Committee on Resources
Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

Testimony of

John E. Graves

Virginia Institute of Marine Science

College of William and Mary
P.O. Box 1346
Gloucester Point, VA 23062
Ph: (804) 684-7352 Fax: (804) 684-7157
graves@vims.edu

Before the

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Unites States House of Representatives

Limited Access Measures for Yellowfin Tuna

Thank you, Mr. Chairman, and the members of the Subcommittee for inviting me to speak. My name is John Graves and I am a Professor of Marine Science and Chair of the Department of Fisheries Science at the Virginia Institute of Marine Science, College of William and Mary. I have studied highly migratory species for more than 15 years, and for the past four years I have served as Chair of the Advisory Committee to the U.S. Section of the International Commission for the Conservation of Atlantic Tunas (ICCAT). I was invited to testify today on the retention limit for recreational anglers of three yellowfin tuna per person per day, a regulation that was included in the Fishery Management Plan for Atlantic Tunas, Swordfish and Sharks Final Rule. Specifically, I was asked to address two issues: (1) the quality of the science on which the decision was based; and (2) the parity of regulations among recreational and commercial fishers.

The rationale proposed by the National Marine Fisheries Service (NMFS) for the recreational retention limit for yellowfin tuna is straight-forward. The 1998 assessment of yellowfin tuna by the ICCAT Standing Committee for Research and Statistics (SCRS) determined the Atlantic-wide stock of yellowfin tuna to be fully fished. In 1993 the U.S. agreed to a binding ICCAT conservation recommendation requiring parties to cap their "effective fishing effort" at 1992 levels. Effort in the U.S. recreational fishery for yellowfin tuna has increased since 1992, and NMFS elected to implement a bag limit of three fish per person per day to offset the increase in fishing effort.

How good is the science supporting NMFS' rationale? The Atlantic-wide stock of yellowfin tuna was last assessed by the ICCAT SCRS in 1998 which included landings and effort data through 1997. Production model analyses based on the eastern Atlantic purse-seine index indicate that current yield is somewhat below maximum sustainable yield (MSY), and depending on assumptions regarding the increase in fishing efficiency of the purse seine fleet over time, fishing effort is either slightly above or below that necessary for MSY. Age structured models suggest that current levels of harvest are sustainable if recruitment does not significantly decrease. Based on these results the SCRS reaffirmed its earlier recommendations to maintain fishing effort at current levels, or preferably, to reduce it.

The U.S. policy at ICCAT has been to fully support the scientific integrity of the SCRS, and to not do so would set a precedent that would seriously diminish the effectiveness of the Commission. The analyses of the SCRS are robust. The assessment was a collaborative, international effort in which several U.S. scientists participated. It is a good bet that Atlantic yellowfin tuna are currently fully fished.

At the 1993 meeting ICCAT contracting parties agreed to cap "effective fishing effort" for yellowfin tuna at 1992 levels. Subsequently in 1995 ICCAT adopted a resolution calling on contracting parties to develop a plan elaborating the specific management measures they were taking to implement yellowfin tuna effort limitation. These plans were presented at the 1996 Commission meeting.

Effort in the U.S. recreational fishery for yellowfin tuna has increased since 1992. I was not able to determine the magnitude of the effort increase from available data, but I assume the data are available in Large Pelagic Survey estimates of the total number of person-days of offshore fishing. The United States does not rely solely on effort controls to manage recreational fisheries. In a statement to Panel 1 at the 1998 meeting the U.S. informed the Commission that it manages recreational fisheries for tunas and tuna-like fishes by using licenses, bag limits, time-area closures, closed seasons and no-sale provisions. The U.S. further stated that given these management measures, the implementation of a limited access system for recreational fisheries was neither necessary or acceptable. A combination of approaches has been used to offset increases in effort in the recreational fishery for yellowfin tuna.

Since 1992 the U.S. has implemented two management measures to reduce the recreational catch of yellowfin tuna. In 1996 NMFS increased the minimum size of yellowfin tuna from 22 to 27 inches lower jaw fork length (LJFL), and in 1999 a bag limit of three fish per person per day was implemented. The increased minimum size of yellowfin tuna was designed to prevent inadvertent landings of small bluefin tuna mistakenly identified as yellowfin tuna, but the measure also resulted in a reduction in landings of yellowfin tuna. Based on North Carolina's Marine Recreational Fisheries Statistics for the years 1993 through 1995, the 27 inch LJFL minimum size would have reduced the number of yellowfin tuna landed by 10 - 40%. At the 1996 Commission meeting the U.S. reported the 27 inch LJFL minimum size regulation as a specific management measure to implement the 1993 yellowfin effort limitation within our recreational fishery.

