INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISIÓN INTERAMERICANA DEL ATÚN TROPICAL

75TH MEETING

CANCUN (MEXICO)
25-29 JUNE 2007

DOCUMENT IATTC-75-05a

STAFF RESPONSE TO REQUESTS FROM *AD HOC* MEETING, FEBRUARY 2007

The *ad hoc* meeting of the IATTC in February 2007 recommended that Commission staff provide the following information and analysis for consideration by the Parties in June:

1. work to refine critical areas for juvenile bigeye tuna and juvenile yellowfin tuna and consider the conservation value of closing these areas to purse-seine fishing for a period or year-round;
2. produce estimates of total allowable catch (TAC);
3. compile a list of the practical and administrative issues raised regarding potential use of national catch allocations or individual fishing quotas (IFQs) for vessels;
4. estimate the conservation measures that would be necessary if the Commission implemented the *Plan for regional management of fishing capacity*[1] and reduced the purse-seine fleet to the target capacity levels;
5. investigate the impact of fishing effort on adult stocks of yellowfin tuna during recent years;
6. summarize available information on the impacts of the use of FADs, describe areas where FADs should not be placed because of the probability of catching juvenile tunas, determine the increase in vulnerability of tunas since the introduction of the FAD fishery, and determine the number of FADs placed.

1. CONSERVATION VALUE OF CLOSING CRITICAL AREAS FOR JUVENILE YELLOWFIN AND BIGEYE TUNA

The staff recommendations in Document IATTC-75-07b address the conservation value of closing critical areas for juvenile yellowfin and bigeye tuna. The staff believes that closing coastal areas would significantly reduce the catch of juvenile yellowfin and may not have adverse consequences for the catches of skipjack and bigeye. On the other hand, closures designed to reduce catches of juvenile bigeye would be likely to lead to significant increases in yellowfin catches and reductions in skipjack catches.

2. ESTIMATES OF TOTAL ALLOWABLE CATCH

The staff recommendations in Document IATTC-75-07b include options for total allowable catches of yellowfin and bigeye tuna.

3. ISSUES REGARDING THE USE OF NATIONAL QUOTAS OR INDIVIDUAL FISHING QUOTAS

The allocation of either national quotas or individual quotas raises issues of criteria for allocation, monitoring of catches against quotas, and transferability.

3.1. Allocation

Allocation of national quotas could be negotiated, possibly after agreeing on criteria for allocation. The simplest allocation is based on recent catches, but this methodis often seen as unfair by states that have

[1] http://www.iattc.org/PDFFiles2/IATTC-73-EPO-Capacity-Plan.pdf

aspirations to develop their tuna industries. Following a consideration of criteria for allocating purse-seine capacity, the Commission adopted Resolution C-98-11, in which allocation of capacity took into account various factors, including: the catch of national fleets during the 1985-1998 period; the amount of catch historically taken within the zones where each state exercises sovereignty or national jurisdiction; the landings of tuna in each nation; and the contribution of each state to the IATTC conservation program, including the reduction of dolphin mortality.

Allocating quotas to individual vessels or vessel owners can also be based on individual catch histories. Catch histories may be reduced by factors such as breakdowns, recent purchases of vessels, *etc*., and it may be necessary to establish a system for compensating for such factors. Under the AIDCP, the total annual dolphin mortality limit is simply divided equally among the qualified vessels, but it is unlikely that such a system would be acceptable for catch quotas.

3.2. Monitoring of catch against quota

Currently, various catch reporting systems are used within the IATTC. Purse-seine vessels and some other vessels based in coastal countries report catches to the IATTC staff, distant-water longline and troll vessels generally report nationally. Some reporting systems are too slow to be used to monitor catch against quotas. Modern technologies, for example vessel monitoring systems (VMS), can provide real-time catch reports.

The consequences of exceeding either national or individual quotas need to be considered. One option is to deduct the excess catch from the next year's quota, possibly with the addition of a penalty.

In addition to monitoring national or individual catches, there must be a record of the quotas. This is more complex if excess catches are deducted from the quota next year..

3.3. Transferability

Some form of transferability is likely to be necessary to allow for new entrants and to allow retirement of those who wish to leave the industry. Without transferability, changes in the distribution of quota could only come about as a result of reallocation of quota.

Transferability of individual quotas requires a very complex system for recording ownership of quotas, and makes monitoring, management and enforcement much more difficult.

