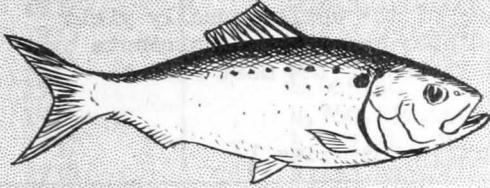


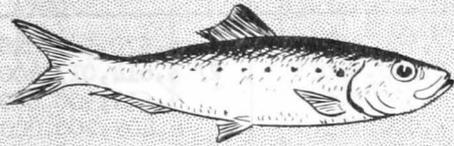
THE RELATIVE PRODUCTIVITY AND VALUE OF THE FISHERIES OF THE UNITED STATES AND ALASKA

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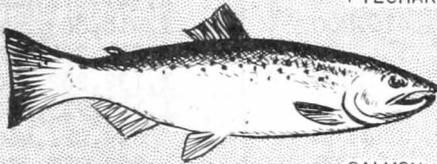
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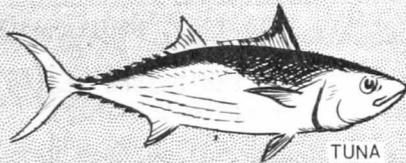
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PILCHARD



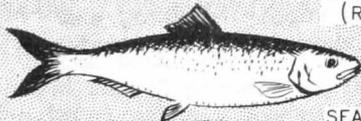
SALMON



TUNA



OCEAN PERCH  
(ROSEFISH)



SEA HERRING



SHRIMP



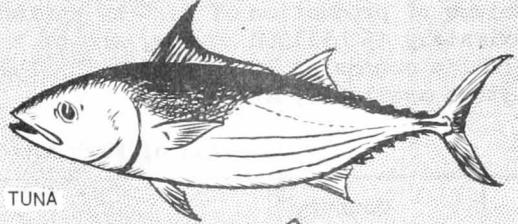
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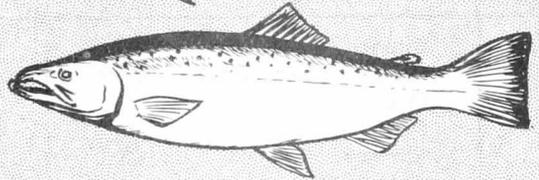
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HADDOCK



TUNA



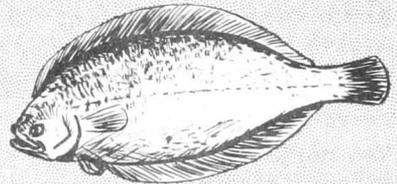
SALMON



SHRIMP



OYSTERS



FLOUNDERS



MENHADEN



PILCHARD



CRABS



OCEAN PERCH  
(ROSEFISH)



LOBSTERS

# THE RELATIVE PRODUCTIVITY AND VALUE OF THE FISHERIES OF THE UNITED STATES AND ALASKA

By Bob Finley\*

The commercial fisheries of the United States and Alaska rank second in the world in the volume of production of fish by nations. The fisheries of the world annually yield approximately 55 billion pounds, and of this, the United States and Alaska contribute over 5.6 billion pounds or 10 percent. The leading nations as listed in the most recent statistics available, are:

Catch of Fish and Shellfish by Certain Countries <sup>1/</sup>

Rank	Country	Year	Metric tons	Pounds
1	Japan	1949	2,980,400	6,570,589,840
2	United States and Alaska	1949	2,546,500	<sup>2/</sup> 5,614,013,900
3	China	1948 Est.	2,500,000	5,511,500,000
4	U. S. S. R.	Annual Est.	2,000,000	4,409,200,000
5	Norway	1949	1,165,700	2,569,902,220
6	United Kingdom	1949	1,156,400	2,549,399,440
7	Canada and Newfoundland	1949	870,400	1,918,883,840
8	Spain	1949	551,000	1,214,734,600
9	Western Germany	1949	513,600	1,132,282,560
10	India	1949	503,000	1,108,913,800
11	France	1949	435,100	959,221,460
12	Iceland	1949	394,200	869,053,320

<sup>1/</sup> The source of these data is the Yearbook of Fishery Statistics, 1948-1949, published by the Food and Agriculture Organization of the United Nations.

