## FISHERY RECEIPTS AT SEATTLE, 1945

## By E. C. Hinsdale\*

Landings and wholesale receipts of fresh and frozen fish, shellfish, and livers at Seattle during 1945 totaled 89,798,000 pounds, 32 percent over the 1944 figure of 68,140,000 pounds, and the largest volume of receipts recorded by the local Market News Office since it was established in 1939. These fishery products included local landings and receipts by the halibut exchange and the salmon cooperative, direct local receipts by wholesalers and deliveries from non-local sources, coastwise vessel receipts from Alaska, and imports received from Canada.

Excluding liver receipts, the ex-vessel landings and other deliveries by water-borne traffic totaled 64,514,000 pounds or 76 percent of the total fish and shell-fish figure of 84,828,000 pounds, with the remaining 24 percent, or 20,314,000 pounds, being made by truck, rail, and express.

Seattle's principal sources of supply were the waters of Washington, Oregon, and Idaho, which supplied over 70 percent of the total receipts or 62,801,000 pounds; Alaska, 25 percent or 22,410,000 pounds; British Columbia, 5 percent or 4,251,000 pounds; and the following areas which contributed less than one-half of one percent: Gulf States, Manitoba, and New York (Table 1). With the exception

Table 1 - Receipts by Source - 1945

Source	FRESH			FROZEN		
	1945	1944	Change from 1944	1945	1944	Change from 1944
1/	Pounds	Pounds	Percent	Pounds	Pounds	Percent
Local	62,801,000	50,874,000	+ 23	d de Time	200-01-01	2 BB15
California	48,000	10,000	+380		from -united	out the
Gulf States	245,000	59,000	+315	-		
New York	8,000	4,000			-	-
laska	604,000	1,079,000	- 44	21,806,000	13,816,000	+58
British Columbia	3,743,000	1,960,000	+ 91	508,000	308,000	+65
Manitoba		-11 -	any peniso	35,000	31,000	+13
Total	67,449,000	53,986,000	+ 25	22,349,000	14,154,000	+58

1/Washington, Oregon, and Idaho.

of Alaska, all sources of supply showed outstanding gains, the direct reverse of 1944. As in the previous year, Seattle again received a carload of frozen white-fish from Canada, indicating a small but possible growing interest in prime freshwater fish of the prairie region.

The sharp increase of almost  $21\frac{3}{4}$  million pounds over 1944 in Seattle's receipts was due, in large part, to two developments. Of first importance was the increase of over  $7\frac{3}{4}$  million pounds in salmon receipts. The year 1945 was a pink salmon year in Puget Sound and receipts of this species totaled 3,790,000 pounds compared to 88,000 pounds for the previous year. In addition, the purse-seine and gill-net operations for chinook and chum salmon showed considerable improvement. While the 1945 trolling operations and reported local landings of chinook salmon were not up to expectations, declining 8 percent, the receipts of silver salmon, of

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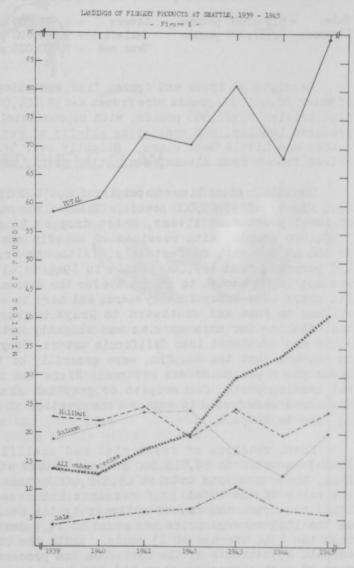
which almost 1-1/3 million pounds were caught by troll gear, were sufficiently heavy to offset the disappointing chinook situation. As a result, the over-all receipts of troll-caught salmon increased from 2,395,000 pounds in 1944 to 2,907,000 pounds in 1945, a gain of 21 percent.

Second, the receipts of true cod, 2,090,000 pounds, and rockfishes, 14,493,000 pounds, represented increases of 226 percent and 158 percent, respectively. These bottomfish were caught and landed almost exclusively by otter-trawl vessels, with the halibut fleet and small shark or line craft accounting for only a minor portion of the total bottomfish receipts. The catch per boat of these species was generally high since highly productive fishing grounds were encountered during the 1945 operations of the trawl fleet in both inside and off-shore waters. The fishing effort was further aided and encouraged by the upward adjustment of a number of OPA's price levels for the fisherman and the processor. The influence of the increased otter-trawl catch is evident from Figure 1, on which are plotted total landings

from 1939 through 1945. On this chart, "all other species," including mainly species taken by otter-trawl vessels, shows the most impressive increase of any group.

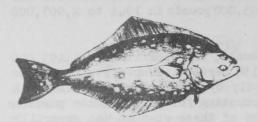
Receipts of halibut influenced the over-all picture to some extent. During 1945, the catch limit of halibut was raised through international agreement to 52½ million pounds, an increase of 1½ million pounds over the 1944 limit. This was reflected to some extent at Seattle where local landings of fresh halibut increased from 11,744,000 pounds in 1944 to 12,425,000 pounds in 1945, a gain of 6 percent.

Alaska ports again received the major portion of the halibut catch by United States vessels. such landings being almost twice the amount landed at Seattle, principally because the vessels operating from Alaska bases could make manymore trips to the banks than could be accomplished through the longer haul to Seattle. This was made possible through the removal of the "lay-over" restrictions in effect in 1943. Consequently, the largest gain in Seattle's receipts of this species lay, not in the deliveries of fresh halibut, but in the receipts of



frozen stocks. Alaska shipped almost  $10\frac{1}{2}$  million pounds of frozen halibut via Seattle for distribution in the United States as compared to  $6\frac{3}{4}$  million pounds in 1944, an increase of 56 percent.

