

TRENDS AND DEVELOPMENTS

Additions to the Fleet of U. S. Fishing Vessels

First documents as fishing craft were issued for 63 vessels of 5-net tons and over during December 1949--4 more than in December 1948, according to the Bureau of Customs of the Treasury Department. Virginia led with 9 vessels, followed by South Carolina and California with 7 vessels each. Vessels documented during 1949 totaled 1,002, compared with 1,184 during 1948.

Section	December		Total	
	1949	1948	1949	1948
	Number	Number	Number	Number
New England	3	3	35	52
Middle Atlantic	2	-	44	40
Chesapeake Bay	12	3	87	59
South Atlantic and Gulf ..	33	30	369	541
Pacific Coast	9	11	327	348
Great Lakes	-	5	38	51
Alaska	4	4	96	81
Hawaii	-	3	5	12
Unknown	-	-	1	-
Total	63	59	1,002	1,184

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



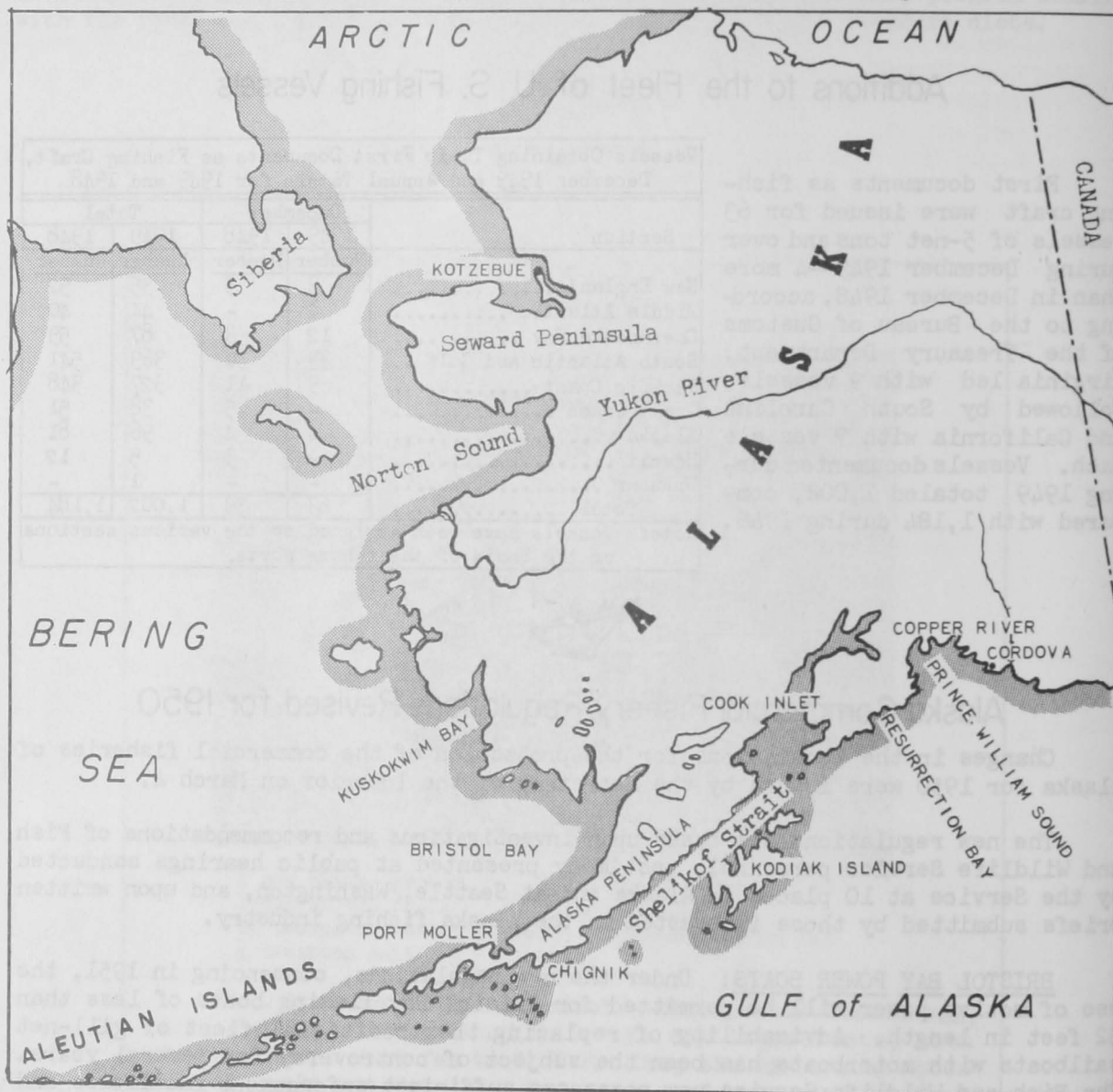
Alaska Commercial Fishery Regulations Revised for 1950

Changes in the regulations for the protection of the commercial fisheries of Alaska for 1950 were issued by the Secretary of the Interior on March 4.

The new regulations are based upon investigations and recommendations of Fish and Wildlife Service personnel, testimony presented at public hearings conducted by the Service at 10 places in Alaska and at Seattle, Washington, and upon written briefs submitted by those interested in the Alaska fishing industry.

BRISTOL BAY POWER BOATS: Under the new regulations, commencing in 1951, the use of motive power will be permitted for Bristol Bay fishing boats of less than 32 feet in length. Advisability of replacing the traditional fleet of gill-net sailboats with motorboats has been the subject of controversy for several years. The Fish and Wildlife Service now possesses sufficient enforcement facilities and scientific knowledge to protect the runs against undue depletion, despite the type of motive power utilized in the fishing boats. The amended regulation merely permits, and does not require, the use of power; the one-year delay is provided to give everyone equal and ample opportunity to effect the change-over, if desired.

FISHING SEASONS: In three major areas, fishing seasons have been shortened and in two others, they have been slightly liberalized. A uniform closure will apply to the entire Kodiak Area from July 15 to 31, with the limited exception of certain recognized red salmon localities. Seasonal opening and closing dates in Kodiak otherwise remain the same as last year. The fishing season in Resurrection Bay Area will open July 1 instead of June 1, as previously. The general Yakutat fishing season will open July 1, although the king salmon fishery in Dry Bay will be permitted to commence on June 1. Seine and trap fishing in Southeastern Alaska is permitted from August 15 to September 3, much the same as last year.



ALASKA (SEE OTHER CUT FOR SOUTHEASTERN ALASKA)

HERRING FISHERY: A new principle is inaugurated this year in the management of the herring quota areas of Kodiak and Resurrection Bay-Prince William Sound. Instead of frequent quota adjustments, based on predictions of availability of supply resulting from analysis of catch data from preceding seasons, these two areas will operate under annual quotas, which are stabilized for a three-year period

and are largely based on previous average productivity. The Kodiak quota is set at 275,000 barrels of herring and the Resurrection Bay-Prince William Sound quota is 180,000 for each of the years, 1950, 1951, and 1952. The quota-season has also been shortened in each area; Kodiak's will end September 30 and at Resurrection Bay-Prince William Sound's, August 10. Herring may be caught subsequent to these dates without regard to the quota limit because the fall runs are believed distinct and not sufficiently in need of such protection. This situation has been emphasized by the herring operators of the Kodiak Area, and it will be observed closely in the coming season, during which further adjustments can be made if desirable.

The herring fishery of the Southeastern Alaska Area will continue to be managed according to principles previously in use; that is, annual adjustment of quotas based upon developments in the years immediately preceding. A currently prevailing natural scarcity of herring in this area makes it necessary to hold the 1950 quota to the comparatively low limit of 150,000 barrels.

