

# TRENDS AND DEVELOPMENTS

## California

SARDINE DATA COLLECTED BY VESSEL "YELLOWFIN" (Cruise 53-Y-5): Various samples and data relating to the Pacific sardine (pilchard) were collected by California Department of Fish and Game personnel aboard the research vessel Yellowfin on a 14-day cruise completed at Los Angeles on May 19. This was a routine hydrographic cruise of the California Cooperative Oceanic Fisheries Investigations to the coastal and offshore area between Oceanside and Baja Head, Baja California. It was designed to collect data for determining the oceanographic factors responsible for the behavior, spawning success, and survival of Pacific sardine.

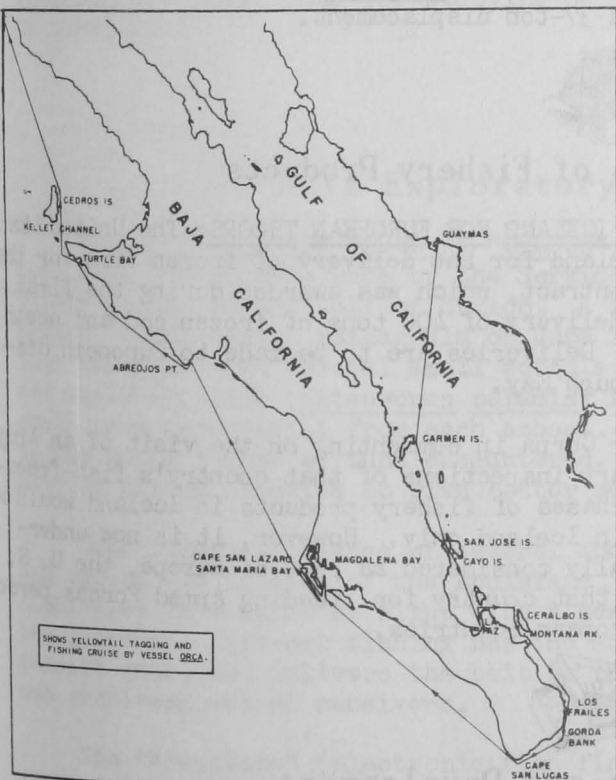
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YELLOWTAIL FISHED AND TAGGED BY VESSEL "ORCA:" A total of 34 yellowtail (*Seriola dorsalis*) was tagged and released by California Department of Fish and Game biologists on the vessel Orca (owned by the J. S. Sefton Foundation of San Diego) in a recent cruise off Baja California. Other phases of the yellowtail study were also

carried out during operations from Carmen Island to Cape San Lucas and along the west coast of Baja California, according to a June 1 release from the California Department of Fish and Game. The yellowtail study is financed with Dingell-Johnson funds.

All of the 34 yellowtail tagged were double-marked with Petersen disks and all-vinylite tubing tags. Scale samples were obtained from 13 of the fish. Three not suitable for tagging provided material for chromatographs, stomach, and ovary samples. Bathythermograph slides were made at six places.

Fishing was tried at Carmen Island, San Jose Island, Cayo Island, Ceralbo Island, Montana Rock, Los Frailes, Gorda Bank, and Cape San Lucas in the Gulf of California. Troll lines were pulled along almost the whole length of western Baja California with concentrated efforts made to catch yellowtail between Magdalena Bay and Cape San Lazaro, across Kellet Channel, and along the east side of Cedros Island. Inshore fishing was accomplished by using a small power boat. Offshore work was done from the vessel's stern. Both trolling and hook-and-line fishing with salted bait were tried. With one exception only the trolling was successful. One yellowtail was speared under the



night light at Cape San Lucas. Fourteen yellowtail were tagged at Carmen Island and 20 off Santa Maria Bay. At these two places all troll lures worked with apparently equal success. Bone jigs, feathers, and a salmon spoon all caught yellowtail.

Surface temperatures were high in the Gulf of California, ranging from 20.5° C. (68.9° F.) at Carmen Island to 24.5° C. (76.1° F.) on Gorda Bank, and dropped sharply on the western side of Baja California. Near Santa Maria Bay where yellowtail were taken the water temperature was 16.8° C. (62.2° F.).

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TRAWLER "NAUTILUS" ADDED TO STATE'S MARINE RESEARCH FLEET: The 50-foot commercial fishing trawler Nautilus was recently added to the marine research fleet of the California Department of Fish and Game, according to a June 24 release from the Agency.

The Nautilus replaces the 35-foot Broadbill, which sank at its moorings in Sausalito harbor during a storm last winter. It will be used by marine biologists as a mothership in abalone-diving research off the north coast, in trawl investigations, and salmon and crab research out of San Francisco.

The State's new vessel carries two-way short-wave radio, loran, automatic pilot, and recording echo-sounder. It is equipped with two drag winches and 450 fathoms of cable.

