



E-NEWS and UPDATES 29 November 2008

Medellin, Colombia 29 November 2008: The Toledo Institute for Development and Environment of southern Belize wins first prize in the Experiences in Social Innovation Contest.

The Toledo Institute for Development and Environment (TIDE) is a nongovernmental organization with a mission to *foster community participation in resource management and sustainable use of ecosystems within the Maya Mountain Marine Corridor* in southern Belize.

The winners of the fourth cycle of the Experiences in Social Innovation award, organized by ECLAC with the support of the Kellogg Foundation, were announced in Medellín, Colombia, on November 28, 2008. 874 organizations submitted applications of which twenty semifinalists were chosen and visited by ECLAC judges in August and September.

Of these, 12 made it to the finals: 9 from South America, 1 from Central America and 2 from the Caribbean. Brazil, represented by 3 projects, was once again the country with the most finalists. For the first time ever, projects from Saint Lucia, Cuba and Belize reached this stage of the contest. TIDE Executive Director, Celia Mahung and Education and Outreach Coordinator, Norman Budna, travelled to Colombia to present information about TIDE, the Freshwater Cup, and to learn about the other projects.

TIDE won the social innovation competition and the first prize of US\$ 30,000 with the Freshwater Cup project. Celia Mahung, Executive Director of TIDE, commented before leaving for Colombia that *"TIDE is already a winner. To be selected out of so many projects makes TIDE, and our beloved Belize, winners."*

Mrs. Mahung's words on winning the award included: *"We are grateful to participating teams, individuals and donors who have supported this project yearly and of course the TIDE staff who give up their evenings and weekends to participate in making both the environmental and football competitions successful! During the first two years of this project, both PACT and MBRS and other partners of TIDE supported the Freshwater Cup. We look forward to sharing our ideas with other organizations who would like to duplicate the Freshwater Cup and other innovative projects in Latin America."*



Exchange Visit – Damian Aldana from Shipstern Nature Preserve visits TIDE.

My trip to TIDE was simply the best. I arrived at P.G at 2:30pm and at PLI at 3:40pm on the 5th October 2008. I'm very grateful to TIDE because of the numerous things I learned. I'm extremely happy that I participated in this exchange program thanks to Mr. Heron Moreno -Manger of Shipstern Nature Reserve, Mr. Eugenio Ah- Manager of PLI, Ms. Celia Mahung and all others that made this possible.

This trip's objective was to expose ourselves to another organization doing the same things we are trying to achieve at Shipstern; effective management of resources, staff effectiveness, effective outreach programs, good day to day data intake among many other good things that I could learn from TIDE, in this case.



On my first morning at PLI 6am wrote my first weather reading, that was an excellent start. I also got the opportunity to participate in GPS training and at the same time I was introduced to YCT rangers and their station. On the same day visited various other communities. At TIDE though PLI I learned about making transect lines this was also possible because of the aid Mr. Elmer Requena (TIDE's terrestrial biologist) contributed to this project. I really enjoy going out on patrols at night time.

During my second week at PLI, I was sent to PHMR. I enjoyed being out there. The hospitality was excellent. On the first day I got to visit Monkey River and witness a positive discussion between Mr. Carlos (head ranger of PHMR) and fishermen of the community. For the second day I saw what changing buys is like. Then at evening time we went to PCNP where I noticed that it's a lot like Shipstern lagoon area which is excellent for a great variety of fauna and flora.

At the end of almost four days with PHMR rangers, it was about time to return to Shipstern. Two weeks was on its terminal phase, but Mr. Eugenio and I realized that there was much more to learn at PLI so an application for a third week was recommended and thankfully it was approved. I learned about effective biodiversity monitoring and collecting and organizing data. I also learned about developing proper trails and many factors of getting a message across to people of different cultures.

Thanks to Mr Budna I saw how presentations to schools were being carried out and also I had the opportunity to participate in a radio talk show along with Mr Requena. A special THANK YOU to Mr Eugenio Ah, Mr Santiago Cucul, Mr Luis Ishim and to Ms. Janel Borlon for their great hospitality and for teaching me so much. I will always remember you all. Thanks to everyone else that assisted me in my quest to learn and take on new skills, information or ideas. Thanks to YCT I had the opportunity to work with Mr. Pop who is a dedicated and knowledgeable person.