Lesser amendments relating to the herring fishery include removal of the prohibition against use of pounds on herring spawning grounds, although such a restriction continues specifically on the Fish Egg Island grounds, near Craig. The area closed to herring fishing along the western shore of Admiralty Island is extended to include the entire side of the Island between Point Gardner and Point Retreat in order to protect small populations of fish in two Bays at the northern end.

GENERAL REGULATIONS OF TERRITORY-WIDE APPLICATION: Other significant amendments to this year's regulations are listed below according to the regulatory areas in which they are effective:

In addition to the previously required registration of fishing boats and processing operations in advance of seasonal activities, operators are now required to notify the Fish and Wildlife Service before moving to a new area or district. An accurate registration system will give the Service current knowledge of the amount of fishing gear in operation in each district, thus making possible effective management of fisheries. Local representatives of the Service will serve as registration agents and are defined according to the towns at which they are stationed.

In conformance with the standardized winter-troll closure recommended by the Pacific Marine Fisheries Commission for the entire Pacific Coast, trolling for king salmon in the outside waters of Alaska is prohibited from November 1 to March 15, and for coho salmon from November 1 to June 15. The fall-troll closure in inside waters has now been shortened to extend only from September 20 to October 5 to conform to the special seining season which opens in several places in Southeastern Alaska on October 5. The prohibition against the taking of undersized king salmon, which formerly applied only to trolling, is now extended to all forms of gear. Identifying names and numbers on fishing boats and net floats must consist of lines at least one-inch wide so that they may be readily distinguished.

Three general regulations pertaining to fish traps have been entirely deleted: one prescribing the rights of natives to trap-site privileges on land set aside for their special occupancy, another requiring the filing of trap-site locations with the Fish and Wildlife Service, and a third specifying methods of determining priorities of applicants for the same trap site. Further, a trap is now defined specifically so that any net or other device which is set or operated in the manner of a trap shall be subject to all the regulations pertaining to traps.

The minimum legal size of king crab is increased from 5-1/2 to 6-1/2 inches in width of shell.

Bering Sea: The use of motors in gill-net fishing boats is no longer prohibited in the Kotzebue-Yukon-Kuskokwim Area.

Bristol Bay Area: The regulation pertaining to the Hagemeister regulatory district has been deleted inasmuch as no commercial fishery has existed in that section for many years. Methods of marking and registering fishing boats have been amended to require that the numbers and letters be at least 12 inches in height and that each boat be lettered to indicate the district in which it operates. Boats must not only be registered prior to the fishing season with the Fish and Wildlife Service but must also reregister in advance of moving to another district. To counteract the growing tendency to operate set nets far offshore on shallow beaches, it is now illegal to set any net at a distance greater than 150 yards from the mean high tide mark.

Regulations for 1950 are based on the premise that no more than the recommended maximum of 426 drift gill-net boats will be operated in the entire Bristol Bay Area.

Alaska Peninsula Area: No change is made in the fishing season from the dates of last year; except for Port Moller, fishing will end throughout the district on August 5 unless escapements are so good as to warrant local extensions. Motive power is no longer prohibited in the gill-net boats of the Chignik Area. Thin Point Cove has been closed to commercial fishing to protect its runs of red salmon. Canoe Bay is closed to king crab fishing because it is recognized as a spawning and nursery ground for that species.

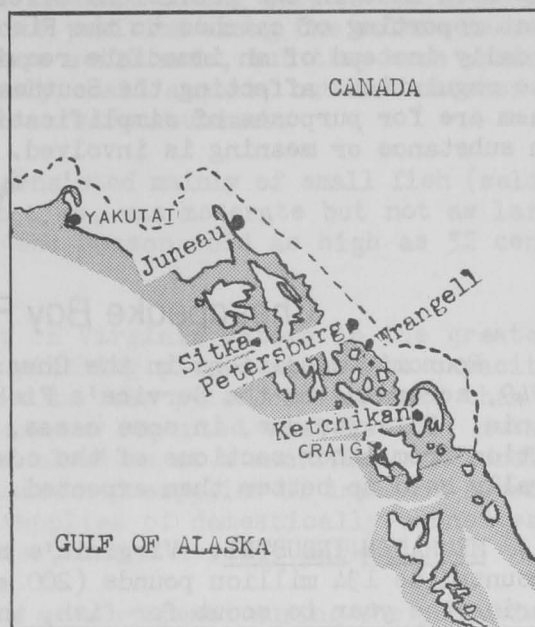
Kodiak Area: A closed season is established from July 15 to 31 generally throughout the Kodiak Area in order to protect the runs of pink salmon, which have been showing a distinctly downward trend in recent years. Exceptions to the closure will apply only to certain predominantly red salmon localities where the catch of that species is controlled by weir counts and where the abundance of pink salmon is not an important factor. Kaiugnak Bay and Sukhoi Lagoon are closed to commercial salmon fishing.

Cook Inlet Area: No change is made in the seasonal dates normally governing even-year operations and the weekly closed period will remain the same as last year. However, the tremendous increase in amount of fishing gear which has come into the Inlet during the last two years is causing grave concern for the conservation of the salmon runs. A complete analysis of the situation is now being made for the purpose of determining the amount of closed time which should be applied to fishing each week to compensate for any further increase in total amount of gear during 1950. Compensatory weekly closing restrictions will be imposed if there is any increase in intensity of fishing over that of 1949. Nets must now be marked with letters at least 6 inches high instead of the 4 inches previously required. Drift, as well as fixed, gear must never be operated less than 600 feet from any other gear.

Resurrection Bay Area: Catches of red salmon in this locality have dwindled to such an extent that the species is being accorded almost complete protection from commercial capture by keeping the season closed until the first of July, one full month later than in previous years.

Prince William Sound and Copper River

Areas: The closing date for red salmon fishing on Copper River is changed to June 20, 5 days later than last season. Port Chalmers on Montague Island is closed to all salmon fishing. Catches of set nets in the Eshamy section must be reported daily to the Fish and Wildlife Service after the general trap and seine season closes August 7 on Prince William Sound. This special reporting procedure is intended to prevent use of this locality's special late season as a loophole for declaring catches taken illegally elsewhere. In order to make the annual quota of razor clams more completely available to industry, the fall subquota is reduced from 3,000 to 1,000 cases and the difference is added to the spring subquota. The closed season on crab fishing in the waters of Orca Inlet, near Cordova, is extended to October 31 to prevent fishing during a period of low quality.



SOUTHEASTERN ALASKA

Yakutat Area: Yakutat no longer constitutes a District in the Southeastern Alaska Area, but is now a distinct Area by itself. The regulations are completely revised to reflect its new status and to provide more realistic and effective management of the salmon runs under present conditions. Because of the serious shortage of red and king salmon in the major streams, due in large part to overfishing, the season opening has been delayed approximately two weeks to increase early escapement. Although Dry Bay will open on June 1, the rest of the Area will remain closed until July 1. Numerous minor adjustments are made in the regulations specifically affecting this fishery; these include reopening of Ankau Inlet to fishing, increasing the maximum allowable length of set nets in Yakutat Bay to 75 fathoms, and increasing the size of the closed area at the mouth of the Situk River.

Southeastern Alaska Area: The opening date for all trap and seine fishing will be August 15. This is the same date on which fishing began last year, and it is hoped that similarly beneficial results will accrue to pink salmon escapements. The Fish and Wildlife Service will keep a close watch on the various districts prior to August 15, and earlier local openings will be permitted if supplies of salmon surplus to spawning needs are available without jeopardy to less favored runs.

Consistent with the policy of permitting gill-netting in all localities susceptible to legitimate exploitation by this form of gear, the Port Snettisham region and the Stikine District have been enlarged to provide larger fields of operation. Likewise, Burroughs Bay, at the mouth of the Unuk River, is declared open to gill-netting during the seining season in the Southern district. A considerable increase in the number of gill-netters fishing the Port Snettisham region has made it necessary to reduce the maximum length of nets to 150 fathoms, the same limit that applies in nearby Taku Inlet.

