

OFFICIAL OUTCOMES OF THE 68th GULF OF CARIBBEAN FISHERIES INSTITUTE ANNUAL MEETING

9 NOVEMBER – 13 NOVEMBER 2015 CIUDAD DE PANAMÁ (PANAMÁ)

HOSTED BY

Fundación MarViva



68th GCFI Board of Directors





INTRODUCTION

From November 9 - 13, 2015, more than 350 fisheries biologists, students, scientists, managers, fishers, and representatives from various government departments and conservation groups from Caribbean countries met in Ciudad de Panamá (Panamá) to explore how they might build networks of people, institutions, and protected areas to further the conservation of marine resources, habitats, and fisheries throughout the region. The 68th Gulf Caribbean Fisheries Institute was held at the RIU Plaza Panamá Hotel, and hosted by the Fundación MarViva. The theme of the Conference was "Two Oceans... Same Coastal Issues". The initiative was based on the interest of the membership of the GCFI to integrate their counterparts from the tropical eastern Pacific at the annual meetings of the Institute, with the aim of optimizing experiences and lessons learned, on the basis that our issues, challenges and opportunities are certainly comparable. The annual meeting opened with a welcome from Dr. Graciela Garcia_Moliner, chairman of the GCFI, followed by the words of Emilio Sempris, Viceministro Ministerio de Ambiente; MSc. Ivan Flóres, Administrador General de la Autoridad de los Recursos Acuáticos de Panamá; José I. Blandón, Alcalde de la Ciudad de Panamá; and Dr. Jorge A. Jiménez, Director General Fundación MarViva.



Members of the Opening Ceremony: Lic. Jose L. Blandón, Lic. Emilio Sempris, Dra. Graciela Garcia Moliner, Dr. Jorge A. Jimenez and MSc. Ivan Flores



The Great team from MarViva



Dr. John C. Ogden



Leroy Creswell opening the Conference

Dr. John C. Ogden retired in 2010 as Professor Emeritus within the Department of Integrative Biology at the University of South Florida. From 1988 - 2010 he was Director of the Florida Institute of Oceanography (FIO), a state-wide consortium of 20 agencies, universities, and marine laboratories whose members included all 11 State of Florida universities.

The focus of Dr. Ogden's professional activities for the last twenty-five years has been on studying coral reef and associated ecosystems and documenting their steady decline from human disturbances. This perspective has convinced him that scientists must become activists in translating scientific information into policy. To this end, he has served on numerous federal and state commissions dealing with coastal ecosystem management, coastal observing systems, marine protected areas, and coral reef conservation. He was a member of the founding Advisory Council of the Florida Keys National Marine Sanctuary and served for six years on the Marine Protected Area Federal Advisory Committee. Currently, he serves on the board of Sea Web, and he is a Fellow of the American Association for the Advancement of Science.

The 68th GCFI conference focused on applying fisheries and marine science to solve problems by bringing multiple users of ocean resources together to make informed and coordinated decisions about how to use sustainably use these resources. The emphasis was on the practical, interdisciplinary, and ecosystem-based approaches of marine spatial planning (MSP) and how effective MSP can make a difference in both conservation and development.

One hundred and forty one oral and 121 poster presentations, including 39 lionfish poster presentations, were delivered during the five days of the meeting covering a wide range of topics such as:

- Integrated management of Marine Fisheries
- Biology, Ecology, and Assessment of Reef Fishes
- Grouper biology and fisheries Fish Spawning Aggregations
- Essential Fish Habitats
- Invasive Lionfish Control and Management
- Biology, Ecology, and Assessment of Invertebrate Marine Fisheries including the biology and fisheries of Queen conch, and spiny lobster
- Marine Protected Areas Science and Management (Biological Connectivity of MPAs)
- Pelagic and Recreational Fisheries
- Aquaculture in the Caribbean

Three concurrent workshops were hosted:

- Lionfish Management Workshop
- Best practices and trade-offs for selecting between fishery-dependent vs fishery-independent sampling in data-limited regions.
- Workshop on the Assessment of standardized methods for baselines and long-term monitoring of Caribbean sharks and rays to meet management and conservation goals.



