

Port Honduras Marine Reserve

Annual Report 2010

Seleem F. Chan

Marine Manager

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Words from the manager

It is with great pride that I present to you the Port Honduras Marine Reserve Annual report for 2010. This report summarizes the main activities that occurred throughout the year.

The field staff conducted a total of 765 Patrols of which 17 arrests were made and successfully prosecuted, 5 illegally set gill nets were confiscated, 2 verbal warnings for conducting commercial fishing without a valid fisher folk license, another warning issued for illegal harvesting of lobsters and possession of lobsters with eggs, also a written warning for harvesting of undersize lobsters. Patrols were conducted jointly with the Fisheries Department, Southern Environmental Association, the Belize Coast Guard and personnel from other protected areas managed by TIDE. Joint activities were also done with the Community Stewards. Special mention must be made of Mr. Martin Reyes, Mr. Reynaldo Ramirez "Roy", Mr. Lionel Delcid and Mr. Fidel Audinett for their continued support in the management of the Port Honduras Marine Reserve. Also, to Mrs. Anna Mutrie for her continued support to Research and Monitoring within the reserve.

Research and Monitoring will always play an integral part of management effectiveness of PHMR. With the direction and guidance of Dr. Nicola Foster and Junior Marine Biologist Marlon Williams we were able to continue with our monitoring program. PHMR Monitoring Program consists of the following: Water Quality, Sea Grass, Mangroves, Conch, Lobster Coral and Fish Monitoring. Fish Stock Assessment Monitoring is also looked at.

Within the month of September, Dr. Foster moved back to her home country. I would like to thank Dr. Foster for the hard work and dedication.

Once again, we would like to express our sincere gratitude to the Belize fisheries Department, PHMR Advisory Committee, the Belize Coast Guard, Oak Foundation, Summit Foundation, The National Oceanic and Atmospheric Administration (NOAA), The Nature Conservancy, Sea grass net, CAMPAM, Environmental Defense Fund and COMPACT. None of our work would have been possible without the contribution and the dedication you have shown throughout the year.

A heart felt thank you and special mention must be made of the buffer community members of Monkey River, Punta Negra and Punta Gorda for their commitment and support, to the Field Staff and the support Staff at TIDE for their continued dedication throughout the year.

Sincerely,

Seleem Chan
Manager
Port Honduras Marine Reserve

About TIDE

The Toledo Institute for Development and Environment (TIDE) is non-profit non-government organization (NGO) founded in September 1997 to meet the growing environmental and development needs of the Toledo District, the southernmost district of Belize. TIDE has conceived as a local initiative in response to the negative environmental impacts of activities such as manatee poaching, illegal fishing, illegal logging and destructive farming methods.

TIDE'S Goals

The organization has been hard at work over the past ten years to achieve its goal of improving organizational capacity to enable us to promote the protection, management and sustainable use of Toledo's natural resources while fostering programs that create and promote alternative economic opportunities for resource users who have traditionally depend on resource extraction for their livelihood. The alternative livelihoods developed and implemented by TIDE accomplished two goals: instilling a sense of ownership in our resources, and conserving them for future generations.

The TIDE goals from the strategic Plan 2007 - 2012 are as follows:

1. Achieve and maintain a membership retention rate of 95% per year.
2. Increase the US membership by 75 new members per year and international membership by 50 new global members per year.
3. Increase the percentage of members who say they are very satisfied with membership services provided by Sister Cities International.
4. Develop effective, ongoing sister city youth programs in US and international programs.
5. Create a sustainable international, national, and state advocacy program.
6. Diversify the organization's revenue sources.
7. Develop a marketing and branding program that results in greater understanding of Sister Cities International on the part of its members, governments, and the global community.
8. Put in place an organizational structure that contributes to mission, financial growth and stability, awareness, program delivery, and advocacy capacity. Implement changes based on that analysis.
9. Strengthen sister cities' institutional leadership at the international, national, state, local, and regional levels.
10. Identify and collaborate with other organizations that share the Sister Cities International mission and values to dramatically increase the number of people aware of and involved in citizen diplomacy and global citizenship efforts.

Our Approach

TIDE uses various methods to achieve our conservation goals, including the natural and social sciences, which fall under five strategic objectives:

1. Protected Areas Planning and Management - To protect conservation targets by promoting and leading the planning and management of protected areas in the Toledo District.
2. Sustainable Development - To foster integrated conservation and development initiatives that creates economic opportunities for local residents and lead to the sustainable use of the resources and the sustainable development of the Toledo District.
3. Research and Monitoring - To maintain the biodiversity and integrity of the Reserve's ecosystems through continuous research, monitoring and appropriate interventions.
4. Environmental Education and Outreach - To expand and enhance the knowledge base on

Toledo's natural resources to promote their protection and sustainable use.