Beach seining, which is permitted only in Wrangell Narrows, is more rigidly described in order to prevent confusion with gill-netting operations. No change

has been made in the provisions affecting the special fall-seining areas, except that reporting of catches to the Fish and Wildlife Service has been liberalized to a daily instead of an immediate requirement. Although the current amendments to the regulations affecting the Southeastern Alaska area are quite numerous, most of them are for purposes of simplification and clarity only and little or no change in substance or meaning is involved.



Chesapeake Bay Fisheries Trends for 1949

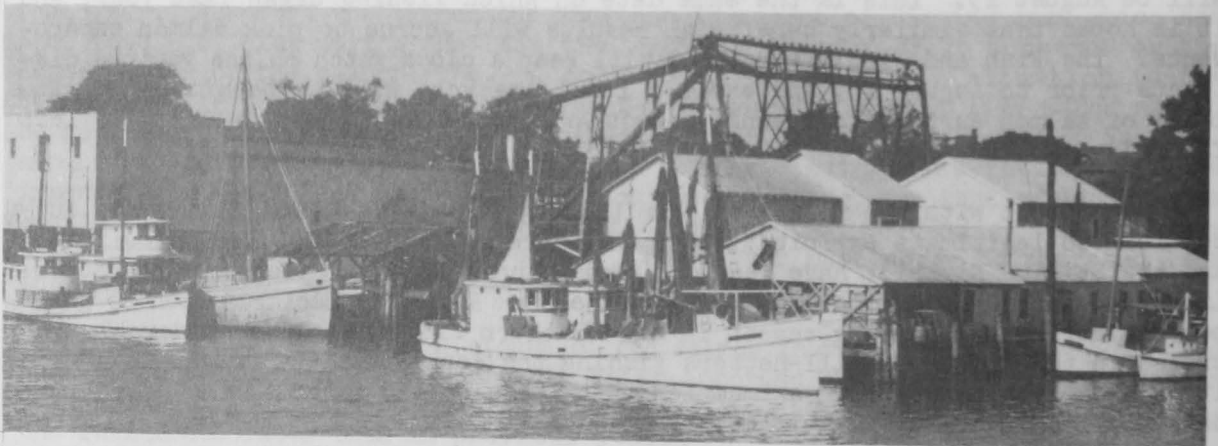
Economic conditions in the Chesapeake Bay fisheries were unsettled during 1949, according to the Service's Fishery Marketing Specialist stationed in Virginia. This was due, in some cases, to a shortage of fish and increased competition from other sections of the country. Prices at the beginning of 1949 generally held up better than expected.

MENHADEN INDUSTRY: Virginia's menhaden production by 18 vessels during 1949 amounted to 134 million pounds (200 million fish). In spite of the use of planes during the year to scout for fish, the production was less than for 1948 when 19 vessels caught 153 million pounds (228 million fish). In 1947, the catch was 178 million pounds (266 million fish). A greater number of fish during 1949 were found in the Bay than for several previous years when most of the fishing took place in the ocean.

Menhaden oil prices dropped from the 1948 high of \$1.40 a gallon to 40 cents a gallon and remained at that level in 1949. However, lower oil prices were partly compensated by an increase in scrap prices to \$150 per ton--\$50 over the 1948 price.

Two versions of a floating trawl were developed independently by menhaden operators, but tests were suspended at the close of the season due to negative results.

Two of the six menhaden plants operating in the State installed equipment for manufacturing fish solubles from stickwater. Other plants are planning to install this equipment also.



FISHING CRAFT DOCKED AT HAMPTON, VIRGINIA. ON THE LEFT ARE TWO OYSTER DREDGERS; IN THE CENTER, TWO DRAGGERS; AND ON THE EXTREME RIGHT, TWO CRAB BOATS.

CROAKER FISHERY: Although the catch of croakers during 1949 was still in the millions of pounds, its sharp decline from its position among the volume leaders was impressive. Occasional large catches were still made, but they were spotty. Ocean trawlers brought in only a comparatively small amount, but the catches of porgy and sea bass from the same fishing areas were abundant.

OTHER FISHERIES: The shad run, which consisted mainly of small fish (seldom exceeding 3½ pounds) spawning for the first time, was moderate but not as large as expected. Roe shad at the beginning of the season sold as high as 52 cents per pound at the dock.

Alewives or river herring were present in Virginia waters in the greatest numbers since 1943. Canning, salting, and pickling plants worked at capacity. As the season advanced, fishermen were forced to take price cuts of more than 50 percent in order to sell their catches. Cannerymen reported that lack of demand might force them to market canned and salted alewives at a sacrifice. According to the packers, lack of demand was due to increased supplies of imported herring and canned sardines, and larger available supplies of domestically-canned sardines, salmon, and tuna. Canned roe, however, found a ready market.

Pearl-essence processing plants in this area reopened during the year since the heavy production of alewives yielded a sufficient supply of scales.

Some sectional shortages were experienced by the oyster industry, but packers in these areas were able to operate by obtaining oysters from other localities.

Acreage leased by the State of Virginia for oyster planting increased steadily during the year to a total of 100,000 acres, while Maryland's private oyster-planting beds totaled only 8,000 acres.

Since soft and hard crabs were plentiful in 1949, at times, supplies reached glut proportions, and prices paid to the crabbers dropped. Winter dredgers were forced to limit their crab catches in December in order to keep from oversupplying the crab-picking plants.

The number of crab pots operated in Virginia increased to 50,000 and in Maryland to about 25,000--both all-time records.

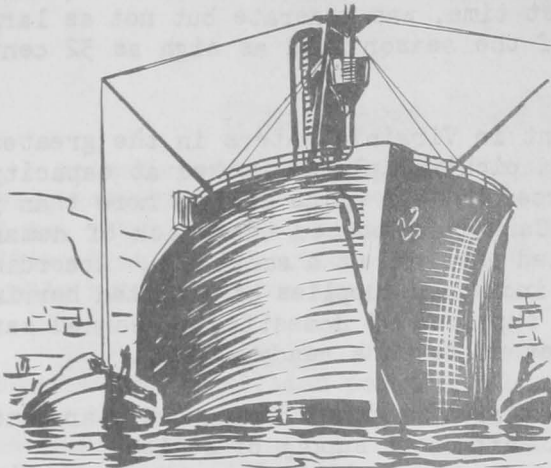
FREEZING OF FISHERY PRODUCTS: Some filleting, freezing, and packaging of fish took place in this area, but it was still in its preliminary stages, according to some producers. Production of frozen oysters and clams increased moderately.



ECA Procurement Authorizations for Fishery Products

There was only one transaction for fishery products among the procurement authorizations for commodities and raw materials announced by the Economic Cooperation Administration during January 1950. This transaction was an authorization of \$593,000 for the purchase of fish oil (menhaden) from the United States and Possessions for shipment to the Federal German Republic. The U. S. Department of Agriculture was the procuring agency.

A total of \$35,804,911 was authorized for fishery products (including fish meal and oils) by ECA from April 1, 1948 (the beginning of the ECA program) through January 31, 1950.



Western European countries took a long step toward the solution of their economic difficulties during the third quarter of 1949 by drastically devaluating their currencies and thus bringing their price levels more nearly in line with those prevailing in the hard currency areas, ECA reported during January in its sixth report to Congress, covering the period from July 1 to September 30. ECA pointed out that this action paved the way for a direct attack on the chief problems of the Marshall Plan countries—the gap in their balance of payments with the hard currency areas, the inconvertibility of their currencies, and the obstructions to the movement of trade. The rise in domestic prices since devaluation in almost all cases has been

modest thus far. Almost all of the rise has been the result of the increased cost of imports in domestic currencies. Improvement in the diet of the European peoples both in quantity and quality, is also manifest.

