

TRENDS AND DEVELOPMENTS

Additions to the Fleet of U. S. Fishing Vessels

First documents as fishing craft were received by 94 vessels of 5 net tons and over during June 1949—42 less than in June 1948, according to the Bureau of Customs of the Treasury Department. California led with 20 vessels, followed by Washington with 15, and Florida with 13. During the first six months of 1949, a total of 495 vessels were documented, compared with 563 during the same period in 1948.

Vessels Obtaining Their First Documents as Fishing Craft, June 1949

Section	June		Six mos. ending with June		Total 1948
	1949	1948	1949	1948	
	Number	Number	Number	Number	Number
New England	3	6	14	26	52
Middle Atlantic	5	9	30	27	40
Chesapeake Bay	8	6	35	20	59
South Atlantic and Gulf	32	47	174	227	541
Pacific Coast	38	47	146	177	347
Great Lakes	2	7	27	25	51
Alaska	6	14	66	56	81
Hawaii	-	-	3	5	12
Total	94	136	495	563	1,183

Note: Vessels have been assigned to the various sections on the basis of their home port.



California Sardine Quota for Reduction Purposes Changed

The quota of sardines which may be reduced into fish oils and meal was upped from 50,000 tons to 75,000 tons for the 1949-50 season by the California fish and game commissioners at their July meeting in San Diego, according to the July 27 Outdoor California of the California Division of Fish and Game. The new figure is the lowest reduction quota in State history and is 25,000 tons below last year's limit. (See Commercial Fisheries Review, August 1949.)

The tonnage quota will be allocated equally among 47 sardine canners and 54 straight-reduction operators.

Following protests from fishermen and boat owners, the Commission refused to renew the 8-inch sardine size limit ruling, which expired July 31.



Federal Purchases of Fishery Products

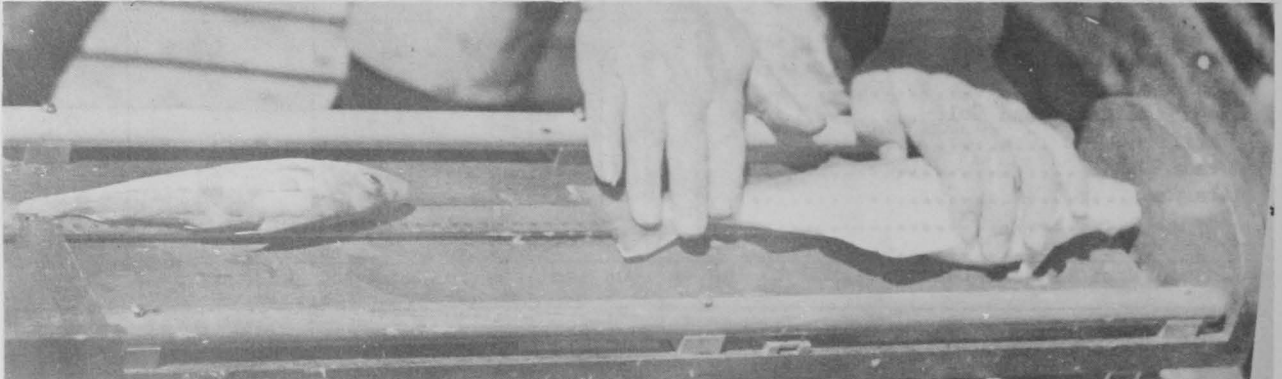
DEPARTMENT OF THE ARMY, June 1949: The Army Quartermaster Corps purchased 1,305,391 pounds (valued at \$430,175) of fresh and frozen fishery products for the U. S. Army, Navy, Marine Corps, and Air Force for military feeding during June 1949, compared with \$1,234,229 pounds (valued, \$393,676) for May 1949, and 1,410,309 pounds (valued, \$461,212) for June 1948. For the first six months in 1949, purchases amounted to 7,880,324 pounds (valued, \$2,644,674), compared with the 1948 six-months total of 7,924,630 pounds (valued, \$2,875,420).