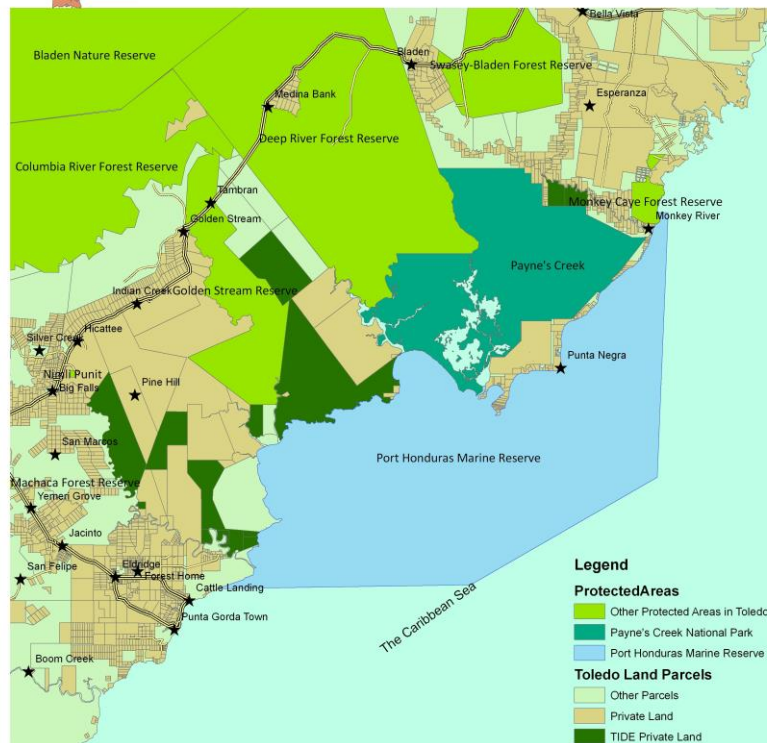
5. Institutional Development - Improve TIDE'S organizational capacity to accomplish its mission.

Where We Work

Near its inception, TIDE identified what is now known as the Maya Mountain Marine Corridor (MMMC) as a high priority conservation action site. The MMMC is a spectacular natural area covering approximately one million acres of land and one thousand square miles of sea. The MMMC extends from the crest of the Maya Mountain in southwestern Belize to the southern end of the Belize Barrier Reef System. Within this area, the more significant conservation activities revolve around the management of the Port Honduras Marine Reserve, Payne's Creek National Park and TIDE'S Private Lands Initiative.



Map of Protected Areas, Private Lands, and Buffer Communities in the MMMC



Map of the Maya Mountain Marine Corridor (MMMC)