Dr. Jorge A. Jimenez, President of MarViva and moderator of the Marine Spatial Planning Session.

The thematic session of the 68th GCFI meeting was "Marine Spatial Planning (MSP): lessons learned and opportunities". This session was hosted by Fundación MarViva. Seven presentations representing the scope of the work being conducted in the field of MSP in the region were presented. The objective of the session was to strengthen the effectiveness and sustainability of planning and management processes in coastal and marine areas of the eastern tropical Pacific, the Gulf of Mexico, and the Caribbean, and to present and discuss MSP experiences developed in the Caribbean, the Gulf of Mexico and the tropical eastern Pacific, with focus in conservation and sustainable use of marine and coastal resources.

Sargassum in the Gulf and Caribbean, sponsored by the Gulf and Caribbean Fisheries Institute. For more information please contact Emma Doyle: (emma.doyle@gcfi.org).

The 68th GCFI meeting marked the first time that multiple presentations about the *Sargassum* influx were bought together in a dedicated GCFI main session. This was sponsored and organized by GCFI to encourage the exchange and dissemination of information on an emerging, regionally important marine science and resource issue.

Moderated by Jim Franks and Emma Doyle, the session included presentations about the state of knowledge on species of *Sargassum*, possible causes of the influx, progress on early advisory systems, monitoring of impacts on coastal habitats and living resources, and experience to date from across the region in the management of impacts on fisheries and livelihoods. Countries and territories featured in the session included Grenada, Martinique, Guadeloupe and the USA. A regional update on cooperation about *Sargassum* was presented by SPAW-RAC and a summary was presented by GCFI about gaps in knowledge, directions in research and management, and needs for partnership building and support.

In conjunction with the session, GCFI hosted an informal gathering of members who are working on aspects of the pelagic *Sargassum* influx in the Caribbean. The objective of this gathering was to meet face-to-face to share about current activities and research related to the *Sargassum* influx, anticipated future directions, and needs for support and networking. Interest was expressed by this group in a 2016 Caribbean *Sargassum* symposium or similar event and, accordingly, GCFI will work with potential partners to help facilitate further exchange of information and perspectives among decision-makers, scientists, managers, educators, resource users, and students on this topic.



GCFI members involved in study of the Caribbean pelagic sargassum influx (Photo: J. Corsaut)

Lionfish Management Workshop. Sponsored by SPAW RAC, UNEP, TE ME UM and UNEP CEP. For additional information visit: (http://www.car-spaw-rac.org/?68th-GCFI-conference,656).

The purpose of this Lionfish Management Workshop (Special Session) was to bring together key managers, including fishermen, who had relevant lessons learnt, local or national strategies successfully implemented, and useful tools to share between fishermen, resource managers, and decision makers (support the "management decision").

Fourteen presentations (good examples) focused on:

- Best management tools and effective methods to promote, management and policy, socioeconomic aspects to support decisions,
- Main lessons learnt for control, local and national strategies adopted,
- Possible other marine invasive with similar patterns in the Caribbean,
- Control of deep populations, and
- Specific management in Marine Protected Areas and No-Take zones.

The coordination and facilitation of the workshop was provided by members of the Regional Lionfish Committee (RLC, an Ad-Hoc Committee from ICRI): Franck Gourdin, SPAW-RAC Senior Project Coordinator /ICRI RLC Co-Head, Ruben Torres, REEF CHECK DR Director /ICRI RLC Member, and Jean-Philippe Marechal, lionfish focal point for the FWI, ICRI RLC member.



Participants in the Lionfish workshop (Photo: J. Corsaut) We acknowledge the support received from the following sponsors of the 2015 Lionfish workshop.



Workshop on the Assessment of standardized methods for baselines and long-term monitoring of Caribbean sharks and rays to meet management and conservation goals. Sponsored by MarAlliance. For more information please contact Dr. Rachel Graham: (rachel@maralliance.org).