Fishery Biology Notes

"ALBATROSS III": Census of Groundfish Populations Continued (Cruise 26): The Albatross III on cruise 26 (July 27-August 5, 1949) continued the census of groundfish populations on Georges Bank, which was begun in 1948. Eighty one-half hour tows were made at sixty-one stations in depths from 13 to 115 fathoms.

Large numbers of scrod haddock, chiefly one-year-old fish, were caught on the southern, eastern, and northern part of the Bank in less than 40 fathoms. Commercial quantities of large haddock were found in 90-100 fathoms off the northern edge.



MEASURING HADDOCK ABOARD THE ALBATROSS III

A large bed of sea scallops was discovered approximately 90 miles E. 3/4 S. of Nantucket Lightship in 42-44 fathoms, and 14 bushels of these shellfish were caught in a half-hour tow with a 1 1/2 Iceland trawl equipped with rollers.

Yellowtail flounders (51) were tagged on the southern part of Georges Bank to supplement existing information on migration of this species.

EXPERIMENTAL PLANTING OF EUROPEAN OYSTERS: A small experimental planting of the European oysters, (*Cstrea edulis*) will be made in September by the Fish and Wildlife Service in Maine waters. A small group of these oysters will be planted near the U. S. Fishery Laboratory at Boothbay Harbor, some in Taunton River, near West Franklin, and others in Basin Grove, near South Harpswell. The purpose of this experiment is to determine whether the oysters will survive the Maine winter. A similar experiment will be conducted in Milford Harbor this winter to determine if they will survive in Connecticut waters.

SARDINE INVESTIGATION CRUISES: The Chief of the Service's South Pacific Fishery Investigations, Stanford, California, reports that examination of the material from Cruises 1 and 2 of the Black Douglas is now complete; the material of Cruise 3 is being examined. On Cruise 1, evidence of very light sardine spawning was found in the area south of San Diego. On Cruise 2, very intensive spawning was encountered, but again on the southern lines only. On Cruise 3, sardine spawning was most intense off San Diego and out to a distance of about 300 miles offshore.

First stations of the Black Douglas are about 30 to 40 miles offshore and relatively few inshore forms are taken. It has been possible to identify most of the young fish taken as to family or genus, and earlier ideas of the abundance and distribution of some species have been altered. For instance, the hake is abundant and widely distributed in the areas covered.

Specimens of the following were collected:

The ragfish (Icichthya lockingtoni) (formerly considered rare).

The rockfish group (the young of which are found well out on the station lines, Vinciguerria and Cyclothone (two deep sea forms which are dominant off Lower California).

The jack mackerel (which coincides in distribution with the previous two and occurs farther offshore when taken to the northward).

The lantern fish group is the most abundant of all five distinct larval types that can be recognized to date.

Trachyterus (ribbonfish) is widely distributed.

The deep sea smelts (Bathylagus, etc.) are almost as abundant as the lantern fish.

SPONGE FISHERY INVESTIGATION: To investigate the status of the sponge industry centered at Tarpon Springs, Florida, arrangements have been made for a joint cooperative survey to secure information on the status of the sponge stocks and particularly to learn whether the reported "disease" conditions are as serious as some reports indicate. The cooperators are the Fish and Wildlife Service, the Florida State Board of Conservation, and the Marine Laboratory of the University of Miami. This pooling of resources and facilities will make it possible to carry on a much more comprehensive survey than would otherwise be the case.

The success of the undertaking will depend largely on the cooperation received from the sponge industry itself, particularly in the way of furnishing the services of sponge boats and divers for the collection of material. It is hoped that the actual field work may be initiated during August.

The Service is assigning one of its own vessels to this survey, but this particular craft is not equipped for diving.



National Fisheries Trends, July - September 1949 ✓

PRODUCTION: United States production of fishery products during the summer months may be somewhat below that of a year ago, principally because of declines

in the catches of fishery products for fresh consumption on the East and West Coasts and a prospective reduction in the landings of fish for canning.

