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## ABSTRACT

We describe the experiences and lessons learned from our joint trip to fishing communities and marine protected areas in Belize and Mexico, from 30 May to 9 June 2007. We visited fishing cooperatives in Punta Allen (Mexico) and Belize City (Belize). We visited the marine reserves of Hol Chan, Gladden Spit and Silk Cayes, and Laughing Bird Cay National Park, in Belize, as well as the Sian Ka'an Biosphere Reserve, in Mexico. We witnessed snapper spawning and whale shark aggregations at Gladden Spit. Along the trip, we stayed in fishing villages, increasing our opportunities to exchange experiences with fishers and their families. We observed the design and construction of "casitas" in 5 different locations, which are used for lobster captures. We learned a great deal about the biology and sustainable management of spawning aggregations and spiny lobster. Also, we met with sport fishing guides and visited sport fishing lodges. Now, we are sharing our experiences with fellow fishermen and marine protected areas managers in our home countries. We are grateful to the United Nations Caribbean Environment Programme (UNEP), who funded the trip through a grant called "Sustainable management of multi-species reef fish spawning aggregations: exchanging fisher experiences". We were accompanied by Juan M. Posada (Univ. Simón Bolívar and Fundación Científica Los Roques, Venezuela), Lindsay Garbutt (Friends of Nature, Belize, and Will Heyman, Texas A&M University, USA), who served as organizers and guides through the entire trip.

KEYWORDS: Sustainable fishing, fisher exchange Belize, Mexico, Antigua, Barbuda, Venezuela

## Intercambio de Experiencias entre Pescadores de Antigua, Barbuda, Venezuela, Belize y México

Se describe la experiencia y lecciones aprendidas en nuestro viaje a las comunidades pesqueras y áreas marinas protegidas de Belice y México, entre Mayo 30 y Junio 9 de 2007. Se visitaron cooperativas de pescadores en Punta Allen (México) y la ciudad de Belice (Belice). Igualmente, se visitaron las reservas marinas de Hol Chan, Gladden Spit y Silk Cayes, junto con el Parque Nacional Laughing Bird Cay, en Belice, así como la reserva de Biosfera de Sian Ka'an, en México. En Gladden Spit fuimos testigos de las agregaciones de tiburones ballena y pargos, estos últimos en actividad reproductiva. A lo largo del recorrido permanecimos en villas pesqueras, maximizando la oportunidad de intercambiar experiencias con los pescadores y sus familias. Observamos el diseño y la construcción de las conocidas "casitas" en cinco localidades diferentes, las cuales se usan para la captura de langosta. Aprendimos mucho sobre la biología y el manejo sustentable de las agregaciones reproductivas de peces y langosta. Igualmente, nos reunimos con guías de pesca deportivos y visitamos las facilidades desde donde operan. Ahora compartimos estas experiencias con pescadores y oficiales de manejo en las áreas protegidas de nuestros respectivos países. Agradecemos al Programa Ambiental del Caribe de las Naciones Unidas (UNEP, por sus siglas en ingles), quienes financiaron este encuentro a través del proyecto "Manejo sustentable de las agregaciones multiespecíficas de peces arrecifales: intercambio de experiencias entre pescadores". Durante todo el viaje estuvimos acompañados por Juan M. Posada (Univ. Simón Bolívar y Fundación Científica Los Roques, Venezuela), Lindsay Garbutt (Amigos de la Naturaleza, Belice) y Will Heyman (Texas A&M University, EEUU), quienes fungieron como organizadores y guías.

PALABRAS CLAVES: Pesca sustentable, intercambio de pescadores, Belice, México, Antigua, Barbuda, Venezuela

## INRTODUCTION/ CONCLUSIÓN

Dalston Samuel spoke on behalf of the other participating fishers (Toribio Mata, German Ortega, and Vernon Griffith) of his experiences on a joint trip to fishing communities and marine protected areas in Belize and Mexico that began on May 30<sup>th</sup> and ended on June 9<sup>th</sup> 2007.

He spoke with pride of his 35-year career as an Antiguan fisher and how he had become a very efficient "natural fish killer" as spear fisher. The 9-day trip to Belize and Mexico, which included himself, two fishers from Venezuela and a fisher from Barbuda, was organized and led by Drs. Will Heyman (Texas A&M University) and Juan Posada (Universidad Simón Bolívar). Mr. Samuel noted that this trip "changed his entire life and his whole

outlook for fishing".

The trip included visits to a number of Mexican and Belizean fishing communities where well-managed fishing cooperatives were active and sustainable fishing practices were in place. For the visiting fishers like Mr. Samuel, this was their first exposure to communities where the diversity, numbers, and size of fishes—in the water as well as harvested—all indicated that fishers in these communities were successfully managing and protecting their marine resources. For Mr. Samuel, this was an enlightening, encouraging and empowering experience. The visitors met with local fishers who were also active in ecotourism activities such as fly-fishing guides and tour boat guides—activities which allowed the local fishers the opportunity to

reduce the financial pressure to fish more frequently. Mr. Samuel acknowledged that some alternatives for income generation would be a necessity for fishers in Antigua and Barbuda if they were ever to be asked to reduce the fishing pressure as part of any conservation or sustainability effort. He was particularly impressed with Mr. Eloy Cuevas, a Belizean Garifuna fisher from Monkey River, Belize who was also a highly successful fly fisher guide. Mr. Samuel expressed interest in inviting Mr. Cuevas to Antigua as a speaker so he can share his experiences and ideas with the local fishers.

The trip also included a dive at Gladden Spit, a well-known reef spot in a marine protected area in Belize, where the visiting fishers witnessed a spawning aggregation of snappers as well as the feeding of whale sharks on the fish spawn. This was the experience of a lifetime for a diver like Mr. Samuel, who like the other visiting fishers, had never seen so many large and mature fish at one time. Watching local fishers recording the weight and sex of every fish taken helped Mr. Samuel see the importance of monitoring a resource and saw that fishers can handle many of the managing responsibilities that are critical to sustainable fishing practices.

When Mr. Samuel commented about how this experience changed his life, he spoke of the challenges facing his home country of Antigua and Barbuda. These challenges included chronic over-fishing, little or no monitoring of the fishing grounds by the government or other stakeholders, and the common use of nets in sensitive areas with corals. He expressed the need for education—experiences like he had in Mexico and Belize—so that other fishers can have the opportunity to learn from fishers like themselves who are successful in managing their resources. He also acknowledged that fishers and scientists must work creatively together and help each other in their efforts to reduce the global trend of diminishing fish stocks.