



8th World Recreational
Fishing Conference

Caribbean Billfish Workshop

W1

Exploring Demand for Recreational Billfish Trips and Willingness to Pay for Billfish Conservation in the Caribbean

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The success of reducing billfish harvest in the Caribbean depends on finding a Coasian solution to the problem of commercial billfish bycatch and targeted catch. That means those that benefit from increased billfish stocks will have to compensate those that lose revenue by forgoing billfish harvest. Currently, billfish is typically not the preferred commercial target bringing low prices and taking up valuable hold space. It is very likely that recreational willingness to pay (WTP) for billfish exceeds commercial profits for landing them. The Caribbean Billfish Project (CBP), recognizing the need for more information on recreational billfish demand and the determinants of demand in the Caribbean, initiated an internet based survey of billfish anglers in the Caribbean. The survey assessed the potential benefit of increasing billfish conservation to recreational anglers and whether or not those anglers would be WTP to increase billfish stocks improving the quality of their recreational billfish experience. The study utilized a sample of convenience from the International Game Fish Association membership lists, various tournaments in the region and solicitations in the billfish press. Several survey methodological questions were explored including innovations in the contingent valuation question used and in survey contact modalities. In addition to the demand questions, the survey collected trip expenditure information and attitudes and opinions regarding various developments in the Caribbean, such as the increase in anchored fish attracting devices, and various strategies proposed by the CBP to conserve billfish. This presentation will discuss the methodology and the preliminary results of the survey effort.



W2

Challenges and Opportunities for Using Rights Based Management to Increase Wealth in Shared Commercial and Recreational Highly Migratory Species Fisheries

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While the discussion of the use of rights based management for recreational fisheries began over 10 years ago, there are still no examples of recreational fisheries managed under a rights-based approach. The use of rights based management for highly migratory species is also in its infancy. Recreational users in the US have been extremely resistant to rights based management for many reasons; equity, fairness, high transactions costs and past culture and traditions to name a few. Perhaps not surprisingly, small scale fishers have many of the same reservations. Both US and Australian recreational user groups have called for a halt to rights based management. Recently, small scale fisherfolk organizations worldwide have done the same. Perhaps surprisingly, both have been using similar rhetoric. The use of rights based management for highly migratory species also adds many other hurdles; lack of infrastructure (both political and management infrastructure), exclusivity difficult, rights of sovereign nations, etc. With all these issues, it seems as if there are more obstacles than opportunities. This talk will focus on these challenges and some ways to address these challenges in a movement towards more incentive compatible management that increases wealth and resiliency and decreases vulnerability. The most important point in this entire debate is for both the naysayers and the proponents to realize that rights based strategies exist on a continuum from weak, attenuated community rights to strong, individual rights and there is a lot of room in the middle that can be used to improve management.



W3

Fishery Performance Indicators (FPIs) for Recreational Fisheries

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Under the Global Environmental Facility, the overarching framework for the Caribbean Billfish Project (CBP), fishery science experts have developed a tool, the FPIs, to rapidly assess the generation of ecological, economic and community wealth from commercial fisheries, and to identify the management structures, governance methods, and regulatory instruments that promote successful wealth generation. This tool has been used to profile over 100 commercial fisheries across the world. Recently, recreational FPIs were developed by the same group of researchers with development and piloting help from additional recreational fisheries experts. The FPIs include 90 measures to assess wealth accumulation on 11 dimensions of stock, harvest industry performance, and support industry performance; and 64 measures of enabling factors—including management and governance—to associate with variation in wealth outcomes. Each measure is scored on a one-to-five scale using data where possible, but relying primarily on informal discussion with fishery participants that are then scored by a fisheries expert. This feature makes it particularly well suited to applications in data-poor countries and for quick response times. The recreational FPI test cases covered billfish fisheries in Costa Rica and Cabo San Lucas, and the lessons learned in the test cases were applied to the two CBP pilot countries of Grenada and the Dominican Republic. This presentation will briefly introduce the methodology and detail the preliminary results developed in the recreational FPI application in the Caribbean.



W4

The Caribbean Billfish Project: An Overview of Objectives, Progress and Evolving Concepts

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Billfish species contribute significantly to Caribbean economies, livelihoods and food security through two distinct fishery sectors - commercial and recreational. Small scale multispecies commercial fisheries supply low value markets while contributing significantly to local livelihoods, income and food security. Billfish are also frequent incidental by-catch species in large scale commercial fisheries which primarily target tunas, both within and beyond the national jurisdictions. With the global tourism sector valued at some USD 70 billion per year; the high worth attributed to live billfish by tourism inducing recreational fisheries creates a substantial divergence in value between commercial and recreational uses. Recreational fisheries are also progressively non-extractive through typically releasing captured billfish. The project aims to exploit this opportunity in pursuit of improved billfish management and conservation in the Western Central Atlantic region.

Despite the typically fragmented nature of billfish data, declining stock trends with overfishing do remain the concerning norm. These trends threaten the sustainability of diverse fisheries respective socio-economic contributions to Caribbean states. Collective action by Caribbean nations to improve regional billfish resource management, and influence decisions of organizations such as ICCAT, will provide significant opportunities to reverse this situation in pursuit of diverse socio-economic benefits.

The Caribbean Billfish Project will trial innovative fishery management mechanisms while developing business plans seeking the sustainable management and conservation of billfish. This presentation will highlight achievements to date, describe the evolving concepts being implemented through the project and encourage informative guiding discussions.



W5

Rescuing Top Predators from Over Exploitation Via Regulated Recreational Fisheries: An Economically and Socially Acceptable Option

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Billfish comprise a group of exotic and charismatic top ocean predator species that sustain multi-million dollar recreational fisheries in the tropical western Atlantic and eastern Pacific Oceans. The species (sailfish and marlins) are subjected to intense and often unregulated commercial exploitation, mostly as bycatch in tuna fisheries. We present contrasting analyses of billfish multi-decadal abundance and trophy size depletions, as well as the proliferation of fish aggregating devices (FADs) that have ramifications on the resource and among stakeholders. In spite of these precarious conditions, high catch rates due to localized densities in particular areas generate extraordinary service opportunities to economically and socially important catch-and-release recreational fisheries. We report on existing and emerging billfish policies, regulations, and the conceptual framework that would secure sustainability of billfish recreational fisheries in lieu of stock statuses. Such a framework is based on extensive studies of billfish habitat use and modeling encounter risks of billfish species with tuna fishing operations. Open ocean reserved areas for billfish recreational fisheries are analyzed while regulations concerning export/import of billfish products and landing restrictions are presented as critical to the conservation of the resources. The need for regional institutional developments to secure passage of resource, economic, and social information to international and national regulatory bodies is emphasized.