The reported total catch of red salmon in Alaska through July 30, 1949, was almost 40 percent below last year. The impact of the small decline in fish for canning, however, should not be reflected in the consumer markets until late in 1949.

CONSUMPTION: The per capita consumption rate of fishery products by United States civilians in the next few months is expected to be approximately the same as in the comparable period of 1948. Apparent consumption of fresh and frozen fishery products during the first half of 1949 was not much different from that in the same period last year.

The market demand for canned fish was somewhat lower than in the first 6 months of 1948, and stocks at the primary distribution level at the end of the pack year (i.e., June 30, 1949) are estimated as being much larger than carryover stocks have been in recent years.

PRICES: Retail prices of fresh and frozen fishery products are likely to continue at a lower level than a year earlier, but above those in the late spring of 1949. According to the data collected by the Bureau of Labor Statistics, the retail price index of fresh and frozen fish in 56 cities during the first 6 months of 1949 averaged about 2 percent below that for the same months in 1948.

COLD STORAGE HOLDINGS: July 1 cold storage stocks of frozen fishery products for human consumption were 11 percent above a year ago. Most of the increase is due to larger holdings of salt-water fish. During the next few months, with production at the seasonal high point, cold storage stocks of frozen fishery products will be expanded so that sufficient supplies will be available for distribution during the low production period in late 1949 and early 1950.

IMPORTS: Imports of fresh and frozen cod, haddock, hake, pollock, and rose-fish fillets during the first 6 months of 1949 were somewhat less than the total for the same months of last year. However, increased imports are reported for the first 4 months of this year as compared to the corresponding period of 1948 for fresh-water fish from Canada; frozen swordfish and shrimp; canned tuna and bonito.

EXPORTS: Exports of edible fishery products during the first 5 months of this year were only about 12 percent below the total in the same period of 1948. Current trends indicate that exports in the remainder of 1949 probably will not exceed last year's level. The international balance of trade and the monetary position of some of the western European countries thus far in 1949, in addition to ample supplies of fresh and frozen fish, have tended to restrict canned fish purchases from the United States. At least in the near future, foreign expenditures in this country are likely to be further restricted to essential food and industrial machinery and equipment. The United Kingdom has recently completed a purchase program for canned pilchards. The proposed purchase of canned salmon by the United Kingdom may be adversely affected by recent actions taken by the British to limit dollar expenditures.

1/ Prepared by the Bureau of Agricultural Economics, Department of Agriculture in cooperation with the Fish and Wildlife Service.



Pacific Oceanic Fishery Investigations

PRELIMINARY TUNA SURVEY OF HAWAIIAN-LINE ISLANDS: In its preliminary tuna survey of the Hawaiian-Line Islands Area, the Section of Biology and Oceanography, of the Pacific Oceanic Fishery Investigations in Honolulu, reported in July that it has compiled data on seasons, places of occurrence, abundance, and possible methods of capture of tunas and tuna-bait fishes by studying the landings of local Hawaiian fishing vessels, interviews with fishermen, field trips in local waters, and visits to French Frigate Shoals, Palmyra, and Canton Island.

Commercial tuna fisheries in the Hawaiian-Line Islands exist only in the Hawaiian-Islands proper. In addition to diverse minor fisheries which use such gear as small surround nets and hand lines, important local tuna fisheries are conducted here. These tuna fisheries use pole and line for live bait surface fishing and long-line for subsurface fishing. The long-line catches landed at the local market were examined and information obtained on area of catch, time of catch, modification of long-lines used, amount of gear used, etc. From the detailed data recorded on the catches of 91 vessels, an analysis of the Hawaiian long-line fishery for the period from January through June is possible regarding:

1. The species composition of the catches taken by vessels operating the long-line gear and seasons of abundance for tunas and marlins taken by subsurface long-line fishing. Yellowfin tuna, big-eyed tuna, striped marlin, black marlin, white marlin, and albacore compose the bulk of the catch landed.
2. The efficiency of the long-line gear as determined from the number of hours the gear has fished, the amount of gear fished, and the amount of catch.
3. The fishing grounds producing the major catches, and the related conditions of surface current and water depths under which they are produced.
4. Construction and operation of the long-line gear.