ECA's Office of Small Business is providing small firms with advance information on purchases to be made in this country by Austria, France, Germany, Italy, and Turkey. With this information, American concerns have leads as to where there are opportunities to market their products abroad. However, to date no fishery products have been included. A January 12 ECA release reported that more than 250 banking and business service leaders in 29 States now are serving as unofficial Marshall Plan field counselors to small businessmen.



Federal Purchases of Fishery Products

DEPARTMENT OF THE ARMY, December 1949: Fresh and frozen fishery products purchased by the Army Quartermaster Corps during December 1949 for the U. S. Army, Navy, Marine Corps, and Air Force for military feeding and a small amount for relief feeding amounted to 1,430,900 pounds (valued at \$495,747). Although December's purchases were practically at the same level as the previous month, the value of December's purchases was 2 percent below the corresponding month a year ago.

Purchases of Fresh and Frozen Fishery Products by Department of the Army (December and Totals for 12 Months, 1949 and 1948)							
Q U A N T I T Y				V A L U E			
December		January-December		December		January-December	
1949	1948	1949	1948	1949	1948	1949	1948
lbs.	lbs.	lbs.	lbs.	\$	\$	\$	\$
1,430,900	1,262,459	17,473,642	16,495,000	495,747	479,668	5,862,011	5,957,000

Total purchases for the year 1949 totaled 17,473,642 pounds (valued at \$5,862,011), compared with 16,495,000 pounds (valued at \$5,957,000) in 1948.



Fishery Biology Notes

ANNUAL INVENTORY OF OYSTERS ON PUBLIC BEDS OF MARYLAND AND VIRGINIA: Annual inventory of oysters on public beds of Maryland and Virginia was made during the last quarter of last year in cooperation with the Chesapeake Biological Laboratory and Virginia Fisheries Laboratory, according to the Service's Chesapeake Bay Investigations.

Maryland: About 150 stations on different bars in the Chesapeake Bay and major tributaries were examined (Table 1). This did not complete the coverage planned but gave sufficient information for drawing some preliminary conclusions.

Table 1 - Summary of the Maryland Oyster Distribution, 1949

Location	No. of Stations	Average No. Oysters Per Bushel		
		Market	Small	Spat
Chester River ...	11	54.0	54.5	1.6
Eastern Bay	14	118.0	336.7	63.4
Choptank River ..	16	61.6	40.0	18.9
Holland Straits .	2	34.0	143.0	562.0
Tangier Sound ...	23	66.6	57.0	90.6
Chesapeake Bay:				
Upper	16	32.3	39.1	24.0
Middle	10	51.0	67.3	38.0
Lower	23	65.1	52.6	140.5
Potomac River & tributaries }	Have not been analyzed			

Recruitment, indicated by spat count, for most of the Bay and tributaries was sufficient to replace oysters removed during the 1949 harvesting except on isolated bars. This was true also in 1948. Effect of the low rate of recruitment for two years will be reflected undoubtedly in reduced oyster yields two and three years hence.

The relative failure of setting in 1949 in Eastern Bay (one of the major seed areas) will reduce seed available for transplanting. Setting in other seed areas, Holland Straits and St. Marys River, was adequate and offsets to some extent the failure in Eastern Bay. The development of three major seed areas at widely separated locations was designed originally to lessen the possibility of complete loss of seed in any one year. This premise has been borne out in this and other years. In 1948, Eastern Bay produced adequate seed, 776 spat per bushel of shell, while the set of 293 in Holland Straits was not sufficient for seed use.

For the current season, the available crop of oysters is less than that harvested in 1948, and the developing crop to be harvested in 1950-51 (as shown by the number of small oysters) suggests another low yield.

Virginia: In four of the major tributaries on the western side of Chesapeake Bay, 51 stations were examined (Table 2).

Setting of oysters on natural beds in the Rappahannock River was not abun-

Table 2 - Summary of the Virginia Oyster Distribution, 1949

Location	No. of Stations	Average No. Oysters Per Bushel		
		Market	Small	Spat
Rappahannock River	21	28.2	34.1	82.3
Piankatank River..	6	66.3	248.3	746.3
Corrotoman River..	4	46.5	304.5	262.0
James River:				
Public Tonging..	3	64.0	120.0	1158.0
Seed Area	17	40.7	826.4	1502.6

dant but adequate for minimum replacement on tonging beds. The Corrotoman and Piankatank Rivers had much higher setting rates. Conditions in the two latter rivers showed excellent potentialities for development of seed beds. These three rivers converge at Chesapeake Bay, the Corrotoman north and the Piankatank south at the entrance of the Rappahannock. Common to these three rivers and characteristic of many of the tributaries of Chesapeake Bay is the gradual diminishing of the numbers of spat as the beds are located farther away from the entrance of the rivers into the Bay. Setting rate was reflected in the number of older oysters in the population.

In the lower part of each river, marketable oysters were found in sufficient quantity to yield a fair harvest for the present season. The number of small oysters indicated at least the same amount available for the 1950-51 season. To predict beyond that on the basis of the 1949 recruitment would not be reliable because of lack of accumulated records on survival of spat. Fewer large and small oysters are found in the upper part of each river. This survey represents initiation of an inventory program for Virginia.

Natural oyster beds in the James River are divided as follows: beds below the bridge producing large oysters for the regular oyster trade and beds above the bridge producing seed oysters for transplanting. These latter beds represent the most prolific and sustained seed source in the world, yielding annually more than 1,500,000 bushels of fine seed oysters on natural cultch.

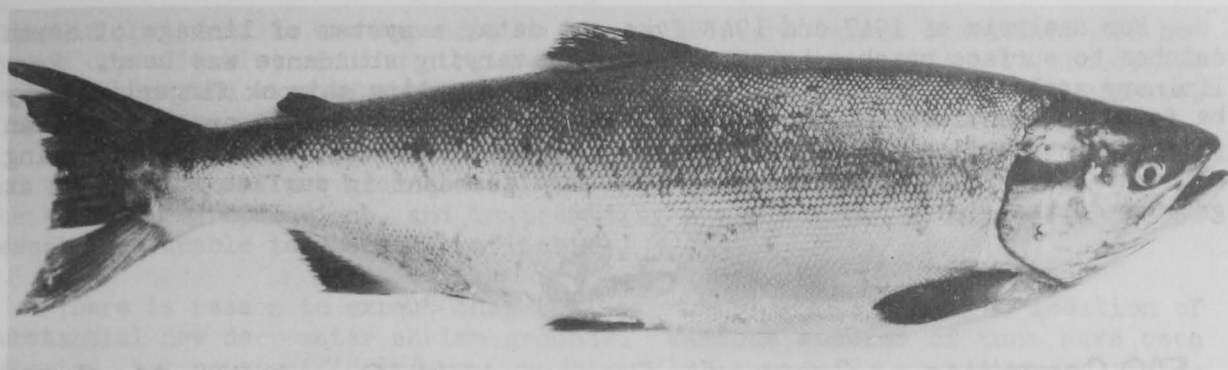
The 1949 spatfall was substantial and well distributed, although again in this river setting was more numerous on the beds in the lower portion of the seed area. Average 1949 set per bushel of bottom material was about 1,500. Beds in the lower portion had an average set of about 2,500 spat per bushel, while the set on beds of the upper portion was 300. The 1949 recruitment was supplemented by a substantial residue of small oysters from the previous years' setting. In the lower portion this was approximately 1,000 and in the upper portion slightly more than 300. Supply of seed, which is a combined population of small oysters and 1949 set, is substantial and in 1950 should provide a large source of seed for the extensive private oyster industry in the State. This should be a factor in maintaining high production for the harvest several years hence.

