

# Coastal and Marine Management and Education in the South Eastern Caribbean (CaMMESEC) Bulletin

September/November 2009

This issue focuses on an exchange opportunity that CaMMESEC was able to support – SE Caribbean participation in the 62<sup>nd</sup> Gulf and Caribbean Fisheries Institute annual conference. CaMMESEC is proud of the contributions made by our SE Caribbean colleagues from St. Vincent and the Grenadines and St. Lucia and looks forward to nurturing the invaluable connections and relationships made with our regional partners.



## GCFI...four letters, one unforgettable experience

This year's conference was held in Cumaná, Venezuela from 2<sup>nd</sup> – 6<sup>th</sup> November, 2009 and was hosted by the Instituto Oceanográfico de Venezuela - Universidad de Oriente. This annual meeting of marine resource management experts and marine resource users, opened with a keynote address by Dr. Daniel Pauly, Professor and former Director, Fisheries Centre, University of British Columbia; Principal Investigator, Sea Around Us Project.



Keynote speaker, Dr. Daniel Pauly

The conference format included two special sessions titled “Are Tropical Bottom Trawl Fisheries Sustainable? Implications and Alternatives” and “Success Stories in Marine Conservation in the Wider Caribbean: Applying Ecosystem-Based Management and Facing the Climate Change”. It also highlighted

concurrent workshops on “Marine Invasive Species: Invasive Lionfish Biology and Management in the Caribbean Sea and Gulf of Mexico” and “Characterization and prediction of transient reef fish spawning aggregations in the Gulf and Caribbean Region”; and a special workshop: “The Gladding Memorial Award Fishers’ Summit.



Panelists in the Gladding Memorial Award Regional Fishers Summit

## CaMMESEC partners with CaMPAM at GCFI

The CaMPAM Network coordinated the special session on “Success stories in marine conservation in the wider Caribbean: applying ecosystem-based management and facing the climate change” at the GCFI conference. At this session, CaMMESEC sponsored representatives from the Tobago Cays Marine Park (Sharon Gulick and Hyron Joseph) and the Soufrière Marine Management Association (Nadia Cazaubon) who presented their stories orally and through posters. Additional experiences were shared by Belize, Colombia, Cuba, Dominican Republic, and Venezuela.

Following are highlights from our Vincentian and St. Lucian colleagues' presentations.

### **Accomplishments and Lessons Learned from the Tobago Cays Marine Park**

The Tobago Cays Marine Park (TCMP), located in St. Vincent and the Grenadines, houses a series of globally significant habitats including coral reefs, sea turtle nesting sites and feeding areas, and small systems of mangroves.



#### **Aerial view of the Tobago Cays Marine Park**

The marine portion of the park (95% of the park's total 66km<sup>2</sup> area) surrounds five uninhabited cays, the island of Mayreau (est. population 280), and three islets.

This precious gem has been protected since 1987 but did not recognise many of the advances in management effectiveness and staff and stakeholder capacity until 2006, one year after being selected as an OPAAL<sup>1</sup> demonstration project site. Under OPAAL, the TCMP received resources for and technical assistance in strengthening protected area management, the development of sustainable livelihood opportunities, and capacity building.

As a result, the Park can now boast of

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<sup>1</sup> the Organization of Eastern Caribbean States (OECS) Protected Areas and Associated Livelihoods (OPAAL) project

- the development and endorsement of a new management plan
- the establishment of a user fee system
- the development of a zoning plan
- the authority to enforce the TCMP's regulations
- a doubling of its staff from seven (7) to fifteen (15) which is inclusive of a Marine Biologist
- an increase in infrastructure and assets to include an interpretation centre, a new patrol boat and a garbage facility on Union Island

Along with its successes, the TCMP has learned many a lesson spanning all areas of management. They note the importance of stakeholder involvement and communication at all stages of decision making; and the need for a high level of transparency in dialogue with stakeholders as areas they will be seeking to improve on. Additionally, the TCMP is striving to improve the systematic collection and analysis of biological resource data, socioeconomic data of the various users, and enforcement data that will inform TCMP management's decision making.