The availability of live bait in the Hawaiian-Line Islands area appears to be a limiting factor in the development of a fishery where large tuna clippers can be operated. It has only been possible for this Section to survey briefly the live-bait situation at a few outlying islands in the Hawaiian-Line region. Year-round studies must be carried out to learn the seasonal abundance of the various small fishes that can be utilized for live bait. Japanese experience in the southwest Pacific has shown that live bait has also been a limiting factor in developing large vessel operations in that region. The frequent spawning and rapid rate of growth of the "nehu," the principal bait species, makes possible wide fluctuations in the stock of these fish in Kaneohe Bay and elsewhere.

PURSE SEINE VESSEL CONTRACT AWARDED: A contract for the construction of a purse seine vessel for exploratory fishing in Hawaiian waters and westward throughout the U. S. Trust Territory of the Pacific Islands was awarded to a boat building company in Tacoma, Washington, on June 27. With the completion of this vessel, John R. Manning, the Service will have three exploratory and research vessels assigned to the Investigations. The vessel will be of wooden construction, 86'6" in length, will have a cruising range of 7,000 miles, and should be ready in December this year.

The other two vessels (tuna-clipper type) of the Investigations, Henry O'Malley and Hugh M. Smith, former Navy YPs of the 600 class, 128 feet in length, are already

being converted for exploratory fishing and research work in West Coast shipyards. They will be completed early this fall.

WORK ON HAWAIIAN LABORATORY TO BEGIN SOON: Work will commence soon on the construction of a fishery research laboratory on a site adjacent to the campus of the University of Hawaii at Honolulu, according to a July 18 report. The contract for the construction of the building was awarded on June 27.

This laboratory will house the shoreside research activities of the Investigations. The building, to conform with typical Hawaiian architecture, will be of hollow concrete block construction, two stories high, and will essentially surround a court with lanais facing the court. Wings to provide additional space will extend outward from either side of the front of the building, and shorter wings will extend from the rear. The floor area, including lanais, will approximate 16,000 square feet. Construction should be completed in December this year.



U.S. Pack of Miscellaneous Canned Fishery Products, 1948

The pack of miscellaneous and specialty canned fishery products in 1948 amounted to 617,974 standard cases (48 cans, 16 oz. net weight, per case), valued at

Table 1 - U.S. Pack of Miscellaneous Canned Fishery Products, 1948 (Production & Value to Packer)			
Product	Std. Cases	Total Value	Location & number of plants
	No.	\$	
Fish:			
Fish cakes ^{1/}	192,357	2,425,550	Me. 4; Mass. 1; N. Y. 1; Va. 1; Calif. 3
Fish spread & paste ^{2/}	895	16,878	Mass. 1; N. Y. 1; Calif. 2
Fish, smoked or kippered ^{3/}	9,901	215,471	Mass. 3; Minn. 1; Wash. 3; Ore. 4; Calif. 1
Fish, miscellaneous ^{4/}	34,456	526,287	Mass. 2; N. Y. 1; N. J. 1; Md. 2; N. C. 1;
Shellfish:			
Crab: deviled, gumbo, etc. ^{5/}	3,352	102,372	Mich. 1; Minn. 1; Calif. 1
Lobster bisque, newburg, soup, and stew	5,284	146,873	N. Y. 1; N. C. 1; S. C. 1; Ala. 1; La. 1; Wash. 1
Oysters, smoked	1,036	82,452	Me. 1; N. Y. 1; La. 1
Oysters, stew, soup, etc. ^{6/}	2,753	57,904	La. 1; Wash. 3
Shrimp cocktail, bisque, creole, etc. ^{7/}	2,594	95,538	N. Y. 1; Ala. 1; La. 2; Wash. 4
Squid	349,799	1,373,810	N. Y. 1; S. C. 1; Ala. 1; Miss. 1; La. 4; Wash. 1
Terrapin & turtle meat	940	30,899	Calif. 20
Terrapin & turtle soup & stew	11,820	138,754	N. Y. 2; Ga. 1; Fla. 1
Shellfish, miscellaneous ^{8/}	2,787	58,774	N. Y. 2; Ohio 1; Ga. 1; Fla. 1; La. 2
Total	617,974	5,271,562	Me. 1; Mass. 1; N. Y. 2; La. 3

