



A bi-monthly electronic bulletin about interdisciplinary research, teaching and outreach at the Centre for Resource Management and Environmental Studies (CERMES)  
 Editors: Maria Pena and Dr. Patrick McConney

## CERMES at GCFI, Santa Marta

By Maria Pena

CERMES once again participated in the 65<sup>th</sup> Gulf and Caribbean Fisheries Institute (GCFI), 5-9 November, Santa Marta, Colombia.

Robin Mahon, Patrick McConney, Hazel Oxenford and Maria Pena were all engaged in side sessions including the FORCE project meeting, Too Big to Ignore project meeting, UNEP-CEP final project meeting, "Regional Support for the Caribbean Challenge: Networking, consolidation, and regional coordination of MPA management," and the GCFI Socio-economic Café. See following articles for information on these sessions.

Poster and oral presentations made included:

- McConney, P. Women in a fish market in Barbados. (Poster)
- Pena, M. Common socio-economic monitoring indicators for Caribbean Challenge MPAs. (Oral)

The NFWF-funded, *Socio-economic Monitoring by Caribbean Challenge MPA Managers* project, managed by Maria Pena, was particularly well represented with five oral presentations of preliminary project results made.

## Future of Reefs in a Changing Environment (FORCE) AGM

By Rachel Turner

Project partners from the Caribbean, Europe and Australia met in Colombia in early November, prior to GCFI for the third annual general meeting (AGM) of the FORCE project. The meeting provided an opportunity to hear

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about the diverse work being undertaken as part of the FORCE project – from explorations of governance and livelihoods to research on cyanobacteria mats and bioerosion. As well as catching up on the activities of other work packages over the past year, the meeting built on previous discussions to begin shaping the format of the project outputs, considering the content and medium that would most effectively communicate the results of the project to policy makers and reef managers throughout the Caribbean. Day 2 of the meeting included breakout groups to discuss ideas and collaborations, and elaborating on ideas for a series of policy briefs to communicate key messages from research findings that are of particular relevance to policy. Preceding the AGM, the social science partners from UWI, Newcastle University (UK) and Integrated Marine Management (IMM, UK) met for an additional day to talk about progress and plans for further data analysis.

## Too Big to Ignore our Working Group #4

By Patrick McConney

One of the well-attended side sessions at the GCFI meeting in Santa Marta was the open

session on the global partnership for research on small-scale fisheries known as “Too big to ignore” (TBTI). The session focused on what would or could be done in Latin America and the Caribbean (LAC) region, and was an excellent and the Caribbean (LAC) region, and was an excellent opportunity for networking. CERMES assisted in organising the session and in explaining the programme of working group #4 that addresses “Enhancing the stewardship”. This working group is led by Patrick McConney of CERMES. There was considerable interest amongst the 50 people who attended the session in collaborating with TBTI, the LAC region group and working group #4. Stay tuned for more. Visit <http://toobigtoignore.net/>.



*Only standing room remained at the TBTI session*

## GCFI Socio-economic Café

*By Patrick McConney*

Conceived by Alejandro Acosta, the conference chairman, the first ever Socio-economic Café was held at the 65<sup>th</sup> GCFI during the poster reception. The aim was to provide GCFI members who had an interest in the socio-economic aspects of aquatic resource management to gather informally and talk about common interests with folks who work in the field. CERMES helped to organise the session.

The discussion leaders were Ratana Chuenpagdee, Silvia Salas, Manoj Shivlani and Patrick McConney, but the



*Relaxing conversation at the socio-economic cafe*

entire gathering actively participated in thrashing out matters ranging from globalisation to management measures and the value chain. Those who were there said, in an informal evaluation afterwards, that they wanted more of this kind of interaction at GCFI. Maybe next year there will be a world café session with many tables and topics of conversation at each!

## WOA-WCR

*By Maria Pena*

The University of the West Indies and Coastal Zone Management Unit (CZMU) comprised a strong Barbados contingent at the UNEP World Ocean Assessment (WOA) for the Wider Caribbean Region (WCR) held from 13-15 November at the Sheraton Miami Airport Hotel and Executive Meeting Centre, Miami.

The WOA is the product of the United Nations regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects. This first World Ocean Assessment is to be completed by 2014, with subsequent assessments to be generated on a five-year cycle to inform policy making.

Specific workshop objectives included the review, evaluation, and compilation of an inventory of all relevant assessments; building an information network among regional experts; identification of information gaps and building capacity for integrative assessment;

and outlining linkages between driving factors and the state of the marine environment.