<sup>2/</sup> The reason for the difference in the amount shown in this table and the United States production reported elsewhere in this leaflet results from the use of in-the-shell weights of certain mollusks in this table. Shell weights are used by the Food and Agriculture Organization. In United States statistics, the weight of univalve and bivalve mollusks is reported in pounds of meats. All other items, except whale products, are reported in round weights.

The period following World War II was one of great activity for the fishing fleets of the United States and Alaska. During this period the fishing industry made its transition to a peacetime basis. Production and marketing was controlled by supply, demand, and competition rather than price ceilings; shortages of supplies, labor and transportation; lack of vessels; and other war-created difficulties.

Although complete statistics are not available for 1949, all areas of the United States and Alaska with the exception of the South Atlantic Area (North Carolina, South Carolina, Georgia, and the East Coast of Florida) and the Mississippi River and its tributaries are shown for that year. The most recent figures available for the South Atlantic Area are for 1945 while those for the Mississippi River and its tributaries are for 1931. The production and value figures used in this leaflet are for the year listed in the preceding sentences.

The following table, which contains recorded production for the areas in which surveys were made, and estimates for other regions from 1929 to 1949, indicates the trend of the volume, value to the fishermen, and average price per pound of the domestic production during recent years. Although the total production has not varied greatly during the past ten years, the total value of the various fishery products has recorded an increase of slightly over 250 percent.

\*Fishery Marketing Specialist, Branch of Commercial Fisheries, Washington 25, D. C.

Note: This is a revision of The Relative Productivity and Value of the Fisheries of the United States and Alaska by A. M. Sandberg, published in February, 1945.

United States and Alaska Catch of Fishery Products, 1929-1949

Year	Pounds	Value	Average price per pound
1929	3,567,277,000	(1)	(1)
1930	3,286,580,000	\$109,349,000	3.33
1931	2,657,317,000	77,344,000	2.91
1932	2,614,140,000	55,532,000	2.12
1933	2,933,459,000	(1)	(1)
1934	4,058,015,000	(1)	(1)
1935	4,065,802,000	(1)	(1)
1936	4,760,330,000	(1)	(1)
1937	4,352,549,000	100,845,000	2.32
1938	4,253,445,000	93,547,000	2.20
1939	4,443,328,000	96,532,000	2.17
1940	4,059,524,000	98,957,000	2.44
1941	4,900,000,000	129,000,000	2.63
1942	3,877,000,000	170,338,000	4.39
1943	4,202,000,000	204,000,000	4.85
1944	4,504,000,000	213,000,000	4.73
1945	4,575,500,000	269,900,000	5.90
1946	4,456,000,000	310,000,000	6.96
1947	4,344,000,000	307,600,000	7.08
1948	4,575,000,000	367,000,000	8.02
1949	4,796,000,000	339,000,000	7.06

1/ Not available.

The tables which follow show the relative rank of the various fisheries of the United States and Alaska for the years indicated. The total of this production amounted to 4,796,000,000 pounds of fish and shellfish for which the fishermen received \$339,000,000. Approximately 158,000 fishermen and 90,000 vessels and boats were employed in producing this catch.

Ten species (or groups of species classified together as one fishery), accounted for 74.6 percent of the total catch and 58.6 percent of the total value. The ten species leading in value, however, accounted for 68.6 percent of the total value and 69.2 percent of the total volume. Menhaden, which led all other fish in respect to volume, were sixth in value, while pilchards were second in volume and seventh in value. Tuna ranked fourth in volume but first in value. Salmon followed tuna, being second in value and third in volume. Only two of the first 58 items placed in the same position with respect to volume and value. These were crabs and sablefish in the 8th and 37th positions respectively.