I hope to come back some time in the future. www.shipstern.org



Lobster Monitoring within PHMR – 2008

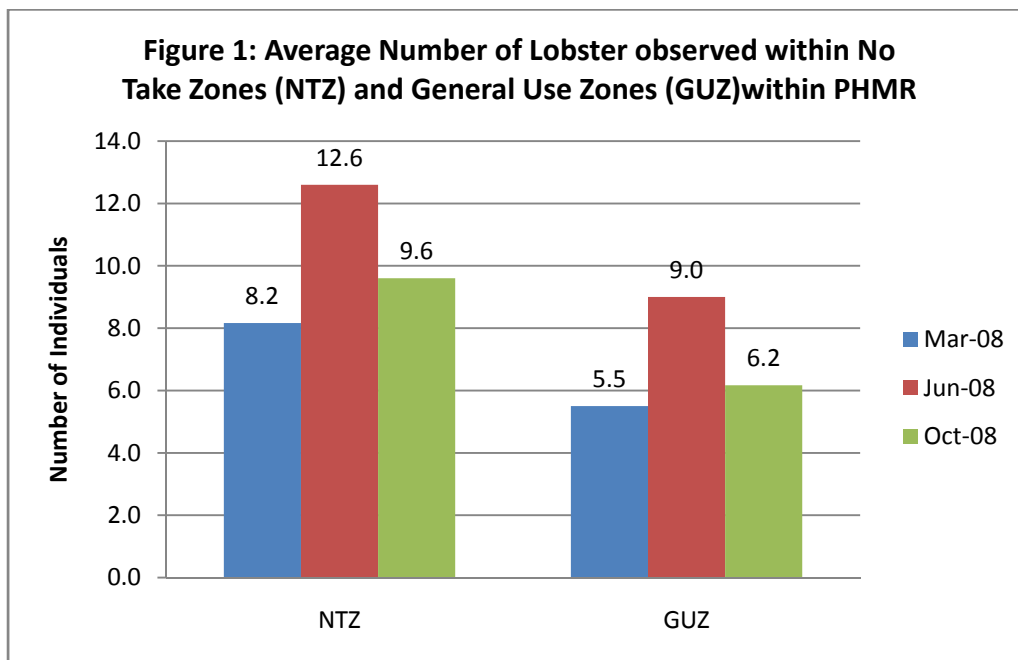
Nicola L. Foster, PhD, Senior Marine Biologist



Monitoring of spiny lobster (*Panulirus argus*) has been undertaken three times during 2008 within the Port Honduras Marine Reserve. The first survey was conducted in March, just after the start of the closed season, the second survey was conducted in June, just prior to the fishery re-opening and the third survey was conducted in October, nearly 4 months after the season re-opened. Data were collected from 12 sites within PHMR, from both No Take Zones (NTZ) and General Use Zones (GUZ). At each of these sites, two 30 minute timed swims were conducted by independent buddy teams parallel to one

another. For each *P. Argus* individual located, the carapace length was measured and recorded (to the nearest cm); sex was determined and for female species the presence of a tar spot or eggs were recorded. Only data relating to abundance and carapace length are reported here.

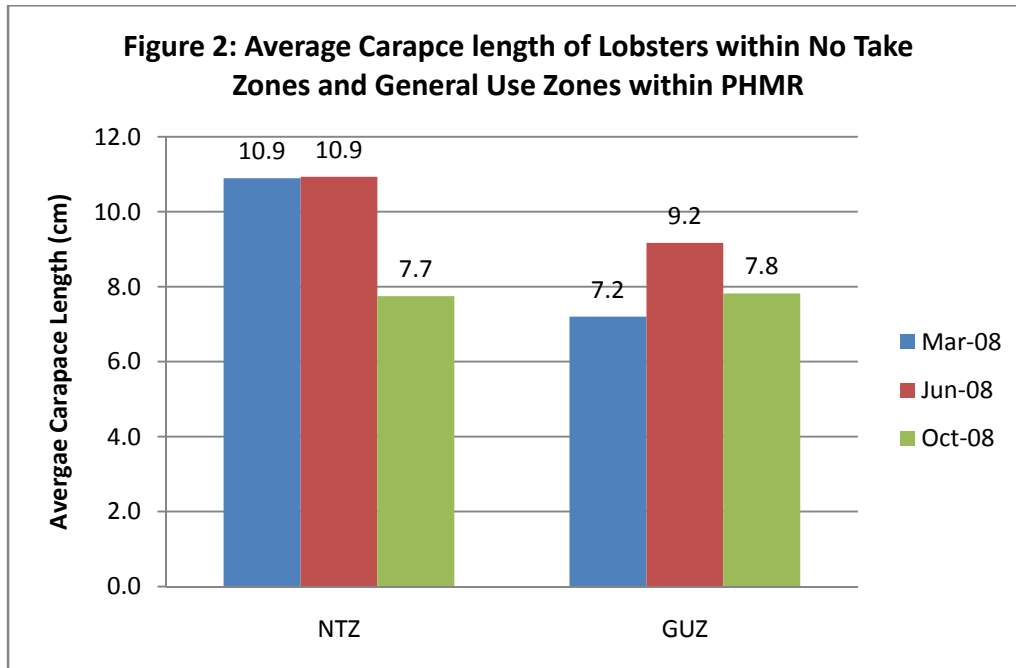
The results show the impact of the fishery on population numbers. The average number of individual spiny lobsters observed at sites within PHMR has declined since June when the season re-opened (Figure 1). However, numbers observed within No Take Zones are consistently higher than numbers observed in the General Use Zones, indicating that the No Take Areas are providing some degree of protection to the lobster populations.