During a number of focused breakout group sessions, regional and national experts from throughout the Caribbean had the opportunity to provide their input to the WOA which will be drafted over the coming months. Chairs from each breakout group presented the results of the group session on the final day of the workshop. Patrick McConney (CERMES) and Marlene Attzs (UWI, St. Augustine) chaired the socio-economic group session. The workshop contributed to a regional perspective and content for the first World Ocean Assessment and also promoted capacity building for conducting marine assessments and for utilizing knowledge acquired through assessments.



*Clockwise: Dr. Leonard Nurse, Profs. Wayne Hunte, Dale Webber and Robin Mahon, Dr. Patrick McConney, Dr. Lorna Inniss, Dr. Marlene Attzs and Ms. Maria Pena (missing Mr. Kareem Sabir)*

UWI participants included Prof. Wayne Hunte, Pro Vice Chacellor (Research), Prof. Robin Mahon, Dr. Patrick McConney, Dr. Leonard Nurse and Ms. Maria Pena (Cave Hill Campus); Dr. Marlene Attzs (St. Augustine) and Prof. Dale Webber (Mona). The CZMU was represented by Dr. Lorna Inniss and Mr. Kareem Sabir. Dr. Inniss was the Chair for the entire workshop session.

## Bringing in Brazil

*By Patrick McConney*

When universities provide study and travel funds for faculty to take leave on academic exchanges they sometimes have to look hard

for the returns on their investment. This will not be the case for the growing CERMES connections to Brazil. As a result of an invitation to a workshop in Brazil in 2010, Patrick McConney returned in 2012 to spend almost a month touring and teaching with colleagues there. He encouraged some of those colleagues to join the TBTI project and working group #4 (see article above), with some attending the GCFI meeting in Colombia to strengthen connections to CERMES and the rest of the Caribbean. A number of TBTI activities involving CERMES may take place in Brazil thanks especially to colleagues Mary Gasalla and Rodrigo Medeiros. In addition, plans are in motion for Brazil (and maybe other parts of South America) to join the SocMon global network in the near future, assisted by Maria Pena of CERMES, the insular Caribbean coordinator.

## Climate change and stream flow in Trinidad

*By Oneka Edwards*

The following has been extracted from a submission made by CERMES past student, Oneka Edwards, to the GWP Caribbean Water Insight newsletter based on her CERMES research paper.

The effect of climate change on stream flow regimes in an important water catchment- the St. Joseph catchment in the Northern Range of Trinidad was investigated as fulfillment of the requirements of the Master of Science degree in Natural Resource and Environmental Management (Water Resources Specialization). The study provided a framework for other catchments to be assessed so that management strategies could be put in place to buffer the predicted impacts of climate change on the available surface water supplies. Such strategies would even prove beneficial should the effects of climate change not be manifested as strongly as expected.



Hydrological modeling was carried out on the catchment to simulate runoff under climate change projections. The results were then compared to measured baseline stream flow values converted from hourly stage readings obtained from the Water Resources Agency. Using the dynamically downscaled RCM PRECIS, projections of rainfall and evapotranspiration for the catchment area for the periods 2005-2052 and 2053-2100 under the A2 and B2 climate scenarios were obtained.

When the climate projections were applied to the hydrological model, reduction in annual runoff of 55-60% were simulated for the period 2005-2052 and a reduction of approximately 80% for the 2052-2100 period (as compared to 2005 baseline values). It was noted that the stream flow regime harmonizes with the dry and rainy seasons and that the dry season regime is projected to experience the greatest reduction in stream flow of up to 99% by 2100, while the rainy season regime is projected to experience a reduction in stream flow of a maximum of 68%. The possible implication of these changes in stream flow is the severe restriction on the ability to supply domestic water to the catchment, as there are two intakes that extract water from the St. Joseph River to supply nearby communities. This implication is of primary importance to water

managers and needs to be taken into consideration in their management strategies. Other implications include the possible changes in stream ecology as well as changes in fluvial geomorphology.

## CRFM and FAO host a marathon of meetings

*By Patrick McConney*

The first two weeks of December were busy for fisheries officers, fisherfolk leaders, CERMES staff and others attending a series of regional meetings organised primarily by FAO/WECAFC and the CRFM. The gatherings were very large.



Among matters discussed was a review of the performance of the CRFM, the International Guidelines for Securing Sustainable Small-Scale Fisheries, the current fisheries management performance and conservation measures in the WECAFC region and the Formulation of a Strategy, Action Plan and Programme Proposal on Disaster Risk Management, Climate Change Adaptation in Fisheries and Aquaculture in the CARICOM and Wider Caribbean Region.

CERMES provided consultants for the last item.

## Happy Holidays

*By Maria Pena and Patrick McConney*

On behalf of CERMES, we would like to take this opportunity to thank you for keeping connected with us during 2012. We look forward to sharing more information about our activities and research at CERMES throughout 2013.

Wishing you all Season's Greetings and the very best for the New Year.