

COMISION INTERAMERICANA DEL ATUN TROPICAL INTER-AMERICAN TROPICAL TUNA COMMISSION

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27 November 2006
Ref.: 0803-708

Mr. Andrew Wright
Executive Secretary
West and Central Pacific Fisheries Commission
P.O. BOx 2356
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Dear Mr. Wright:

You asked recently for comments about the IATTC experience with measures to restrict fishing effort to conserve tuna stocks in the eastern Pacific Ocean. I have prepared an outline of the measures adopted by the IATTC since 1966, which may be useful in your preparations for your meeting.

The IATTC successfully used a closure of the purse-seine fishery in the Commission's Yellowfin Regulatory Area (CYRA) from 1966 to 1979, and subsequently with similar measures during 1998 - 2001. For a period between 1980 and 1985 it was not possible to reach agreement on the implementation of conservation measures, and during 1986 to 1997 conservation measures were not necessary. The closure allowed fishing to continue within the CYRA for other species so long as the catch of yellowfin did not exceed 15% of the total.

The closure of the CYRA for purse-seine fishing for yellowfin was a successful measure because:

- 90% of the yellowfin catch was taken by purse-seine,
- fishing outside the CYRA caught large yellowfin, catches of which had a relatively small impact the stock,
- purse-seine fishing that targeted skipjack was not affected by the closure.

In 1998, the IATTC introduced its first measure to control purse-seine catches of bigeye tuna by prohibiting sets on floating objects after 45,000 t of bigeye had been taken ([Resolution C-98-05](#)). A similar measure was adopted in 1999 ([Resolution C-99-06](#)), and provisionally for 2000 ([Resolution C-99-09](#)).

However, there was a very strong recruitment of bigeye in 1998 producing very large catches in 2000 which would have led to the fishery on floating objects being closed in the middle of the year, with very serious repercussion of the catches of skipjack. Eventually, the Commission

closed the fishery on floating objects from 15 September to 15 December 2000 ([Resolution C-00-02](#)).

During the brief period that management measures had been adopted for bigeye tuna two difficulties arose. The first was in determining in advance the appropriate TAC for bigeye. This was particularly important because purse-seine catches bigeye were taken as a minor catch in sets on floating objects. While stopping fishing for bigeye too early may not have been serious from the point of view of catches of bigeye, it would have been a more serious issue if skipjack catches were curtailed unnecessarily.

The objectives of management measures for bigeye tuna and the means of achieving them have varied. The initial concern, during the 1990s, with purse-seine catches of bigeye on FADs was that the fishery particularly selected small bigeye tuna. The Commission tended to equate purse-seine caught bigeye with small or immature bigeye, and restrictions were aimed at reducing all purse-seine catches. However, in 2000, the bigeye taken by purse-seine vessels were medium sized indicating the fishery could catch a wider range of sizes than hitherto thought. In 2001, the bigeye closure was modified to be triggered by the estimated catch of bigeye less than 60cm ([Resolution C-01-06](#)). There was also an emerging problem in monitoring sets on floating objects. Even with vessels carrying an observer, there was a trend for the vessel to make sets including, or near floating objects, and to claim there were on an unassociated school.

In addition, the use of FADs, which were spread throughout the fishery started to produce catches of small bigeye and, to a lesser extent, yellowfin outside the CYRA. A CYRA closure was not effective for bigeye, and its rationale for yellowfin was weakened.

As a result of these issues, the management measures for purse-seine fishing were switched from TAC based measures to measures to limit fishing effort. This was particularly convenient in 2002, when the recommended reductions in effort for bigeye and yellowfin were comparable and the conservation resolution for 2002 ([Resolution C-02-04](#)) simply closed the whole EPO to purse-seine fishing during the month of December.

In 2003, the December closure was limited to an area of the EPO that contained a large part of the fishery in association with FADs shown in figure 1 below ([Resolution C-03-12](#)).

In a subsequent analysis of the effect of the closed area, it was determined that the reduction in catch attributed to the closure was negligible and that, overall, the closure was ineffective ([SAR-5-06](#), 2004 Stock Assessment Working Group). This was because the closure was both too short, and the area was too small, allowing the fleet to make good catches of yellowfin and bigeye tuna outside the closed area.

In 2003, it was also agreed that the fishery in all of the EPO should be closed to purse-seining during 1 August to 11 September 2004. The dates for 2004 were chosen as the period in which there would be the greatest reduction of catches of small bigeye compared to the reduction of skipjack catch. The time of the year made little difference for yellowfin catches. The Resolution also required that the longline catches of bigeye tuna of each CPC be restricted to the level of their catch in 2001. This was the first binding limit on longline catches in the eastern Pacific. In fact, in 2004 there was a debate about the most appropriate period for a closure and in the event

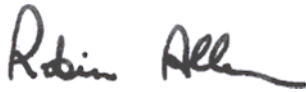
two six-week periods of closure were adopted, the second one being from 20 November to 31 December, with each CPC being able to adopt one or the other for its fleet.

An assessment of the effect of the closures in 2004 and 2005 on the number of sets of each type at the 2006 Stock Assessment Review Group ([SAR-7-12](#)) showed that there was not a consistent reduction in fishing effort in 2004 and 2005 compared to 2003. This was in part due to the growth of the purse-seine fleet, and also because many vessels scheduled their normal maintenance, when they would not have been fishing anyway, during the closure period.

The six-week closures were applied from 2004-2006 (Resolution [C-04-09](#)), and subsequently extended to 2007 ([Resolution C-06-02](#).) The Resolutions also provided specific catch limits for bigeye taken by longline for China, Chinese Taipei, Japan, and Korea and required other CPCs to limit their catches to those of 2001. For 2007, that was changed to the maximum of 500t or their catch in 2001.

I hope this assists you in your work of providing advice for your Commission.

Yours sincerely,

A handwritten signature in black ink that reads "Robin Allen". The signature is written in a cursive, flowing style.

Robin Allen
Director

Figure 1. Closure zone, established by Resolution C-03-12 on tuna conservation