In addition to a decline in population numbers since the fishery re-opened in June, the average size of spiny lobsters encountered has also declined (Figure 2). The average carapace length was nearly 2cm less than was observed in June indicating that larger lobsters have been removed from the population, likely through fishing. Furthermore, average carapace length of lobsters within the No Take Zones is now equivalent to that



observed within General Use Zones (Figure 2). These data highlight the need for an increase in the area of No Take Zones within PHMR to conserve viable lobster populations.



October 2008 – Bleaching Summary Report for Port Honduras Marine Reserve

Nicola L. Foster, PhD, Senior Marine Biologist and Marlon Williams, Junior Marine Biologist

Introduction

On Saturday 4th October a bleaching survey was conducted at six sites within the Port Honduras Marine Reserve (Table 1). Two surveyors used the weighted-bar swimming transect (WBST) to assess the extent of coral bleaching at each of the sites. A minimum of 95 colonies were assessed at each site for paleness, partial bleaching and whole bleaching (>90%).

Table 1: GPS position and survey method utilized at each of the 6 sites within PHMR.

Site Name	Max Depth / Survey Method	Latitude (°)	Longitude (°)
South Snake Caye (SSC)	3.6/SCUBA	16.180972	-88.56440
East Snake Caye 1 (ESC1)	4.8/SCUBA	16.20778	-88.50805
East Snake Caye 2 (ESC2)	2.0/SNORKEL	16.20988	-88.50607
Middle Snake Caye (MSC)	3.3/SCUBA	16.203364	-88.55108
West Snake Caye (WSC)	4.5/SCUBA	16.190584	-88.569771
Frenchman Caye (FMC)	4.8/SCUBA	16.18109	-88.6364

Results

The species composition differed at each of the 6 sites (Figure 1). Frenchman Caye and South Snake Caye were dominated by *Siderastrea siderea* colonies, while the remaining four sites were dominated by *Porites astreoides* colonies.