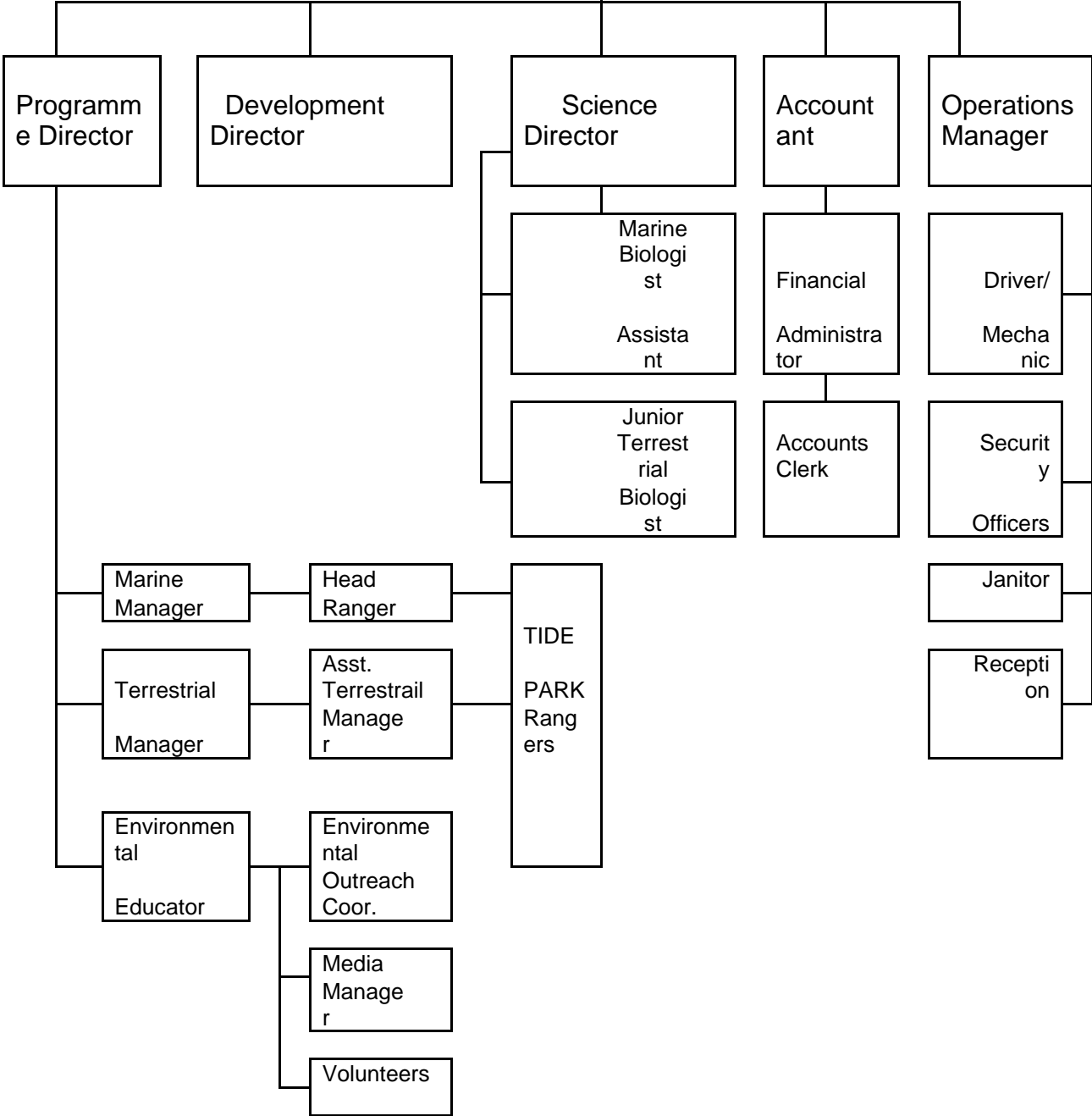
TIDE'S Organizational Structure

In its inception TIDE started out with volunteers, and has grown to include an Executive Director who manages 28 full time staff and two temporary. The organization also has a policy making body - Board of Directors comprised of individuals from a wide cross section of the society. Please refer to the below organogram.

TIDE's Organizational Structure

Board of Directors

Executive Director



About the Port Honduras Marine Reserve (PHMR)

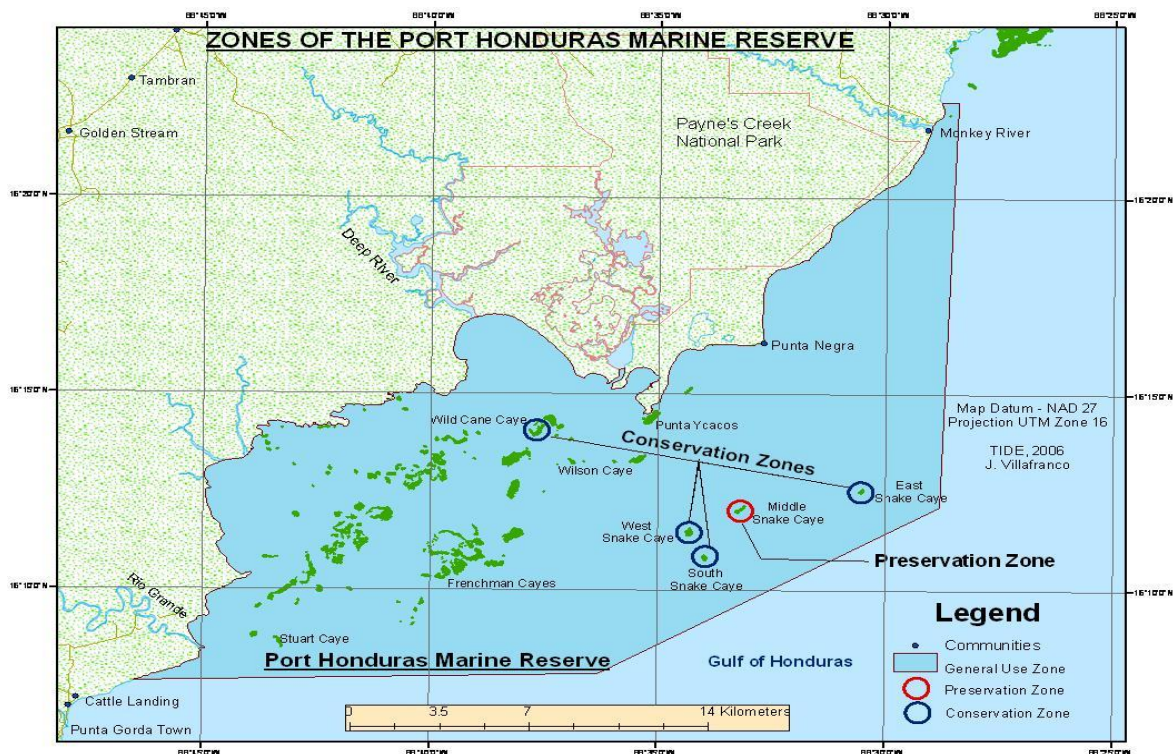
Introduction

Declared by the Government of Belize in January 2000, the PHMR is being actively co-managed by TIDE and the Fisheries Department. PHMR covers approximately 160 square miles and is an integral part of the MMMC in southern Belize. The reserve is located just off the coast of Punta Gorda and extends north to just north of Monkey River Village. PHMR comprises of all the coastal wetlands, sea, seabed, and national lands within the area known as the Port Honduras with general boundaries being the Rio Grande in the south, Monkey River in the north, the snake cayes in the east and the coastal wetlands along the coast in the west.