Of the total of 198 items listed in the catch records for 1949, 58 of the items accounted for 98 percent of the total production, while 61 items accounted for 99 percent of the total value. The relative position of each fishery in volume and value is shown in Table I.

Considering the catch by sections, the fisheries of the Atlantic Coast during 1949, (with the exception of the South Atlantic Area, the figures which are for 1945), produced 2,260,554,000 pounds of fish and shellfish valued at \$125,970,000, or 47.2 percent of the volume and 38.2 percent of the value of the total domestic fisheries. The menhaden fishery, leading in production with 35.3 percent of the catch, ranked eighth in value. Ocean perch (rosefish) was in second place in both volume and value. Oysters ranked tenth in production but first in value, while haddock was third in value and fourth in volume. Table II indicates the relative position in volume and value of the 25 leading species which together represent 94.9 percent of the production and 93.7 percent of the value of the Atlantic Coast fisheries. The fisheries of the Atlantic Coast are much more diversified than those of the Pacific Coast. On the East Coast, the leading 20 species accounted for approximately the same quantity and value as do only seven species on the West Coast.

Table I - Relative Volume and Value of the Fisheries of the United States and Alaska, Various Years\*  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN				
Rank	Species	Volume (000 lbs.)	Percent of total		Rank	Species	Value (000 dollars)	Percent of total	
			United States and Alaska	Cumulative				United States and Alaska	Cumulative
1	Menhaden	1,075,573	22.5	22.5	1	Tuna	54,126	16.4	16.4
2	Pilchard	633,540	13.2	35.7	2	Salmon	46,697	14.2	30.6
3	Salmon	484,206	10.0	45.7	3	Shrimp	33,489	10.2	40.8
4	Tuna	335,680	7.0	52.7	4	Oysters	29,536	9.0	49.8
5	Ocean perch (rosefish)	236,987	4.9	57.6	5	Flounders	10,967	3.3	53.1
6	Sea herring	205,030	4.3	61.9	6	Menhaden	10,905	3.3	56.4
7	Shrimp	173,384	3.6	65.5	7	Pilchard	10,760	3.3	59.7
8	Crabs	155,164	3.2	68.7	8	Crabs	9,970	3.0	62.7
9	Mackerel	143,091	3.0	71.7	9	Ocean perch (rosefish)	9,820	3.0	65.7
10	Haddock	134,971	2.9	74.6	10	Lobsters	9,491	2.9	68.6
11	Flounders	125,707	2.6	77.2	11	Clams	9,295	2.8	71.4
12	Whiting	91,620	1.9	79.1	12	Haddock	9,250	2.8	74.2
13	Oysters	77,519	1.6	80.7	13	Halibut	7,821	2.4	76.6
14	Cod	71,012	1.5	82.2	14	Scallops	7,792	2.4	79.0
15	Hake	57,104	1.2	83.4	15	Mackerel	4,705	1.4	80.4
16	Halibut	49,915	1.0	84.4	16	Mullet	4,255	1.3	81.7
17	Mullet	44,013	.9	85.3	17	Cod	4,030	1.2	82.9