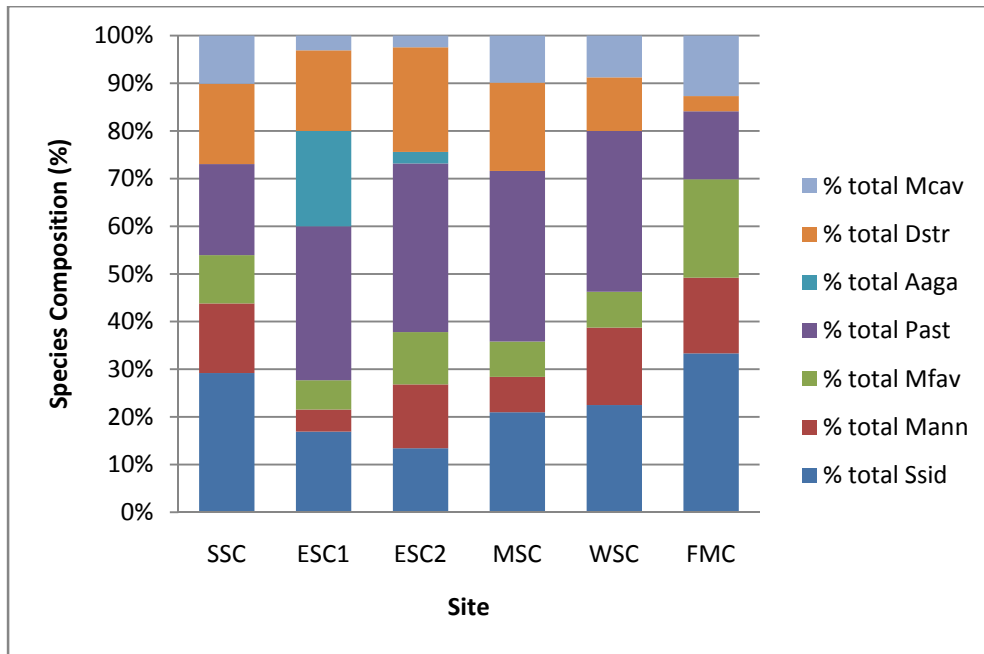


Figure 1: Species composition at each of the six sites.

The highest number of colonies with signs of bleaching (paleness, partial bleaching or whole bleaching) was observed at East Snake Caye 2 and West Snake Caye (Figure 2).

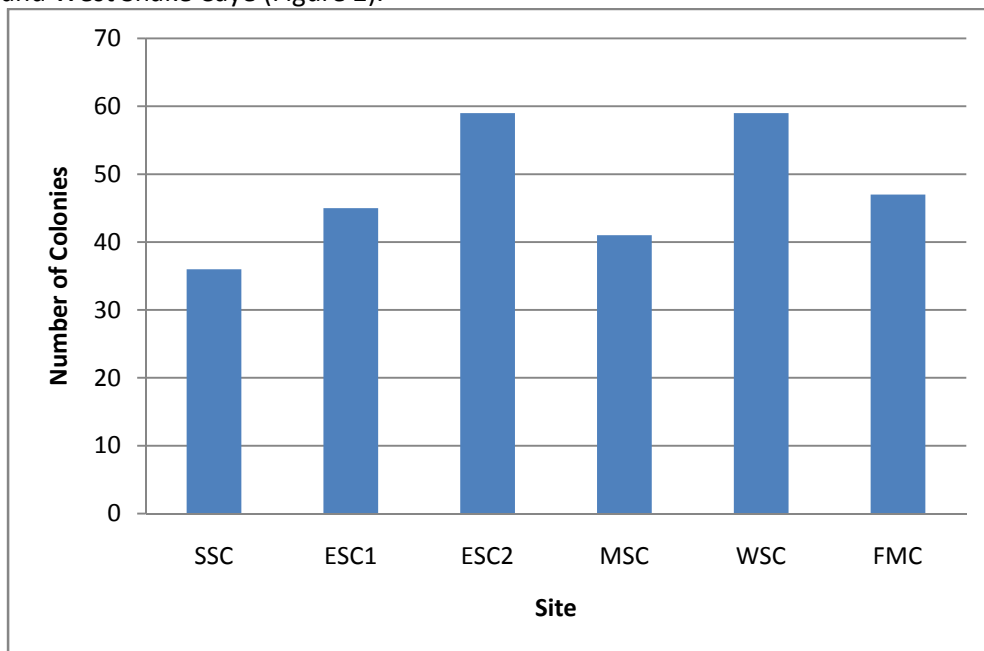


Figure 2: Total number of colonies at each of the 6 sites within PHMR with signs of bleaching (pale, partial and whole bleached).

Of the total number of colonies assessed at each site, various proportions showed different levels of bleaching. The highest level of pale colonies was observed at East Snake Caye 2, the highest level of partially bleached colonies was observed at Frenchman Caye and the highest proportion of whole bleached colonies was recorded at East Snake Caye 2. The percent of colonies displaying pale tissue ranged from 16% at Frenchman Caye to 35% at East Snake Caye 2. The proportion of colonies showing partial bleaching ranged from 11% at South Snake Caye to 28% at Frenchman Caye. The proportion of colonies with greater than 90% bleached tissue ranged from 2% at Middle Snake Caye to 10% at East Snake Caye 2.