The Reserve is rich in biodiversity containing approximately 138 small mangrove cayes, which provide essential habitat and nursery for juvenile aquatic species. Other critical habitats include sea grass beds, hard bottom communities, and soft bottom communities. A large portion of the reserve is inhabited by sea grass, which also provides essential habitat and food for juvenile fish species, sea turtles, salt water crocodiles and manatee. Also within the reserve you find fringing reefs and several coral patches and coral heads, which provide habitat for vertebrates and invertebrates.

There are two villages located in the Reserve, Monkey River and Punta Negra Villages. The residents of each village are mostly commercial fishers, tour guides, or fly-fishing guides who depend on the Reserve for their livelihood.

Map of Port Honduras Marine Reserve



Reserve's Strategic Plan and Goals

The PHMR management strategy is based on five major goals:

1. To protect the physical and biological resources of Port Honduras
2. To provide education and research
3. To preserve the value of the area for fisheries and other important genetic resources.
4. To develop recreational and tourism services that will enhance the economic and social benefits of the area without causing environmental damage.
5. To strive for sustainable financing.

Zoning Plan and Regulations

For the purpose of the regulation and control of the Reserve, five zones were established:

1. **General Use Zone** (95% of the Reserve)

To provide opportunities for established uses and activities (e.g. fishing for conch, lobster and finfish) under a stringent monitoring scheme.

2. **Conservation Zone**

To provide an area free from commercial fishing to prevent fishery stock from over exploitation, provide an undisturbed area for recruitment of species, and enhance the value of the area for recreational and tourism activities.

3. **Preservation Zone**

To provide areas within the marine reserve that is preserved in an entirely natural state and to protect areas of particularly fragile habitat or with threatened or rare species.

4. **Special Management Area**

Area reserved for special projects

Staff of the Port Honduras Marine Reserve

Name	Position
Seleem Chan	Manager
Carlos Ramirez	Head Ranger
Godfrey Alford	Ranger
Kenley Williams	Ranger
Narciso Martinez	Ranger
Kenworth Martin	Ranger
Edwin Cabrerias	Temporary Ranger
Dr. Nicola Foster	Marine Biologist (resigned on September 10, 2010)
Marlon Williams	Junior Marine Biologist

Other Community Members and Volunteers

Alastair Daly
Christopher Hamley
Rob Ferguson
Glennis Padilla
Mathew Mosher
Amanda Mundt
John Daw

PHMR Accomplishments 2010

Patrols and Surveillance

A total of 765 patrols were conducted for 2010. This figure shows a slight decline in the amount of patrols conducted versus the total patrols conducted for 2009. As a result of these patrols 5 gillnets were confiscated. Six (6) fishers were given warnings for various offenses and 17 arrested.

Table 1 provides a summary of the arrests conducted and the outcome of the arrests for the year 2010.

Table 2 summarizes the number of patrols done for 2010 and also includes the number of night, day and joint patrols, number of patrols conducted outside of the boundaries of the reserve as well as warnings for first offence and number of gill nets confiscated. What is of interest to note is the total number of gill nets confiscated for the year 2010; 5.

Table 3 provides an 8 year trend showing number of patrols conducted, gillnets confiscated and number of arrests made. Brief analysis shows that overall the number of patrols increased in 2005-2006 resulted in increased number of nets confiscated and number of arrests made combined. In 2007 the number of nets confiscated was the highest on record; we believe that this was due to the fact that rangers started to do more night patrols in more areas as compared to previous years. In 2005 the number of arrests made was the highest on record, this was mainly because of a large number of fishers from Monkey River that went out to fish for lobster the day before the opening season, they were all arrested, but was not charged due to reasons beyond our control. In 2010, the number of arrests increased to seventeen (17). With the assistance of our Community Stewards on the water we believe there is not a greater need for the rangers to be out on the water during the day time. More attention was put into strategic patrols.