18	Alewives	40,630	.9	86.2	18	Catfish and bullheads	3,272	1.0	83.9
19	Clams	37,641	.8	87.0	19	Sea herring	3,177	1.0	84.9
20	Mussel shells	37,255	.8	87.8	20	Whitefish	3,069	.9	85.8
21	Scup or porgy	29,071	.6	88.4	21	Sea trout or weakfish	2,988	.9	86.7
22	Pollock	28,832	.6	89.0	22	Croakers	2,506	.8	87.5
23	Catfish and bullheads	28,789	.6	89.6	23	Whiting	1,994	.6	88.1
24	Lobsters	27,544	.6	90.2	24	Snapper	1,955	.6	88.7
25	Rockfishes	23,971	.5	90.7	25	Scup or porgy	1,780	.5	89.2
26	Sea trout or weakfish	23,656	.5	91.2	26	Shad	1,636	.5	89.7
27	Lake herring	21,934	.5	91.7	27	Blue pike	1,568	.5	90.2
28	Scallops	19,804	.4	92.1	28	Sea bass	1,561	.5	90.7
29	Croakers	19,609	.4	92.5	29	Yellow pike	1,555	.5	91.2
30	Carp	19,218	.4	92.9	30	Sharks	1,529	.5	91.7
31	Buffalofish	16,573	.4	93.3	31	Lake trout	1,355	.4	92.1
32	Spot	16,484	.3	93.6	32	Chubs	1,294	.4	92.5
33	Grayfish	14,749	.3	93.9	33	Striped bass	1,157	.4	92.9
34	Blue pike	14,085	.3	94.2	34	Spanish mackerel	1,142	.4	93.3
35	Squid	13,794	.3	94.5	35	Rockfishes	1,100	.3	93.6
36	Sea bass	12,021	.3	94.8	36	Groupers	1,023	.3	93.9
37	Sablefish	11,830	.3	95.1	37	Sablefish	981	.3	94.2
38	Shad	11,002	.2	95.3	38	Spot	975	.3	94.5
39	Groupers	10,107	.2	95.5	39	Hake	965	.3	94.8
40	Spanish mackerel	9,874	.2	95.7	40	Pollock	808	.3	95.1
41	Whitefish	9,017	.2	95.9	41	Lake herring	788	.2	95.3
42	Sheepshead	8,637	.2	96.1	42	Yellowtail	779	.2	95.5
43	Snapper	8,444	.2	96.3	43	Buffalofish	752	.2	95.7
44	Lingcod	8,188	.2	96.5	44	Alewives	751	.2	95.9
45	Yellowtail	7,759	.2	96.7	45	Grayfish	747	.2	96.1
46	Chubs	7,732	.2	96.9	46	Lingcod	747	.2	96.3
47	Yellow pike	7,121	.1	97.0	47	Drum	744	.2	96.5
48	Sharks	6,996	.1	97.1	48	Carp	731	.2	96.7
49	Butterfish	6,947	.1	97.2	49	Yellow perch	706	.2	96.9
50	Smelt	6,361	.1	97.3	50	Butterfish	615	.2	97.1
51	Striped bass	6,240	.1	97.4	51	Bluefish	611	.2	97.3
52	Drum	5,970	.1	97.5	52	King mackerel	584	.2	97.5
53	Yellow perch	4,809	.1	97.6	53	Smelt	508	.2	97.7
54	Bluefish	4,312	.1	97.7	54	Pompano	500	.1	97.8
55	King whiting	4,237	.1	97.8	55	Sponges	471	.1	97.9
56	King mackerel	4,235	.1	97.9	56	Swordfish	438	.1	98.0
57	Suckers	4,038	.1	98.0	57	Mussel shells	422	.1	98.1
58	Anchovies	3,724	.1	98.1	58	Squid	411	.1	98.2
					59	Sheepshead	405	.1	98.3
					60	Abalone	398	.1	98.4
					61	Barracuda	370	.1	98.5
	All other	92,875	1.9	100.0		All other	4,925	1.5	100.0
	Total	4,790,626	100.0	100.0		Total	329,702	100.0	100.0

\* Data are for 1949 except those for the Mississippi River and tributaries which are for 1931 and the South Atlantic area (North Carolina, South Carolina, Georgia and the East Coast of Florida) which are for 1945.