The Caribbean possesses a patchwork of management and conservation approaches for sharks, rays, skates, and chimaeras (collectively known as chondrichthyans). Management approaches have been developed following overfishing of populations of shark and rays species that share similar vulnerable life histories of longevity, slow growth, late maturity and low fecundity. And measures used include international conventions, regional agreements, and national legislation that oversee species specific fishing bans, gear use and fishing seasons, as well as marine protected areas. The success of these approaches in the Caribbean's large marine ecosystem is challenged by the lack of a cohesive baseline informing a network of relevant actors on the status of chondrichthyans, a clear standardized monitoring process that allows for cross site comparisons and a clear vision of expected outcomes. MarAlliance hosted a day-long workshop to review management and conservation goals for sharks and rays in the Caribbean, gaps in knowledge of the region's chondrichthyans, currently used monitoring methodologies, and capacities required to implement baselines and large-scale yet cost-effective monitoring. Workshop participants identified critical processes needed for the planning, networking, capacitybuilding, and implementation of a broad-scale baseline and long term standardized monitoring of Caribbean chondrichthyans to reach management and conservation goals. A selection of researchers, decision-makers, fishers, conservationists and members of the private sector currently working with chondrichthyans in the Caribbean participated in this important workshop.



Dr. Rachel Graham, with participants of the Workshop on the Assessment of standardized methods for baselines and long-term monitoring of Caribbean sharks and rays to meet management and conservation goals.

Lionfish Research Symposium and Publication. (Sponsored by Florida Sea Grant Program) For more information please contact LeRoy Creswell: (Creswell@ufl.edu).

This was a great year for Lionfish Research at GCFI. Not only did we host a special management workshop, but we also conducted a full day of oral presentations (25 presentations) and our own poster session with 39 poster presentations. These presentations covered all the areas of research being conducted in the region. This year we also offered to the participants of the lionfish session the opportunity to submit their research for peer-review and inclusion in a special section of the journal Marine Ecology Progress Series (MEPS). Of the 25 presentation submitted nine were selected for publication in MEPS.







Lionfish organizers Stephanie Green and James Morris present a Certificate to Meaghan Faletti from FWC Florida for their support to the Lionfish Session. Dr. Martin Main of Florida Sea Grant accepts our appreciation for their sponsorship of this Lionfish Session. Croy McCoy, from the Cayman Islands, presenting his work during the lionfish poster session.

Planning Workshop for the Caribbean Node of the Global Partnership on Marine Litter

A parallel workshop during the 68th GCFI meeting was jointly hosted by the United Nations Environment Programme's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities/Global Partnernship on Marine Litter (UNEP/GPA/GPML), UNEP's Regional Coordinating Unit for the Caribbean (CAR/RCU), and GCFI to help guide the establishment and operationalization of a Regional Node for the Global Partnership on Marine Litter (GPML) in the Wider Caribbean Region. The Caribbean GPML Node will be co-hosted by GCFI and CAR/RCU with the purpose of:

The host organizations provided an overview of their role in global and regional marine litter issues. First, the fit of the GPML within the framework of UNEP's Global Programme of Action for the Protection of the Marine

Environment was explained. The UNEP CAR/RCU representative described the Caribbean Regional Seas Programme and the Protocol Concerning Pollution from Land-based Sources and Activities (LBS Protocol) to the Cartagena Convention, and gave an update on the finalization of the 2015 Regional Action Plan on Marine Litter Management for the Wider Caribbean Region (RAPMaLi). GCFI explained its role in relation to networking for the Caribbean Node of the GPML.

Information was shared about the GEF IWEco (Global Environment Facility, Integrating Water, Land and Ecosystem Management in Caribbean Small Island Developing States) and the countries participating in this project. The role of the Regional Marine Pollution Emergency Information and Training Center for the Wider Caribbean (REMPEITC-Caribe), a Regional Activity Center (RAC) for the Protocol Concerning the Cooperation in Combating Oil Spills in the Wider Caribbean Region (Oil Spills Protocol) was described as it plays an important role in small island developing states in relation to port reception facilities and disposal of ship-borne waste. The rest of the workshop was devoted to facilitated participant discussion, which sought to identify priorities for marine litter management and ways to increase capacity for marine litter management in the region.

