

OTHER FISHERY NOTES

Additions to the Fleet of U.S. Fishing Vessels

Eighty-eight vessels received their first documents as fishing craft during November 1946, according to information released by the Bureau of Customs. This brought the total number of craft receiving their first documents as fishing vessels during the first 11 months of 1946 to 1,018, compared with 698 in the same period of 1945. An additional 114 vessels were redocumented as fishing craft during the first 11 months of 1946.

Vessels Obtaining Their First Documents as Fishing Craft

Section	November		Eleven months ending with Nov.		Total, 1945
	1946	1945	1946	1945	
	Number	Number	Number	Number	
New England	9	3	81	67	70
Middle Atlantic	9	5	68	45	48
Chesapeake Bay	11	4	66	53	55
South Atlantic and Gulf	34	23	329	222	240
Pacific Coast	17	5	356	238	244
Great Lakes	6	8	71	49	60
Alaska	-	-	19	5	5
Hawaii	2	-	13	1	1
Unknown	-	-	15	18	18
Total	88	48	1,018	698	741

Note: Vessels documented by the Bureau of Customs are craft of 5 net tons and over.

Source: Monthly Supplements to Merchant Vessels of the United States, Bureau of Customs.

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A total of 1,201 vessels were added to the domestic fishing fleet during 1946, according to information released by the Bureau of Customs. Vessels receiving their first documents as fishing craft numbered 1,085, and an additional 116 vessels were redocumented as fishing craft during the year. In 1940, the total number of fishing vessels of 5 net tons and over, operated in the United States and Alaska, amounted to 5,562 craft.

Vessels Obtaining Their First Documents as Fishing Craft

Section	December		Twelve months ending with December	
	1946	1945	1946	1945
	Number	Number	Number	Number
New England	5	3	86	70
Middle Atlantic	6	3	74	48
Chesapeake Bay	5	2	71	55
South Atlantic and Gulf	22	18	351	240
Pacific Coast	19	6	375	244
Great Lakes	5	11	76	60
Alaska	-	-	19	5
Hawaii	4	-	17	1
Unknown	1	-	16	18
Total	67	43	1,085	741

Note: Vessels documented by the Bureau of Customs are craft of 5 net tons and over.

Source: Monthly Supplements to Merchant Vessels of the United States, Bureau of Customs.

FAO Fisheries Division



The Food and Agriculture Organization has forwarded to member governments a Progress Report and Summary of its 1947 Program. That portion relating to the Fisheries Division, which is directed by Dr. D. B. Finn, follows:

"In accordance with the recommendations of the Standing Advisory Committee on Fisheries, which held its first meeting at Bergen in August 1946, and of the second session of the Conference, the work of the Division, which is responsible for all FAO activities relating to fish and fisheries, will be divided amongst three branches: Fishery Economics, Fishery Biology, and Fishery Technology.

"Fishery Economics Branch will be concerned with the equilibrium of production, distribution and consumption of fish, and with economic efficiency within the limits of fishery activities. The economic relationship of fish with food in general is a responsibility of the Economics Division. The work of the branch will initially be divided into three parts:

- "(a) Statistics, including the development of common conversion factors and of methodology in the less advanced countries, as well as the collection and collation (in collaboration with Statistics Division) of statistical material in its present form;
- "(b) Production and consumption studies, undertaken in cooperation with governments;
- "(c) International trade, including studies in the significance of fishery products in international trade and the effect of limiting factors.

"The work of Fishery Biology Branch will be divided into (a) marine biology and (b) fresh water biology, and will ultimately cover fish cultural methods, hydrography, oceanography, and meteorology.

"Fishery Technology Branch will initially include the following subdivisions:

- "(a) Fishing methods;
- "(b) Fish processing;
- "(c) Fishery by-products;
- "(d) Fishery engineering, including the application of engineering science both to the catching, processing, transport, storage, and distribution of fish and to river and lake management.

The branch will, no doubt, be called on to provide governments with technical advice, either through the services of its own staff or through arranging for the loan of experts by one government to another. This will be facilitated by compilation of a world directory of fishery experts.