Table II--Relative Volume and Value of the Fisheries of the Atlantic Coast, Various Years\*  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN						
Rank	Species	Volume (000 lbs.)	Percent of total			Rank	Species	Value (000 dollars)	Percent of total		
			United States and Alaska	Atlantic Coast	Cumu- lative				United States and Alaska	Atlantic Coast	Cumu- lative
1	Menhaden	799,067	16.7	35.3	35.3	1	Oysters	22,563	6.9	17.9	17.9
2	Ocean perch (rosefish)	236,987	5.0	10.5	45.8	2	Ocean perch (rosefish)	9,820	3.0	7.8	25.7
3	Sea herring	170,680	3.6	7.5	53.3	3	Haddock	9,250	2.8	7.3	33.0
4	Haddock	134,971	2.8	6.0	59.3	4	Lobsters	9,019	2.7	7.1	40.1
5	Crabs	91,820	1.9	4.1	63.4	5	Clams	8,685	2.6	6.9	47.0
6	Whiting	91,620	1.9	4.0	67.4	6	Flounders	8,505	2.6	6.7	53.7
7	Flounders	82,721	1.7	3.6	71.0	7	Scallops	7,724	2.3	6.1	59.8
8	Cod	62,575	1.3	2.8	73.8	8	Menhaden	7,657	2.3	6.1	65.9
9	Hake	56,963	1.2	2.5	76.3	9	Crabs	5,154	1.6	4.1	70.0
10	Oysters	56,013	1.2	2.5	78.8	10	Shrimp	4,031	1.2	3.2	73.2
11	Shrimp	43,681	.9	1.9	80.7	11	Cod	3,744	1.1	3.0	76.2
12	Mackerel	42,070	.9	1.9	82.6	12	Sea herring	2,711	.8	2.2	78.4
13	Alwives	40,630	.8	1.8	84.4	13	Croakers	2,491	.8	2.0	80.4
14	Clams	35,037	.7	1.5	85.9	14	Mackerel	2,309	.7	1.8	82.2
15	Scup or porgy	29,071	.6	1.3	87.2	15	Whiting	1,994	.6	1.6	83.8
16	Pollock	28,832	.6	1.3	88.5	16	Scup or porgy	1,780	.5	1.4	85.2
17	Lobsters	25,228	.5	1.1	89.6	17	Sea trout or weakfish	1,730	.5	1.4	86.6
18	Scallops	19,651	.4	.9	90.5	18	Shad	1,490	.5	1.2	87.8
19	Croakers	19,378	.4	.9	91.4	19	Catfish and bullheads	1,288	.4	1.0	88.8
20	Sea trout or weakfish	17,167	.4	.8	92.2	20	Sea bass	1,254	.4	1.0	89.8
21	Spot	16,218	.3	.7	92.9	21	Striped bass	1,156	.4	.9	90.7
22	Catfish and bullheads	13,069	.3	.6	93.5	22	Mullet	968	.3	.8	91.5
23	Mullet	12,048	.3	.5	94.0	23	Hake	964	.3	.8	92.3
24	Sea bass	10,497	.2	.5	94.5	24	Spot	957	.3	.8	93.1
25	Shad	8,802	.2	.4	94.9	25	Pollock	808	.2	.6	93.7
	All other	115,758	2.4	5.1	100.0		All other	7,918	2.4	6.3	100.0
	Total	2,260,554	47.2	100.0	100.0		Total	125,970	38.2	100.0	100.0

\* Data are for 1949 except those for the South Atlantic area (North Carolina, South Carolina, Georgia and the East Coast of Florida) which are for 1945.

During 1949, the fisheries of the Pacific Coast States and Alaska produced 1,837,408,000 pounds of fish and shellfish, representing 38.3 percent of the total domestic production, valued at \$139,672,000 or 42.3 percent of the total value. The pilchard fishery, while accounting for 34.5 percent of the total Pacific catch, made up only 7.7 percent of the value for third position. The salmon fishery, which followed the pilchard fishery in production with 26.3 percent, was second in value with 33.4 percent. The catch of tuna ranked third with 18.1 percent in volume, but first in value with 38.6 percent. Together these three species accounted for 78.9 percent of the total Pacific Coast catch and 79.7 percent of the total value. Table III lists the relative positions of the ten largest and the ten most valuable Pacific Coast fisheries, which comprise 95.5 percent of the total volume and 95.1 percent of the total value of the fisheries on the West Coast.

