## The Impact on the Marine Recreational Fisheries of Longliner Operations in the Carribean

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## **ABSTRACT**

Es un hecho conocido que por muchos años han estado operando en el Caribe barcos palangreros así como barcos con redes de cerco. Recientemente ha habido un influjo de barcos palangreros estadounidenses como resultado del desarrollo reciente de la pesca del pez espada. De acuerdo con la información disponible, el número de barcos operando en el a area ha aumentado. Como resultado del incremento en el esfuerzo, ha ocurrido un decrecimiemto marcado en la captura de peces de pico, peto, dorado, y otras especies valiosas que son importantes para el pescador recreacional marino. Nosotros estámos conscientes que habra a un aumento en el 1987, de ambos tipos de barcos, el doméstico americano y el extranjero, que estara an pescando especies migratorias, mayormente pez espada y atún. Este aumento contínuo en el esfuerzo puede causar daños irreparables al abasto de peces de importancia para el pescador recreacional marino. La adopción de un régimen de manejo adecuado se complica por el hecho de la naturaleza de esta pesquería en donde hay una multitud de países envueltos. La situación se complica aún mas por el hecho de que no existe información estadística adecuada y de que muchos de los gobiernos envueltos no esta an conscientes de los efectos detrimentales que la situación pueda causar a sus pesquerías recreacionales.

Marine recreational fisheries activities are an important component of the day to day activities of a large segment of the population of the Caribbean. They fish for the pleasure of it and, most frequently, the fish caught supplements the home supply of proteinic food. Marine recreational fishing goes from the handline cast by a little boy at some spot on the beach to the sophisticated pursuit of billfih and other pelagics in modern, luxurious fishing boats.

Pastimes and hobbies play a very important role in maintaining the collective emotional stability of the population and in the formation of well-balanced, normal individuals. Recreational fishing is no exception to these pastimes.

Marine recreational fisheries also constitute an important segment of our tourism industry which, in turn, represents the economic backbone of certain nations of the Caribbean and, in other cases, the source of an important segment of their national income. Tourism and recreational fishing go hand in hand in most of the islands. Many of our visitors are greatly interested in fishing. Maintaining a good recreational fishing industry helps in "selling" our respective tourism attractions to our visitors.

The Caribbean Tourism Statistical Report of 1986, issued by the Barbados-based Caribbean Tourism Research and Development Center, indicates that the year 1985 was good for tourism in the Caribbean. During that

year, an estimated 7,880,000 tourists and 4,300,000 cruiseship passengers visited the Caribbean. In addition, there were large numbers of visits-by-day tripsers. Tourist arrivals in 1985 were 3.4 percent higher and cruise passenger arrivals about 16 percent higher than in 1984. Expenditures in the Caribbean by all visitors in 1985 is estimated at US \$5 billion, some 8 percent more than in 1984.

It is also estimated that about 278,000 persons in the Caribbean (excluding Venezuela) were directly or indirectly dependent on tourism for their livelihood in 1985.

While all marine fish species are important in terms of recreational fisheries, billfishes, dolphin fish, sharks, mackerels, and the tunas are the most important groups to which most of the efforts of marine recreational anglers are

targeted. Please notice that most of them are migratory pelagics.

Let's examine briefly the situation of these fisheries. According to the "Report on the Seasonality and Migration of Pelagic Fishes in the Eastern Caribbean" (Mahon and Mahon, unpublished report) the species comprising the catch of the multispecies pelagic fisheries of the eastern Caribbean region display a diverse array of biological and distributional patterns. The majority of these species also support fisheries along the east coast of the USA, south of Cape Hatteras. Several of these species (mainly tunas and billfishes), are also the target of large scale commercial fishing operations, primarily longlining by distant water fleets.

Most of our knowledge of these species is based on studies off the east coast of the USA and in the Gulf of Mexico. For most of the tunas which are distributed throughtout the tropics, almost all the research has been done in the Pacific and eastern Atlantic.

According to Mahon and Mahon, whereas a general view of a species' biological characteristics can be gleaned from studies conducted elsewhere, the details important to fishery management planning may be quite different in the eastern Caribbean. For example, species which migrate along the east coast of the USA in response to strong seasonal temperature shifts may not migrate much in the eastern Caribbean. Other characteristics such as growth, maturity, and spawning may be different.

In the opinion of Mahon and Mahon, "the available data from the eastern Caribbean show seasonality for many species, but we are unable to clearly distinguish between directional migration and onshore-offshore movements. One feature is notable, most species are absent from the eastern Caribbean from July to September. This coincides with the tradewind relaxation and decreased salinity in the region due to the influence of the major South American rivers."

Even if it is not definitely established scientifically, recreational fishermen estimate that most of the gamefishes migrate to the Caribbean during the winter months, following a route close to land masses, that is, in a southeasterly

direction. This trend is reversed during the warm months.

We feel it is safe to state that fishing pressure in the Caribbean might affect the "stocks" in the area and in the eastern seaboard of the United States. Consequently, it is very important for recreational fishermen to follow closely fisheries activities in the Caribbean to see that gamefishes are not overfished. In this regard, recreational fishermen throughout the Caribbean, the Gulf of Mexico, and the East coast of the United States are very much concerned about the impact that unrestricted fishing by both foreign and domestic longliners operating in the Caribbean is having on the gamefish stocks.