^{1/}Consists of cod; haddock; alewife and menhaden; rockfish; albacore and lingcod; barracuda and Mexican sea bass.

^{2/}Consists of spreads (herring, salmon, and tuna) and pastes (sardine, finnan haddie, smoked halibut, herring and salmon).

^{3/}Consists of smoked (carp flakes, finnan haddie, herring, salmon, shad and sturgeon) and kippered (alewives, herring, sablefish and sturgeon).

^{4/}Consists of carp flakes, eels in jelly, fish chowder, frog-leg newburg, mullet, red drum, salmon in cheese sauce, Spanish mackerel, tuna-fish frankfurters, and whiting.

^{5/}Includes deviled crabs, soft-shell crabs; and crab gumbo, bisque and cocktails.

^{6/}Consists of cocktails, creole, stew; and smoked paste and spread.

^{7/}Consists of bisque, balls, cocktails, creole, curry, deviled, gumbo, paste, and smoked.

^{8/}Consists of bouillabaisse, clam cakes and loaf, creole gumbo, conchs, crayfish bisque, and seafood newburg.

Note: "Standard cases" represent the various-sized cases converted to the equivalent of 48 cans, each containing 16 ounces net weight.

\$5,271,562 to the packer. The bulk of this pack consisted of fish cakes and squid. Although the pack of fish cakes is not as high as in 1947, it still is the highest for all other years since 1939. The pack of squid is not as high as in 1946, but it is the highest for all other years since 1939.



Table 2 - Pack of Canned Fish Cakes & Squid, 1939-48
(Production & Value to Packer)

Year	Fish cakes			Squid		
	Standard Cases		Value	Standard Cases		Value
	No.	Avg. Price	\$	No.	Avg. Price	\$
1948	192,357	12.61	2,425,550	349,799	3.93	1,373,810
1947	263,732	12.40	3,270,624	221,056	4.06	898,210
1946	130,662	12.02	1,570,858	592,678	5.89	3,488,469
1945	1/	-	1/	172,629	5.19	895,545
1944	73,614	10.75	791,450	130,699	5.29	691,050
1943	1/	-	1/	102,525	5.58	572,410
1942	81,988	7.92	649,671	1/	-	1/
1941	128,841	6.90	889,046	1/	-	1/
1940	115,508	6.72	776,684	22,475	3.49	78,364
1939	113,839	6.64	756,253	1/	-	1/

1/ Data not available for publication since the pack was canned by less than three firms.

U.S. Production of Marine-Animal Scrap and Meal, 1948

The 1948 production of fish and marine-animal scrap and meal in the United States and Alaska amounted to 199,519 tons, valued at \$23,086,734 to the producer.