Table III--Relative Volume and Value of the Fisheries of the Pacific Coast, 1949  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN						
Rank	Species	Volume (000 lbs.)	Percent of total			Rank	Species	Value (000 dollars)	Percent of total		
			United States and Alaska	Pacific Coast	Cumu- lative				United States and Alaska	Pacific Coast	Cumu- lative
1	Pilchard	633,540	13.2	34.5	34.5	1	Tuna	53,852	16.3	38.6	38.6
2	Salmon	484,205	10.1	26.3	60.8	2	Salmon	46,696	14.2	33.4	72.0
3	Tuna	332,069	6.9	18.1	78.9	3	Pilchard	10,760	3.3	7.7	79.7
4	Mackerel	101,021	2.1	5.5	84.4	4	Halibut	7,714	2.3	5.5	85.2
5	Halibut	49,439	1.0	2.7	87.1	5	Crabs	3,615	1.1	2.6	87.8
6	Flounders	42,165	.9	2.3	89.4	6	Mackerel	2,396	.7	1.7	89.5
7	Crabs	36,241	.8	2.0	91.4	7	Flounders	2,302	.7	1.7	91.2
8	Sea herring	34,350	.7	1.8	93.2	8	Sharks and grayfish	2,206	.7	1.6	92.8
9	Rockfishes	23,971	.5	1.3	94.5	9	Oysters	2,133	.6	1.5	94.3
10	Sharks and grayfish	18,094	.4	1.0	95.5	10	Rockfishes	1,100	.3	.8	95.1
	All other	82,313	1.7	4.5	100.0		All other	6,898	2.1	4.9	100.0
	Total	1,837,408	38.3	100.0	100.0		Total	139,672	42.3	100.0	100.0

The fisheries of the Gulf Coast, including the West Coast of Florida, during 1949 produced 524,588,000 pounds of fish and shellfish valued at \$49,705,000 to the fishermen, this represents 11.0 percent of the volume and 15.1 percent of the value of the total domestic fisheries for that year. The menhaden fishery led all others in production with 52.7 percent of the Gulf catch, however, this species accounted for only 1.5 percent of the total value for fourth place in this area. Shrimp, which was second in volume, was first in value. Oysters were second in value followed by mullet. Table IV indicates the relative position of the ten largest and the ten most valuable Gulf Coast fisheries, which comprised 96.5 percent of the total volume and 94.8 percent of the total value of these fisheries.

Table IV—Relative Volume and Value of the Fisheries of the Gulf Coast, 1949\*  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN						
Rank	Species	Volume (000 lbs.)	Percent of total			Rank	Species	Value (000 dollars)	Percent of total		
			United States and Alaska	Gulf	Cumu- lative				United States and Alaska	Gulf	Cumu- lative
1	Menhaden	276,506	5.8	52.7	52.7	1	Shrimp	29,207	8.8	58.8	58.8
2	Shrimp	126,514	2.6	24.1	76.8	2	Oysters	4,839	1.4	9.7	68.5
3	Mullet	31,893	.7	6.1	82.9	3	Mullet	3,282	1.0	6.6	75.1
4	Crabs	27,103	.6	5.2	88.1	4	Menhaden	3,248	1.0	6.5	81.6
5	Oysters	13,121	.3	2.5	90.6	5	Snappers	1,886	.6	3.8	85.4
6	Groupers	8,397	.2	1.6	92.2	6	Sea trout or weakfish	1,258	.4	2.5	87.9
7	Snappers	8,081	.1	1.6	93.8	7	Crabs	1,201	.4	2.4	90.3
8	Sea trout or weakfish	6,489	.1	1.2	95.0	8	Groupers	835	.3	1.7	92.0
9	Drum	4,089	.1	.8	95.8	9	Catfish and bullheads	817	.2	1.7	93.7
10	Spanish mackerel	3,876	.1	.7	96.5	10	Drum	568	.2	1.1	94.8
	All other	18,519	.4	3.5	100.0		All other	2,564	.8	5.2	100.0
	Total	524,588	11.0	100.0	100.0		Total	49,705	15.1	100.0	100.0

\* Includes West Coast of Florida.

