

Fish Aggregating Buoys in Brazil

Skipjack tuna (*Katsuwonus pelamis*) fishing in Brazil is a very recent activity. In 1978 less than 2,000 tonnes were obtained in Rio de Janeiro. Its fishery grew rapidly reaching total landings of almost 16,000 t in 1982, with a fishing fleet beginning with three vessels in 1979 to a 100-vessel fleet in 1982. This dis-ordinate growth was accompanied by a lack of expertise on the technique of locating skipjack schools and knowledge on its migration.

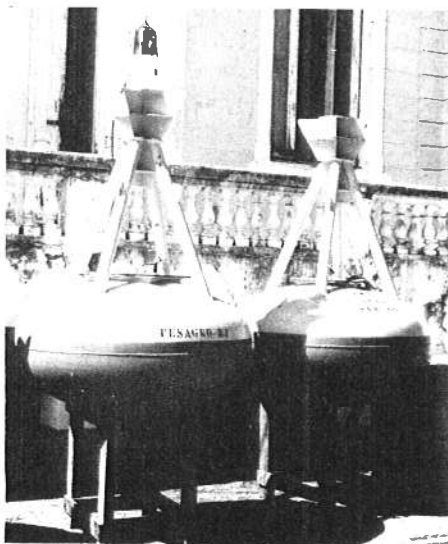
Since 1982, landings have decreased considerably although the initial stock estimates show that there is no over-fishing being done. The vessels are all equipped with livebait wells. Only three purse seiners made tryouts in the south-eastern coast of Brazil with unsatisfactory results. The majority of the fishermen employed in this fishery were totally inexperienced, and very few had initial experience on the African coast. These are mainly Portuguese who emigrated from Mocambique, Cabo-Verde and Ilha da Madeira looking for better life conditions.

Based on the experience of *payaos* in the Philippines, the fish aggregating devices of Hawaii, and local observations aboard their research vessel, PESAGRO, a

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state fishery research agency decided to build a number of buoys to be anchored at the edge of the continental platform in the states of Rio de Janeiro, São Paulo and Paraná. The initial test was made with a bamboo raft which did not last long, but worked very well attracting fish.



PESAGRO's fish attracting buoys.

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By November 1984 PESAGRO deployed three buoys with a light to signalize passing fishing vessels. The results will be known in May 1985, the best time for skipjack fishing. Federal funding for an additional eight rafts made of oil drums was supplied, but due to bad sea conditions the rafts were all lost.

PESAGRO's research entails the deployment of another 11 buoys like the ones in the photo, in new fishing areas, encouraging fishermen to expand their territory. Attached to the buoy is 15 m of propylene roping with stretches of used netting for the attachment of marine organisms that hopefully will attract skipjack tunas to stay around the buoys for a few days.

Olintho da Silva, head of the Marine Fishery Research Unit at PESAGRO, is very optimistic about the scope and possibilities of this program. It will reduce costs in fuel consumption due to the targeted course of the vessels toward the buoys, where the tuna should be concentrated, instead of the zigzag course currently done until a skipjack school is located.

Republic of the Philippines
Ministry of Transportation and Communications
Bureau of Posts, Manila
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Editor: J.L. Maclean, Address: Metrobank Plaza, Buendia Ave. Ext., Makati, Metro Manila. Business Manager: Angelito O. del Mundo. Owner: International Center for Living Aquatic Resources Management (ICLARM). Publisher: ICLARM. Printer: Emiluz Printing Industries. Office of Publication: ICLARM.

ICLARM is a nonstock, nonprofit corporation. Total number of copies printed and circulated of the last issue dated January 1985.

1. Sent to paid subscribers	162
2. Sent to others than paid subscribers	3,100
Total	3,262

(Sgd.) J.L. Maclean, Chief Editor

SUBSCRIBED AND SWORN to before me this 16th day of April 1985, at Makati, Metro Manila, the afiant exhibiting his Passport No. P726793 issued at Sydney, Australia on November 2, 1979.

Doc. No. 92 Page No. 19 (Sgd.) Vitaliano N. Aguirre II
Book No. XI Series of 1985 Officer Administering Oath

The ICLARM Newsletter is a quarterly publication issued by the International Center for Living Aquatic Resources Management (ICLARM), MCC P.O. Box 1501, Makati, Metro Manila, Philippines. Telephones 818-0466 and 818-9283; Cable ICLARM Manila; Telex ITT 45658 ICLARM PM.

The ICLARM Newsletter publishes information/data on all phases of fisheries and other living aquatic resources, including research or project summaries, news, notices of new publications and upcoming workshops, conferences, symposia, and courses, summary reports of meetings, and news of personnel. The editor invites articles and reviews but reserves the right to accept or reject papers and to shorten them to meet space requirements. Authors may order reprints of articles published at cost. Opinions expressed in a signed article are those of the author/s and not necessarily those of the management of ICLARM.

Deadlines for submission are 1 December, 1 March, 1 June, and 1 September of each quarterly period. The Newsletter comes out January, April, July and October each year.

The Newsletter is distributed free of charge by surface mail to institutions or individuals associated with fisheries and aquaculture in developing countries. However, readers are recommended to request airmail delivery for \$8/year, since surface mail can take several months. In developed countries, a subscription charge of \$6/year surface or \$14/year airmail is levied. Articles appearing in the ICLARM Newsletter may be quoted. We would appreciate a reference made to the source and receiving a cutting of any reprinted material.

Editor, Jay L. Maclean; Assistant Editor, Leticia B. Dizon; Artwork, Ovidio F. Espiritu, Jr.

PCPM Certificate of Registration SP No. 1034.

ISSN 0115-4575