

**REPORT ON THE WORKSHOP ON NORTHERN PACIFIC BLUEFIN TUNA (SHIMIZU, JAPAN,
FEBRUARY 1-2, 1995)**

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Assistant Executive Secretary

I was requested to attend the Workshop on Northern Pacific Bluefin Tuna, held in Shimizu on February 1-2, 1995, representing ICCAT in an observer capacity, by the Workshop Chairman, Dr. Z. Suzuki. This Workshop took place immediately after the FAO Consultation on Pacific Fisheries Interaction, so that many experts attending the Consultation could extend their stay by two days to also attend the Workshop.

Dr. Suzuki considered that my attendance would be beneficial both for the Atlantic group as well as the Pacific group of scientists working on bluefin. Authorization was granted by the ICCAT Executive Secretary for me to attend the Workshop, although the per diem to cover this period of stay at Shimizu by the Commission was not authorized. Therefore, I participated in the Workshop at my own expense, since I believed it would be beneficial to ICCAT.

The Agenda is attached as an Appendix. The meeting reviewed the progress made on northern bluefin tuna researches, which have been jointly conducted by I-ATTC and Japanese scientists over the last two years and aimed to plan research activities for the immediate future.

At present, a single population is hypothesized for the entire north Pacific, the distribution of which even extends to the south Pacific. However, the existence of sub-populations, which might have different migration patterns and habitat can not be rejected. The major problem for the research of the Pacific bluefin tuna seems to be the lack of basic data. Catch statistics are uncertain for juvenile tunas and effort data are not available for most of the catches. Hence, there are no reliable abundance indices for the Pacific bluefin, since most of the fisheries are coastal small scale fisheries, which are multi-purpose fisheries which do not only target bluefin tuna. The fisheries are very dynamic and change yearly. In this respect, they are very similar to the Mediterranean fisheries, except that only U.S., Japan and Taiwan are involved in the fisheries of the Pacific.

Quite extended discussions took place about the identification of northern bluefin tuna as distinct from southern bluefin tuna, particularly in relation to the ICCAT Bluefin Tuna Statistical Document Program.

Size data are quite abundant for one sector of the Japanese purse seine fisheries but not available for all the fisheries. A new catch-at-size table for the Japanese fisheries are created and presented, while some primitive cohort analysis was conducted by the IATTC scientists.

Future planning centered on how to improve the quality of data. The use of archival tags were discussed. The major problem is the cost per tag and there was a discussion as to whether all the agencies in the world which are interested in using archival tags could jointly guarantee an order of the minimal number of tags needed to make the price more realistic (currently \$1000 per tag).

WORKSHOP ON NORTHERN PACIFIC BLUEFIN TUNA

1-2 February 1995
Shimizu, Shizuoka, Japan,

AGENDA (Draft)

Wednesday 1 February

1. Opening remarks
2. Discussion of agenda
3. Review of past and present research
(presentation -- 10 minutes, discussion -- 10 minutes)

DATA

1. Itoh, T, and T. Nishida, Data catalogue.
2. Itoh, T., Y. Uozumi, S. Tsuji and T. Nishida, Pacific northern bluefin tuna (P-NBT) fisheries in Japan.
3. Tsuji, S., Trends in bluefin tuna catch and effort by Japanese coastal purse seine.
4. Itoh, T, and T. Nishida, Review of length-weight and age-length relationships for Pacific northern bluefin tuna (P-NBT).
5. Tohoku National Fisheries Research Institute, Length and weight measurement of landing bluefin tuna caught by purse seine fisheries.
6. Wang, C. H., Taiwanese bluefin fisheries in the Pacific Ocean.

ANALYSES

7. Tomlinson, P. K., Movement of large bluefin tuna, *Thunnus thynnus*, in the North Pacific Ocean, as determined from the Japanese longline fishery, and implications regarding interactions between the fisheries of the western and eastern Pacific Ocean.
8. Bayliff, W. H., Timing of the departure of juvenile bluefin from the western Pacific Ocean.
9. Itoh, T, and T. Nishida, CPUE trend of Pacific northern bluefin tuna longline fisheries.
10. Nishida, T., Information of bait in the Pacific northern bluefin tuna longline fisheries - brief note -.
11. Ishizuka, Y. and T. Itoh, Estimates of catch and age compositions for bluefin tuna (*Thunnus thynnus*) caught by Japanese fisheries in the north Pacific Ocean during 1965 to 1992.
12. Bayliff, W. H., Yield-per-recruit analyses of bluefin tuna in the Pacific Ocean.
13. Bayliff, W. H., Spawner-recruit and recruit-spawner relationships for northern bluefin tuna, *Thunnus thynnus*, in the Pacific Ocean.

14. Tomlinson, P. K., Pacific northern bluefin tuna cohort analyses, with implications for management.
15. Tsuji, S., Review of bluefin larval survey and recent information on fecundity.

ARCHIVAL TAG

16. Bayliff, W. H., Tagging northern bluefin tuna with archival tags.
17. Itoh, T, and T. Nishida, Influence of archival tag on fish.

Thursday 2 February

4. Future research

1. Catch and effort data
 2. Size-frequency data
 3. Other biological data (growth, mortality, longevity, reproduction, etc.)
 4. Relationships with the environment
 5. Stock structure
 6. Assessment
 7. Tagging, comment
Archival.
5. Future workshops