COMISIÓN INTERAMERICANA DEL ATÚN TROPICAL INTER-AMERICAN TROPICAL TUNA COMMISSION

WORKING GROUP ON BYCATCH 3RD MEETING

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

DOCUMENT BYC-3-05a

BYCATCH OF SEA TURTLES IN THE TUNA PURSE-SEINE FISHERY

One of the major objectives of the Agreement for the International Dolphin Conservation Program (AIDCP) is the reduction of the bycatch of all species taken by the purse-seine fishery. The bycatch of sea turtles has been of particular interest because of their endangered or threatened status and because their life-history characteristics are consistent with a population that grows slowly. In October 1999, following the recommendation of the Bycatch Working Group and the objectives of the AIDCP, the IATTC resolved that the States with purse-seine vessels fishing for tunas in the eastern Pacific Ocean (EPO) should require "the release of all sea turtles caught, and report on their number and the condition in which they were released, and that States with other types of fishing vessels operating in EPO encourage these practices to the extent practicable."

In June 2000, a more specific resolution was adopted by the IATTC at the recommendation of the Bycatch Working Group, requiring "fishermen on purse-seine vessels [to] promptly release unharmed, to the extent practicable, all sea turtles, sharks, billfishes, rays, mahi-mahi and other non-target species" and establishing "specific measures for application to encircled or entangled sea turtles as follows:

- Whenever a sea turtle is sighted in the net, a speedboat should be stationed close to the point where the net is lifted out of the water.
- If a turtle is entangled in the net, net roll should stop as soon as the turtle comes out of the water and should not start again until the turtle has been disentangled and released.
- If a turtle is brought aboard the vessel, it should, if necessary, be resuscitated before being returned to the water."

The staff conducted a preliminary analysis of the compliance with these provisions of the 2000 resolution. The *Sea Turtle Records* with information collected in 2001 were examined. The data base contained information from 461 IATTC trips; this does not include approximately 37 trips that were not yet available for this summary, nor does it include data from national programs.

During 291 sets, most of them on floating objects, 308 sea turtles were encircled (Table 1); of these, 70 (23%) died during the set, 18 (6%) were released with serious (5) or slight (13) injuries, and the remainder (71%) were released unharmed. Of the 70 turtles killed, 64 (91%) died going through the power block, 3 (4%) died due to drowning or other causes, and at least 3 (4%) were killed intentionally for later consumption. As is the case for dolphins, all turtles that passed through the power block are considered mortalities, even when the turtle is released alive afterwards, because the injuries sustained are typically serious and likely to be fatal. Passing turtles through the power block is usually preventable, but continues to be a major source of mortality, and runs contrary to both the current and previous IATTC resolutions and the recommendations of the Bycatch Working Group.

A speedboat was recorded as being launched during 6 (2%) of the 291 sets in which turtles were encircled.

During the 217 sets in which turtles were entangled in the purse-seine net, net roll was stopped during 126 sets (58%) to release a turtle, while 89 cases (41%) of non-compliance with this requirement were recorded. For the remaining sets, information about net roll was not available, or the turtle was released

or escaped by other means.

Sea turtles can also become entangled in net materials that are discarded at sea or hung under FADs. In 83 sets, FADs that had sea turtles already entangled in net webbing were encircled. Of the 89 turtles found in these circumstances, 39 (44%) were already dead, 36 (40%) were released unharmed, 10 (11%) were released with serious (2) or slight (8) injuries, 3 (3%) were left entangled, and 1 (1%) died during fishing operations. It should be noted that sea turtles entangled in flotsam-associated nets were often rescued even when no set was made. Of 261 entangled turtles sighted, 67 (26%) were already dead, 122 (47%) were released unharmed, and 29 (11%) were released with serious (9) or slight (20) injuries. Apparently many captains do assume the obligation to release turtles from FAD webbing, regardless of whether they encircle it, to minimize turtle mortality.

Table 1. Number of sets involving sea turtles, number of sea turtles involved, and number of sea turtle mortalities, by set type, during 2001.

Set type	Sets		Turtles		Mortalities	
	No.	%	No.	%	No.	%
Dolphin	44	15.1	44	14.4	7	10.0
Unassociated	34	11.7	39	12.8	18	25.7
Floating object	213	73.2	223	72.9	45	64.3
Total	291		306		70	