The workshop was attended by representatives from the Caribbean Public Health Agency, US Environmental Protection Agency, UNEP's Regional Office for Latin America and the Caribbean, the Regional Marine Pollution Emergency Information and Training Center for the Wider Caribbean, St. George's University, the National Environment and Planning Agency of Jamaica, Fundación MarViva and other NGOs.



Participants in the marine litter workshop (Photo: E. Doyle)

Workshop on Best practices and trade-offs for selecting between fishery-dependent vs fishery-independent sampling in data-limited regions.

(Sponsored by NOAA)

(Session Moderators: Bill Michaels, Nancie Cummings, and Mandy Karnauskas, NOAA).

A special theme session and workshop on data-limited stock assessments was held at the 68th annual conference of the Gulf and Caribbean Fisheries Institute (GCFI) in Panama City, Panama during November 9-13, 2015. Contributors to the GCFI special session provided presentations on a variety of

topics relating to fishery-dependent data collection. The 1.5 day GCFI workshop provided an opportunity for scientists, managers, and stakeholders to identify and prioritize the optimal elements to incorporate in designing efficient data-dependent statistical collections. A pre-workshop questionnaire survey was employed to obtain information on the backgrounds of attendees and level of involvement in data collection and management systems. Presentations included an overview of guiding principles for designing effective monitoring programs and case studies describing existing fishery independent and fishery dependent data collection systems in the region (Bermuda, Bahamas). Participants were exposed to presentations and practical exercises on harvest control rules, management strategy evaluation, and general principles of developing management systems.

During the workshop, participants engaged in breakout group sessions addressing:

- Linkages between data collection and management needs,
- Decision making criteria that play a role in prioritizing fishery dependent vs fishery independent sampling,
- Stakeholder involvement and improving communication,
- Adaptive sampling approaches, and
- The use of management strategy evaluation (MSE) as a tool to simulate the effectiveness of the data collection management feedback loop.

Participants gained experience in the use of analytical tools for evaluating the effectiveness of data collection systems and had the opportunity to apply these tools to real case study problems. Finally, the workshop participants identified best practices relating to improving data-limited stock assessments in the Caribbean region.



Participants of the 68th GCFI Workshop on Best practices and trade-offs for selecting between fishery-dependent vs fishery-independent sampling in data-limited regions.

Report of the Fisheries for Fishers (F4F) Fishers Forum: Fishers Forum 2015: Financing fisherfolk — success stories

The theme of the 2015 Fishers Forum, "Financing Fisherfolk" seeks success stories of how fisherfolk organizations have achieved financial sustainability while following their own agendas and plans to serve their members. Fisherfolk organizations need not be entirely self-financing. However, they should not need to "follow the money" as a matter of survival to the detriment of their ideals and objectives. The aim of the Forum was to examine and learn from successful partnerships between fisherfolk organizations and their funders. Speakers from Dominica, Mexico, Panama, and the USA made interesting presentations on the theme covering both commercial and recreational fisheries. Gladding Memorial Awards were presented to two responsible fishers: Edwin Font from Puerto Rico and Abel Ruiz from Panama. The Fishers Field Trip to Puerto Caimito was well attended by fisherfolk and other GCFI members who gained insight into large-scale processing for fishmeal. The Forum, as usual, could not have happened without the generous support from sponsors too numerous to mention (but FAO needs to be singled out for its engagement) as well as MarViva, the local organizers.



Dr. Graciela Garcia-Moliner, Chairperson of the GCFI presented the GMA award to Mr. Edwin Font of Puerto Rico and Abel Ruiz from Panama, for his constant concern for sustainability in the use of fishery resources. In the picture past GMA winners: Don DeMaria (USA), Mitchell Ley (Antigua) and Jaime Medina (Mexico).