Formerly the Sportfisher II, the 7-year-old Nautilus is a northern dragger, with a 14-foot beam, 8-foot draft, and 37-ton displacement.



## Federal Purchases of Fishery Products

ARMY PURCHASES FROZEN FILLETS IN ICELAND FOR EUROPEAN TROOPS: The United States Army awarded its first contract in Iceland for the delivery of frozen fish for the U. S. Armed Forces in Europe. This contract, which was awarded during the first quarter of this year, called for the delivery of 400 tons of frozen cod and ocean perch fillets at a price of \$153,200. Deliveries are to be made to European destinations in monthly installments through May.

Previously the Army Quartermaster Corps in commenting on the visit of an Army Veterinarian to Iceland to make sanitary inspections of that country's fish-freezing plants had indicated that the purchases of fishery products in Iceland would be for Armed Forces personnel stationed in Iceland only. However, it is now understood that since Iceland is traditionally considered as part of Europe, the U. S. Army may purchase fishery products in that country for feeding Armed Forces personnel stationed in Iceland and other European countries.



## Gear Research and Development

UNDERWATER SOUND AND TELEVISION TESTED OFF BAHAMAS BY RESEARCH VESSEL "POMPANO" Underwater sound recordings and tests with underwater television were made on a day cruise of the M/V Pompano, a 57-foot exploratory fishing research vessel, on

ated by the Service's Branch of Commercial Fisheries. The cruise was completed at Miami, Florida, on June 16. Tests were conducted in the vicinity of Bimini Islands in the Western Bahamas.

Underwater sound recordings were obtained on schools of bluefin tuna which migrate northward along the western shore of the Bimini group from about May 15 to June 15 each year. Numerous schools containing from 10 to 20 large tuna (each 400 lbs. or over) were sighted to the west of Gun and Cat Cays during a 3-day period beginning on June 8. Twenty-one tape recordings were made while tuna were observed at distances from 5 feet to about 75 yards from the hydrophone. A small chartered float plane was helpful in spotting the schools and in guiding the boat into positions near the fish.

The recordings will be analyzed in the near future at the Service's gear research station at the University of Miami Marine Laboratory to determine if they contain any sounds attributable to the tuna. If the recordings are found to contain sounds characteristic of the fish, additional work will be undertaken to develop special devices which will help commercial fishermen locate schools of tuna (and possibly other fish) by the sounds which they produce in the water.

Preliminary tests were also carried out with industrial television equipment adapted for underwater use to determine its suitability for studying fishing gear in operation. The camera was lowered in a water-tight housing and trained on sections of the bottom, 15 to 20 feet away from the camera lens. Small fish, seaweed, and coral formations on the bottom in depths up to 40 feet were visible on the monitor screen in good detail. The tests indicate that the equipment, with certain improvements, such as a remote control for changing the iris opening, can be developed into a useful tool for studying otter trawls and other types of fishing gear in operation.



### Gulf Exploratory Fishery Program

TUNA BAIT GROUNDS FOUND BY "OREGON" IN GULF (Cruise No. 19): Good catches of tuna bait fishes were made by the Service's exploratory fishing vessel Oregon on a 72-day cruise in the Gulf of Mexico. A few tuna schools were also sighted. The cruise, completed at Pascagoula on June 20, was plagued by unfavorable weather. Contact was made with several small schools of blackfin tuna (Parathunnus atlanticus) and white skipjack (Katsuwonus pelamis) in the Straits of Florida, and only a few small tuna were caught from each school. The poor catch was probably due chiefly to the small number of tuna encountered, but some minor modifications of gear and methods can be expected to give better results.

Good tuna-bait fishes of several species were found in the Florida Keys area and around the islands of the Louisiana, Mississippi, and Alabama coasts. Adequate quantities were taken at night with a new type of lift net designed especially for the purpose. Lift-net fishing has the advantages of requiring less labor, less expensive gear, and delivers the bait to the tanks in much better condition than methods requiring use of receivers.

The "Fischlupe" (electronic fish finder) was used to examine suitable bottom for snappers toward the end of the cruise. The results were promising.

Tuna Bait Fishing: During April the Oregon worked along the west coast of Florida as far as Key West, Florida, in search of suitable tuna bait. The lampara-type

bait seine tried by the Oregon crew proved unsatisfactory for species of Harengula (razorbellies) until a new floor of small mesh was put in. Subsequently both Harengula and Opisthonema (thread herrings or hairy backs) were tried on fish in the Straits of Florida and found unsatisfactory because of their tendency to rush away from the boat and to sound.

