RECOMMENDATIONS BY THE STAFF FOR CONSERVATION MEASURES IN THE EASTERN PACIFIC OCEAN, 2013

CONSERVATION OF TUNAS

YELLOWFIN, SKIPJACK, AND BIGEYE TUNAS

The staff recommends maintaining Resolution C-13-01 for 2015.

PACIFIC BLUEFIN TUNA:

The staff therefore recommends that the commercial catches in 2014 be limited below 3,154 t, which was the estimated commercial catch in 2013. The staff recommends that the non-commercial catches in 2014 be limited below 208 t, which is based on the same method that was applied to commercial catch to determine that recommended limit.

NORTHERN ALBACORE TUNA:

No new measures are proposed by the staff for 2014.

REFERENCE POINTS

Stock	Target reference point	Limit reference point
Albacore tuna	B_{MSY}; F_{MSY}	$F_{0.5R0}$ and $S_{0.5R0}$, where h = 0.75
Bigeye tuna	B_{MSY}; F_{MSY}	$F_{0.5R0}$ and $S_{0.5R0}$, where h = 0.75
Skipjack tuna	B_{MSY}; F_{MSY}	$F_{0.5R0}$ and $S_{0.5R0}$, where h = 0.75
Yellowfin tuna	B_{MSY}; F_{MSY}	$F_{0.5R0}$ and $S_{0.5R0}$, where h = 0.75
Bluefin tuna	B_{MSY}; F_{MSY}	$F_{0.5R0}$ and $S_{0.5R0}$, where h = 0.75

The harvest control rule proposed is to decrease fishing mortality to the MSY level if it currently exceeds that level. In addition to that F_{MSY}-based management action, if the abundance of a stock falls below its limit reference point, further action should be taken to promote the rebuilding of the population towards its target reference point.

Conservation of silky sharks

- For purse-seine vessels:
  - Prohibit retention of silky sharks by all vessels, and require that the sharks be promptly released unharmed, to the extent feasible.
  - Establish observer programs for capacity class 1-5 vessels, with technical assistance from IATTC staff, at a level of observer coverage adequate to reliably monitor silky shark bycatches.
  - Record, through observer programs for purse-seine vessels of all capacity classes, the number and status (dead/alive) of silky sharks caught and released.
- For vessels other than purse-seiners, require that all silky sharks captured in fisheries that do not target this species be released as soon as they are seen in the net, on a hook, or on deck, to improve their chances of survival.
- **Close fisheries directed at silky sharks for a three-month period each year, preferably during the first semester. Fisheries not directed at silky sharks, but which catch the species incidentally, may continue to operate during the closure, but should not be allowed to use steel leaders on longlines for the duration of the closure.** The three-month closure is based on the ratio of the best measure of average catch in 2008-2009 to that in 2011-2102. The distribution of catches suggests that the predominant period of silky shark catch is the first half of the year.
- Limit the catch of silky sharks of less than 100 cm total length during a trip to 20% of the total number of silky sharks caught during that trip.
- Identify silky shark pupping grounds and prohibit fishing (with steel leaders) in them.
- Change Paragraph 12 of Resolution C-05-03 to read “Paragraphs 2-10 of this resolution apply only to sharks caught in association with fisheries managed by IATTC” so that reporting of shark catches, by species, and of fishing effort, required by paragraph 11 of the resolution, is mandatory for all vessels.
- Conduct experiments on mitigating shark catches, especially in longline fisheries, and on the survival of sharks captured by all gear types, with priority given to those gears with significant catches. Survival experiments should include studies of the effects on survival of shorter sets and of the use of circle hooks.
- support research on mitigation of shark bycatch and data collection projects.

BYCATCH

- **SEABIRDS**
- **HANDLING OF MOBULID RAYS IN PURSE-SEINE FISHERIES**
- **HANDLING OF SEA TURTLES IN LONGLINE FISHERIES**
- **FISHING GEAR CONFIGURATIONS-**
- **NON-ENTANGLING FADS**

IDENTIFICATION AND MARKING OF FADS

- Vessels should authorize the companies the operate the satellite systems used to track the FADs to provide to the IATTC perhaps with a time lag of four months to protect the owner's proprietary information.
- FADs with satellite buoys deployed after January 1, 2015, shall be marked on the upper surface with a five-digit numeric code, at least 50 mm high...

OBSERVER COVERAGE OF LONGLINE VESSELS

- The data show that 5% is too low a level of coverage to allow accurate estimates of the catch of species caught infrequently in those fisheries.
- The staff recommends 20% observer coverage of large longline vessels until sufficient information is available to justify a revision.