Table 1 - Production of Marine-Animal Scrap & Meal, 1948 (Quantity & Value to Producer)

Product	Atlantic and Gulf Coast		Pacific Coast (including Alaska) ^{1/}		T o t a l		
	Tons	Value	Tons	Value	Tons	Price Per Ton	Value
Meal and dried scrap:							
Anchovy	-	-	163	\$ 21,517	163	\$132.01	\$ 21,517
Crab, blue	5,151	\$ 266,761	-	-	5,151	51.79	266,761
Fur seal	-	-	341	36,996	341	108.49	36,996
Groundfish ("white fish" inc. rosefish)	21,780	2,872,544	-	-	21,780	131.89	2,872,544
Herring	4,632	431,221	13,054	1,633,821	17,686	115.75	2,065,042
Menhaden	^{2/} 104,058	11,560,914	-	-	104,058	111.10	11,560,914
Pilchard	-	-	19,076	2,614,616	19,076	137.06	2,614,616
Salmon	-	-	1,152	112,223	1,152	97.42	112,223
Shark	^{3/}	^{3/}	^{4/} 106	^{4/} 11,178	106	105.45	11,178
Shrimp	724	49,016	-	-	724	67.70	49,016
Tuna and mackerel	-	-	21,305	2,757,778	21,305	129.44	2,757,778
Whale:							
Meat	10	700	409	40,900	419	99.28	41,600
Bone	-	-	60	3,000	60	50.00	3,000
Miscellaneous	^{5/} 3,124	319,591	^{6/} 4,374	353,958	7,498	89.83	673,549
Total	139,479	15,500,747	60,040	7,595,987	199,519	115.71	23,086,734

1/ Includes small production of unclassified meal in Minnesota and shark meal in Florida.
 2/ A small production of acidulated scrap has been included with dry scrap and meal.
 3/ Included with West Coast production.
 4/ Includes Florida production.
 5/ Includes the production of cod-liver press cake, fish pumice; and alewife, horseshoe crab, lobster, and miscellaneous fish scrap and meal.
 6/ Includes a small production of unclassified meal in Minnesota, and Dungeness crab and miscellaneous scrap and meal on the Pacific Coast.

This was an increase of 7 percent in volume and 3 percent in value compared with the previous year. The production of menhaden scrap and meal, which exceeded 100,000 tons for the first time, accounted for over half of the volume and value

of the 1948 production. Due to the continued failure of the pilchard fishery in California, the yield of pilchard meal amounted to only 19,076 tons--only 16 per cent of the record 1936 production of 121,739 tons.

Table 2 - Production of Marine-Animal Scrap and Meal, 1939-48 (Quantity & Value to Producer)

Year	Dry scrap and meal			Acidulated scrap			T o t a l		
	Tons	Price Per Ton	Value	Tons	Price Per Ton	Value	Tons	Price Per Ton	Value
1948	1/199,519	\$115.71	1/\$23,086,734	1/			199,519	\$115.71	\$23,086,734
1947	185,808	120.30	22,353,488	632	\$42.50	26,863	186,440	120.04	22,380,351
1946	197,599	103.04	20,360,943	2,022	38.81	78,475	199,621	102.39	20,439,418
1945	199,118	72.03	14,343,138	1,557	39.95	62,200	200,675	71.78	14,405,338
1944	210,225	71.98	15,131,918	2,922	38.02	111,104	213,147	71.51	15,243,022
1943	188,848	71.86	13,570,331	1,555	37.83	58,821	190,403	71.58	13,629,152
1942	168,486	68.52	11,545,239	2,594	31.04	80,520	171,080	67.96	11,625,759
1941	225,815	56.92	12,852,781	11,029	22.01	242,792	236,844	55.29	13,095,573
1940	177,724	42.55	7,562,288	15,520	17.50	271,533	193,244	40.54	7,833,821
1939	210,249	41.99	8,827,747	15,853	16.77	265,850	226,102	40.22	9,093,597

1/A small production of acidulated menhaden scrap has been included with dry scrap and meal.



Wholesale and Retail Prices

The wholesale index for all foods on July 12 was 164.2 percent of the 1926 average, 0.5 percent above 4 weeks ago, but 13.4 percent below the comparable period in 1948.