In May the Oregon worked in the Straits of Florida, made a brief run south of the Isle of Pines in the northwestern Caribbean, and fished for bait in the vicinity of the Florida Keys with a lift net. The lift net, a specially designed model, was very successful in getting bait. The bait taken with the lift net in the Florida Keys was chiefly the majua (Jenkinsia lamprotaenia). Good quantities were taken also of a species of anchovy not yet identified, and of small Sardinella anchovia. These appear to be good bait fish. Thread herrings and razorbellies were also taken but were discarded. After the middle of June bait was taken in adequate quantity with the lift net near the outside beaches of Chandeleur Island, Louisiana; Horn Island, Mississippi; and Petit Bois Island, Alabama. This bait was chiefly a species of anchovy not yet identified. It appeared to have excellent behavior characteristics as bait and lived well in the tanks. Anchovies of this or a similar species taken in the Florida Keys lived in the Oregon bait tank for 47 days before use.

Tuna Fishing: Relatively few schools of tuna were seen in the Florida Straits or south of Cuba during the few days of good fishing weather. Between 75 and 100 tuna were taken, all under 10 pounds—about evenly divided between blackfin and white skipjack. Only one blackfin was taken on trolling lines during the entire cruise although trolling lines were used at all times when under way. A relatively large number of little tuna (Euthynnus alletteratus) were taken while sailing over the continental shelf, but deep-water trolling catches, other than the single blackfin tuna, consisted of dolphin, wahoo, and barracuda. No porpoises were seen offshore or near the small tuna schools in the Straits of Florida or south of Cuba, but birds were working over most of them.

Most of the tuna were taken on May 9, 40 to 60 miles north of Havana. The ratio of fish caught to strikes was low indicating probably that the squids and poles were not right for the size fish present. Some larger fish were present, but were deep and would not rise to the squids. A number of other schools were fished with poor success. On May 16 mechanical difficulties forced a return to Key West. Bad weather prevented fishing during the first week of June. One school of tuna—about 30 fish and probably yellowfin weighing over 25 pounds—were found in company with a pair of whale sharks off Mobile over a depth of 600 fathoms on June 11. They were feeding on clouds of small bait fish accompanying the whale sharks and would not take the Oregon's bait except at too great a distance from the stern for fishing.

Snapper Fishing With Aid of "Fischlupe": On several occasions the Oregon moved in from deep water after dark to anchor on the continental shelf, passing over rocky places or lumps suitable for red snappers. Good correlations of trial hand-line catches were found with indications of fish on the "Fischlupe." Conversely, no fish or few fish were hooked over good-appearing rocky bottom where the "Fischlupe" failed to show fish. One spectacular showing on the "Fischlupe" appeared during the night and was noted while the vessel was at anchor. Snapper hand lines were tried immediately and catches were always made before the leads hit bottom, and continued until the shoal of fish, as indicated by the "Fischlupe," moved away. Then catches stopped. Judging from the catches, the shoal of fish consisted of medium and small size snappers with white trout (Cynoscion arenarius) in a layer over the top of the shoal. The shoal extended from the bottom upward about 8 fathoms at a depth of 50 fathoms. It was not possible to predict the size of the fish from the "Fischlupe" readings, and the interpretation of some indications which may have resulted from bottom growth such as Alcyonarians were uncertain. More experience with the instrument under Gulf conditions might be expected to give better results.

Indications of fish in deep water were noted many times on the "Fischlupe," but in most cases fishing was not attempted because of gear limitations and positive correlation of indications with fish caught on hook and line were made only for red snappers. Readings that we were unable to interpret at all were fairly frequent. For example, a "false bottom" appeared at 180 fathoms where the depth was approximately 600 fathoms and above this "false bottom" (between 80 and 150 fathoms) were scattered indications with about half the intensity of usual fish showings.



## Japanese Frozen-Cooked Tuna Shipped to U. S. in Unsealed Cans

On June 15 a shipment of 100 cases (48 No.  $\frac{1}{2}$  cans) of Japanese frozen-cooked tuna in unsealed cans was received by a broker in San Francisco, reports the Service's Fishery Marketing Specialist in California. Previously, small samples of this product were received by several canners and brokers for experimental purposes, the first shipment of which arrived in southern California late in 1952.

It is understood that in Japan the cans are filled with solid-pack tuna, frozen without lids, and packed 48 cans to a carton for shipment. A sheet of cardboard is placed between the layers of cans in the carton and the product is kept frozen in transit. The tariff rate for this import was  $12\frac{1}{2}$  percent ad valorem.

It is also understood that the experimental lots received earlier were handled in this country by simply adding oil and salt, sealing with a lid, and processing in a retort.



## Metal Cans--Shipments for Fishery Products, January-April 1953



Total shipments of metal cans for fish and sea food in January-April 1953 amounted to 22,520 short tons of steel (based on the amount of steel consumed in the manufacture of cans), 10 percent more than the 20,483 short tons shipped in the similar period in 1952.

This is based on a June 22 report issued by the Bureau of the Census.