To further offset the increase in recreational fishing effort NMFS imposed a bag limit of three fish per person per day in the Final Rule of the Fishery Management Plan. In 1996 and 1997 Large Pelagic Survey (LPS) data indicate that approximately 95% of the trips targeting pelagic species landed nine yellowfin tuna or less, and 79% of the trips had three or more anglers on board. These data suggest that a three fish per person bag limit would not impact many anglers. However, this may not be a valid conclusion if a large number of offshore trips specifically target species other than yellowfin tuna, if a high proportion of trips with less than three anglers brought in more than 6 yellowfin tuna, or if a major user group was excluded from the LPS. Nevertheless, the conclusion is supported by dockside interview, telephone survey and

logbook data from the State of New Jersey that indicate the vast majority of offshore trips do not return with more than three yellowfin tuna per angler. With the data available to me it was not possible to calculate the actual reduction in catch that a three fish bag limit would provide, and NMFS did not provide such an estimate in the Fishery Management Plan. However, based on the above statistics, it is my perception that the reduction in total landings due to the three fish per person bag limit would not be great.

It is my conclusion that the U.S. has more than offset the increase in recreational fishing effort required in the 1993 ICCAT recommendation by instituting an increased minimum size for yellowfin tuna of 27 inches in 1996 and imposing a three fish per person per day bag limit in 1999. It is important for the U.S. to take a leadership role at ICCAT by implementing these recreational regulations. However, proactive conservation measures by the U.S., and even timely compliance to previous ICCAT recommendations, have disadvantaged our recreational and commercial fishers in the past. It is therefore imperative that we receive recognition from ICCAT for the full extent of these conservation measures.

I was also asked to comment on the parity of yellowfin tuna effort limitations among recreational and commercial fishers. Since 1993 effort limitations in the commercial yellowfin tuna fishery include elimination of pair trawl fishing, a voluntary reduction in purse seine effort, and the implementation of a limited access program for the pelagic longline fishery. From 1991 through 1995 the annual catch of the experimental pair trawl fishery for yellowfin tuna was 33.7 metric tons. This fishery has been eliminated. From 1991 through 1994 the purse seine fishery landed an average of 401 metric tons of yellowfin tuna. Since that time a voluntary reduction in purse seine effort on yellowfin tuna resulted in a single reported catch of 6.8 metric tons in 1996. These figures demonstrate a significant reduction in effort and landings by pair trawls and purse seines, accounting for almost 10% of the U.S. commercial yellowfin tuna landings.

The pelagic longline is the major gear type used to land yellowfin tuna in the commercial fishery, and the effect of a limited access program on effort within the pelagic longline fishery is difficult to assess at this time. The Fishery Management Plan indicates that a large number of vessels with permits will be excluded from the fishery because they do not meet permitting criteria. However, the number of boats able to participate in the fishery is probably not as good an indicator of fishing effort as is the number of hooks set. In 1992 the pelagic longline fishery reported fishing 9.1 million hooks. The value increased to about 9.7 million hooks in 1997. The actual reduction in the number of hooks set resulting from limited entry will only be evident after full implementation of the program for a fishing year, and effort reductions could also be promoted by implementation of time-area closures to protect juvenile swordfish and billfish.

In conclusion, it is not possible with the available data to determine whether the mandated effort and catch reductions will have equal effects on the recreational and commercial yellowfin fisheries. Clearly, the perception in both constituencies is that they will not. And as I am sure you are aware, the members of each fishery see themselves as being unfairly restricted. It is my opinion that the implementation of a minimum size and a bag limit more than meet the ICCAT mandate to not increase effort in recreational fishery. It is too early to determine if the elimination of the pair trawl fishery, voluntary reduction in purse seine effort, implementation of limited entry program for the pelagic longline fishery, and possible time-area closures will compensate for the increase in pelagic longline effort that has occurred since 1992, but it appears that they will.

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