Canned salmon wholesale prices were steadier in July than they were in June. In July, canned pink salmon prices were 2.8 percent higher than in June, but

Wholesale and Retail Prices				
Item	Unit	July 12, 1949	June 14, 1949	July 13, 1948
<u>Wholesale: (1926 = 100)</u>				
All commodities	Index No.	154.2	-0.3	-8.9
Foods	do	164.2	+0.5	-13.4
<u>Fish:</u>				
Canned salmon, Seattle:		<u>July 1949</u>	<u>June 1949</u>	<u>July 1948</u>
Pink, No. 1, Tall	\$ per doz. cans	4.556	+2.8	-15.9
Red, No. 1, Tall	do	5.664	-2.1	-14.8
Cod, cured, large shore, Gloucester, Mass.	\$ per 100 lbs.	15.500	0	+6.9
<u>Retail: (1935-39 = 100)</u>				
All foods	Index No.	<u>July 15, 1949</u>	<u>June 15, 1949</u>	<u>July 15, 1948</u>
Fish:		201.7	-1.3	-7.0
Fresh, frozen and canned	do	307.7	-1.6	+2.0
Fresh and frozen	do	251.1	-0.4	-1.1
Canned salmon:				
Pink	¢ per lb. can	57.6	-3.4	+7.7

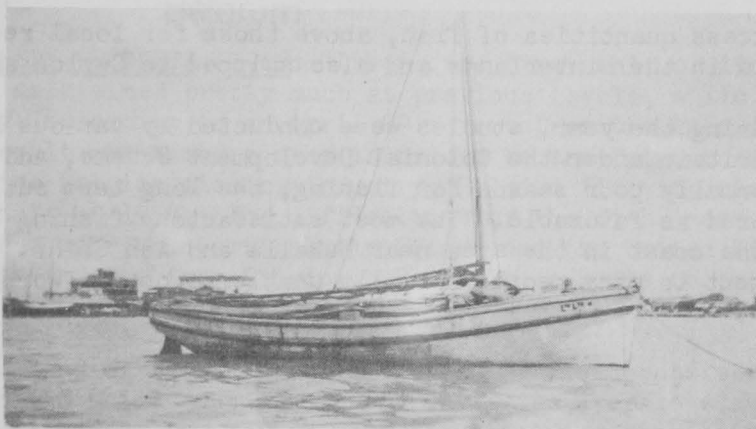
still were 15.9 percent below July 1948. On the other hand, canned red salmon prices in July were 2.1 percent lower than the previous month and 14.8 percent below a year ago.

Retail food prices declined 1.3 percent from mid-June to mid-July, and were now 7 percent below mid-July 1948. Prices of fresh, frozen, and canned fishery products followed the same trend and on July 15 were 1.6 percent below mid-June, but were still 2 percent above July 15, 1948. The index for only fresh and frozen fishery products on July 15 was only 0.4 percent below mid-June and 1.1 percent below mid-July 1948. Canned pink salmon retail prices were 3.4 percent lower than on June 15, but were still 7.7 percent above mid-July 1948.



THE CUBAN FISHING INDUSTRY

Unless the Cuban fishing fleet is enlarged and modernized and refrigeration is introduced, it is unlikely that production of fresh fish in Cuba during the next few years will increase beyond 30 or 40 million pounds. Production of canned tunny, albacore, bonito and sardines probably will increase and, in time may compete with sardines and tuna fish imported from the United States and Latin American countries.



HEAVY-DUTY ROW-BOATS WITH REMOVABLE MAST USED FOR COASTAL FISHING.

Effective Cuban local demand for fresh fish will continue about the same as in the past few years—roughly 30 or 40 million pounds—and will go beyond that only if refrigerated fish markets are introduced or if the price of fish declines in relation to prices of other meat.

Cuban import requirements in normal times are about 20 to 25 million pounds of dry salted (cod) and 3 million pounds of other cured and canned fish. When war-time shortages are eased, the demand for salt fish will continue about the same as before the war but that for canned products may decline owing to increasing domestic production.

Canned tunny, albacore, bonito and sardines may be exported in increasing quantities, depending on prices in Cuba and abroad. The duties applying on these commodities in the United States reportedly hamper Cuban exports.