NOTE: STATISTICS COVER ALL COMMERCIAL AND CAPTIVE PLANTS KNOWN TO BE PRODUCING METAL CANS. REPORTED IN BASE BOXES OF STEEL CONSUMED IN THE MANUFACTURE OF CANS, THE DATA FOR FISHERY PRODUCTS ARE CONVERTED TO TONS OF STEEL BY USING THE FACTOR: 23.0 BASE BOXES OF STEEL EQUAL ONE SHORT TON OF STEEL.



## North Atlantic Fishery Investigations

MESH-SELECTIVITY EXPERIMENTS ON HADDOCK CONDUCTED BY "ALBATROSS III" (Cruise No. 51): Mesh-selectivity experiments on haddock, and special fishing for young ocean perch were the objectives of the Service's research vessel Albatross III on a 9-day cruise completed at Boston, Mass., on June 17. The areas investigated included the vicinity of Jeffries Ledge in the Gulf of Maine, and the southeast part of Georges Bank.

Six tows in the Gulf of Maine yielded several hundred young ocean perch of 5 to 10 cm. (2 to 4 inches). This was more than the number sought.

Fifty-three tows were completed on Georges Bank to test the effect of covers upon escapement of small haddock through the cod end. Covered and uncovered cod ends of 3-inch (inside measurement) mesh were fished alternately. Several tows with a partial cod end cover were made to determine the most important part of the cod end for releasing small haddock. An abundance of small haddock on Georges Bank provided an abundance of data on the effect of cod-end covers.



## Pacific Coast Halibut Fishery

AREAS 3A AND 1A CLOSED JULY 7: The International Pacific Halibut Commission on June 18 announced that Pacific halibut Area 3A would be closed to halibut fishing at 11:59 p. m. (P. S. T.), July 7, 1953. The Commission estimated that by that date the quota of 28,000,000 pounds for Area 3A would have been attained. Area 1A, which had no established quota, would close at the same time as Area 3A. Pacific halibut fishing this year opened on May 17 instead of May 14 as in 1952.

Areas 3A and 1A this season were open to fishing for 52 days—the shortest season on record—compared to 60 days in 1952, 56 days in 1951, 66 days in 1950, 73 days in 1949, 72 days in 1948, and 109 days in 1947.

Areas 2A and 1B closed at 11:59 p. m. (P. S. T.), June 9, 1953. These areas were open to fishing this season for 24 days—also the shortest season on record for these areas—compared with 26 days in 1952, 28 days in 1951, 32 days in 1950, 34 days in 1949, 32 days in 1948, and 39 days in 1947.

Prior to 1951 the closure of Areas 3A and 1B would mean the end of all halibut fishing in the Pacific, except for halibut caught incidentally. However, 1953 regulations established subdivisions of certain areas to increase the production of halibut on some underfished banks. These subdivisions are: Areas 2B and 2C, scheduled to be opened to fishing for 10 days beginning July 31; and Areas 3B and 4 scheduled to be opened to fishing for 25 days beginning August 5. Areas 2B and 2C were first established in 1951, and Area 3B was first established in 1952.

Regulations for the retention of incidentally-caught halibut during the 1953 season are similar to those issued in 1952.



## Pacific Oceanic Fishery Investigations

TUNA ATTRACTANTS TESTED BY "CHARLES H. GILBERT" (Cruise No. 8): Tests with liquid tuna extracts to attract skipjack schools and study their reaction were made by the Service's Pacific Oceanic Fishery Investigations research vessel Charles H. Gilbert on a 7-day cruise completed at Honolulu on March 3. Three skipjack tuna schools were chummed successfully to the stern of the boat and liquid tuna extract was cast among them by several different means. In one instance it appeared as though the individuals of the school were attracted, and in two instances the results were negative. In the instance that the individuals of the school appeared to be attracted, about six fish appeared to dart around for several seconds within the cloud of material breaking the surface and exhibiting the typical feeding reaction observed in the Coconut Island ponds at Hawaii. However, even in this instance the school itself disappeared and within 60 seconds the six fish observed within the cloud of extract also disappeared and only reappeared at the stern of the vessel when chumming was again resumed.

Experiments were carried out where the extract was cast in a straight line and also in a large circle hoping to attract schools of skipjack without the use of chum. In all cases where chum was not used, no skipjack were observed close to the material in the water nor could any feeding reaction be observed. It was found to be very difficult to keep contact with the fish without the use of live bait.

Attempts to chum 7 schools of skipjack were successful in bringing 3 schools to the stern of the boat and catching fish from all 3 schools. Many other schools were seen but since bait was scarce chumming was not attempted. It was concluded that schools were successfully chummed without any adverse reaction of the schools. In one instance fish appeared at the stern of the vessel apparently attracted by the turbulence from the propeller; no chum was thrown.

An attempt was made to capture viable tuna to return to the Coconut Island ponds, but only one little tuna (kawakawa) remained alive at the end of the trip. Three yellowfin placed in the live-bait wells died within 3 days after being placed in the wells.