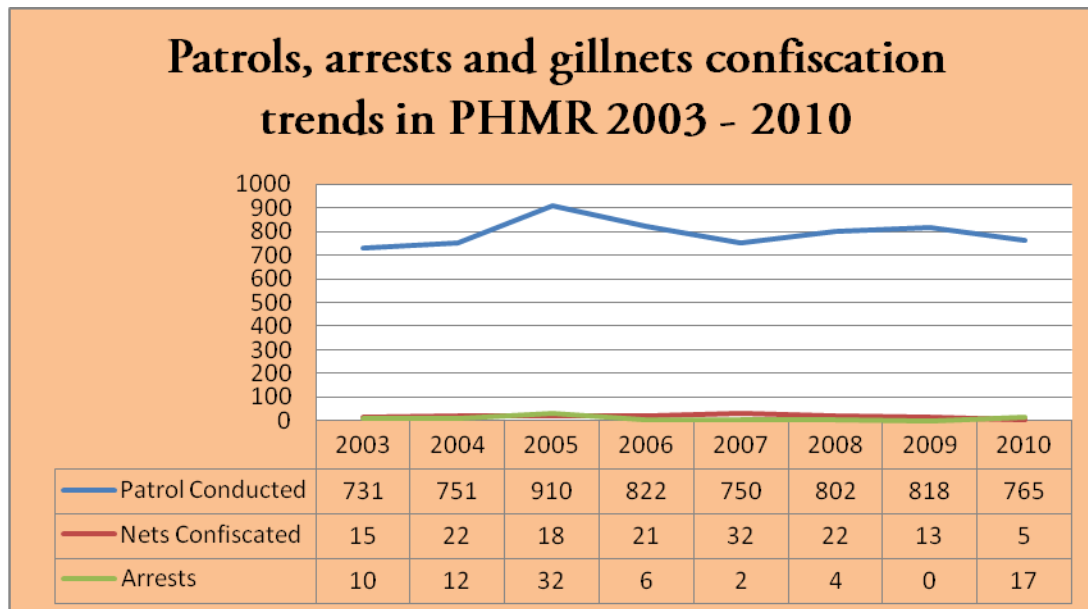
Table 1: Summary of arrest made within PHMR for 2010

Date	Name or Person	Offense	Quantity	Action Taken	Outcome
Jan.23, 2010	Darwin Chavarria	Conducting Commercial Fishing without a valid vessel license		1 arrest	pending
Feb. 24, 2010		No arrest			
March 24, 2010		No arrest			
April 24, 2010		No arrest			
May 24, 2010		No arrest			
June 24, 2010		No arrest			
July 27, 2010	-	1 gill net confiscated	1	Reported to Fisheries	

				Dept.	
Aug. 5, 2010	Mr. Alberto Faux, Elworth Linarez, Desiree Faux, Eloy Cuevas Jr.	Possession of conch out of season	733	4 arrests	Charged
Sept. 18, 2010	E. Perez, Felix E. Gutierrez, Simeon V. Batun and Ezequiel Ramirez	harvesting of undersize lobsters and spawn lobsters	2 undersize lobsters, 3 spawn lobsters	4 arrests	Charged
Oct. 12, 2010	. Mario Alfonso Fuentes, Mr. Marvin R. Saldivar, Walton A. Parham, Mr. Fernando Figarora and Mr. Jose Angel Che	harvesting of Sea Cucumbers without a valid license and during the close season for Sea Cucumbers	78 Sea Cucumbers	5 Arrests	Charged
Oct. 19, 2010	Minor Icho, Elmer Icho and Alejandro Hernandez	Conducting Commercial Fishing without a valid Commercial License and in an unlicensed vessel		3 arrests	Charged
Oct. 23, 2010	Eloy Cuevas Sr. and Elon Cuevas	harvesting of undersize lobster		Written Warning Issued	
Nov. 30, 2010	-	No arrest	-	-	-
Dec. 30, 2010		No arrest			

TABLE 2: Patrol summary for 2010

Month	Day patrols	Night Patrols	Joint Patrols	Outside Reserve Boundary Patrols	Arrests	Sub Totals	comments
Jan	50	3	1		1	54	2 verbal warnings issued to fishers fishing without a valid fisher folk license
Feb	44	3	1		0	48	
Mar	56	4	1		0	61	
Apr	60	5	1		0	66	
May	56	4	0		0	60	
Jun	62	4	0		0	66	
Jul	56	5	0		0	61	1 gillnet confiscated
Aug	54	6	0		4	60	3 gillnets confiscated
Sept	65	5	0		4	70	
Oct	44	6	0	8	8	58	1 warning issued for illegal harvesting of Lobsters, 1 warning issued for conducting commercial fishing without a boat license, 1 warning issued for the possession of lobster with eggs within the reserve
Nov	62	4	0	5	0	71	
Dec	67	10	0	13	0	90	1 gill net confiscated, 1 warning issued for possession of two undersize lobsters
Totals	676	59	4	26	17	765	

Table 3: Enforcement trend in PHMR

Partnerships

The PHMR staff continues to work with local and international partner organizations. These partners include Southern Environmental Association, the Fisheries Department, the Police Department, the Belize Defense Force, the Belize Coast Guard, and the University of Belize

Community Education and Outreach



Community Steward Lionel Delcid cleaning his days' catch of Lobsters for the day



Vessel being check for proper licenses

Community Education and Outreach is an important task for proper management. For the rangers of the Port Honduras Marine Reserve this is a daily task. While on patrol rangers make a conscious effort to communicate the Fisheries Laws and Regulations to the stakeholders.

Mr. Norman Budna is TIDE's Education and Outreach Coordinator. Mr. Budna along with other key staff members for PHMR visits the schools within the buffer communities of the reserve.

For the year 2010, one of our major education and outreach activity was TIDE's Community Stewards – Follow up Program. With funding from COMPACT we were able to continue to engage our Community Stewards trained in 2009 and also engage a new group of stakeholders. This was done through a series of activities which included a Master Class in Catch Shares Management, an Exchange visit to Punta Allen, Mexico, Open Water Dive Training for 10 and an Advance Species Identification on Coral and Fish Species. The Science Club from the Toledo Community College was also engaged. This was done by providing an opportunity for its members (students) to travel out into the Sapodilla Cayes Marine Reserve, which is located on the southern most end of the Belize Barrier Reef.



