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Trip report - Meeting of Expert Committee on Tropical Skipjack  
(February 25 to March 1, 1974, Papeete, Tahiti)

I departed Honolulu on 20 February 1974. My itinerary included a stopover in American Samoa (Feb. 20-24) prior to attendance of the meeting of the Expert Committee on Tropical Skipjack in Papeete, Tahiti (Feb. 25 to March 1). I departed Papeete on 4 March and returned to Honolulu on 5 March. The following provides a brief summary of my trip:

Shad (*Dorosoma petenense*) transport to Tahiti. At the request of Centre National pour l'Exploitation des Océans (CNEXO) in Tahiti, we made a second attempt to transport live shad to Tahiti. An earlier attempt made several months ago failed when none of the shad survived the trip. On this last attempt 6 lots of 25 fish were placed in sea water in large plastic bags. Each plastic bag was placed in a separate styrofoam container. The shipment accompanied me on the trip as cargo. Our plan was to ship the shad in two stages; the first from Hawaii to American Samoa and then from American Samoa to Tahiti. Upon arrival at American Samoa we opened the boxes at the Laboratory of the Marine Resources Department of American Samoa and discovered that nearly all of the shad were dead. Six specimens were still living; these were transferred to a separate container and aerated. New sea water was placed into the container. The following day, 5 of the remaining 6 shad were reported dead.

Since CNEXO is still very much interested in obtaining shad, we plan to review our procedures, develop new handling and shipping techniques and carry out a third trial.

#### American Samoa (Feb. 20-24)

Meeting with Governor Haydon. I met with Governor Haydon for several hours at his office to discuss fisheries matters. We had an opportunity to review the PIDC meeting which had taken place the previous week in Honolulu. I informed Governor Haydon that I looked at PIDC with considerable promise, especially since tentative financial commitments have been received from industry and that he, as the newly selected Chairman of PIDC, and Mr. Schoning, as the new Director of NMFS, would provide the much needed guidance. Governor Haydon indicated that he would be extremely delighted if a skipjack fishery could be developed and based out of American Samoa. Needless to say the reliance on foreign fleets for tuna has created mixed feelings among elements in government and industry.

Bait-rearing project. I discussed the bait-rearing project with Dr. Swerdloff, Director of the Department of Marine Resources. Dr. Swerdloff indicated that production of the mollies to date has not been as high as initially projected. Some problems have been encountered in their holding ponds. Also, there was some concern that the growth rate of the mollies was considerably less than they had hoped for. I believe Dr. Swerdloff indicated that on one of the two limited field trials conducted to date they were able to catch some skipjack with mollies. He did, however, state that these trials were very limited.

On Saturday, 23 February 1974, I participated on a brief field trial using approximately 1-1/2 buckets of small sized mollies. We used the smaller 28-ft. vessel owned by the American Samoa Department of Marine Resources. The larger vessel, ALAPAGA, was inoperable at the time. Unfortunately, we did not see any skipjack schools until late afternoon. We were unsuccessful in raising a school of large (20-lb.) skipjack tuna with the mollies. Field conditions were not optimal; e.g., late afternoon (approaching darkness), rain squalls, and small amount and size of mollies. During the course of the day the mollies proved to be extremely hardy; low mortality experienced despite the extreme rough conditions. With reference to the future of the baitfish culture work in American Samoa, Dr. Swerdloff is expecting Wayne Baldwin from the HIMB to visit Samoa shortly to assist with the project. I believe the presence of Wayne Baldwin will help overcome some of the problems Dr. Swerdloff has encountered in production, survival and growth. Assuming good production, the critical part of the project is to obtain adequate field trials.

Bumble Bee cannery plans. Based on recent newspaper accounts Castle and Cooke's plan to build a cannery in American Samoa appeared to be a firm fact. During my brief stay in American Samoa, I found out that it does not appear as a "sure" thing. I understand that the local politicians are extremely disturbed about Bumble Bee's plans to open a cannery in American Samoa. They are principally concerned with the demands that another cannery will place on their limited supply of water, power and labor. As expected Star-Kist and Van Camp are not drumming the bushes to support Bumble Bee's proposed development in American Samoa.

Longline fleet operation. Based on the number of boats operating out of American Samoa, the longline fishery appears to be extremely active. It was reported that approximately 300 boats were currently operating out of American Samoa.