A Navy noise-measuring set was used to detect sounds emanating from tuna. No unusual noises which could be attributed to tuna were heard when the sensitive element was lowered over the stern in the vicinity of a school of skipjack.

An attempt was made to study the deep scattering layer by the use of an Edgerton underwater camera. The camera was lowered on two separate nights for a total of 210 minutes off Waianae on leeward Oahu and off Port Allen on Kauai. No particularly important photographs were obtained from this attempt.

Surface trolling was carried on systematically using various boat speeds in an attempt to study trolling as an effective means of quantitative sampling for surface skipjack schools. Trolling was carried out for a total of 56 hours and 20 minutes and only 8 fish were caught--1 skipjack, 4 yellowfin, 1 little tuna (kawakawa), and 2 "mahimahi." Trolling as it is now being carried out is not an effective means of quantitatively sampling the surface skipjack schools.

An echo-sounder was used consistently when near bird flocks or other signs of surface skipjack schools. Excellent traces of surface schools were made by the use of the instrument.

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SKIPJACK TUNA STUDIES IN HAWAIIAN WATERS CONTINUED BY "CHARLES H. GILBERT" (Cruise No. 12): In order to keep almost constant tabs on the abundance and the movements of skipjack tuna schools in Hawaiian waters during the fishing season, three series of weekly cruises were planned for the research vessel Charles H. Gilbert. The second series of cruises was completed on June 3 and lasted 25 days. The principal objectives of the cruise were: (1) to test fish attractant solutions at sea; (2) to continue the weekly two-day hydrographic section through Kaiwi Channel; (3) to secure viable skipjack and other tuna for the Coconut Island ponds; (4) to test new methods of tagging skipjack tuna; (5) to further test the Banner plankton trap inshore and offshore.

Three different fish attractant solutions were used during the cruise: Preserved yellowfin tuna flesh extract, preserved skipjack gut extract, and frozen skipjack flesh extract. Sea trials were attempted on six fish schools variously composed of skipjack, frigate mackerel, and dolphin. Results were inconclusive or negative.

The three 2-day hydrographic sections were a continuation of the series started on Cruise 11. The results of oceanographic observations from the cruises so far com-

pleted indicate a striking parallel between the warming of the water around the Hawaiian Islands in the spring and the seasonal increase in the abundance of the skipjack or aku. If further work bears out this relationship, the use of water temperature as an index of skipjack abundance may be of value for predicting the catch in local waters and for guiding the skipjack sampan fleet to new fishing grounds south of its present range of operation during the winter, when the tuna are scarce around the Hawaiian Islands.

A total of 30 active and apparently viable skipjack were captured and transferred to the Coconut Island pond. All were dead within a day. Fifteen of these fish were tagged with numbered hooks through the crest of the back just back of the second dorsal fin. These hooks remained in place without tearing out even when the fish swam at high speed in the pond.

The Banner plankton trap was set overnight at inshore anchorages on 3 occasions. Catches were good enough to justify further consideration of this type of trap.

Good radar observations on a few bird flocks were secured under calm sea conditions in the Waianae lee.

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NEW TYPE LONG-LINE GEAR SUCCESSFULLY TRIED BY "JOHN R. MANNING" (Cruise No. 15): After a two-month exploratory fishing cruise across the equatorial yellowfin tuna grounds, the Service's Pacific Oceanic Fishery Investigations research vessel John R. Manning returned to its Pearl Harbor base on June 16. The expedition brought back valuable data on the seasonal and geographical fluctuations in abundance of tuna and also provided an opportunity to test a new and promising type of fishing gear. It was found that the new long-line gear, which has very short branch lines with a free-swiveling attachment to the mainline, were remarkably immune to tangling, and caught about 40 percent more yellowfin than the conventional gear.

The vessel went south along the meridian of 150° W. longitude, stopped at Canton Island, and returned along 170° W. longitude. The rich zone for yellowfin tuna fishing was found at 3° to 4° N. latitude on 150° W. and between 1° S. and 4° N. on 170° W. Catches reached a maximum in the rich zone of 10 yellowfin for every 100 hooks fished, approximately 4 times the average in local waters. Unusually large numbers of albacore, averaging about 40 pounds, were taken at all the more southerly stations on both longitudes.

The operation of a mid-water trawl to sample the forage fish in the same area was abandoned after two trials due to failure of the diving vane.

The modified long-line gear used worked exceptionally well. It caught fish at about three-fourths the rate of the standard gear and yet because of the special construction nearly eliminated the tangling; with the smaller amount of line per basket it was possible to haul it almost twice as fast as the standard gear, or at a rate of about 200 hooks per hour. Salted baits were found to be slightly superior to fresh baits.

Both surface and subsurface temperatures were quite unusual during this cruise because the current and countercurrent system was nearly at a standstill. The surface temperatures increased while crossing the equator from north to south instead of decreasing at the equator as they usually do. The only evidence of the easterly countercurrent was found close to the equator where the surface currents usually flow westerly.