Belizean Fishers fishing with Punta Allen Fishers Oct. 21, 2010/Exchange Visit to Punta Allen, Mexico

Community Members who benefited from the dive training:

- (1.) Mr. Kenworth Martin
- (2.) Mr. Jamie Williams
- (3.) Ms. Genevieve Ramirez
- (4.) Mr. Jonathan Alford
- (5.) Mr. Kyrone Leonardo
- (6.) Mr. Dario Williams
- (7.) Ms. Erin Bowden
- (8.) Ms. Lolita Jacobs
- (9.) Gail McNab
- (10.) Mr. Skipworth Borland.

Site Visit to Hol Chan Marine Reserve

On September 23 & 24 2010, Representatives from TIDE and fishers from Punta Negra, Forest Home and Punta Gorda traveled to the island of San Pedro to visit the Hol Chan Marine Reserve. The objective of the site visit was to provide a first hand experience of the management of Hol Chan Marine Reserve and to witness there success stories with their increase of marine products. Assisting us in accomplishing this was Ms. Kira Forman, Hol Chan's Marine Biologist and Ms. Mariela Palma Archer, Hol Chan's Environmental Educator. Ms. Archer presented to the group on the history of Hol Chan Marine Reserve and its management activities to present. Ms. Foreman presented on the biological aspect of management. Emphasizing on how development on the island has affected the ecosystems.



Addie Marin, Environmental Activist



Fisher Ray Arzu enjoying the marine life

PHMR Management Plan Revision

The staff of PHMR and TIDE conducted a great deal of work on the revision of the reserve's Management Plan. A Management Survey was conducted within the buffer communities of Monkey River, Punta Negra and Punta Gorda to have an idea of the perceptions coming from the communities. The results of the survey were then presented to the communities. A series of public consultation meetings were then carried out throughout 2010. TIDE hopes to submit a first draft to the Fisheries Department in 2011.

Trainings, workshops, meetings

A number of trainings and workshops and meetings were attended by the staff of PHMR for 2010. Brief summaries of these activities are below:

- Within the month of January 2010, Mr. Karel Kuran the Manager of TIDE Tours conducted a basic Camera Use Training with the rangers on duty.
- On February 23, 2010, the Marine Manager attended a workshop in Belize City on the revision of the Fisheries Department's Enforcement Policy Manual.
- On June 18 & 19 2010, TIDE's Marine Manager Seleem Chan traveled to Key Largo, Florida to attend a Disturbance and Bleaching Monitoring Plan workshop sponsored by The Nature Conservancy. The workshop is a follow up activity from three months on line course Mr. Chan was participating in.

Germany	0	4	0	0	0	0	0	0	0	0	0	0	4
Australia	2	0	0	0	0	0	0	0	0	0	0	0	2
Scotland	0	0	0	0	1	0	0	0	0	0	0	0	1
United Kingdom	2	6	0	0	1	0	1	0	0	0	1	0	11
Guatemala	0	0	0	7	0	0	0	0	2	0	0	0	9
Mexico	0	0	0	2	0	0	0	0	0	0	0	0	2
Spain	0	0	0	0	0	0	0	1	0	0	0	0	1
France	0	2	0	0	0	0	0	0	0	0	0	0	2
Honduras	0	0	1	0	0	0	0	0	1	0	0	0	2
Africa	0	1	0	0	0	0	0	0	0	0	0	0	1
Monthly totals	45	73	78	66	61	47	40	20	9	23	46	52	562