Experience brings wisdom to guide the path forward and the Tobago Cays Marine Park is moving full steam ahead.

### **The Helen of the West: A beacon of Marine management Success...Simply Successful!**

For many of us within the Caribbean, and more specifically within marine science and education, the Soufrière Marine Management Area (SMMA) and effective co-management have become synonymous. The SMMA's successes stand tall on the pillars of Co-management, Science, Sustainability and Institutional Arrangements.

The early years saw a very involved multi-stakeholder consultation process which generated a sense of ownership. This led to a very stakeholder centric user based zonation plan, where the related user was given priority within each zone. The spatial separation of the

different users proved to be pivotal in reducing user conflict.



**Zonation map for the SMMA**

The Soufrière Marine Management Association furthered their commitment to the community and the stakeholders by training displaced fishermen in alternative fishing techniques and implementing a buy back system where by fishermen with destructive fishing gear such as gillnets were compensated for their investment in fishing gear.

Empirical data was also central to the success that emanated from the process. The constant fish stock assessments from 1995-2001 by Dr. Callum Roberts and his research team churned out such validation. His research results indicated that fish stock doubled in Fishing Priority Areas and tripled in the Marine Reserves. This finding was also endorsed by the fishermen who went on record stating that they were catching more and larger fish and that fish species had “returned”.

To date the SMMA

- has been made a Local fisheries management Area and Authority
- has the mandate to enforce the relevant laws and regulation under the local Fisheries Act

- has trained its Marine Park Rangers as Special Police Constables with the power to arrest those in contravention of the SMMA’s rules and regulations
- has become self sustaining since 1998 through successful implementation of user fees, for provision of mooring and anchorage services, dive fees and related services, which accounts for 90% of the operational costs

The SMMA has seen the spill over effect of these services and has recorded an increase in mega yacht arrivals and other tourism related activities. This has resulted in a bloom of economic activities for the businesses in Soufrière.

The SMMA sparks a flame of pride within the Caribbean. It has, through many trials, triumphed against the odds, much to the benefit of the marine environment and the community. It remains a beacon hailing from the west; a guide to the region and even the world.

**GIS: the new wrench in Marine Park Management’s Tool Box**

Cherece Wallace-Haywood (left) and Juel Paul (right) both of the Buccoo Reef Trust in Tobago contributed to the poster



presentations at the 62<sup>nd</sup> GCFI conference. Cherece chronicles her experience as she sheds light on the potential for GIS in marine park management.

“The 62<sup>nd</sup> GCFI Conference, Cumaná, Venezuela, was really an educational and eye-opening experience for me. The sessions were thought provoking and the attendees were quite friendly and knowledgeable. At the conference, we the Geographical Information Systems (GIS) officers of GEF-Integrating

Watershed and Coastal Area Management / Buccoo Reef Trust, Tobago presented a poster entitled, "Utilizing Three-Dimensional Ocean Model Maps of Buccoo Reef Tobago, for Marine Park Management."

The poster explains how Marine Park Managers can now use advanced three-dimensional topographic models of the Buccoo Reef to make routine planning and management decisions. The study was used to analyze the best locations for snorkel trails, reef balls, a boat channel and the extension of the existing marine park boundary based on the 3D model. All these factors can help minimize the boat and visitor traffic, divert user impact / traffic to other areas based on observed reef activity and coral survey data, and also to encourage safety by the use of a demarked boat channel to be used as a mitigating force. Many participants were fascinated by methods used to help in Marine Park Management and stimulated interest as to how GIS can be used in their own Marine Protected Areas. This was my first GCFI experience and is without question, one of the most fascinating conferences I ever attended."

### **Soufrière Fishermens Cooperative Sees Sustainable Fishing as a Must**



We break the trend a bit, and offer you an interview with Julian Alexis, Manager of the Soufrière Fishermens Cooperative. Enjoy as he goes through the history of the cooperative, its involvement with the SMMA and his experience at GCFI.