At several stations it was possible to obtain full stomachs of big-eyed, yellowfin, and albacore simultaneously for a study of the comparative food of the three species. Big-eyed tuna were found in spawning condition and ovaries collected for laboratory study. The albacore had evidently spawned some time previously. Excellent material for racial study of albacore was collected. Several specimens of the mako shark were found to be the Atlantic species Isurus oxyrinchus rather than the Pacific species Isurus glaucus.



## U. S. Foreign-Flag Fishing Vessel Regulations Do Not Apply to Guam and American Samoa

Foreign-flag vessels engaged in certain fishery operations are permitted to land their products at Guam and American Samoa. This opinion was issued by the Bureau of Customs, Treasury Department, as a guide to collectors of customs and in reply to an inquiry from a West Coast fishery association. The Bureau's reply to an inquiry which asked whether section 4311, Revised Statutes (46 U.S.C. 251), as amended by the Act of September 2, 1950 (64 Stat. 577), has application to Guam and American Samoa, follows:

"...You ask whether the Bureau has settled the question of the statute's application to Guam and American Samoa, and if so, under what authority of law the settlement was determined. The section of law cited prohibits, except as permitted by treaty or convention, a foreign-flag vessel, whether documented as a cargo vessel or otherwise, from landing in a port of the United States its catch of fish taken on board on the high seas or fish products processed therefrom, or any fish or fish products taken on board such vessel on the high seas from a vessel engaged in fishing operations or in the processing of fish products.

"The Act of August 1, 1950 (ch. 512, 64 Stat. 384-393; 48 U.S.C. Supp. V. 1421-1424b.), declaring Guam to be an unincorporated territory of the United States and setting forth its form of government, also states that no law of the United States thereafter enacted shall have any force or effect within Guam unless specifically made applicable by act of the Congress, either by reference to Guam by name or by reference to 'possessions.' The Act of September 2, 1950 (64 Stat. 577), being a 'law of the United States thereafter enacted,' has no force or effect within Guam because the act is not specifically made applicable, either by reference to Guam by name or by reference to 'possessions.'

"American Samoa is an unorganized, unincorporated territory appurtenant to the United States. As such neither American Samoa itself nor any port or place therein is a 'port of the United States' within the purview of section 4311 of the Revised Statutes, as amended, unless it can be made to appear that Congress intended otherwise. To this Bureau, it does not so appear.

"The Bureau therefore is of the opinion that a foreign-flag vessel is not prohibited by section 4311 of the Revised Statutes, as amended, from landing in Guam or American Samoa its catch of fish or fish products taken on board such vessel on the high seas from a vessel engaged in fishing operations or in the processing of fish or fish products."

The Bureau also was asked about the dutiable status of fish when landed at a port of the United States after the fish (products of a Japanese fishery) are discharged at Guam or American Samoa from a Japanese fishing vessel coming from the high seas. The Bureau states that "fish landed in Guam or American Samoa by a Japanese vessel and then transhipped to any port in the customs territory of the Unit-

ed States would be subject to customs treatment, including rates of duty, as though the importations were made directly from Japan. Such shipments would also be subject to applicable tariff quotas."

NOTE: SEE COMMERCIAL FISHERIES REVIEW, APRIL 1953, P. 26.



## U. S. Pack of Pacific Coast Sea Herring, 1952

The United States pack of Pacific sea herring in 1952 totaled 40,333 standard cases, valued at \$280,237 to the canners, or an average price of \$6.95 per case

Table 1 - U. S. Pacific Sea Herring Pack By Style of Pack, 1952 <sup>1/</sup>				Table 2 - U. S. Pacific Sea Herring Pack by Can and Case Size, 1952 <sup>1/</sup>			
State and Style of Pack	Quantity	Value to Canners	Avg. Price Per Std. Case <sup>2/</sup>	Can and Case Sizes	Quantity	Value to Canners	Avg. Price Per Case
	Std. Cases <sup>2/</sup>	\$	\$		Actual Cases	\$	\$
California:				15 ounces net (48 cans) .	30,245	199,929	6.61
Natural <sup>3/</sup> . . . . .	30,941	208,733	6.75	5 ounces net (100 cans) .	13,601	71,997	5.29
In tomato sauce . . . . .	9,392	71,504	7.61	Other sizes (converted to standard cases) . . . . .	643	8,311	12.92
Total . . . . .	40,333	280,237	6.95	Total	44,489	208,237	-

<sup>1/</sup>PRELIMINARY.  
<sup>2/</sup>CASES OF VARIOUS SIZES CONVERTED TO THE UNIFORM BASIS OF 48 NO. 1 TALL CANS TO THE CASE, EACH CAN CONTAINING 15 OUNCES NET.  
<sup>3/</sup>INCLUDES A SMALL PACK IN OLIVE OIL.