Picture of the Participants of the Field trip visit to Promarina, S.A. and Will Hayman and Mitchell Ley enjoying a fry fish.

We wish to acknowledge the support received from the following sponsors of the 2015 Fishers Forum as well as assistance from many individuals on the GMA Committee. Among the local organizers we wish to especially thank Juan Posada of MarViva and his colleagues who arranged sponsorship and logistics in Panama. We also thank the several other organizations who sponsored fisherfolk (men and women with livelihoods in harvest and postharvest sectors) to participate in GCFI.



Second Regional Workshop on Caribbean Billfish Management and Conservation of The WECAFC/OSPESCA/CRFM/CFMC Working Group On Recreational Fisheries

Fifty-four experts from over 20 countries from the Caribbean and the USA met in Panama City on November 9, 2015 for a three-day workshop on Caribbean Billfish Fisheries Management and Conservation.

The workshop was co-sponsored by the World Bank's Ocean Partnership Programme, Western Central Atlantic Fisheries Commission (WECAFC), and the Food and Agriculture Organization of the United Nations (FAO) during the 68th Conference of the Gulf and Caribbean Fisheries Institute (GCFI).

Billfish species (blue and white marlin, sailfish and spearfish) make significant contributions to Caribbean economies, livelihoods, and food security through commercial and recreational fisheries. Billfish are also important incidental by-catch species from large scale tuna long-line fisheries operating both within and beyond national jurisdictions. Collective action by Caribbean nations to improve management and conservation of regional billfish resources and to influence decision making at the international level, offer significant opportunities.

During the workshop, attendees:

- Increased their awareness and understanding of the Caribbean Billfish Project: a 1.95 million USD project to develop business plans for two pilot projects to create sustainable management and conservation of billfish within the Western Central Atlantic Ocean. The completed business plans will incorporate the economic, technical and financial rationale, and feasibility to attract investment involving private and public capital among major fisheries sector stakeholders.
- Presented and reviewed preliminary results of current studies on: the status of the resources and billfish fisheries in the wider Caribbean fisheries; the value of billfish resources to both commercial and recreational fisheries; the application of the Manual on Economic Impact Assessment of Recreational Fisheries in Martinique and The Bahamas; and the initial findings of an

- assessment of the fisheries legislative frameworks in the Caribbean.
- Presented and discussed draft components of a Regional Billfish Fisheries Management and Conservation Plan, and discussed management objectives and potential regional management measures.
- Selected two countries for the pilot trials (Grenada and Dominican Republic) to test and validate innovative management arrangements (including some rights based approaches).

The final day concluded with a meeting of the Consortium of Billfish Management and Conservation (CBMC) which is the advisory body to the Caribbean Billfish Project and promotes stakeholders' participation and provides advice for improving billfish fisheries management through innovative management arrangements. The CBMC is currently comprised of representatives from IGFA, FAO, World Bank, Conservation International (CI), the Caribbean Fisheries Management Council (CFMC), the Caribbean Network of Fisherfolk Organizations (CNFO), the Caribbean Regional Fisheries Mechanism (CRFM), and the Central American Fisheries and Aquaculture Organization (OSPESCA).

Report of the 7th Scientific Advisory Group session, Panama City, 7-8 November 2015

The seventh session of the Scientific Advisory Group (SAG) was held in Panama City, Panama, on 7 and 8 November 2015. The list of the members of SAG who attended the meeting is attached as Appendix B. The experts were selected on the basis of their specialized knowledge. They served in their personal capacities and not as representatives of their respective governments or organizations. Fisheries experts from Barbados, Colombia, France, Mexico, Trinidad and Tobago, and the United States of America, CRFM, CLME+ Project, GCFI, CFMC, NOAA, OSPESCA, IFREMER, CNFO, the Secretary of the Western Central Atlantic Fishery Commission (WECAFC) and two FAO technical support staff also attended the meeting.