PARAMOUNT. The PARAMOUNT arrived in Pago Pago on Saturday (23 Feb. 1974) with a tuna catch reported to be about 330 tons of small (4 to 6 lb.) skipjack. On the basis of information obtained from several sources, the skipjack were taken off New Zealand. This was the second catch offloaded by the PARAMOUNT; the first catch was offloaded in New Zealand and transhipped to Star-Kist canneries. For the second load Star-Kist must have decided that steaming from New Zealand to American Samoa was cheaper than paying the cost of freight. I received conflicting information on the success of fishing. From one source I was told that the total catch was

made in 10 days of fishing. Another source reported that the catch had been made in 38 days. Still a third report mentioned that 200 tons of skipjack were taken in 4 days of fishing. Whatever the case may be, fishing was considered extremely good. Conversations with one of the crew members indicated that he was satisfied with the financial arrangements. He and other crew members got a base amount in addition to an "incentive" clause which is tied in to the catch. A final note with regard to the PARAMOUNT. We received an unconfirmed report that the French Government in New Caledonia was negotiating with Star-Kist to have the PARAMOUNT carry out some trials in waters off New Caledonia after completion of the present trials (joint cooperative venture with the Government of New Zealand). October 1974 was reported to be the starting date.

#### Expert Committee on Tropical Skipjack Tuna

The meeting took place in Papeete, Tahiti, from 25 February-4 March 1974. The committee was appointed by the Committee on Fisheries of the South Pacific Commission. The purpose of the meeting was to establish cooperative research efforts and to develop a region-wide skipjack assessment program; review the skipjack fishing activities in the Pacific Ocean; develop a standard data format for collecting fisheries data, develop a method for data exchange and develop plans to conduct an extensive tagging program through the South Pacific.

Participants of this meeting included:

M. Rene Grandperrin, Centre ORSTOM, Noumea, New Caledonia  
 Dr. Robert E. Kearney, Dept. of Agriculture, Stock and Fisheries, Papua  
 New Guinea  
 Dr. Stanley Swardloff, Dept. of Marine Resources, Pago Pago, American  
 Samoa  
 M. G. Loubens, Centre ORSTOM de Noumea, Noumea, New Caledonia  
 M. F.X. Bard, Centre Oceanologique du Pacifique, Vaitao, Tahiti  
 Dr. S. Comitini, Economic Research Center, University of Hawaii, Honolulu,  
 Hawaii  
 Mr. R.S. Shomura, NMFS, Honolulu, Hawaii

In general I felt the meeting was very successful. We were able to discuss in some detail the various topics relating to skipjack fishery development and research in the Pacific. We were also able to establish what was considered priority objectives. These included (1) the development of a basic catch and effort data to be collected by the several fisheries located throughout the Pacific area. The data sheets will follow the general format of the form used by the Government of Papua New Guinea. The plan is to have the Honolulu Laboratory produce these forms and send them to the Fisheries Officer of the South Pacific Commission. The forms will then be transmitted to countries and territories that have ongoing skipjack fisheries. Data collected by these countries and territories would then be transmitted back to the Honolulu Laboratory via

SPC, these data will be keypunched and placed on IBM cards. Final implementation depends on the approval of this arrangement by the various Governments and territories. The committee felt that by this method the membership of the South Pacific Commission would be able to centralize the collection of data and be in a position to evaluate the skipjack resources. (2) An agreement was reached to collect size frequency data from the several fisheries. (3) A general tagging project was developed; the plan to be submitted for consideration at the meeting of the Technical Committee on Fisheries to be held in July 1974. The Committee urged the establishment of extensive tagging experiments to determine migration, definition of subpopulations and to determine growth parameters. A recommendation made by the Committee was to urge Japan and other countries not affiliated with SPC to participate in the tagging program.

Miscellaneous information gathered during the trip.

1. Tahiti. Presently there are approximately 100 small vessels (called bonitiers) operating in Tahiti. These fast-moving boats utilize the Tahitian style of skipjack fishing which involved the use of pearl lures. On an annual basis the total catch probably does not exceed 2,000 tons. Currently plans are being developed to carry out trial pole-and-line fishing using live bait. I believe this program is being handled by CNEOX. Related to this subject, there appears to be some differences in opinion on the availability of baitfishes. Several of the local fishermen reported that baitfish was abundant in Tahiti, at least in sufficient quantities to support several small pole-and-line boats. Others state that baitfish is lacking.
2. CNEOX. I am not sure when CNEOX established a base in Tahiti. However, the French Government appears to be putting a considerable sum of money into this organization. They have started construction of a fair size laboratory at Vairao, Tahiti. The head of the CNEOX lab is M. de Chezeau. He was reported to be the powerhouse in the fisheries activity in Tahiti. The scientist responsible for the aquaculture and biology part of CNEOX is M. Alain Michel. M. Xavier Bard is the biologist engaged in the tuna research. The laboratory is still in the midst of a building phase. The French apparently believe in doing things on a realistic scale. As part of their construction program they built three extremely large concrete tanks which will be used in the pilot operation of culturing invertebrates and fishes. Presently they are working on the culture of Macrobrachium, several species of Penaeid shrimps and a local carangid fish species. The culture work will also include culturing species to be used as livebait for the skipjack pole-and-line fishing operation.