In past years, the bulk of Alaska halibut had been trans-shipped to many eastern markets via Prince Rupert, Canada, in bond. The diversion of such ship-



ments to Seattle in 1945 was occasioned by inadequate cold-storage space and lack of handling equipment at Prince Rupert, together with a critical shortage of suitable rail cars and other shipping facilities necessary for the rapid movement of large volumes of frozen stocks.

The year's total receipts of 89,789,000 pounds were composed of 39 classifications, 10 of which

accounted for approximately 95 percent of the total weight. Heading the list of items which contributed most heavily to the year's receipts was halibut with 23,339,000 pounds, 26 percent of the total receipts. In second place, was salmon with a total of 20,017,000 pounds or 22 percent, and in third place, were rockfishes with 14,493,000 pounds or 16 percent. Following these items were:

Sole - 5.905.000 pounds Lingcod - 5,337,000 pounds Livers - 4,971,000 pounds Sablefish - 3,809,000 pounds Crabs - 1,510,000 pounds True cod - 2,090,000 pounds

Oysters - 3,402,000 pounds

Receipts of fresh and frozen fish, excluding livers, totaled 78,502,000 pounds, of which 20,401,000 pounds were frozen and 58,101,000 pounds fresh. Receipts of shellfish totaled 6,326,000 pounds, with approximately four-fifths of this amount being produced locally, and consisting chiefly of Pacific oysters, Dungeness crabs, and butter and Little Neck clams. Slightly over 362,000 pounds of shellfish were received frozen from Alaska, consisting mainly of clams, crabmeat, and shrimp meat.

Seattle's total liver receipts of 4,971,000 pounds were 17 percent less than the 1944 figure of 5,985,000 pounds. The decline was caused by a decrease in receipts of locally obtained livers, which dropped 36 percent, from 5,316,000 pounds to 3,384,000 pounds, with receipts of soupfin shark and grayfish livers decreasing 56 and 48 percent, respectively. Although frozen livers from Alaska increased 137 percent, from 669,000 pounds in 1944 to 1,586,000 pounds in 1945, this gain was not large enough to compensate for the decrease in the local production. Soupfin shark were exceptionally scarce and hard to obtain in the waters off the Straits of Juan de Fuca and southward to Grays Harbor. Some shark fishermen reported that fishing for this species was slightly better off the mouth of the Columbia River and southward into California waters. Grayfish, while somewhat more plentiful in numbers than the soupfin, were generally of very small size, consequently, the liver yield per pound was reduced. There was no market in Seattle, or other local landing ports, for soupfin or grayfish shark carcasses, with the result that fishermen were forced to continue the practice of dumping stripped carcasses at sea or enroute to port.

Local receipts of fresh fish and shellfish (from Washington, Oregon, and Idaho) amounted to 59,718,000 pounds, valued at \$7,127,000 to the fishermen. In 1944, these receipts totaled 45,632,000 pounds, valued at \$5,912,000. Although the value of the total 1945 receipts increased almost  $1\frac{1}{4}$  million dollars over 1944, this rise was caused entirely by the over-all increase of local receipts, as the 1945 average price per pound of 11.9 cents was 1.1 cents or 8 percent less than the 1944 average of 13 cents. While the Office of Price Administration made certain adjustments at the fishermen and processor price levels during 1945, they were of such character they did not tend to affect the general price of fish.

During most of the war years, OPA's price ceilings tended to act largely as a "floor." However, during the latter part of 1945, in infrequent instances, fishermen accepted returns below ceiling prices. Such cases, rare for the most part, influenced the drop in the over-all average price per pound.

During 1945, the heaviest deliveries of fishery products were made during the spring and summer months of May, June, and July. During May, the heaviest monthly receipts of shellfish and livers were made totaling 854,000 and 1,165,000 pounds of these items, respectively. July accounted for the greatest monthly volume of fresh and frozen fish, with a total of 10,891,000 pounds. June was the heaviest month for total fish and shellfish items, aggregating 11,403,000 pounds, and it led also in monthly receipts of fish, shellfish, and livers with a total of 11,961,000 pounds. During the preceding years, June was the heaviest month for all classifications, receiving almost  $9\frac{1}{2}$  million pounds in 1944 and  $12\frac{3}{4}$  million pounds in 1943.



## THE HARD SHELL CLAM

The quahog, round clam, Little Neck, or hard shell clam is the most abundant on Middle Atlantic shores. The fisheries of New York and New Jersey yield between 2 and 3 million pounds each; the Virginia clam in-

dustry is only slightly less productive, with a yield of nearly 2 million pounds. Small quantities are taken in Delaware, Maryland, and North Carolina.



The bulk of the clam catch is sold fresh; the balance is canned--as minced clams, as chowder, or as clam cocktail.

Hard shell clams live in coastal waters, from almost the high tide level to depths of more than 50 feet. The deeper growing clams are taken by dredging or with tongs (the New York fishery is carried on entirely by tonging), while clams that live in or near the tidal zone are dug out of the sand with rakes or are picked by hand.

Because hard shell clams are well adapted to cultivation and grow within a wide depth range, the fishery could be greatly developed by extensive farming. In practice, however, cultivation has been neglected and pollution has been tolerated in otherwise good clam-growing areas; as a result only a fraction of the potential value of the clam resource is realized.

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