"The work of the Division in assembling recorded knowledge, assisting in its dissemination, determining the gaps in existing knowledge, stimulating measures to fill the gaps and making recommendations for action will depend for its success on liaison with government departments and other national and international organizations. Full advantage will be taken of facilities provided by national FAO committees and regional offices.

"Steps have already been taken to develop cooperation. Mr. P. D. H. Dunn, Fisheries Secretary for England and Wales, who has been closely associated with the work of FAO since its inception, has been appointed as adviser to the Fisheries Subcommittee of the Emergency Economic Committee for Europe. The Director of the Division was present at a meeting of the International Council for the Exploration of the Sea held at Stockholm in August 1946 and made arrangements with the Chairman and the Secretary-General of the Council for coordination of its work with that of FAO. The Director also attended at Bergen in September an international meeting of the salt fish trade, which is seeking to form an international association with objects that are in accordance with the aims of FAO. He also represented FAO at the International Whaling Conference in Washington in November. Measures for continuance of the work of the Fisheries Rehabilitation Division of UNRRA are under discussion.

"Arrangements are contemplated for members of the staff of the Division to visit certain countries in order to assist in developing latent fishing resources. Plans are also under way for a world fishery census in 1950, and a start has been made by the Economics Branch in making special studies of fish products in relation to commodity arrangements."



Fishery Leaflet 200

This leaflet, prepared by the Division of Information, Fish and Wildlife Service, lists the titles and numbers of all fishery leaflets from 1 to 200. These publications cover such subjects as angling laws; baits; preservation and care of fish nets; fish culture; fish ponds; various fish and shellfish in their respective areas; marine predators; Irish moss, sponges; care of aquarium fishes; food value of fish and shellfish; fish cookery; home preservation of fishery products; refrigeration of fish; unemployment insurance for fishermen; and many more.

Copies of this publication may be obtained, free of charge, from the U. S. Fish and Wildlife Service, Department of the Interior, Merchandise Mart, Chicago 54, Ill.



Fishery Products Purchased by Army Quartermaster Corps

Purchases of fishery products by the Army Quartermaster Corps' 12 market centers during the years 1943 to 1946, inclusive, totaled more than 199 million pounds. Procurements during 1946 amounted to 25,146,425 pounds, a decline of 54 percent under those of 1945. A tabulation of the purchases by months is shown on page 40.

During September, October, and November 1946, the Army's procurement of fishery products exceeded its meat purchases; however, during these months, meat was in extremely short supply. Following the return of meat to the markets, the Army's

purchases of fish declined. This was reflected in its December purchases, which were 56 percent less than those in November.

Month	1943	1944	1945	1946
	Pounds	Pounds	Pounds	Pounds
January	3,764,722	3,717,261	2,928,254	4,442,020
February	3,924,502	5,247,017	2,500,989	2,377,388
March	4,113,493	4,611,690	3,844,308	1,792,728
April	3,357,874	7,612,747	4,958,707	731,807
May	4,033,638	9,034,419	5,378,541	690,120
June	5,902,756	8,772,073	7,941,247	1,298,044
July	5,682,422	5,705,824	4,753,443	1,534,121
August	5,650,140	4,987,699	4,893,007	1,747,690
September	4,018,787	2,348,852	4,275,587	2,943,477
October	4,866,451	3,073,230	3,011,802	3,214,982
November	6,189,080	5,839,746	4,132,875	3,037,957
December	4,200,151	3,279,844	5,499,304	1,336,091
Totals	55,704,016	64,230,402	54,118,064	25,146,425



Preliminary Procedures for the Analysis of Vitamin A in Fishery Byproducts

In June 1944, technical representatives of the vitamin A industry and officials of State and Federal Government agencies interested in fishery byproducts met at San Francisco and worked out uniform, unofficial procedures for determining the oil content of raw materials containing vitamin A and for preparing the solvent extract used for the spectrophotometric determination of the content of vitamin A.

These procedures, listed below, have been successfully employed to facilitate the trade in materials containing vitamin A.

"It is assumed that the material has been presented for analysis in the form of a sample consisting of one pint of material representative of the lot in question. It is not assumed that this material, as received, is fully ground for analysis.

Preparation of Sample

"Entire sample should be homogenized in a Waring Blender or any similar disintegrating device, the treatment being continued until the mass is freed of lumps and is of entirely uniform consistency throughout.