CNEOX hopes to have a boat (20 m length) in the near future. They plan to use this vessel to conduct some trials of livebait fishing for skipjack in French Polynesia. Thus, they expressed interest in a skipjack tagging program.

The Service de L Peche has started a program to collect catch and effort data. M. Bard also indicated that they have commenced with collecting of size frequency data of skipjack tuna.

One item of interest is that since the establishment of CNEXO in Tahiti a bit of rivalry has developed between CNEXO and the Service de La Peche. Xavier Bard, a biologist with CNEXO, appears to be trying his best to work cooperatively with La Peche.

3. Bumble Bee - Star-Kist joint venture. I had an opportunity to review the Bumble Bee - Star-Kist joint venture very briefly with representatives of Bumble Bee and Star-Kist. The joint venture is based on operating a transshipment point in Tahiti. The freezer unit is owned by Tahitian interests and is rented to the joint venture. I believe they mentioned something in the order of 50-60 boats being operated out of Tahiti. The major problem at this time is that fishing is so poor that nearly the entire fleet is currently in port.

4. Western Samoa. During my stopover in American Samoa I met Walter Paulo, who was the former skipper of the TOWNSEND CROMWELL. Mr. Paulo is currently employed by UNDP to work on a skipjack development project in Western Samoa. He was in American Samoa with the Fisheries Advisor to the Government of Western Samoa to obtain information and fishing supplies. Mr. Paulo has only been in Western Samoa for several weeks. He indicated that he was encountering innumerable problems involved with getting the boat in an operable condition. Also, he expects to encounter problems in training Western Samoans in the art of pole-and-line fishing and the related baitfishing activity. In listening to Mr. Paulo, it reminded me of the situation that American Samoa faced some four years ago.

#### Papua New Guinea.

Dr. Robert Kearney was one of the members of the Expert Committee. As a result I was able to obtain a considerable amount of information on the current status of the skipjack fishery based in Papua New Guinea. Dr. Kearney reported that last year's skipjack catch was approximately 28,000 metric tons. This is phenomenal when one considers the fact that the fishery started in 1970. This 28,000 ton catch was made by 30-35 Okinawan baitboats. Interestingly the fleet was on its way back to the Ryukyu Islands in late 1973 when they encountered large schools of skipjack north of Papua New Guinea. The boats turned around and return to Papua New Guinea and awaited the arrival of the skipjack schools in the fishing grounds. The skipjack did not disappoint them. Reports of 9 tons per day per boat were not uncommon. This heavy influx of skipjack in late 1973 was not expected on the basis of the previous two years' survey work. The fish were all small skipjack (5 or 6 pounds).

Dr. Kearney reported that they are collecting considerable amounts of catch and effort data of skipjack and also data on the catch of baitfish.

Collecting of these data has not proved to be much of a problem since the Government of Papua New Guinea insisted that the companies involved in the joint venture provide these types of data. The data presently are keypunched and put on computer cards for automatic data processing. Dr. Kearney's group recently completed an extensive tagging program. Some of their tag returns have indicated movements to the north and more recently to the southeast of the Papua New Guinea area.

Discussions with Dr. Kearney indicated that the continuance of this data collecting program was in doubt. The newly formed Government of Papua New Guinea will be taking over much of the activity presently sponsored by the Australian Government. Depending on their views, the Government of Papua New Guinea may not consider that these data are important. During the meeting of the Expert Committee we urged that some means be sought to continue the collection of these statistics.

5. British Solomon Islands. Dr. Kearney reported that the catch of skipjack by the joint venture operating out of British Solomons was approximately 7,600 tons landed by about 13 Okinawan boats.

6. New Caledonia. Presently New Caledonia has in operation two Tahiti-style skipjack boats operating in New Caledonian waters. The catch was reported to be about 30 tons per year. The French Government is hopeful of developing a skipjack fishery based in New Caledonia. Skipjack are known to occur in waters close to New Caledonia. The problem is to determine whether adequate supplies of baitfishes are available. The French Government hopes to obtain a 20-meter boat in the near future to conduct an extensive bait study. The French participants at the Expert Committee meeting requested assistance in developing their baitfish survey program. This was provided during the course of the meeting.

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