

BLUEFIN TUNA TAGGING OFF THE ATLANTIC COAST OF MOROCCO IN 1978

by

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SUMMARY

The 1978 bluefin tuna tagging operations off Casablanca, Morocco were conducted from July 21 through July 23. Due to a lack of fish in the fishery, only 12 age I bluefin tuna were double tagged with ICCAT tags and released.

One bluefin tuna tagged in 1978 was also recaptured in the release area after three days at liberty.

The Atlantic bluefin tuna tagging program conducted off Morocco in 1977 (SCRS/77/22) was continued in 1978. The operations in 1978, however, were shifted to make use of commercial purse seine vessels fishing out of Casablanca. We felt that the commercial boats would provide us with easier access to a greater number of fish for tagging than had been available by trolling from a research vessel. The Office National des Pêches du Maroc and ICCAT agreed on this program and gave their support.

The Moroccan purse seiner "MARIAGE" (27 tons GRT) agreed to participate in the 1978 tagging effort and the program was scheduled to begin on June 15. Jose Cort and Jose Carlos Rey of Spain joined the fishery but unfortunately the fishery had not begun and no bluefin had been seen in the area. The visiting scientists returned to their own work as plans were postponed until the fish arrived.

On June 27 an exploratory cruise was made from Casablanca by a research vessel of MRP. In three days of searching the traditional fishing area no bluefin tuna were discovered. The only fish located were some schools of albacore, Thunnus alalunga, and a small quantity of atlantic bonito, Sarda sarda. Four albacore were tagged and released on June 28, 1978 (see Appendix I).

Bluefin tuna were first landed in Casablanca on July 6. Catches, however, were very low and sparse for the first three weeks of July (<500 fish). As a result of the lack of fish the purse seiners were fishing only for sardines instead of tuna. On July 21st we were finally able to hire the purse seiner to look for bluefin.

Only three trips could be made with the seiner before the fishermen decided to return to exclusively fishing for sardines. During this time we were never able to find a school of bluefin to set and the entire fleet made less than 5 sets. The only tagging that could be accomplished was of the dispersed fish taken on the jig lines during searching operations.

A total of 12 age I bluefin tuna were tagged from jig catches during the three day operation - 7 on July 21, 3 on July 22 and 2 on July 23. Sizes ranged from 55 to 65 cm and all the fish were taken in the same general area (Table 1) in 22°C water.

On July 23, 1978 one of this years tagged fish was recaptured. It had been released on July 21 in the same area (Table 1).

The results of this years work leave many unanswered questions. We are concerned about the status of the 1977 year class in the eastern Atlantic. Reports of age 0 fish last year were extremely low and Moroccan catches of age I fish in the Atlantic in 1978 are only about 20 metric tons. We feel that close observations must be made on recruitment and the state of the spawning stock in the eastern Atlantic. It is also noted that many Moroccan fisheries are low this year and other species beside bluefin are absent. However, we must stay mindful of the problem even though some local environmental conditions may have also been involved.

We are encouraged by the interest that has been generated among the local fishermen. They are willing to participate in this research and will be able to make a valuable contribution if the fishing returns to a reasonable level. We hope since this interest is now high that work can be pursued in the future to take advantage of this opportunity for a better understanding of the bluefin's behavior pattern.

We are grateful to Mr. H. Bourrari owner of the purse seiner "MARYWISSE" and the people of SPANP (Syndicat des patrons et amateurs a la peche industrielle) for all their assistance in making this work possible.

TABLE 1

1978 tagging of jig caught Atlantic bluefin tuna off Casablanca, Morocco

<u>DATE</u>	<u>ICCAT TAG #</u>	<u>SIZE</u>	<u>LOCATION</u>
July 21	6640) 6641)	58 cm	} 33°35'W to 33°45'W { Recaptured July 23, 1978 same locati
" "	6642) 6643)	58 cm	
" "	6644) 6645)	57 cm	
" "	6646) 6647)	55 cm	
" "	6648) 6649)	59 cm	
" "	6650) 6651)	58 cm	
" "	6652) 6653)	57 cm	
July 22	6654) 6655)	58 cm	
" "	6656) 6657)	56 cm	
" "	6658) 6659)	60 cm	
July 23	6660) 6661)	56 cm	} 07°50'W  to 08°00'W
" "	6662) 6663)	57 cm	

APPENDIX 1.

Tagged albacore, Thunnus alalunga, released off the Atlantic coast of Morocco in 1978.

<u>DATE</u>	<u>LOCATION</u>	<u>SIZE</u>	<u>ICCAT TAG #</u>
June 28, 1978	34°20'N 07°00'W	45 cm	6630
" " "	" "	46 cm	6631
" " "	" "	47 cm	6632
" " "	" "	46 cm	6633