Table 4: Visitation data by country for 2010

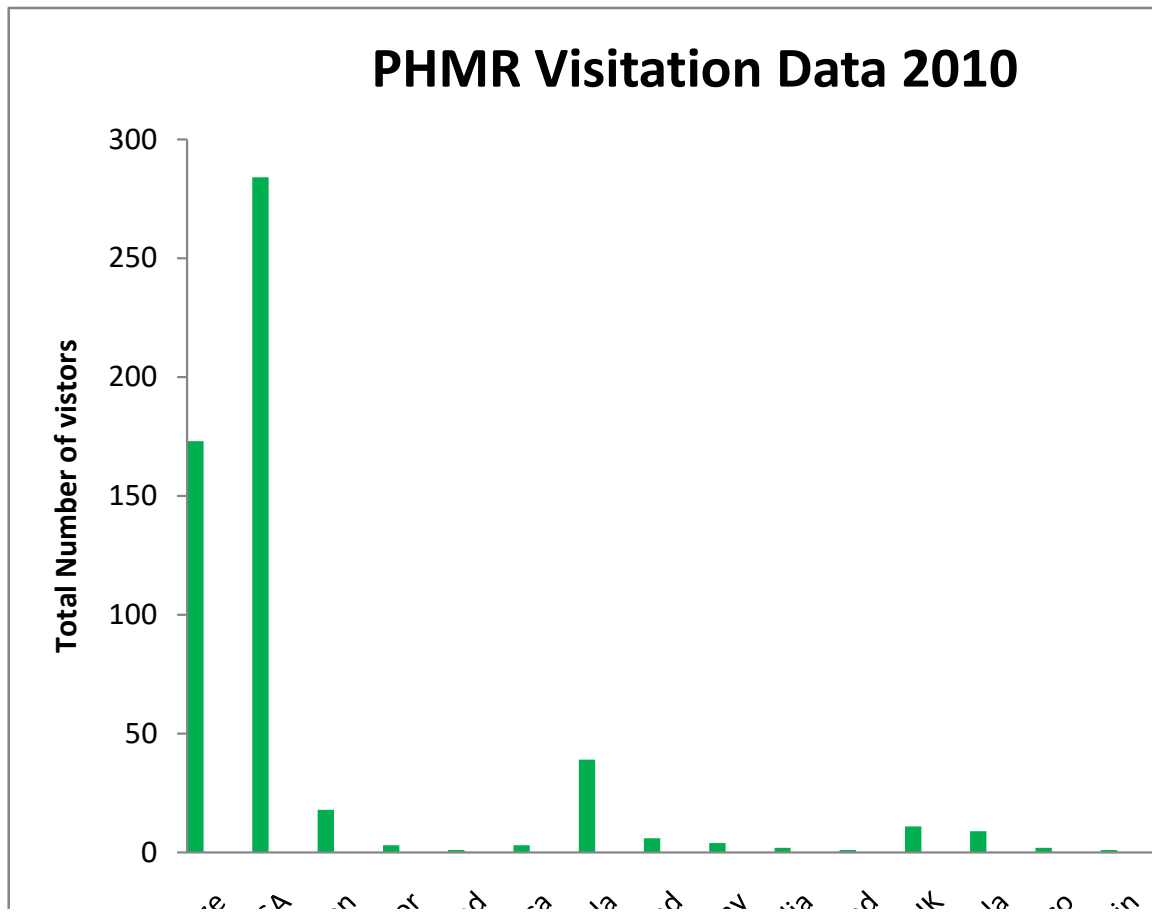
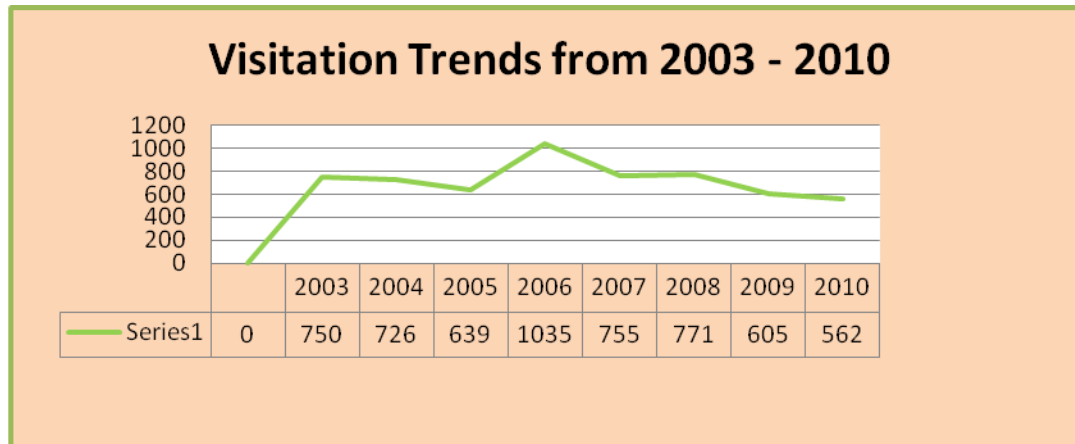


Table 5: Visitation Trends for PHMR since 2003 - 2010**Users of the Reserve and vessel names for 2010 (this not a true list of all the fishers using PHMR)**

FisherFolk	Boat Name
Marcial Mes	Lynn
Carl Gonzalez	Carlita
Eloy Cuevas	Trouble
Nery Coleman	Yomira
Winsley Garbutt	Dania
Alvaro Romero	Bruno
Alfredo Canelo	Puma
Esquivel Ramirez	Ever
Leslie Williams	Silence
Darwin Garbutt	Delanie
Lionel Delcid	Gilda
Cristian Trapp	Marie Julie
Felix Gutierrez	Janett
George Ramirez	Viviana
Darwin Garbutt	Delanie
Martin Reyes	Charity
George Garbutt	Mystic
Jose Ariola	Andrea
Ray Arzu	Sheridan
Rafael Ramirez	Anna
Beham Parham	Mariela
Leonardo Garcia	Evelyn

