects in communities within the Maya Mountain Marine Corridor. While teams work on projects, they also participate in an organized football competition. This is an innovative community project, involving both natural resource management and entertainment. It also gives community members an opportunity to make an income by selling food and drinks during games. Everyone saw how easily this project could be duplicated in many other countries since football is a sport that people in many countries love to play.

We look forward to sharing our ideas with organizations that would like to duplicate the Fresh Water Project in other areas of Latin America.

Celia Mahung  
Executive Director  
Toledo Institute for Development and Environment (TIDE)  
1 Mile San Antonio Road (or) P.O. Box 150  
Punta Gorda, Toledo District

#### Contact Information:

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E-mail: celmahung@gmail.com

## Projects at TIDE

The Toledo Institute for Development and Environment has been hard at work over the past six years protecting what is now known as the Maya Mountain Marine Corridor (MMMC) as a high priority conservation action site in southern Belize. This region is a magnificent natural area covering almost 800,000 acres of land and 1000 square miles of sea.

Maya Mountain Marine Corridor consists of six watersheds in southern Belize and connects the Maya Mountains and protected areas with the coastal waters and reefs of the Gulf of Honduras. This expansive region has tremendous biodiversity with no less than 43 distinct ecosystems. These ecosystems support increasingly threaten species such as jaguar, marine turtles, manatee, and many endangered bird species such as the Yellow-headed Parrot.

In Sept 2007, the Maya Mountain Marine Corridor Conservation Action Planning partnership was formalized to safeguard the MMC's interconnected and interdependent ecosystems. The actions and strategies are designed to ensure that biodiversity conservation becomes an important and integral part of social and economic development. The threats to the biodiversity are many, including hunting and fishing pressure, climate change, agro-industries, critically low population numbers for certain species, coastal development, habitat destruction (mangrove loss) destructive fishing practices and the pet trade.

TIDE staff and volunteers work closely with neighboring communities to ensure sound management and the development of income generating activities. They provide protection against illegal fishing and poaching, by promoting marine protection and encouraging local fisherman to find other more sustainable industries.

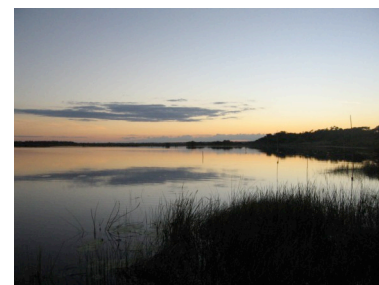
For example, TIDE fly-fisherman and tour guide training programs have been very successful in this area. Today, almost every guide employed in the sport fishing industry in Toledo was at one time a net fisherman. As a result, the communities themselves lobbied the government along with TIDE for the declaration of the Port Honduras Marine Reserve, an area rich in biodiversity. We have also been very successful protecting some of our local forests and wildlife by training hunters, loggers, and agriculturists to be general tour guides and kayaking guides.

TIDE has long been involved in other efforts to promote sustainable development in Toledo including a scholarship fund for children whose parents agree to stop using unsustainable fishing and farming methods and a net exchange program that allows fishermen to trade gillnets for more environmentally sensitive equipment.

TIDE has been recognized by the UNDP Equator Prize 2002 for the organization's outstanding community efforts in the area of poverty reduction and biodiversity conservation.

#### A Sample of other current projects

- Co-management of Port Honduras Marine Reserve: patrols and maintains the park
- Co-management of Payne's Creek National Park: patrols and maintains the park
- Private Lands Initiative: acquisition of lands to be held in perpetuity for the people of Belize







## Toledo Institute for Development and Environment (TIDE)

The Toledo Institute for Development and Environment (TIDE) was founded in 1997 to meet the growing environmental and development needs of the Toledo District, the southernmost district of Belize. TIDE was conceived as a grassroots initiative in response to the negative environmental effects from activities such as manatee poaching, illegal fishing, illegal logging, destructive farming methods, and other types of unsustainable development. Initially started by volunteers, TIDE has now grown to include 20 paid staff.

TIDE's mission is to research, monitor, and help manage Toledo's natural resources. The Maya Mountain Marine Area Corridor stretches from the lush pristine forests of the Maya Mountains to the white sand beaches and spectacular array of colors of the Belize Barrier Reef System World Heritage Site. In addition, TIDE assists planning responsible tourism and other environmentally sustainable economic alternatives by providing training and support to local residents.

Toledo Institute for Development and Environment (TIDE) also leads ecotourism expeditions throughout Belize, in addition to other wildlife conservation and monitoring activities.

### Contact Information:

Celia Mahung, Executive Director  
Toledo Institute for  
Development and Environment,  
Punta Gorda Town, Belize  
[www.tidebelize.org](http://www.tidebelize.org)



In addition, the forests of the Rio Bravo Conservation and Management Area are important sites for a carbon sequestration project. Here four million tons of carbon will be sequestered for generations to come.

The *Programme for Belize* (PFB) is a Belizean, nonprofit organization, established in 1988, to conserve the natural heritage of Belize and to promote wise use of its natural resources. The *Rio Bravo Conservation and Management Area* (RBCMA) is its flagship project where Programme for Belize demonstrates the practical application of its principles.

Since its inception, PFB has secured 260,000 acres of forest in northwestern Belize that was otherwise destined for clearance. The RBCMA represents approximately 4 percent of Belize's total land area and is home to a rich sample of biodiversity including: 400 species of birds, 200 species of trees, 70 species of mammals and 12 endangered animal species. On the RBCMA, PFB conducts research, conservation education, professional training and promotes environmental awareness among visitors'.

### Contact Information:

Edilberto Romero, Executive Director  
Programme for Belize, Belize City, Belize  
[www.pfbelize.org](http://www.pfbelize.org)