Public tonging beds below the bridge had a relatively high 1949 recruitment, a good supply of large oysters for the 1949 harvest, and a sufficient number of small oysters for the 1950-51 yield.

Barring spring freshets and extensive predator damage, the current and future production of both seed and marketable large oysters from the James River should be good.

The Virginia Fisheries Laboratory, the Service's Chesapeake Bay Investigations, and the Chesapeake Bay Institute of Johns Hopkins University, have planned a hydrographical and biological study of the James River seed area. The work, which will start in June, should answer some questions that have long eluded research workers studying factors controlling oyster setting.

RUN OF RED SALMON AT KARLUK, ALASKA (1949): Readings of scales collected at Karluk, Alaska, during the 1949 field season were completed, according to a January report from the Service's Alaska Fishery Investigations. From these readings were determined the age composition, by weeks, of the 1949 run and the contribution to this run made by the various preceding broods.



RED OR SOCKEYE SALMON

The total run of red salmon at Karluk in 1949 was 1,141,000 fish, somewhat less than the average for the past few years. It was found that 53 percent of the 1949 run was composed of 5-year fish, deriving from the 1944 seeding, while 40 percent were 6-year fish, deriving from the 1943 seeding. The contribution from the 1943 seeding was considerably less than had been anticipated, and this factor appears to have been the cause of the run being less than that forecast.

EXPERIMENTS ON THE EFFECT OF TAGGING ON VARIOUS KINDS OF FISH: The initiation of a series of experiments on the effect of tagging on various kinds of fish was announced by the Service's Middle and South Atlantic Fishery Investigations. Various species of fish will be kept in small concrete ponds at the Beaufort Laboratory and the various types of tags will be compared as to their durability and their affect upon fish. Results will be important in carrying out the expanded program of shad investigations now being started.

1949 BLUEBACK SALMON AND TROUT RUNS ABOVE ROCK ISLAND DAM: An outstanding factor of the 1949 blueback salmon and trout run was the small number of fish which eventually reached the two important spawning areas (Wenatchee and Osoyoos Lakes) above Rock Island Dam in Washington, according to a December 1949 report from the Service's North Pacific Fishery Investigations.

This was due in part to the fact that only 50 percent of the fish escaped the commercial and Indian fishery and got past Rock Island Dam, while in 1946, 1947, and 1948 the percentages were 73, 67, and 76, respectively. Of the fish which did pass Rock Island Dam only relatively few could be accounted for on spawning grounds. Less than 40 percent of the 18,682 fish passing Rock Island Dam in 1949 could be accounted for either at the hatcheries or on the spawning ground, after allowances had been made for progressive spawning. No satisfactory explanation is available of the cause of this situation.

During the blueback salmon spawning surveys in the Osoyoos Lake region, the Service learned that the Canadians are contemplating an elaborate flood control program in the Okanogan River system. The proposed project would, among other things, involve widening and straightening the Okanogan River in the 20 miles now utilized for spawning purposes by bluebacks. Eleven weirs would be placed across the river in this region in connection with the project. This project could have a very serious affect on production of blueback salmon in the Okanogan River and will require careful consideration by West Coast fishery interests. The Service has furnished the Washington State Department of Fisheries with the data obtained in the studies of this region.

For analysis of 1947 and 1948 fyke net data, a system of linkage of depth catches to surface catches to compensate for varying abundance was used. Preliminary analysis demonstrates that downstream migrating chinook fingerlings may be found in quantities at depths of 45 and 55 feet as great as or greater than those at the surface. Some evidence, though not clear-cut, shows that yearling chinooks (fish in their second year) are more abundant in surface water than at greater depths.



FAO Committee on Commodity Problems Holds Organization Meeting

The 14-nation FAO Committee on Commodity Problems, established by the Fifth Session of the FAO Conference, held its first meeting in Washington on January 12 and 13.

The Committee devoted its time to questions of organization and methods to be used in its work. At this first meeting, it elected N. G. Abhyankar of India as Chairman and Dr. G. S. H. Barton of Canada as Vice-Chairman.

The following countries are members of the Committee:

Australia	Egypt	Netherlands	United States of America
Brazil	France	Pakistan	Uruguay
Canada	India	Poland	
Cuba	Indonesia	United Kingdom	

The Committee on Commodity Problems is an advisory body which will direct its attention to commodity surplus problems caused by current difficulties in international finance (See Commercial Fisheries Review, December 1949, p. 23).

The Committee will meet again in Washington at the call of the Chairman.



Gulf Fishery Investigations

Pascagoula, Mississippi, has been chosen as headquarters for the Service's Gulf Exploratory Fishery Program. The port will also be the base for the 100-foot troller Oregon.

The Oregon, after a 27-day voyage from Seattle, Washington, arrived at Pascagoula, Mississippi, on January 5. After repair and conversion, the vessel will start its exploratory work. Congress made available a sum of \$83,000 for the ship's overhaul and subsequent operations. After conversion has been completed, exploratory fishing work will be undertaken in the Gulf of Mexico and, at present, it is expected that about three months' fishing can be conducted before the end of the fiscal year (June 30, 1950).

Exploration and development of the potential fishery resources in the Gulf of Mexico, especially those existing in offshore waters, are the main objectives of the program. Exploratory work is the best possible means of maintaining the fishing industry of the Gulf of Mexico on a sound basis. The present fishing

fleet in that area is now expanded to the point where vessel operations are becoming unprofitable, and the strain of the intense fishing effort is noticeable in the diminished size of the catches taken in the presently exploited fisheries.

Diversion of fishing effort resulting from the development of new fisheries and the location of new grounds will materially aid in relieving the stress on the known fish populations, and in providing a new source of supply for those vessels now unable to operate profitably.

There is reason to expect that the operations will reveal the location of substantial new deep-water shrimp grounds. Various species of tuna have been reported, but no specific information is available on their abundance and availability on a commercial scale. Menhaden may be found in areas other than those now fished. The further development of the red snapper, Spanish mackerel, flat fish, and king mackerel fisheries also hold promise. The potential fishery resources of the Gulf are unknown.

The Gulf States Marine Fisheries Commission has appointed a committee to make suggestions concerning the exploratory work. The Fish and Wildlife Service will also consult the fishing industry in an effort to maintain a balance in the operations and fairly represent all interests.

The Oregon is one of four vessels originally constructed by the Reconstruction Finance Corporation for the Pacific Exploration Company, and it was subsequently turned over to the Fish and Wildlife Service.



Gulf of Mexico Fisheries Trends, 1949

Generally, the commercial fisheries of the Gulf States have experienced a good year, according to a report from the Service's Fishery Marketing Specialist surveying the fisheries of those States.

Menhaden Fishery: This industry continued to show a steady growth in the Gulf area. A new menhaden plant was built at Cameron, Louisiana, and began operations in midseason. At the end of 1949, there were 7 plants in operation in the Gulf and 2 more are scheduled to be completed in time for operation in 1950. A third plant at Port Arthur, Texas, is contemplated and may be built in time for the opening of the season.

In general, most of the menhaden operators felt they had expended a little more effort to get the same number of fish taken in 1948.

With narrowing margins of profit, resulting from the depressed fats and oils market, more attention was directed toward utilization of stickwater. Further expansion of the stickwater recovery probably will take place in 1950.

Shrimp Fishery: Production of shrimp during 1949 was probably the highest since 1945, but it is not known yet whether or not the catch reached that year's total. Alabama is believed to be the only State showing a catch below 1948. Alabama reported shrimp scarce, with most of the catches made up of small-sized shrimp.

During 1949, the most important development in the shrimp fishery was increased production of grooved (brown) shrimp. Fishermen have been bringing in grooved shrimp in small quantities for many years. However, the production of this variety during 1948 increased, and in April 1949, large quantities were landed. Craft out of Brownsville, Texas, shrimping 30 miles or more south of that city, in depths of 18 to 27 fathoms, began taking considerable quantities of grooved shrimp.

