CONSERVATION

Tuna 'Slaughter'

Japanese longline boats seen chief culprits.

A detailed American study of Japanese tuna fishing in the tropical Atlantic has confirmed fears that the heavy catches may result, if continued, in depletion of the schools of fish.

An analysis of the effects of saturation longline fishing on the school's ability to produce a sustainable annual yield, was made by the Bureau of Commercial Fisheries based on Japanese operations from 1956 to 1964.

The Bureau's analysis, one of the most thorough ever undertaken of a single oceanic region, required more than a year to complete. It was made at the new Tropical Atlantic Biological Laboratory, Miami, under the direction of biologist John P. Wise.

Figures used were taken from official, voluntarily submitted Japanese Government reports. It took several years to obtain them from the far flung Japanese longline fleet.

Reports of heavy Japanese catches caused protest against the "slaughter" of Atlantic tuna resources and the incidental catches of marlin, sail and swordfish. Reacting to the uproar, the United Nations Food and Agricultural Organization last year called a meeting in Rio de Janeiro of 17 nations fishing for tuna in the Atlantic, including the U.S.S.R.; a tuna control treaty was set up.

Five nations have ratified it—the U.S. (March 1, 1967), plus Japan, Spain, Brazil and the Congo. Ratification by seven countries is needed to make the treaty effective. The Soviets have not indicated they intend to sign.

In the first eight years of Japan's Atlantic operations its high seas craft caught approximately 12 million fish according to the analysis. They are estimated to have weighed about 1.5 billion pounds, worth around $300 million, wholesale.

Of this total, 52 percent or 6,110,000 fish were the prime target, the prized yellowfin tuna; 31 percent or 3,589,000 were the equally valuable albacore; 9 percent or 1,048,000 were bigeye tuna. Caught along with these were 134,000 giant bluefin tuna, 318,000 blue marlin, 255,000 white marlin and 61,000 swordfish which, when mature, weigh beyond 1,000 pounds.

"To establish our findings," Wise explains, "the whole of the tropical Atlantic, including the Caribbean and Gulf of Mexico, was split into 10 approximately equal zones, about 1.2 million square miles each." They include these regions—the Gulf of Guinea; north oceanic east (Madeira-Canary Islands); Cape Verde; Benguela (off Portuguese West Africa); the Caribbean (including the Gulf of Mexico); Guiana (off northeast South America); north oceanic west (off the Bahamas); Bahia and Rio de Janeiro and Florida.

"Yellowfin landings showed the most substantial drop since they were the main species sought. Declines in yellowfin abundance occurred in eight out of the 10 zones and were greatest in the three shown by Japanese records to have been the most intensively fished—the Gulf of Guinea, off South America's Guianas near the Canary Islands.

"The analysis reveals Japanese longline fishing reached an excessive level in the areas where declines were most notable in yellowfin and albacore tuna.

"Our calculations," warns Wise, "indicate that to maintain an equilibrium level in the three zones showing greatest yellowfin declines, not more than 12 million hooks a year should be used, whereas Japanese longliners during peak operations were employing as many as 55 million."

Decreases in albacore landings were noted in three of the 10 zones—Bahia, Guiana and north oceanic east. There was no substantial drop in bigeye tuna catches. However, blue marlin hauls were noticeably less after several years of fishing near Bahia and Guiana off the Bahamas.

With the Atlantic tuna control treaty still ineffective, large numbers of vessels from Japan, South Korea and other nations are still longline fishing the Atlantic, primarily after yellowfin and albacore. Ships using equally deadly purse seines or lines are surface fishing for yellowfin and albacore.

And now, since the Inter-American Tropical Tuna Commission, which controls Pacific catches, last year imposed the first catch limits and closed season in the 16 years of its existence, the owners of west coast U.S. tuna vessels are planning moves to the Atlantic. Their purse seines cost upwards of $50,000; their big and efficient trawlers around $1 million each. They say they can't afford to let such investments sit idle for months at a time or run the risk of losing highly trained crews they cannot pay during such periods.

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