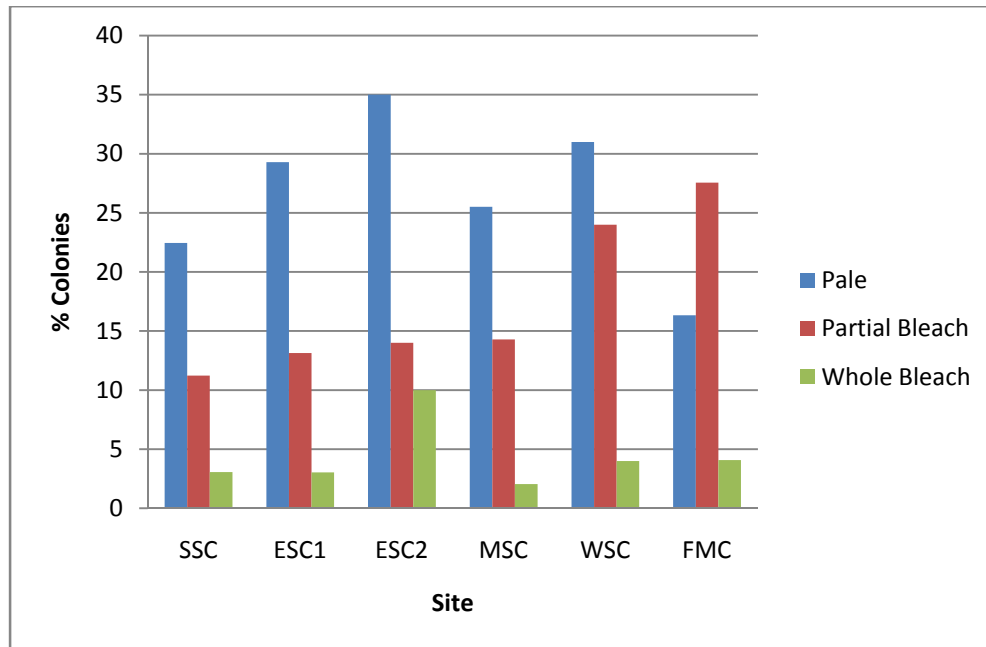


Figure 3: Percent of colonies assessed showing signs of bleaching at each of the 6 sites within PHMR.

Conclusions

The greatest level of bleaching was observed at East Snake Caye 2 within the Port Honduras Marine Reserve. East Snake Caye 2 was the shallowest of sites surveyed with a maximum depth of 2 metres which may help to explain the high levels of bleaching observed. Shallower sites are likely to be subjected to greater temperature and irradiance levels compared to the deeper sites. Middle Snake Caye had the least number of colonies with greater than 90% bleaching, however, a large proportion of colonies displayed partial bleaching or pale tissue. Overall, South Snake Caye had the least number of colonies affected by bleaching.

IN OTHER NEWS

Mario Muschamp attended training in Advanced Banding Techniques to increase understanding of the role of avian species as key indicators of environmental degradation, the current status of avian influenza in Belize and the need for continued monitoring of migratory species for population trends and avian influenza.

Norman Budna attended training on Climate Change and Security held at the University of Belize to receive first hand information on climate change related to areas of security hosted by the Ministry of National Security and the British High Commission in Belize.

Tanya Garbutt has joined the staff as Community Liaison in Monkey River. TIDE held a meeting in October to formally introduce Tanya and a follow-up meeting in November to maintain the lines of communication.

A meeting was held on the "Matambre" farming issues on TIDE property (Kerns) near Big Falls Village. Farmers received an update regarding the status of the land, location, and ownership. Temporary use of the land (2008-2009 season only) will be permitted but agro-chemicals and hunting are prohibited.

The Community Stewards Program has been funded by COMPACT and will receive funding from the MAR (Mesoamerican Reef) Fund and the PACT Small Grant Program. Implementation of the program is expected to begin in the next few weeks.

The Mr/Ms Conservation Competition will take place at Parish Hall on 13 December 2008. Eight organizations and contestants will provide use the event to present conservation information through skits and song. MARTRA (The Mesoamerican Ridge-to-Reef Alliance) has provided funding for the evening and scholarships for the winning contestants. MARTRA is a Chicago-based nonprofit organization working to protect the Mesoamerican Barrier Reef System.

Executive Director, Celia Mahung, made a visit to MASS Audubon to learn about their programs and ways in which TIDE and MASS Audubon would work together. During the visit, funding for infrastructure on West Snake Caye was discussed.

TIDE and Ya'axche Conservation Trust completed the Conservation Action Plan for the Maya Mountain Marine Corridor, an effort funded and supported by The Nature Conservancy.