<sup>1/</sup>PRELIMINARY.

(table 1). All the Pacific sea herring was canned in California; 9 plants packed in 1952. Of the total pack, 77 percent was put up natural style and the remaining 23 percent in tomato sauce.

Table 3 - U. S. Canned Pacific Sea Herring Pack, 1947-52			
Year	Quantity	Value to Canners	Avg. Price Per Std. Case <sup>1/</sup>
	Std. Cases <sup>1/</sup>	\$	\$
1952 <sup>2/</sup> . . . . .	40,333	280,237	6.95
1951 . . . . .	2 <sup>3/</sup>	-	-
1950 . . . . .	-	-	-
1949 . . . . .	-	-	-
1948 . . . . .	46,060	386,806	8.40
1947 . . . . .	6,861	48,008	7.00

<sup>1/</sup>CASES OF VARIOUS SIZES CONVERTED TO THE UNIFORM BASIS OF 48 NO. 1-TALL CANS TO THE CASE, EACH CAN CONTAINING 15 OUNCES NET.  
<sup>2/</sup>PRELIMINARY.  
<sup>3/</sup>ONLY A SMALL PRODUCTION WAS REPORTED IN 1951.



## Wholesale Prices, May 1953

Wholesale prices for edible fishery products rose from April to May because of lighter-than-normal production and an increase in demand. The over-all edible fish and shellfish (fresh, frozen, and canned) wholesale index for May was 106.5 percent of the 1947-49 average (see table)--7.7 percent higher than in April and 8.7 percent higher than in May 1952, the Bureau of Labor Statistics of the Department of Labor reports.

Prices in May were higher for all varieties included in the drawn, dressed, or whole finfish subgroup except West Coast halibut and salmon. Lighter landings in May caused the ex-vessel price of large drawn offshore haddock at Boston to rise 78.1 percent above April. All fresh-water varieties in this subgroup were priced

higher in May due to lighter production on the Great Lakes. On the other hand, prices of West Coast halibut and salmon at New York City were down 4.1 and 3.2 percent, respectively, due to large inventories and weaker markets. Compared with May 1952, the over-all May price index for this subgroup was down 15.8 percent--each item in the subgroup was priced substantially lower than a year earlier.

Fresh processed fish and shellfish prices were 8.8 percent higher than in April and 35.3 percent above a year earlier. Shrimp prices continued to rise as stocks were further reduced and production continued light--from April to May fresh large shrimp prices at New York City rose 15.0 percent and they were 78.6 percent higher than in May 1952. Small haddock fillet prices at Boston in May were up 12.5 percent from the previous month because production was light, but 8.5 percent lower than a year earlier. Shucked oyster prices remained the same as in April, but were 5.6 percent above May 1952.

Table 1 - Wholesale Average Prices and Revised Indexes for Edible Fish and Shellfish, May 1953 and Comparisons

Group, Subgroup, and Item Specification	Point of Pricing	Unit	Avg. Prices-		Indexes (1947-49 = 100)			
			(\$)		May	April	March	May
			1952	1953	1953	1953	1953	1952
<b>ALL FISH AND SHELLFISH (Fresh, Frozen, and Canned)</b>					106.5	98.9	102.8	105.8
<b>Fresh and Frozen Fishery Products:</b>					112.2	99.4	105.7	108.2
<b>Drawn, Dressed, or Whole Finfish:</b>					96.7	81.8	94.8	114.8
Haddock, large, offshore, drawn, fresh	Boston	lb.	.09	.05	90.1	50.6	77.4	108.6
Halibut, Western, 20/80 lbs., dressed, fresh or frozen	N.Y.C.	"	.29	.31	90.5	94.4	102.1	106.8
Salmon, king, lge. & med., dressed, fresh or frozen	"	"	.47	.48	104.5	107.9	109.6	125.9
Whitefish, mostly Lake Superior, drawn (dressed), fresh	Chicago	"	.50	.43	122.7	105.3	100.4	130.1
Whitefish, mostly Lake Erie pound or gill net, round, fresh	N.Y.C.	"	.60	.50	121.3	101.1	73.8	131.4
Lake trout, domestic, mostly No. 1, drawn (dressed), fresh	Chicago	"	.48	.39	98.4	79.9	129.1	101.4
Yellow pike, mostly Michigan (Lakes Michigan & Huron), round, fresh	N.Y.C.	"	.31	.22	72.7	51.0	129.0	102.0
<b>Processed, Fresh (Fish and Shellfish):</b>					134.2	123.3	123.1	99.2
Fillets, haddock, sml., skins on, 20-lb. tins	Boston	lb.	.27	.24	91.9	81.7	102.1	100.4
Shrimp, lge. (26-30 count), headless, fresh or frozen	N.Y.C.	"	1.00	.87	158.1	137.5	130.4	88.5
Oysters, shucked, standards	Norfolk area	gal.	4.75	4.75	117.5	117.5	117.5	111.3
<b>Processed, Frozen (Fish and Shellfish):</b>					124.3	115.3	112.7	102.3
<b>Fillets:</b>								
Flounder (yellowtail), skinless, 10-lb. pkg.	Boston	lb.	.31	.33	108.7	115.7	115.7	129.7
Haddock, sml., skins on, 10-lb. cello-pack	"	"	.19	.21	70.7	78.1	76.2	89.3
Ocean perch, skins on, 10-lb. cello-pack	Gloucester	"	.23	.23	108.1	112.0	114.4	110.7
Shrimp, lge. (26-30 count), 5-lb. pkg.	Chicago	"	1.06	.87	163.5	134.2	127.7	94.1
<b>Canned Fishery Products:</b>					98.0	98.2	98.5	102.2
<b>Salmon, pink, No. 1 tall (16 oz.), 48 cans per case</b>								
	Seattle	case	19.70	19.71	104.4	104.4	104.4	109.5
<b>Tuna, light meat, solid pack, No. 1/2 tuna (7 oz.), 48 cans per case</b>								
	Los Angeles	"	14.80	14.80	92.4	92.4	92.4	89.6
<b>Sardines (pilchards), Calif., tomato pack, No. 1 oval (15 oz.), 48 cans per case</b>								
	"	"	9.25	9.25	108.0	108.0	108.0	109.4
<b>Sardines, Maine, keyless oil, No. 1/4 drawn (3 1/2 oz.), 100 cans per case</b>								
	N.Y.C.	"	7.20	7.45	76.6	79.3	81.9	102.7