The development of the grooved shrimp fishery seems to have been the result of two main trends:

1. Increased construction of more modern, larger trawlers capable of remaining at sea longer.
2. Seeking of new shrimp grounds because the catch per boat on the old beds has declined.



SORTING SHRIMP ABOARD A SOUTHERN SHRIMPING VESSEL.

Elsewhere along the Gulf Coast, the grooved shrimp was taken with varying degrees of success. Mississippi reported that a substantial part of its 1949 summer catch was grooved shrimp.

Development of a peeling and heading machine for raw shrimp indicated that mechanization continued in the shrimp industry during the year.

Oyster Fishery: Fresh Gulf oysters continue to have difficulty in competing with Eastern stock. Shucking houses, therefore, operated on a limited basis during 1949. Alabama, which has experienced a very good season, had difficulty meeting the East Coast competition even with fresh, high quality oysters.



Indo-Pacific Fisheries Council Accepted by Korea and Indonesia

The Governments of the Republic of Korea and the United States of Indonesia have accepted the Agreement reached at Baguio, Republic of the Philippines, February 28, 1948, for the formation of the Indo-Pacific Fisheries Council. Notification was received by the Food and Agriculture Organization on January 19 and 31, respectively.

To date the following Member Governments have accepted the above Agreement:

Australia	France	Netherlands	United Kingdom
Burma	India	Pakistan	United States of America
Ceylon	Indonesia	Philippines	
China	Korea	Thailand	

The next meeting of the Indo-Pacific Fisheries Council is scheduled for April in Australia.



Michigan's Commercial Fisheries Production, 1949

Commercial fisheries production from the Michigan waters of the Great Lakes dropped from an above-normal 30,000,000 pounds in 1948 to a slightly below-average 24,964,000 pounds in 1949, according to preliminary figures released by the Fish Division of Michigan's Conservation Department. A 26,000,000-pound-year is considered near average. The value of the 1949 catch was around \$5,100,000.

More chubs, yellow pike, and smelt, but a smaller amount of all other species were produced.

The biggest decline was in whitefish--production by Lake Huron fishermen alone was about 2,400,000 pounds less. Whitefish landings in 1949 (mainly from Lake Michigan) were 3,875,000 as compared with 7,721,000 pounds in 1948.

Herring again led all species, but 1949 landings of 8,388,000 pounds were somewhat lower than 1948 (9,038,000 pounds). The largest catch (4,052,000 pounds) was in Lake Superior.

Over 2,500,000 pounds of chubs, mostly from Lake Michigan, were netted as against 2,257,000 pounds in 1948. The increase was attributed to a concentration on chub fishing, due to the scarcity of lake trout.

Increased fishing pressure may have been responsible for a smaller comparative drop in the take of lake trout in Lake Superior--2,129,000 pounds taken last year contrasted to 2,161,000 pounds in 1948. With 220,000 pounds from Lake Michigan and 1,000 from Lake Huron, Michigan's Great Lakes total was down from 2,754,000

pounds in 1948 to 2,350,000 pounds in 1949. The sea lamprey is blamed for the continued smaller take of at least the lake trout. Still this species accounted for the fourth largest take.

Michigan's commercial fishermen reported 2,013,000 pounds of white suckers and mullets, 500,000 pounds less than in 1948.

Yellow pike increased from 1,229,000 pounds in 1948 to 1,250,000 pounds in 1949. Lake Michigan's take, (primarily Green Bay) shot up from 599,000 pounds in 1948 to 1,045,000 pounds in 1949.

Fishermen also recorded better catches of smelt--1,059,000 pounds (practically all from Lake Michigan), compared to 627,000 pounds in 1948.

Carp production dropped more than 1,000,000 pounds--982,000 pounds last year in comparison to 2,055,000 in 1948.



National Fisheries Trends for 1949 and Outlook for 1950^{1/}

A moderate decline in business activity and a consequent slight weakening in consumer demand for fishery products is forecast for 1950. However, many fishery products are in a favorable domestic market situation for the first quarter of 1950.

PRODUCTION: The first quarter of the year is a period of generally low production in the fisheries of the country, but as spring approaches, catches increase.

Commercial production of fishery products in 1949 was slightly higher than the previous year. Landings in the New England ports, a very important wholesale distribution area for fresh and frozen fish in the United States, were smaller than in 1948.

STOCKS: Cold-storage stocks of frozen fish on January 1 appear to be sufficient for domestic needs until early spring when the usual seasonal expansion of commercial fishing operations will take place.

Commercial freezing of fishery products in continental United States for human consumption was about 5 percent greater than the 241 million pounds frozen in 1948. However, domestic cold storage stocks of fish for food use at the end of 1949 were slightly lower than a year earlier.

Stocks of the popular species of canned fish in the hands of packers and their selling agents at the beginning of 1950 were somewhat higher than a year earlier, and are expected to be large enough to meet the anticipated domestic and foreign demand for canned fish at prices somewhat below the previous year until the 1950 pack begins to move to market in large volume late next summer.

The 1949 pack of canned fishery products was slightly higher than that of the preceding year. Production of canned salmon (especially pink salmon) and pilchards

^{1/} Based mainly on a report issued early in February by the Bureau of Agricultural Economics, Department of Agriculture, and prepared in cooperation with the Fish and Wildlife Service.

was larger than last year, while the pack of tuna was not much different from the record output of 1948. Mackerel and Maine sardine packs in 1949 did not differ much from those of a year earlier.

CONSUMPTION: Civilian per capita consumption of fishery products in 1950 probably will continue at about the rate of the past two years. Retail prices are expected to average lower than in 1949.

Per capita consumption of fishery products by United States civilians in 1949 did not differ much from the preceding year. Demand for fresh and frozen fish was relatively stable throughout most of the year.

Military acquisitions of fishery products were less in 1949 than in the preceding year. Procurement of frozen fish was more than 5 percent above the 16.5 million pounds bought in 1948, but not as much canned fish was bought.

FOREIGN TRADE: Prospects for international trade in edible fishery products are not considered favorable. Foreign trade of the United States in fishery products in 1950 may be slightly different from the previous year's pattern. Exports, mainly of canned fish, probably will remain low relative to the levels reached during the immediate postwar period. Imports of frozen fish fillets and canned fish are expected to be somewhat larger than in 1949.

Imports of edible fishery products for 1949 (464,993,798 pounds, valued at \$111,714,320) were slightly smaller than for 1948. Receipts of fresh, frozen, and canned fish from foreign countries were less than in 1948, but those of cured fish were greater.

Exports of fishery products for human consumption in 1949 (149,670,640 pounds, valued at \$30,415,657) were almost 50 percent greater than in 1948, with increases reported for fresh and frozen fish, canned, and cured products.



Northwest Pacific Exploratory Program

SHAKEDOWN CRUISE SCHEDULED FOR "JOHN N. COBB:" The John N. Cobb, exploratory fishing vessel of the Service's North Pacific Exploratory Fishery Program, left Seattle, Washington, on March 19 for a shakedown cruise in the waters of Southeastern Alaska. The cruise will last approximately four weeks.

In addition to thoroughly testing the general vessel equipment and scientific and navigational instruments, exploratory work will be carried on in the inland waters of Southeastern Alaska in an attempt to locate concentrations of shrimp in the hope of establishing an off-season fishery in Alaska waters.

If quantities of large shrimp can be found in the deep-water channels near Ketchikan, an additional source of income will be opened to small-boat operators in Southeastern Alaska after the salmon season closes. As the channels are rocky and trawls cannot be used successfully, the Service hopes to devise and test other methods of fishing for shrimp.