**CaMMESEC:** What is the name of your organization?

**Alexis:** Soufrière Fishermens Cooperative Society Ltd.

**CaMMESEC:** How long has the Cooperative been in existence?

**Alexis:** The Cooperative was registered in 1977.

**CaMMESEC:** Were you involved with the Cooperative from the start?

**Alexis:** I came in 1979, 30 years ago. I started as a gas attendant with the cooperative...and I'm now the manager.

**CaMMESEC:** How long have you held your current position?

**Alexis:** 20 years.

**CaMMESEC:** How many members are there in the Cooperative?

**Alexis:** 103 members and a board of directors of 8. I report directly to the board and carry out their directives.

**CaMMESEC:** What type of fishing is carried out by Cooperative members?

**Alexis:** Deep water fishing; seine fishing, including fillet fish nets for surface fish, seine nets for mid-water; and bonito seines for big fish; pot fishing; and flying fish which is the main income earner.

**CaMMESEC:** What services does the Cooperative provide for its members?

**Alexis:** We provide ice for fishermen and bins for storing their catch. We have a scholarship fund to support two children/ year to attend primary and secondary school; we donate ice for community activities; we have a death fund to support members' families; we have a distress fund if a fisherman gets injured; and we support fishermen when cash from sales are not directly available. We also work with agencies to provide training that would enable fishermen to better sell their fish. For example we've had training in general food handling and customer service. Some of the things the cooperative wants to do next year are trainings in fish handling, safety at sea and navigation.

**CaMMESEC:** What benefits do members derive from being in the Cooperative?

**Alexis:** They have gotten patronage refund every year for the last 15 years. There is no fixed percentage but it is based on profits and decided at the AGM. Based on this year's profits members will get 5%. They also get a percentage of the shares. This year 7% was

paid on shares. 2008 profits were approximately EC\$75,000 as opposed 2007 which was EC\$56,000. Our assets are over EC\$3.25M.

**CaMMESEC:** What was the Cooperative's involvement in the creation of the Soufrière Marine Management Area (SMMA)?

**Alexis:** We were involved in consultations for development of SMMA.

**CaMMESEC:** What role does the Cooperative play in the management of the SMMA?

**Alexis:** We have a representative on the Board.

**CaMMESEC:** What has been the impact of the establishment of the SMMA on the fisheries of the Soufrière area?

**Alexis:** Very recently we've been seeing increases in mackerel. The corals are rejuvenating and supporting reef fish.

**CaMMESEC:** How does SMMA support the fishermen?

**Alexis:** SMMA has fishing priority areas, multiuse area, and no take areas. There were conflicts between fishermen and tourism so SMMA was set up to address this.

**CaMMESEC:** Is this your first GCFI meeting?

**Alexis:** Yes!

**CaMMESEC:** What were some of the highlights of the conference for you?

**Alexis:** I learned a lot about lionfish; didn't think that fish were so endangered globally. I want to discuss how we do sustainable fishing; we have to be more responsible to the environment. I know that there are fishermen [back home] that will not accept this but they must try. If fishing continues as is the fishery might collapse.

**CaMMESEC:** Have you been able to establish any relationships that you will nurture when you return to St. Lucia?

**Alexis:** I got some good contacts, email contacts. Every fisherman should be sharing their email addresses 'cause there are experiences that can be shared. I want to have an exchange with Grenada to see their long line fishery.

**CaMMESEC:** How will the Caribbean Network of Fisherfolk Organisations benefit the Cooperative?

**Alexis:** The umbrella fishermen's association in St. Lucia is part of the Caribbean Network of Fisherfolk Organisations for a little over a year and the Cooperative will benefit from various trainings offered. Also my presence here [at the conference] will now strengthen that link.

**CaMMESEC:** What does St. Lucia need to do to ensure the longevity of fishing?

**Alexis:** They need to have more reserves and Fish Attracting Devices (FADs) but also have right equipment to target the correct size of fish.

**Alexis:** [GCFI] was a wonderful experience, meeting scientists and other fishers from the region. Thank you CaMMESEC for sponsoring me!

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