"Duplicate sub-samples for analysis should be obtained while the mass is still being agitated, using a pipette or hypodermic syringe approximately calibrated to deliver 5 ml. of material for method A and 10 ml. for method B, the entire delivery being used for each sample.

Analysis

Method A

"1. If the material is estimated to contain 40% fat or over, samples should be placed in tared centrifuge bottles of approximately 125 ml. capacity provided

with tight fitting extracted corks (corks should be extracted to such an extent as to have no effect on the optical density of the solvent), and the sample weights determined to within 0.01 gram.

"2. Approximately 20 grams of pulverized, neutral, anhydrous sodium sulfate and exactly 50 ml. of petroleum ether (Skellysolve F, or equivalent grade) are added to the sample, which is immediately tightly stoppered and shaken until the vitamin A and oil are in complete equilibrium with the solvent phase. It is deemed impractical to specify the exact time and technique of shaking to be used by each Laboratory, but the completeness of the extraction should be determined when the method is first undertaken by examining aliquots drawn after different periods of shaking. For subsequent use an adequate safety factor should be added to the time necessary to produce equilibrium.

"3. When equilibrium is obtained, the solvent layer should be inspected and, if found to be free from all turbidity, aliquots for vitamin A and fat may be drawn. If turbidity persists in the solvent phase, the entire mass should be centrifuged until a clear solvent layer is obtained.

"A 5 ml. aliquot is transferred to a volumetric flask and suitably diluted with 'anhydrous' isopropanol for spectrophotometric examination.

"4. A 10 ml. aliquot is pipetted into a tared flask and rendered free of solvent by heating on a water-bath until boiling ceases and thereafter heating in an air oven at 105° C. or a vacuum oven correspondingly adjusted, for not less than ten nor more than sixty minutes, cooled in a desiccator and weighed to within 0.001 gram.

"5. The percentage of oil in the sample is calculated by the following formula in which S = sample weight and W = weight of oil in aliquot:

$$\% \text{ oil} = \frac{5000 W}{10S - (0.92)(WS)}$$

"6. The sample weight to be used in calculating E (1%, 1 cm) is $\frac{1}{2}$ of the weight of oil derived from the 10 ml. aliquot.

Method B

"1. If the material is estimated to contain less than 40% oil, samples should be placed in tared 100 ml. beakers and weighed to nearest 0.01 gram.

"2. An excess of pulverized, neutral, anhydrous sodium sulphate and approximately 1 teaspoonful of diatomaceous earth are added, and the mass thoroughly mixed. The use of materials that absorb vitamin A shall be avoided.

"3. Four extractions are performed with 30 to 40 ml. of petroleum ether (Skellysolve F, or equivalent grade), stirring thoroughly and decanting after each extraction into 250 ml. volumetric flask.

"4. Treatment is continued by adding 2-3 grams of washed sand (rendered fat-free by ignition), transferring the residue from previous extraction to a glass mortar, and extracting three or four additional times with petroleum ether, grinding thoroughly each time and decanting to the 250 ml. flask. The extract is then made to volume and mixed.

"5. Aliquots are withdrawn and analysis completed as in Sections 3 and 4, Method A, except that in this instance a 50 ml. aliquot is used for oil determination.

"6. Calculate oil content by the following formulae:

$$\frac{\text{Wt. of oil in aliquot} \times 5 \times 100}{\text{Wt. of sample}} = \% \text{ oil in sample}$$

"Weight of oil for E (1%, 1 cm) measurement = 1/10 of weight derived from aliquot."



Protection for Fishermen

Immersion in ice-cold water long has been one of the principle hazards of fishing. Many men, swept from the decks of fishing boats, have never been found alive, because the shock of icy water was too much for them to stand. Recently discovered experiments in Germany may solve this problem.

Shortly after the close of hostilities in Europe, four American technicians were sent to Germany to collect technical and research data and to survey every phase of the German textile industry. Nearly every textile center in the American, British, and French occupied territory was visited.

According to the preliminary reports of the technicians, which were published in the January 1946 issue of Textile Manufacturer, Manchester and London, England, it was not always easy to get the information desired. Germany's big cities and industrial centers, with few exceptions, suffered heavily in the war. Sometimes documents and records had to be dug out of salt mines or hay lofts or from under wood piles as far as 150 miles away from the plants to which they belonged.

