

Drift Net Problems Spread to South Pacific

Like video games and hamburgers, drift gill net fishing (drift netting) is becoming commonplace throughout the world. Its latest emergence is in the relatively unfished waters of the South Pacific by Taiwanese and Japanese drift net fleets targeting surface schools of albacore. Concerned fishery officials of several South Pacific island countries met in Suva, Fiji, on November 3 and 4, 1988, to discuss ways to discourage the use of drift nets on the high seas of the South Pacific, according to Dr. George W. Boehlert, Director of the Honolulu Laboratory, NOAA Fisheries—Southwest Region.

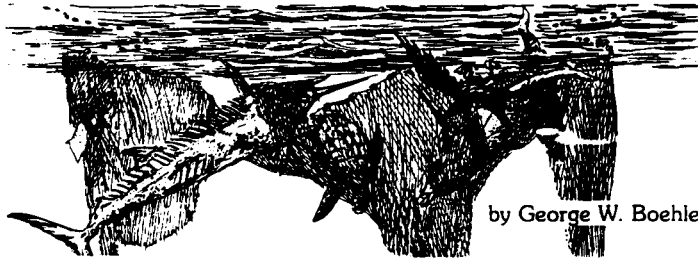
"This highly effective fishing technology brings with it considerable controversy and a host of knotty problems for fishermen, marine scientists and government fishery managers," said Dr. Jerry A. Wetherall, an albacore expert and chief of the Honolulu Laboratory's Pelagic Resources Investigation, who attended the meeting. "One of the main problems is that drift nets entangle and kill other marine life occurring in the same area as the target fish species."

"Drift net fishing occurs legally on the high seas, so the South Pacific fishery officials considered means to discourage drift netting in the region by reducing economic incentives," said Wetherall. Albacore are the premium species of tuna for canning and a resource of considerable interest to South Pacific islanders.

Albacore gill netting on the high seas is economically attractive to its proponents because nets 15 miles or more in length, reaching from the sea surface down to 30 feet, can be set in the water, left to drift in the current overnight and hauled in at relatively low cost. The nets are made from multifilament nylon and have meshes about 7 to 8 inches wide.

Large albacore have been harvested for 30 years in deep waters of the South Pacific by fleets of longline fishing vessels from Japan, Taiwan and Korea operating out of ports in Asia or the South Pacific. Recently it was discovered that smaller albacore could be caught in a narrow zone of the South Pacific stretching from New Zealand to Chile near 40 degrees south latitude. In that area, water of the temperature preferred by albacore occurs at the sea surface, coincident with a zone relatively rich in forage. Albacore aggregate there to feed and are vulnerable to surface trolling and drift netting as well as longlining.

Two trollers from the United States began a fishery in the area in 1986, followed by seven trollers in 1987. In the 1988 fishing season, a fleet of 41 U.S. vessels was joined by trollers from Canada, Fiji and



by George W. Boehlert

French Polynesia. The troll fishery was so successful that several South Pacific island countries consider it a promising avenue for local economic development.

In 1988 drift net fishing began on a small scale in the same area fished by the trollers. However, during the upcoming 1989 fishing season, January through April, the fleet of drift net boats is expected to grow to as many as 80 vessels, each with a capacity of 200 to 300 tons of albacore. Some concern exists that the increased catch of albacore by drift net vessels, when combined with the catch already taken by longline and trolling fleets, may exceed the maximum sustainable yield of the population.

This situation is complicated by the fact that the actual mortality caused by drift net fishing may be substantially greater than the observed catch. Some of the fish and other marine life entangled in the nets drop out during fishing and retrieval of the nets, and an unknown fraction of albacore dropping out die as a result of the encounter. Others suffer cuts and abrasions that reduce their value to troll and longline fishermen who may catch them later.

Troll fishermen also report that albacore behavior is affected by encounters with drift nets, reducing the effectiveness of troll fishing.

The incidental mortality associated with albacore drift netting in the South Pacific is a potential problem. The incidental catch may include marlin, swordfish, seabirds, sea turtles and marine mammals. Such species as the southern fur seal and beaked whale may be at risk. Other methods of catching albacore, such as trolling or longlining are not detrimental to seabirds, sea turtles or marine mammals.

Another major problem caused by drift nets is the hazard they impose to fishing vessels and fishermen at sea. The nets are operated at night and are set at the water's surface, where they can easily entangle

the propellers of vessels. Trolling vessels, and even the drift net vessels themselves, have become disabled by drift nets. Fishermen are endangered when they are forced to dive under the vessel to cut the boat free. During gill netting trials a few years ago in waters north of Australia, two Japanese fishermen drowned in such an effort.

The Suva meeting, which was called by the South Pacific Forum Fisheries Agency, was attended by representatives from American Samoa, the Cook Islands, New Zealand, Fiji, French Polynesia, Tonga and Vanuatu, as well as officials from the South Pacific Commission, the United Nations Development Program and South Pacific Island fishing companies. Wetherall provided the group with technical information about the albacore resource and fisheries.

According to Wetherall, one of the means considered by the South Pacific fishery officials to discourage albacore drift netting was for countries in the region to deny drift net vessels access to their exclusive economic zones or ports for any purpose, such as provisioning, refueling or transfer or delivery of catches.

"Another measure considered was for officials to persuade the canneries and transshipment facilities in the South Pacific to deal only in albacore caught by trollers and longliners, and not drift netters," said Wetherall.

The use of drift gill nets by foreign vessels has been banned within the 200-mile exclusive economic zone around Hawai'i, Guam and American Samoa. The actions taken by the South Pacific island countries add to the growing global resistance to drift net fishing and show that concerns about negative effects of drift netting exist even in the remote waters of the South Pacific.

... George