The John N. Cobb will return to Seattle before June 1 for a checkup. The vessel will sail in early June to the seamount area, approximately 500 miles due

west of the Columbia River and wait there for the first albacore tuna of the season to arrive. Then it will proceed to Dellwood Hills (an undersea plateau) and to other seamounts off Southeastern Alaska to trace the tuna's migration and determine patterns of abundance. This exploratory work may help to establish an important tuna fishery for Alaska.

While searching for tuna, the vessel will broadcast information to the fishing fleets, and render incidental services, such as, giving bearings and weather reports. These services will follow the pattern set by the US FWS Oregon while exploring for tuna last fall.

Commissioning of the new exploratory fishing vessel took place on February 18 in Seattle, Washington, with more than 500 people attending the ceremonies.



Pacific Coast Purse-Seining Methods Tried in East Coast Menhaden Fishery

In an effort to cut the production costs of the raw product going into fish meal and oil, Pacific Coast methods of purse seining were tried by menhaden operators in the North Carolina area during January this year.

Since difficulty was being experienced by the operators, they asked the Fish and Wildlife Service for assistance. Two experienced West Coast fishermen were detailed by the Service's Branch of Commercial Fisheries to Morehead City, North Carolina, from aboard the vessel Oregon, now at Pascagoula, Mississippi. These fishermen assisted in conducting experimental menhaden fishing with the Pacific Coast purse seine.

The Air Hawk, the vessel used in the project, returned to Morehead City to have certain necessary alterations made in the West Coast purse seine which it was using without any success.

The purse seine was 250 fathoms long (hung, before shrinkage), 15 fathoms deep, with a stretched mesh of 2-1/4 inches. Weight of twine in the seine at the bottom was 9-thread, graduated to 12-thread at the top, and the bunt was 15-thread. Some 1,100 pounds of lead was placed along the lead line. The number of rings was increased to 160. All mid-seine plastic floats were removed and the breast was shortened. A 3-3/4-inch purse line and 8 one-inch sheaves were installed to facilitate handling the net. In addition, more corks were placed on the cork line and the after-end of the seine was tapered. The gear at present has fine web to the lead line, but it was suggested that when time permitted, the seine should have approximately 15 meshes of large mesh netting (5-inch mesh) on the bottom to prevent the seine from rolling up.

On January 16, the gear was in operating condition, but the weather was too rough to permit its use. Operation of the net was again tried on January 20, but it was still too rough to permit fishing. A haul was made in shallow water on January 21, and, although some roll-up was experienced, the operation was straightened out to permit a complete set. The following day, the weather improved and an extensive search was made for fish from Cape Hatteras south to Charleston, but none were found except a few schools of very small size. Since these small-sized fish would gill in the net and would have afterwards required a tedious cleaning of the net, no attempt was made to make a set. A haul was made on January 23

in the late afternoon. The net was set without difficulty and without delay, but this was a dry run.

The exploratory operation was concluded on January 24 and the Service's specialists returned to the Oregon at Pascagoula, Mississippi.



Pacific Marine Fisheries Commission Discusses Salmon-Marking Program^{1/}

A large-scale salmon-marking program along the entire Pacific Coast was the main subject for discussion at the meeting of the Pacific Marine Fisheries Commission held at Portland, Oregon, on December 12, 1949.

The subcommittee dealing with salmon and trout marking reported that it favored a large-scale salmon-marking program along the Pacific Coast; and that if adequate information concerning salmon migrations is to be obtained, at least 2,000,000 chinook salmon and 800,000 silver salmon should be marked.

California, Oregon, and Washington indicated their plans for an all-out effort both in marking and recovering the marked fish during the first year of operation of this program.

In regard to chinook salmon, the State of Washington proposes to mark 600,000 fish in Puget Sound and 200,000 in the Columbia River, using four sets of marks. Oregon will mark 200,000 in the Columbia River and 400,000 in the coastal streams, using three marks. California plans to mark 200,000 chinook salmon from the waters of northern California and 400,000 from the Central Valley, using three sets of marks. No chinook salmon-marking program is planned by Canada or Alaska at this time.

With reference to silver salmon, the State of Washington proposes to mark 200,000 fish in Puget Sound and 100,000 in other streams, using three marks; Oregon will mark 200,000 in the Columbia River and 200,000 along the coast, using 4 marks; California will mark only 100,000 in coastal streams, using one mark.

In conjunction with these studies, the salmon subcommittee recommended the establishment of a library of salmon scales that would be available to all concerned through the Commission's Research Coordinator office.

All agencies interested in fish marking are to be invited by the Commission to an annual meeting to discuss suggestions concerning salmon and trout marking.

Since the marking program originated after the budget was drawn up, little or no funds are included in the Commission's budget for a marking program. The Commission arrived at no definite solution of the budgetary problem presented by this marking program.

The Commission also recommended that the Tri-State Committee should endeavor to organize industry and fight as a unit to protect salmon throughout the entire Pacific Coast. In the discussion which preceded this motion, it was indicated that the Commission is not opposed to dams in general but is opposed to the construction of any dams which will be in direct conflict with salmon migrations in Pacific Coast streams.

^{1/}Also see Commercial Fisheries Review, December 1949, p. 27.

In addition, at this meeting a Research Coordinator was appointed and it was announced that a headquarter's office for the Commission had been established in Portland.



Pacific Oceanic Fishery Investigations

"HUGH M. SMITH" FINDS TUNA (Cruise No. 2): The Service's research vessel Hugh M. Smith left Pearl Harbor on January 16 on its second cruise, according to the Director of the Pacific Oceanic Fishery Investigations at Honolulu. The vessel returned to its base on March 2, after a 44-day voyage through the waters lying west and south of the Hawaiian Islands. The vessel traveled from Honolulu to French Frigate Shoals, south to the Phoenix Islands, east to the Line Islands, and then back to Honolulu.

The primary mission of the voyage was to gather data concerning the oceanography of the Pacific Ocean between the Hawaiian Islands and the Equator. At each of the 50 stations occupied for this purpose and spaced along the route mentioned, water temperatures and samples of water were taken at various levels from the surface to a depth of approximately 4,500 feet. Although stormy weather was encountered, the ship completed this portion of the mission successfully.

The temperature and chemistry of the water is known to exert a tremendous influence upon the growth and behavior of fish. The migrations of tunas and, therefore, their availability to the fishermen, depend strongly upon water temperature. In order to predict with any success the time and place of the occurrence of tunas, it will be essential to first acquire a detailed knowledge of the oceanography of the region. The amount of food available for the tunas is directly linked with the composition of the water. Sea water, which is rich in nutrient salts, can be expected to produce an abundance of food organisms. Moreover, there is some reason to believe that the survival of young tunas, and therefore, the abundance of marketable tunas, may be closely connected with the richness of the water.

Collection of samples of plankton and young fish at each hydrographic station was the secondary object of the cruise. The plankton (consisting of fish eggs, fish larvae, and other very small animals) were taken in the search for tuna-spawning grounds and to get an estimate of the quantity of marine life in these sections of the Pacific Ocean. It is believed that the young of the tunas may be considerably more widespread in distribution than is known at the present time.

A brief reconnaissance was made of tuna resources in the Phoenix Islands. Although fishing was not a primary objective of the cruise, two days were spent at Canton Island in the Phoenix Group for a preliminary survey of the tuna and bait-fish resources. On the day fishing operations for bait were conducted, 85 scoops (about 650 pounds) of small fish suitable for tuna bait were caught. Part of this bait was used in an attempt to fish schools of tuna near the Island. A school of skipjack (aku) was raised, but were too wild to be caught successfully. Shortly thereafter, a school of large yellowfin tuna (ahi) rose to the bait. In neither case was any large quantity of tuna caught. It is also of interest to note that a large school of skipjack was encountered in the open ocean--1,100 miles southwest of Honolulu. These data will be of use in clarifying the seasonal changes which occur in the distribution of tunas.