Participants of the Seventh Session of the WECAFC Science Advisory Group

GCFI Student Awards for Academic Excellence (Sponsored by Louisiana Sea Grant and the Caribbean Marine Fisheries Council)

Another great year of student presentations at the 68th GCFI annual meeting. Students from the entire region competed for two scholarships offered to students to participate in the next GCFI annual meeting. A total of **20** students competed in the oral category and **18** students competed with posters.

The 2015 winners of the Academic Achievement Award winners were:



Cassandra Benkwitt, for her presentation "Lionfish Hunting Behavior Across Multiple Habitats: Effect of Local Lionfish Density and Implications for Native Fish". Cassie is a PhD student at Oregon State University, and her advisor is Dr. Mark Hixon.



Alexander Fogg, for his presentation "Comparing Age and Growth Patterns of Invasive Lionfish Among Three Ecoregions of the Northern Gulf of Mexico". Alex is a MS student at University of Southern Mississippi and his advisor is Dr. Mark Peterson.

In addition, students throughout the entire region also competed for four scholarships to participate in the 2015 annual meeting.

The winner of the *Ron Schmied Scholarship* (sponsored by IFGA, private donations, and GCFI) was:



Orian Tzadik from University of South Florida, USA and Bill Michaels from NOAA

The winners of the *GCFI Student Travel Awards*, sponsored by Puerto Rico Sea Grant for the 2015 meeting were **Itzigueri Burgos**, from CICIMAR-IPN, La Paz, Mexico and **Lillian Tuttle** from Oregon State University, USA.





Itzigueri Burgos and Lilian Tuttle with Dr. Alfonso Aguilar Perera

The winner of the *Society for the Conservation of Fish Aggregations (SCRFA) Travel Award* was **Christopher Biggs** (University of the Virgin Islands, USA).

GCFI would like to thank all the judges that participated this year and to Nancy Brown-Peterson and Dr. Alfonso Aguilar-Perera for their leadership in organizing this event and the successful silent auction.

Cinefish

CINEFISH 2016 set a record in film submissions for the 10th edition of this annual Marine Science and Fisheries film festival. Thanks to the leadership of **Alejandro Balaguer from Fundación Albatros Media**, awards were given to the top three films of the evening, as judged by the audience. The audience this year was comprised of more than 150 scientists, marine managers, fishers, and students, and over 100 audience members voted on the best films. The following is the program.

Documentales (Documentaries):

- The Value of connecting Caribbean Fishers: Using the GCFI conference to foster this relationship. Film makers: The Nature Conservancy, Northern Caribbean Program in the Bahamas and MoviGroup
- More Fish, please and thanks!

Film Makers: Produced by Giovanni Damiani through the Caribbean Fish Sanctuaries Partnership (C-FISH) Initiative (implemented by The CARIBSAVE Partnership).

• Historia de Éxito

Cineastas/autores: MarViva I Financiamiento BID FOMIN

Seamount of Life

"Montaña Submarina de la Vida: Protegiendo un Oasis"

Film makers: Roger Herr, Jonathan Sargent, Gary Strieker

• Open Blue Sea Farms

Film makers: TaijiGroup.Vancouver Canada.

• Goliath Grouper Spawning Aggregations

Film maker: William Michaels

• Sharks Demystified: How Sharks Are Perceived in the Dutch Caribbean Islands of Saba, St.Eustatius and St.Maarten

Film makers: Chizilala Productions/ Dutch Caribbean Nature Alliance/ WWF Netherlands/ Saba Conservation Foundation/ St. Maarten Nature Foundation/ STENAPA

• STINAPA Junior Rangers Explore: Sea Turtles

Film makers: Anouschka van de Ven (STINAPA) & Merel Notten (Pajero Productions)

• The Book of Marine Protected Areas: a true story

Film makers: GianniFabrizio, Peyrusse Kevin, Prato Giulia.