Official information is not available regarding the total number of US and foreign fishing vessels that operate in the area. However, it has been documented that 35 U.S. longliners operated in the area in 1985, under proper authorization, but there are claims that the total number was around 60. On the other hand, no information is available regarding the number of foreign vessels operating in the area. However, there is some scattered information that provide basis for estimates. For example, the Caribbean Fishery Management Council received a request for information, around a year ago, regarding the intention to request permits for around 40 foreign boats, which are based in St. Marteen, to fish in the U.S. Fishery Conservation Zone. We have also received information of 11 boats operating from Curacab, and we have letters stating that around 300 Korean boats might be operating in the area in the near future. No information is available to us as to the number of boats operating from St. Lucia and from Venezuela. Based on all this unconfirmed information and on some personal observations, it is our estimate that over 125 longliners and purse seiners might operate, at a given time, in the Caribbean. These are mainly, Koreans, Taiwanese, Japanese, and U.S. vessels. There is evidence also that Spanish vessels have fished the area and will probably fish in increasing numbers in the future.

Most of the U.S. domestic fleet operate longlines of around 30 to 50 miles, which are set at sunset and retrieved at dawn, as their main objective is swordfish, a night feeder. However, some are also targeting tuna at daylight. According to unconfirmed sources, most of the foreign longliners are setting lines from 50 to 100 miles long and they are fishing 24 hours a day. Even if it is a directed fishery for tuna, they will not release any of their catches regardless of the species involved.

Official information obtained by the U.S. Department of State from the National Fisheries Administration of Korea, their total catch of billfishes during 1984 was 58 mt. On the basis of 200 pounds as the average weight for billfish, this means that their total catch was around 600 billfishes during the year. We have difficulty in accepting this as reliable information taking into consideration incidental catches reported by other boats. In the absence of reliable information on landings and catch composition, but based on information obtained from different sources, our Chairman, Mr. Jose Luis Campos, a very well-known sport fisherman from San Juan who has been following the situation closely, has estimated that over 15,000 billfish a year might be taken by commercial fishing vessels operating in the Caribbean. This means that recreational fishermen have 15,000 less opportunities to encounter a billfish in their pursuit of these gamefish.

The information from different sources seems to confirm this estimate. In the way of an example, sailfish has practically disappeared from recreational landings in the U.S. Virgin Islands and Puerto Rico. From personal communication between Mr. Alfredo E. Pichardo, from Aruba, and Mr. Campos, landings of sailfish in Aruba have steadily declined from 227 in one tournament, in 1980, to 36 in 1986 during the same type of event.

In a personal communication to Mr. Campos, Mr. Juan E. Gautreau, who is in charge of fisheries statistics of gamefish tournaments in the Dominican Republic, stated that their landings have been reduced to around 50% of what they used to be. Many other areas in the Caribbean report similar situations.

We may summarize by saying that it is very evident that there is an intensive fisheries effort in the Catibbean by longliners during a large part of the year. Even if the fisheries are directed mainly at tunas and swordfish, there is no doubt that a substantial number of gamefishes are incidentally caught. The situation is impacting the sportfishing effort of many countries, including the U.S. Thus, it is very important that the community of recreational anglers keep a close view of the situation and try to see that measures are adopted for the protection of the gamefish species. We feel that some measures could be adopted by most of the nations in the area to bring about some control on the situation. Some of the measures suggested are:

 A permit system should be established, individually or collectively, by the affected countries, for the operation of these vessels. Each country should require that the fishing vessel be properly identified in order to make aerial surveillance possible and assist in the identification of those

vessels that operate without proper permits.

A Data collection system should be established by each country including requesting a species composition report from each boat operating under permit.

3. A central organization should compile the information and distribute it as

deemed convenient.

- 4. Considering that the area is a spawning ground for most of the gamefishes, all countries should consider the possibility of establishing a variable seasonal closure for the entire area by concerted, well planned action.
- A system to place observers on board some of the vessels should be examined. This will be very helpful in obtaining biostatistical data and catch and effort information.
- 6. A system of tagging and releasing the valuable species should be implemented in the area, to assist in assessing migratory patterns.
- Prohibit the landing and sale of some of the gamefishes, particularly of the billfishes.

Our common resources are being reaped from the sea by many foreign governments. If we do not adopt today a joint management regime for the area, it could be too late tomorrow.

Of no less importance, local anglers in the area should re-evaluate their own behavior in the billfish fishery. As they are so deeply worried about domestic and foreign longliner's by-catch of gamefishes, don't you think it is time to start considering the acoption of release tournaments and other conservation practices?

We would like to see our grandchildren and great grandchildren enjoy a day's fishing in our region and to be able to battle the champions of the sea, "the pelagics." But we would also expect that after a hard fought experience, and following the example set by their fathers and grandfathers, they will also release those fishes so that a healthy fishery could be maintained for the years to come. This can only be achieved if we start today with the adoption of adequate conservation practices.