1/ REPRESENT AVERAGE PRICES FOR ONE DAY (MONDAY OR TUESDAY) DURING THE WEEK IN WHICH THE 15TH OF THE MONTH OCCURS.

Continued rising shrimp prices caused the over-all frozen processed fish and shellfish index for May to increase 7.8 percent. However, the 21.8 percent rise in shrimp prices from April to May was the only increase among the items in this subgroup. Prices of frozen fillets of flounder, haddock, and ocean perch were all down in May because inventories continued fairly heavy and the market was somewhat weak. Compared with May 1952, the index for frozen processed fish and shellfish was up 21.5 percent due entirely to the large increase in shrimp prices, while frozen fillet prices dropped substantially.

Canned Maine sardine prices dropped 3.4 percent from April to May--the only canned fishery product to show a price change. Canned salmon, tuna, and California sardine prices remained at the April level. Compared with May 1952, canned fish prices were down 4.1 percent: lower prices (25.4 percent) for Maine sardines were offset somewhat by higher prices for pink salmon and tuna.



## Fishery Products Marketing Prospects for July-September 1953

Consumption and Retail Prices: United States civilian per-capita consumption of fishery products during January-June was somewhat smaller than a year earlier. The decline occurred almost entirely in fresh fish; the movement of both the canned and the frozen products into civilian markets was about as large as in the first half of 1952. Retail prices of fishery products through midyear averaged moderately lower than a year earlier. Prospects for the next few months are that civilians may take about as much fresh and processed fishery commodities per person as in the same period of last year. Retail prices for these products are not expected to average as high as those of a year earlier.

Civilian consumption of canned fishery products through mid-1953 was about as large per person as a year earlier, according to trade information. Some seasonal increase will occur this summer, but the consumption rates are not expected to be much different from those of last summer.

Catch: The total commercial catch of fish and shellfish through midyear was moderately smaller than for the same months of 1952. This reduction was the combination of several factors: unfavorable weather in both the New England and Gulf areas hampered commercial fishing operations, and the relatively small catch of tuna from the usual fishing grounds. During the third quarter of 1953, commercial fishing operations and landings of fish and shellfish will reach seasonal peaks.

Freezings and Holdings: Freezings of fish and shellfish in the United States and Alaska from January to June totaled 101.2 million pounds, 27 percent smaller than for the comparable months of last year. Probably one of the most important factors which discouraged freezing activity was the fear of declining prices due to the large stocks of frozen fishery products early in the year and anticipated competition from imported frozen fish fillets.

Frozen fishery products (edible and inedible) in storage on July 1 totaled 142. million pounds, 6 percent less than a year earlier. The net movement of fishery products out of cold storage was unusually large during the first 5 months of 1953 in response to some price cuts at the wholesale level. The seasonal build-up of frozen fish and shellfish stocks which began in June will continue well into the fourth quarter of the year.

Foreign Trade: Imports of fishery products this year will be large, but are not expected to reach the 1952 total. Receipts of major fishery products from abroad during the first four months of 1953 were about as large as a year earlier, with a sharp reduction in frozen groundfish (including ocean perch) fillets not quite offset by increased imports of canned fishery products. Exports of canned fish are expected to be much smaller in total this year than in 1952 principally because of the short supplies of California sardines.

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