Nuevos Medios (New Media)

• The Value of Nature to Human Livelihoods

Film makers: The Nature Conservancy, Northern Caribbean Program in the Bahamas and VAudio Productions

68th Gulf and Caribbean Fisheries Institute

• Comercial Mar Viva: Consumo y Pesca Responsable

Film makers: MarViva

• Natural Number Episode Five: Spawning aggregations

Producers: Brad Erisman and Octavio Aburto. Director: Jaime Rojo

A Natural Numbers film created through collaboration between Scripps Institution of Oceanography, the University of Texas Marine Science Institute, and Science and Conservation of Fish Aggregations (SCRFA).

• Bonaire National Marine Park Orientation

Film makers: Anouschka van de Ven (STINAPA Bonaire) & Merel Notten (Pajero Productions)

Animación (Animation):

• Keep it Clean, Keep it Blue ••• Pump it out!

Film makers: Margaret Parkes, Kelly Wallwork, Makrand Joshi, Jane Schneider, Ross de la Vega, David Gonzalez, Scott Henry, Craig Calhoun, Jules Sound

• El Estándar

Film makers: MarViva

Documentales (Long Documentaries):

• La piche durable dans lesiles de Guadeloupe:les picheurs ont la parole "Fishermen speak about fishing and sustainable development within the Guadeloupe Archipelago"

Film maker: Franck Decluzet (Kiorofilms) with the CRPMEM-IG (Regional Fisheries Office of Guadeloupe)

• Sustaining the Bahamas Spiny Lobster Fishery for the Future

Film makers: The Nature Conservancy, Northern Caribbean Program in the Bahamas and MoviGroup.

The winners were:

Best Public Service Announcement: *Yo Soy.* Presented to: Claudio Matos.

Best Short Documentary: Supporting Our Way of Life. Film makers: Lavardo Stubbs (Conchboy Films), Janeen Bullard, Craig Dahlgren and Felicity Burrows.

Best Documentary: Sanctuary. Film makers: Esther Figueroa (Vagabond Media 2015)





Field Trips

The three field trips were conducted and all the participants were impressed with the facilities and the beauty of Panama City natural resources. The field trips were to:

- Miraflores Locks Visitor Center,
- Colonial Panama, and
- Old Panama City Tour. P

Participants also enjoyed shopping in the fabulous shopping malls of Panama.

CONCLUSION

The GCFI expresses its sincere gratitude to MarViva, and specially a Dt. Juan Posada, for organizing the 68th Gulf and Caribbean Fisheries Institute, and to all the governments, NGO's, and private donors for their support to the Conference. The aim of GCFI around the region continues to focus on the challenges and opportunities presented in today's rapidly changing status of marine resources, with special emphasis on sustainability and conservation of marine resources. Some of the key recommendations, statements, and comments emerging from the conference special symposiums and presentations were:

- The best student attendance numbers/participation in recent years a great way for students to experience a firsthand encounter with critical regional issues and meet the people working on those issues. Engaging students continue to be one of the top priorities for GCFI. Five student annual awards were given.
- The high number of presentations related to lionfish indicated the level of concern and the high number of initiatives throughout the region to eradicate or control this invasive species.
- As part of networking, emphasis should be made to transfer essential skills, resources, and capacity building to researchers, fishermen, and management staff in less developed countries to help them obtain the data necessary to develop and effectively manage marine resources, using MSP, MPAs, and FSA aggregation sites.
- The participation of fishermen from the Centro America, the Gulf of Mexico and the Caribbean reflected the need of further develop the GCFI fisher ambassadors program and expand the exchange program among fishers.
- Once again, the annual meeting confirmed GCFI as the most comprehensive and inclusive network in the region committed to the exchange of information and the promotion of sustainable use, wise management, conservation, and restoration of regional fisheries and marine resources.

The conference concluded with the announcement that the 69th GCFI - 2016 annual meeting will be in Grand Cayman, Cayman Islands.

Enjoy Some Memories from the Conference



Panamanian Traditional dancers, sponsored by ARAP la Autoridad de los Recursos Acuaticos de Panama.



Good Friends and Great Team!