Extracts from the technicians' findings with regard to immersion suits follow:

A great deal of effort has been directed to the protection of men in cold water. Research has been instigated by various institutions in the United States and England. These efforts were mostly directed towards extremely tight-woven fabrics, with a sufficient water repellent finish or coating to keep the water away from the skin of an immersed person. These efforts have gone as far as using clothing made of leather with a waterproof coating, none of which have proved entirely satisfactory.

This problem was attacked in Germany from a completely different angle than in the United States or England. It was thought essential that a suit of clothing should be constructed which is permeable when dry, so as not to hinder body movements or make the wearer hot, and yet enable the person immersed in cold water to survive for many hours.

It was thought that the best way to solve this problem was to build a suit in which the cold water which penetrated into the clothing would be forced out again by a stabilized foam, which develops quickly inside this protective suit.

Loss of body heat to water would be considerably reduced by the air bubbles in the foam. When some of these suits were tried out, it showed that a stay of 24 hours in ice-cold water was not at all harmful.

It was necessary to develop a strong and stable foam, and the best result could be obtained with a carbon dioxide forming mixture of sodium bicarbonate with an acid. To avoid body irritation, an organic acid, harmless to the skin; was mixed with bicarbonate in molecular proportion. The mixture should not be hygroscopic. Citric acid proved particularly suitable; it dissolves quickly in cold sea water, so that a foam rapidly develops and as it is a tribasic acid, it gives a high yield, and, therefore, allows a large equivalent quantity of bicarbonate to be worked into the mixture so that a good deal of carbon dioxide can be developed. The best foam medium proved to be a particular Mersolate--type H 30--low in salt content.

The best formula worked out at I.G. Farben at Hoechst was foam powder No. 4, which contained 24.4 percent Mersolate H 30 (30% H₂O) low in salt content; 41.40 percent sodium bicarbonate; 34.14 percent citric acid.

A complete suit consists of trousers, jacket, gloves, and shoes. This was considered better than a one-piece suit, because it could be put on and taken off more easily and was more comfortable. The collar was made of foam rubber which, normally, was kept open and when necessary, closed tightly very quickly by merely pulling a cord. A sort of life belt was worn around the neck which kept the head out of the water.

The production of these suits was intended for the Air Force as well as the Navy and, as the first field tests proved quite successful, an increase of production was planned just before the fighting ceased. It is claimed that suits which were used could be opened, washed out, dried, again filled with powder, and then sewed together and used again.

To construct such an immersion suit, three layers of cloth were used. On the outside, a filament acetate poplin; next, an acetate plush with pile towards the outside; then a viscose filament tightly-woven fabric. The acetate did not swell or absorb a lot of water and permitted the sea water to penetrate quickly to the foam powder, which produced foam immediately. The inner layer of viscose did swell and tighten and kept most of the water away from the body. The foam powder was rubbed into the pile of the plush by hand, at the rate of 4.4 pounds per suit.



Canadian Provincial Fisheries Department Report, 1945

The value of the fishery products of Canada for the year 1944 totaled \$89,418,451. During that year British Columbia produced fishery products to the value of \$34,900,990, or 39 percent of Canada's total. British Columbia in 1944 led all the Provinces in the Dominion in respect to the production of fisheries wealth. Her output exceeded that of Nova Scotia, the second in rank, by \$11,238,935.

The total canned salmon pack canned in British Columbia in 1945 amounted to 1,739,312 cases, according to annual returns submitted to the Provincial Fish-

eries Department by the licensed canners. This was 641,755 cases greater than the number canned in the year previous, but in 1944 the salmon pack in British Columbia was the smallest since the depression years of 1931-32.

Provincial Fisheries Department Report, 1945 (with Appendices), contains in addition to the above information, an account of the capital, equipment, and employees in the British Columbia fisheries; the canned salmon pack for British Columbia in 1945 by districts; other canned packs such as pilchard, herring, and shellfish; and net fishing in non-tidal waters. In the Appendices of the publication, such subjects are discussed as: Contributions to the Life-History of the Sockeye Salmon; Tagging of Herring in British Columbia--Insertions and Recoveries During 1945-46; Condition of the Butter-Clam Fishery in British Columbia. The report on investigations of the International Pacific Salmon Fisheries Commission for 1945 and the salmon-spawning report for British Columbia for 1945 also have been included.