Ezequiel Ramriez	Mariela
Walton Parham	Maria Juli
Kent Audinett	Admiral
Jason Martinez	Big Game
Roy Ramirez	Tesha
Geovanni Ramirez	Eagle
Conrado Perez	Mirrza
Freddy Perez	Paola
Roberto Echavarria	Wild Thing
Valerio Perez	Delfin
Wilder Parham	Alejandra
Daniel Tillett	Tunvo
Marcos Barrientos	Paloma
Abraham Perdomo	Lewis

Sport Fishing/tour guides and their vessel names 2010

Mikhail Martin	Brown Sugar
Eworth Garbutt	Destiny
Lionel Martin	tight line
Bobby Polonio	Princess
Daniel Castellanos Jr.	Xavi
Ian Cuevas	Opportunity
George Garbutt	Mystic
Eloy Cuevas Sr.	Fugitive
Roberto Echavarria	Wild thing
Oliver Garbutt	Sea Life
Thomas Garbutt	Unity

TIDE Board of Directors

Gabriel Roches – Chairman – Public Officer
 Alistair King – Vice - Chairman -*Local Businessman (Texaco & Fabrigas)*
 Alexander Garbutt Sr. - *Local Fisherman and Tour Guide in Monkey River*
 Eric Moore – Treasurer - *Ministry of Works, Toledo*
 Anselmo Cruz – Red Cross, Toledo
 Marie Aleman – *Retired*
 Kamela Palma –
 Dale Gomez – PCNP Representative
 Derwin Garbutt – PHMR Representative
 Celia Mahung – Ex – Oficio Member - *Executive Director, TIDE*
 Darius Avila – TIDE Accountant

TIDE Staff**Management Staff**

Executive Director: Celia Mahung
 Operations Director: Stephene Supaul
 Program Manager: Joseph Villafranco
 Development Director: Post Vacant
 Education and Outreach Coordinator: Norman Budna

Administrative staff

Financial Administrative: Danny Hun
 Accounts Clerk: Kimberly Coleman
 IT Officer: Paul Etienne
 Driver/Mechanic: Ernesto Caliz
 Office maintenance: Claudette Borland

Programmatic Staff**Port Honduras Marine Reserve**

Manager: Seleem Chan
 Senior Marine Biologist: Post Vacant
 Junior Marine Biologist: Marlon Williams
 Head Ranger: Carlos Ramirez
 Ranger: Kenly Williams
 Ranger: Narciso Martinez
 Ranger: Godfrey Alford
 Ranger: Kenworth Martin

PHMR Advisory Committee

Wilfred Mutrie/Dennis Garbutt/Alex Leonardo: BTIA – PG
 Celia Mahung: TIDE Executive Director
 Derwin Garbutt.: Fisherman Monkey River
 Hon. Eden Martinez/Delly Martinez: Toledo East Area Representative
 Floyd Lino/ Orlando Muschamp: Mayor – PG Town Council
 George Ramirez: Rio Grande Fisherman Cooperative – PG
 Lyndon Rodney: Fisheries Department – PG
 Philip Morgan: Lecturer, UB – Toledo
 Paula Williams: Punta Negra Village

Seleem Chan: PHMR Manager

PHMR Donors

The OAK Foundation
 National Oceanic and Atmospheric Administration (NOAA)
 The Nature Conservancy
 The Summit Foundation
 COMPACT
 CAMPAM
 Sea Grass Net
 Hausman Foundation
 Environmental Defense Fund
 Belize Fisheries Department

TIDE/PHMR CONTACT INFORMATION

Toledo Institute for Development &
 Environment (TIDE)
 Attn. Port Honduras Marine Reserve
 1 mile San Antonio Road/PO Box 150
 Punta Gorda Town
 Toledo District
 Belize, Central America
 Telephone: (501) 722-2274/2431
 Fax: (501) 722-2655
 E-mail: info@tidebelize.org
 Web: <http://www.tidebelize.org>

Income and Expenditure Statement January - December 2010

Income	
4001 - Grants	<u>677,587.27</u>
Total Income	677,587.27
Expense	
3001 - Equipment	62,537.84
5001 - Salaries & Wages	257,426.72
5002 - Travel & Transportation	4,057.23
5003 - Cleaning & Sanitation	20.01
5006 - Insurance, Licensing & Permits	22,271.82
5007 - Postage & Delivery	529.22

5008 · Profesional Fees	89,291.75
5009 · Public Awareness & Env. Ed.	50,156.09
5010 · Repairs and Maintenance	15,843.78
5011 · Supplies	17,750.76
5012 · Training	40,320.03
5014 · Board/Advisory Board Expense	3,519.00
5015 · Utilities	5,358.31
5016 · Telephone, Comm. & Internet	8,160.83
5019 · Reserves & Parks Improvement	3,056.83
5020 · Net Working	13,692.24
5025 · Institutional Strengthening &	10,799.25
5026 · Research & Monitoring	44,728.74
5027 · Recruitment	270.00
5035 · Surveillance, Patrol & Enforce	38,934.55
5036 · Disaster Preparedness	<u>1,857.72</u>
Total Expense	<u>690,582.72</u>
Excess of Expenditure over Income	<u><u>-12,995.45</u></u>