4. CONSERVATION MEASURES NECESSARY IF THE COMMISSION IMPLEMENTED THE PLAN FOR REGIONAL MANAGEMENT OF FISHING CAPACITY

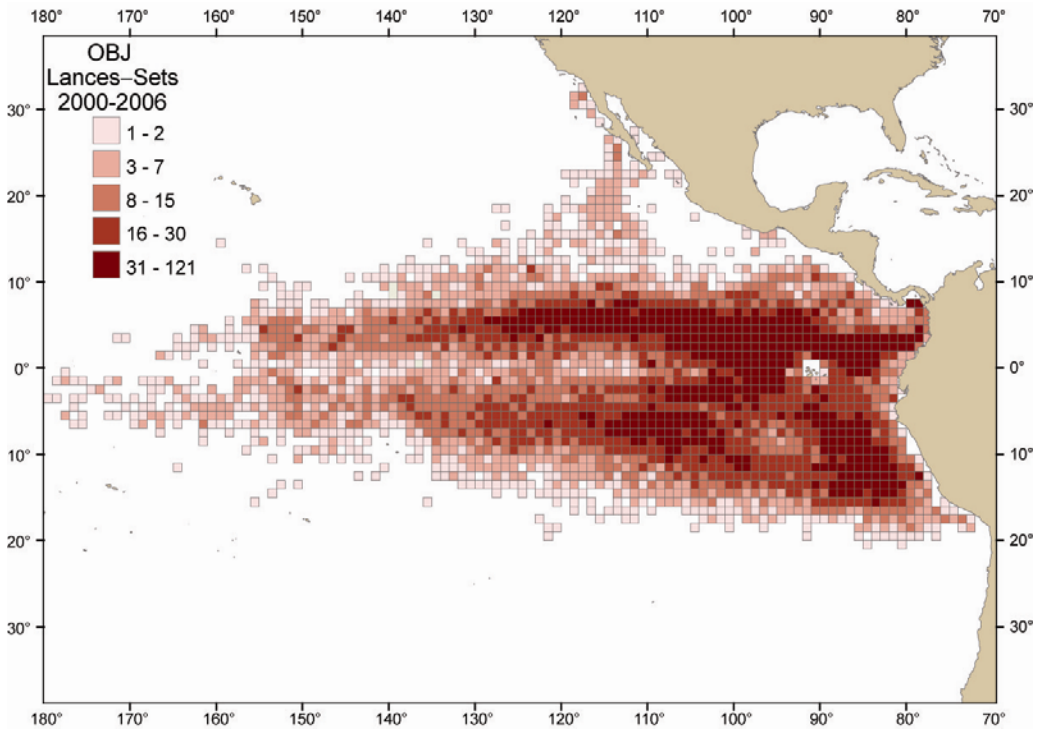
The target for the purse-seine fleet capacity in the *Plan for regional management of fishing capacity* was calculated with the intention that other management measures would not be necessary if the purse-seine fleet was reduced to the target size and other fleets were not increased. However, some economic studies have shown that there may be a significant difference between measurements of fishing capacity contemplated in the regional plan of action, and actual harvest (excess capacity) that the fleet in the eastern Pacific is capable of. It is possible that a reduction of the fleet size would lead to more efficient use of the remaining vessels, and if so, additional measures may be required.

5. IMPACT OF FISHING EFFORT ON ADULT STOCKS OF YELLOWFIN TUNA DURING RECENT YEARS

The yellowfin stock assessment summarized in Document IATTC-75-06 considers the effect of fishing effort on adult stocks of yellowfin tuna during recent years.

6. AVAILABLE INFORMATION ON THE IMPACT OF FADs

The figure below shows the distribution of sets on floating objects (most of which are FADs) during the 2000-2006 period.



The number of sets and the catches in those years are as follows.

	Number of sets—Número de lances			Retained catch—Captura retenida		
	Vessel capacity-Capacidad del buque		Total	YFT	SKJ	BET
	≤ 363 t	> 363 t				
OBJ	**Sets on fish associated with floating objects Lances sobre peces asociados con objetos flotantes**					
2000	504	3,916	4,420	42,688	121,036	91,474
2001	801	5,744	6,545	66,353	122,752	60,627
2002	857	5,781	6,638	37,797	116,656	55,916
2003	704	5,497	6,201	29,798	181,326	52,705
2004	615	5,083	5,698	27,595	117,669	65,829
2005	641	5,122	5,763	26,238	132,483	67,510
2006	1,086	7,140	8,226	35,642	194,679	69,564

What is not known for the fleet as a whole is how many FADs are placed at sea, where they are deployed and for how long.