Report on International Whaling Conference

"The International Whaling Conference met in Washington, D. C., on November 20, 1946. The Governments of Argentina, Australia, Brazil, Canada, Chile, Denmark, France, Netherlands, New Zealand, Norway, Peru, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, and the United States of America were represented by plenipotentiary delegations; and the Governments of Iceland, Ireland, Portugal, Sweden, and the Union of South Africa were represented by observer delegations. Remington Kellogg, chairman of the delegation of the United States, was elected permanent chairman of the Conference, and Ira N. Gabrielson, member of the delegation of the United States was elected vice chairman. The final session was held on December 2, 1946. As a result of the deliberations of the Conference, the following instruments were formulated and opened for signature on December 2, 1946, to remain open for 14 days thereafter:

- "1. International Convention for the Regulation of Whaling.
- "2. Protocol for the Regulation of Whaling.

"The Protocol contains the regulations applicable to the whaling season 1947-48 and includes all the provisions of the Protocol for the Regulation of Whaling signed in London on November 26, 1946, to apply as if in the said Protocol the words 'season 1947-48' were substituted for the words '1 May 1947, to 31 October 1947.' This Protocol will come into force when notifications of acceptance thereof shall have been given to the Government of the United States of America by all the Governments, parties to the Protocol of November 26, 1946.

"The Convention, which includes a schedule, provides for a long-term agreement, to become effective July 1, 1948. The Convention shall, when instruments of ratification have been deposited by at least six signatory governments, which shall include the Governments of the Netherlands, Norway, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, enter into force with respect to those governments and shall enter into force with respect to each government which subsequently

ratifies or adheres on the date of deposit of its instrument of ratification or the receipt of its notification of adherence.

"The Convention provides for the establishment of an International Whaling Commission to be composed of one member from each contracting government. This commission shall elect from its own members a chairman and vice chairman and shall determine its own rules of procedure. Recognizing that specialized agencies related to the United Nations will be concerned with the conservation and development of whale fisheries and the products arising therefrom and desiring to avoid duplication of functions, the contracting governments will consult among themselves within 2 years after the coming into force of this Convention to decide whether the commission shall be brought within the framework of a specialized agency related to the United Nations.

"The Convention provides that each contracting government shall take appropriate measures to insure the application of the provisions of the Convention and the punishment of infractions against the said provisions in operations carried out by persons or by vessels under its jurisdiction. The Convention also provides that no bonus or other remuneration shall be paid to gunners and crews of whale catchers for any illegal whales taken.

"The schedule, which is part of the Convention, provides that at least two inspectors shall be maintained on each factory ship for the purpose of maintaining 24-hour inspection, and that adequate inspection shall be maintained at all land stations. The schedule also forbids the taking of gray whales or right whales and the killing of calves or female whales accompanied by calves. The schedule forbids the killing of any blue, fin, sei, humpback, or sperm whales below the following respective lengths: 70, 55, 40, 35, or 35 feet. The schedule requires that copies of all official laws and regulations relating to whales and whaling and changes in such laws and regulations be transmitted to the commission. The schedule provides that the maximum catch taken during any whaling season should not exceed 16,000 blue-whale units and that blue-whale units shall be calculated on the basis that one blue whale equals (1) two fin whales or (2) two and a half humpback whales or (3) six sei whales."

