

COMISIÓN INTERAMERICANA DEL ATÚN TROPICAL  
INTER-AMERICAN TROPICAL TUNA COMMISSION

**WORKING GROUP ON BYCATCH**

**3<sup>RD</sup> MEETING**

LA JOLLA, CALIFORNIA (USA)  
5-6 MARCH 2002

**DOCUMENT BYC-3-06**

**EVALUATION OF OTHER MEASURES TO OBTAIN BYCATCH DATA**

**I. Bycatches by vessels not covered by observer programs**

As explained in Document IATTC-68-11, prepared for the 68<sup>th</sup> meeting of the Commission held in June 2001, the resolution on bycatch of June 2000 calls for the development, for consideration by the Parties, of a program to obtain data on bycatches by purse-seine vessels not covered by the current observer program and by longline vessels and other tuna-fishing vessels. This program is to include consideration of the placement of observers or any alternative data collection system, as appropriate, and should specify the proposed funding mechanisms. A program to collect such data was discussed in the above-referenced document, but was not considered by the governments at the 68<sup>th</sup> meeting. The most salient aspects of the program are repeated below.

**1. Small purse-seine vessels**

The staff has prepared a plan to obtain catch data for Class 4 and 5 vessels (182-362 mt carrying capacity), not covered by the current observer program, under which observers would be placed on 20-25% of trips made by these vessels, and all their unloadings would be monitored for two years. On the basis of an analysis of the data obtained, a long-term coverage level would be proposed. For smaller purse-seine vessels and other tuna vessels such as baitboats, the staff would continue the current practice of abstracting vessel logbooks, when available, and incorporating this information into the analyses.

The cost of such an observer program would be approximately US\$70,000-80,000. This cost could be borne by vessel owners, as with the AIDCP On-Board Observer Program. With 25% coverage, the vessel assessment would be approximately US\$8.00-8.50 per cubic meter. If the Commission wishes to fund the program in this way, it should establish the assessment fee by a resolution. The program would be accounted for separately from the IDCP program.

**2. Longline vessels**

There are two components to this question. The first and most important, in terms of catches, is the fleet of large longliners fishing in the eastern Pacific Ocean (EPO). The staff consulted with Japan to develop an appropriate program to obtain bycatch information for the Japanese fleet, and it appears that such a program will be implemented in the near future. Japan has proposed the following preliminary program for a bycatch data collection system for its longline vessels:

**a. First Phase: 2001-2002**

The following activities will be conducted as a feasibility study;

- i. Japanese commercial tuna longline vessels operating in the EPO will be asked to collect and report bycatch data;
- ii. Bycatch data collection would be conducted by possibly two Japanese research vessels in the EPO (chartered commercial tuna longline vessels that will be engaged solely in scientific research activities, with at least one scientist aboard during operations);
- iii. The results of i) and ii) above and the accuracy of the data obtained will be reviewed, and the feasibility of continuing these arrangements will be assessed.

These arrangements will cover sharks and seabirds since they are subjects of the FAO International Plans of Action for the conservation and management of sharks and for reducing the incidental catch of seabirds in longline fisheries.

**b. Second Phase: 2003 →**

The program to be developed and implemented will be based on the results of the first phase.

**c. Funds and handling of data**

The cost of implementing arrangements of i) and ii) will be borne by Japan. The data obtained will be collected and compiled by the Japanese National Research Institute of Far Seas Fisheries, and thereafter provided to the IATTC staff. Analyses will be conducted jointly by Japan and the IATTC staff. Confidentiality should be ensured for these processes.

The staff has also written to other governments with large longline vessels that fish, but do not unload their catches, in the region, namely the European Union (for Spain), Korea, and Taiwan, but to date has not received any responses regarding their intentions regarding the collection of bycatch data.

The second component of the longline fishery is the fleet of relatively small longline vessels based in the region, flying the flags of several states of the region. There are also longline vessels flying the flags of states outside the region, which apparently are based in or licensed by some of the coastal states. As these vessels unload in the region, data on their catches and bycatches may be accessible to IATTC field offices, and hence it may be possible to establish a system for collecting these data different to that for longliners whose catches are not landed in the region. The table below summarizes the information available on numbers of such vessels that have fished in the EPO or unloaded tuna in ports of the region, by flag.

BLZ	Belize	13
BOL	Bolivia	4
CHN	China	10
COL	Colombia	10
CRI	Costa Rica	81
ECU	Ecuador	113
GTM	Guatemala	18
HON	Honduras	85 <sup>1</sup>
IDN	Indonesia	19
MEX	Mexico	79
NIC	Nicaragua	46
PAN	Panama	42
PER	Peru	- <sup>2</sup>
SLV	El Salvador	5
TWN	Taiwan	29
USA	United States	2
VCT	St. Vincent	2
	<b>TOTAL</b>	<b>558</b>

The staff has been attempting to obtain more information regarding the scope and activities of this fleet. At present there is not much information available to the staff regarding the catches of these vessels, although several governments are cooperating in providing information.

<sup>1</sup> Includes all Honduran-flag vessels, some of which do not fish in the EPO, and some may fish in the EPO but do not unload their catches in ports of the region

<sup>2</sup> Data unavailable

## **II. Video cameras to assess bycatches in unobserved vessels**

The resolution calls for the Parties to consider alternative data collection systems to estimate bycatches of vessels that are currently unobserved, essentially small purse seiners (less than 363 mt carrying capacity) and longliners. One possibility is the use of video cameras that operate automatically.

In 1994, the staff began tests on a video camera system which could be used on tuna vessels for observing activities related to setting on dolphins. The second of the two prototypes built was deployed in 1998. The camera was designed to be completely self-contained: it carried its own power source, was resistant to the elements and tampering and would not require any intervention by vessel personnel while at sea.

Images were recorded on 8mm Hi8 tape with 4 hours of recording time. Ten seconds of videotape were recorded every 30 minutes during daylight hours. The camera was mounted as high as practical, either halfway up the mast or on top of the pilothouse, and was aimed off the port side of the vessel to film the area where the net is normally deployed during a set.

To adapt this system for monitoring bycatches some technical problems will have to be resolved. Since the camera is completely self-contained, it is limited in power and recording time. To maximize both, the camera should be activated only when catch is loaded aboard the vessel. A system to detect when a set is occurring, and more specifically to detect when catch is brought aboard, would need to be developed. It is estimated that a single prototype would cost approximately US\$10,000.