An observer from the U. S. Weather Bureau was taken aboard at Canton Island, and the expedition obtained both meteorological and hydrographic data near the Equator.

"HENRY O'MALLEY" EXPLORES FOR BAIT: The exploratory fishing vessel Henry O'Malley returned to Honolulu on February 10 after 17 days of exploring for bait at French Frigate Shoals. The vessel sailed on its second cruise on January 21 and was not scheduled to return until March 21. However, main-engine failure forced the vessel to return to port for repairs. This cruise was planned to extend down through the various islands of the Line Island group for tuna fishing and additional prospecting for bait.

Severe weather conditions at French Frigate Shoals allowed only two days of baiting operations. Strong winds up to 40 knots, and heavy seas, caused severe tide rips making operations most difficult. The crew managed to capture 14 buckets of bait which lived quite well in the bait tanks. A portion of this bait is being used for physiological research by a graduate student at the University of Hawaii.

THE "JOHN R. MANNING" SAILS: The motor vessel, US FWS John R. Manning, sailed from Seattle on February 20 via San Pedro for Honolulu where it will undertake exploration for tuna together with the other two vessels of the Investigations—Hugh M. Smith and Henry O'Malley.

The John R. Manning, which is of wooden construction, is 86' 6" in length, 22' 6" in breadth, and 12' 8" in depth. The vessel, whose cruising speed is 9 knots, is equipped with two Diesel generators for auxiliary power, and has a cruising range of 8,000 miles which is in excess of the typical West Coast purse seiner. A large cruising range is necessary because of the vast authorized area of operations—13,000,000 square miles with very few refueling points. The vessel is equipped with such modern navigational equipment as Loran, radio direction finder, 250-watt radio telephone and telegraph transmitter, and an automatic steering pilot.

This vessel will be primarily concerned with experimental purse-seine fishing for tuna on a commercial scale in the tropical and subtropical seas between Hawaii and the Palaus. Not only are the features of a West Coast purse seiner included in the vessel, but experimental features, such as, live-bait tanks and numerous gurdies for deep trolling and long-line fishing also have been installed.

TUNA FISHERY IN HAWAII: After a lull in activity during the New Year holidays, the Hawaiian flag-line fleet returned to the regular pursuit of tuna, according to a January report from the Pacific Oceanic Fishery Investigations at Honolulu. Big-eyed tuna (P. mebachi) was still the major species in the catch during the month, but fishing did not seem quite as remunerative as it was in December 1949. A few yellowfin tuna (N. macropterus) are being taken and the catch of striped marlin has increased somewhat. During the latter part of the month, a 962-pound black marlin (M. magara) was caught.

TAGGING TUNAS: Investigation of methods of tagging tunas has continued, but no final decision has been reached concerning methods of release and recovery. A number of standard units for recovery of metal particles from a production line have been examined. It appears that such installations could be depended upon to detect all tags at the cannery.



Puget Sound Salmon Fishery, 1949



PURSE SEINE VESSELS OFF SAN JUAN ISLAND, PUGET SOUND.

PRODUCTION: The largest commercial salmon fishing fleet in 30 years operated in Puget Sound during the 1949 season, according to the Washington State Fisheries Department. Some 320 seiners, 641 gill netters, and 137 reef netters were engaged in catching salmon. The fleet caught 9,996,000 fish during 1949, compared to 2,911,417 in 1948, and 10,709,867 in 1947 (see table). The sockeye catch jumped 50 percent over the brood year 1945—a fact attributed to the success of the International Pacific

Salmon Fisheries program on the Fraser River. Although the pink catch was substantially under the 9,015,000 fish caught in 1947, the 1949 catch has been exceeded only four times since 1913. Of the other species of salmon, silver showed the most gain, while king and chum catches were approximately equal to those of the parent cycles.

Puget Sound Catch and Pack of Salmon by Species, 1947-49 ^{1/}						
Species of Salmon	C A T C H			P A C K		
	1949	1948	1947	1949	1948 ^{2/}	1947 ^{2/}
 (Number of Fish) (Standard Case ^{4/}) ..		
Red or sockeye	1,110,000	1,087,039	90,117	80,547	90,441	8,119
Pink	7,455,000	294	9,015,375	527,478	1,502	607,330
Chinook or king	234,000	191,425	245,183	5,922	22,387	18,248
Silver or coho	790,000	696,175	735,098	57,960	65,744	65,722
Chum or keta	407,000	936,484	621,094	14,904	94,238	93,749
Total	9,996,000	2,911,417	10,709,867	686,811	274,312	793,168
^{1/} Does not include pack from salmon imported from Alaska and Canada. ^{2/} Includes 3,536 cases from 1947 frozen chinooks; 3,807 cs. from 1947 frozen chums; 726 cs. from 1947 frozen pinks; and 5,795 cs. from Columbia River chinooks. ^{3/} Includes 10,235 cases custom pack and reprocessed. ^{4/} One standard case equals 48 one-pound cans.						

Prices paid by packers for salmon averaged about one-third under the previous year. Fishermen received 20 cents a pound for sockeye, 12½ cents for king and silver, 10 cents for pink, and 8 cents for chum.

PACK: Approximately 686,000 standard cases of canned salmon were packed during 1949 from the Puget Sound catch (see table). Valued at approximately \$13 million, the pack was the second largest since 1933. In addition, 140,000 standard cases of fish imported from Alaska and Canada were canned by Puget Sound canneries.

Although Puget Sound canned salmon generally found a ready market during the year, prices were under those of 1948.



Wholesale and Retail Prices

Average wholesale market prices of all commodities on January 10, 1950, were 0.1 percent above December 13, 1949, but 6.3 percent lower than on January 11, 1949, the Bureau of Labor Statistics of the Department of Labor reported. Food prices, on the other hand, declined 0.4 percent and 6.5 percent, respectively.

Wholesale canned pink salmon prices during January this year were the same as those which prevailed in December 1949, but were still 33.3 percent below January 1949. Red canned salmon prices, on the other hand, rose slightly (0.1 percent) above the previous month, but were 1.8 percent below the corresponding month a year ago.

Wholesale and Retail Prices				
Item	Unit	Percentage change from--		
		Jan. 10, 1950	Dec. 13, 1949	Jan. 11, 1949
Wholesale: (1926 = 100)				
All commodities	Index No.	151.2	+0.1	-6.3
Foods	do	155.9	-0.4	-6.5
Fish:		Jan. 1950	Dec. 1949	Jan. 1949
Canned salmon, Seattle:				
Pink, No. 1, Tall	\$ per doz. cans	3.94	0	-33.3
Red, No. 1, Tall	do	6.526	+0.1	-1.8
Cod, cured, large shore, Gloucester, Mass.	\$ per 100 lbs.	15.00	-0.8	-2.4
Retail: (1935-39 = 100)				
All foods	Index No.	196.0	-0.7	-4.3
Fish:				
Fresh, frozen and canned	do	301.9	+1.0	-9.0
Fresh and frozen	do	272.2	+1.9	-0.1
Canned salmon:				
Pink	¢ per lb. can	46.6	-1.1	-24.1

Retail food prices declined 0.7 percent between December 15, 1949, and January 15, 1950, and they were 4.3 percent below January 15, 1949. However, fresh, frozen and canned fish prices advanced 1.0 percent between December 15, 1949, and January 15, 1950, but were still 9.0 percent below January 15, 1949. The biggest increase occurred in fresh and frozen fish since these prices advanced 1.9 percent above December 15, 1949, but they were still 0.1 percent below a year ago. Canned pink salmon prices on January 15, 1950, dropped 1.1 percent below a month ago, and were 24.1 percent lower than on January 15, 1949.