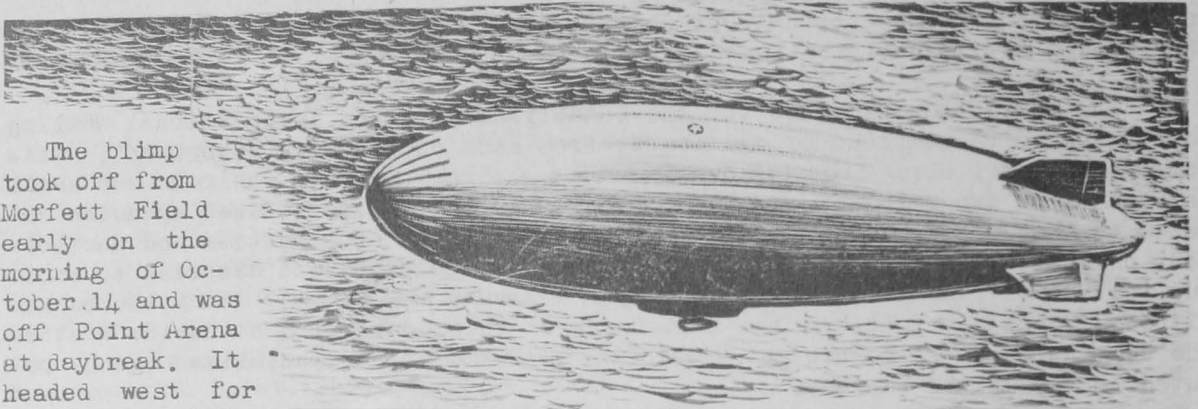
--Coast Guard Bulletin, February 1947.



Scouting for Sardines from Navy Blimp

A search for sardine schools off the coast of central California was undertaken by a Navy blimp from Moffett Field on October 14, 16, 17, 18, and 28. The search was requested by the San Francisco Sardine Industry, whose representative accompanied all five flights. In addition, a representative of the California Division of Fish and Game was aboard the blimp on the first three flights and a Fish and Wildlife Service biologist on the last two.

In the following report, the account of the first three flights has been taken from charts and notes supplied by Mr. J. A. Aplin, of the California Division of Fish and Game. The last two flights have been described by Mr. Osgood R. Smith, Biologist, Division of Fishery Biology, Fish and Wildlife Service.



The blimp took off from Moffett Field early on the morning of October 14 and was off Point Arena at daybreak. It headed west for 50 miles and then came in because of high winds. It flew back and forth between Gualala and Tomales Bay three times, paralleling the coast 10, 20, and 30 miles offshore, then continued southwesterly to the Farallon Islands and in near Point San Pedro. Whales, porpoises, and "fish signs" (flotsam) were observed north of Tomales Bay, and about 12 schools of fish were seen in Fish and Game Block 450, northwest of the Farallon Islands. These were reported to the industry by radio. A few boats from the Monterey fleet scouted in the area on the night of October 14, but they found only a few small schools that appeared to be anchovies.

On October 16, the blimp paralleled the coast between Point Reyes and Gualala; took one leg out 40 miles west of San Francisco and back, and another out 25 miles west of Point Montara. No fish were sighted.

The blimp flew about 100 miles west from the San Francisco lightship on October 17, then back to Point San Pedro; out about 50 miles west from Half Moon Bay and back, then out about 40 miles southwest of Point Ano Nuevo and in to Monterey Bay. Eight whales were sighted about 20 miles off Pigeon Point, and "signs of fish" were seen off Monterey Bay, but no fish were sighted.

On October 18, the blimp headed out to sea over Santa Cruz, continuing about 40 miles westward. From there it paralleled the coast 35 or 40 miles up to Point Arena, then turned and followed the coast back to Point Montara, staying about 8 miles off. A few whales and sea lions were seen north of the Farallon Islands, but no fish were sighted.

The blimp flew 150 miles out to sea due west from Pescadero Point on October 28, then in towards Point Reyes and northerly to Point Arena, staying 20 to 30 miles off the coast. From Point Arena it followed the coast line back, staying about 6 miles offshore, then over to the Farallon Islands and southeasterly to Pescadero Point. On the long seaward leg nothing was sighted, not even bits of kelp, but after approaching Point Reyes, bits of kelp and other flotsam became rather common. On the return trip from Point Arena, several dozen fish schools were spotted near Russian River, about 6 miles offshore, and a few more schools, perhaps a dozen, were seen between the Farallon Islands and Point Montara. The schools appeared as purple, brown, or even brick red, spots of various shapes. Off Russian River and southeast of the Farallon Islands, humpback whales, sea lions, and birds were associated with the fish schools.

The schools were identified as sardines, and their presence reported by radio to the industry, both in San Francisco and Monterey. A few boats scouted for these fish on the 2 nights following the report, but found nothing.

On all of the flights, scouting was done from an altitude of about 1,500 feet, and visibility was excellent. The fish seen on October 28 showed up well at 1,500 feet, but could not be located when the blimp came down to a few hundred feet.



The Biology of the Soupfin

A report has recently been issued by the State of California, Division of Fish and Game, Bureau of Marine Fisheries, on the soupfin shark. It is Fishery Bulletin No. 64 entitled "The Biology of the Soupfin and Biochemical Studies of the Liver."

The report treats the subject in a most comprehensive manner. The following subjects are covered: The Soupfin Shark and the Fishery; The Relation of the Biology of the Soupfin to the Liver Yield of the Vitamin A; Determination of the Percentage of Oil in the Soupfin Shark Liver; Determination of Vitamin A in Soupfin Shark Oils; Stability of Vitamin A in Whole Shark Liver.

Copies of this report may be obtained by writing to the Department of Natural Resources, Division of Fish and Game, Bureau of Marine Fisheries, Ferry Building, San Francisco, Calif.



Purchases of Fish by Department of Agriculture

October 1946 purchases of fishery products by the U.S. Department of Agriculture totaled \$5,418,412. Canned salmon purchases alone amounted to \$5,371,885 and were largely responsible for the increase of \$4,580,579 in the month's total purchases compared with September. From January 1 to October 31, 1946, total purchases reached \$11,284,277.

Purchases of Fishery Products by USDA

Commodity	Unit	October 1946		January-October 1946	
		Quantity	F.O.B. Cost Dollars	Quantity	F.C.B. Cost Dollars
<u>FISH</u>					
Fish, ground, canned	Cases	-	-	229,000	794,000
Herring, "	"	-	-	12,688	77,565
Mackerel, "	"	-	-	48,117	414,760
Pilchards, "	"	11,091	47,227	182,298	686,083
Salmon, "	"	370,065	5,371,185	711,922	9,238,432
Sardines, "	"	-	-	15,929	73,437
Total	"	381,156	5,418,412	1,199,954	11,284,277



Wholesale and Retail Prices

Wholesale prices for all foods showed a decline of 5.1 percent from mid-August to mid-September, while retail prices for all foods advanced 1.7 percent for the same period, according to reports from the Bureau of Labor Statistics, Department of Labor. Average retail prices of fresh and canned and fresh and frozen fish rose 0.1 and 1.8 percent, respectively, during the period. The retail price of pink salmon declined 6.0 percent and that for red salmon, 3.5 percent between August 13 and September 17, 1946.

Wholesale and Retail Prices

Item	Unit	Percentage change from--		
		Sept. 14, 1946	Aug. 17, 1946	Sept. 15, 1945
<u>Wholesale: (1926 = 100)</u>				
All commodities	Index No.	121.7	- 5.1	+16.2
Foods	do	128.1	-14.0	+22.5
		<u>Sept. 1946</u>	<u>August</u>	<u>Sept. 1945</u>
Fish:				
Canned salmon, Seattle:				
Pink, No. 1, Tall	\$ per doz. cans	2.438	+12.5	+23.7
Red, No. 1, Tall	do	4.570	+12.4	+23.7
Cod, cured, large shore, Gloucester, Mass.	\$ per 100 pounds	13.50	0	0
Herring, pickled, N. Y.	¢ per pound	12.0	0	0
Salmon, Alaska, smoked, N. Y.	do	35.0	0	0
<u>Retail: (1935-39 = 100)</u>				
All foods	Index No.	174.1	+1.7	+24.9
Fish:				
Fresh and canned	do	237.8	+0.1	+ 8.2
Fresh and frozen	¢ per pound	40.8	+1.8	+10.8
Canned salmon:				
Pink	¢ per pound can	24.0	-6.0	- 2.8
Red	do	41.7	-3.5	+ 4.5



PACKAGING

Interest in the pre-packaging of food products will be intensified in 1947. Many retail food store operators and some wholesalers and shippers have been carrying on experimental operations in this field. Shortages of materials and equipment have interfered with the rapid introduction of most new merchandising developments during the past few years. Easing of these shortages will permit adoption of proved practices.

The sale of pre-cut and packaged fish, both fresh and frozen, has been increasing in recent years, and this method of merchandising is expected to expand, especially when supplies of materials become plentiful and the market again becomes highly competitive.