The production and values shown for fish and shellfish in the Great Lakes and in the Mississippi River Areas are for 1949 and 1931 respectively. During these years, this area produced 168,076,000 pounds of fish and shellfish valued at \$14,355,000. This represented 3.5 percent of the total domestic catch and 4.4 percent of the total value. The leading item produced in this territory was mussel shells, used mainly in the button industry. This item accounted for 22.2 percent of the total Lakes and Mississippi River production. It did not appear among the first ten items with regard to value. Lake herring (13.1 percent) and carp (9.8 percent) were in second and third positions respectively. With regard to value, whitefish led all other species with 21.4 percent of the total value. In the second and third positions were blue pike with 10.9 percent and yellow pike with 10.8 percent respectively. Lake trout, which led the value column for many years was in fourth place with 9.4 percent. Although the per-pound value of lake trout has risen steadily in recent years, the production has dropped markedly. This has been caused partially by the depredation of the lake trout in the Great Lakes by the sea lamprey. Table V indicates the relative positions of the leading species with regard to both volume and value.

Table V—Relative Volume and Value of the Fisheries of the Great Lakes and Mississippi River, Various Years\*  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN						
Rank	Species	Volume (000 lbs.)	Percent of total			Rank	Species	Value (000 dollars)	Percent of total		
			United States and Alaska	Lakes and Miss. R.	Cumu- lative				United States and Alaska	Lakes and Miss. R.	Cumu- lative
1	Mussel shells	37,255	.8	22.2	22.2	1	Whitefish	3,066	.9	21.4	21.4
2	Lake herring	21,934	.5	13.1	35.3	2	Blue pike	1,568	.5	10.9	32.3
3	Carp	16,459	.3	9.8	45.1	3	Yellow pike	1,554	.5	10.8	43.1
4	Buffalofish	15,779	.3	9.4	54.5	4	Lake trout	1,355	.4	9.4	52.5
5	Blue pike	14,085	.3	8.4	62.9	5	Chub	1,294	.4	9.0	61.5
6	Catfish and bullheads	11,682	.2	6.9	69.8	6	Catfish and bullheads	1,128	.4	7.9	69.4
7	Whitefish	8,981	.2	5.3	75.1	7	Lake herring	788	.2	5.5	74.9
8	Chub	7,732	.2	4.6	79.7	8	Buffalofish	688	.2	4.8	79.7
9	Yellow pike	7,121	.2	4.2	83.9	9	Yellow perch	675	.2	4.7	84.4
10	Sheepshead	7,032	.1	4.2	88.1	10	Carp	607	.2	4.2	88.6
	All other	20,016	.4	11.9	100.0		All other	1,632	.5	11.4	100.0
	Total	168,076	3.5	100.0	100.0		Total	14,355	4.4	100.0	100.0

\* Data are for 1949 for the Great Lakes and the International Lakes of Northern Minnesota but for 1931 for the Mississippi River and tributaries. The last complete survey of the Mississippi River was conducted in 1931.

California led the various states and Alaska in both production and value with 23.6 percent of the total domestic production and 22.0 percent of the value. Massachusetts ranked second (13.5 percent) in volume and third (11.8 percent) in value, while Alaska, in third place in volume with 9.9 percent was second in value with 11.9 percent. Louisiana was in fourth place in both categories with 6.4 percent in volume and 8.6 percent in value. Together, these four states produced 53.4 percent of the total domestic catch and accounted for 54.3 percent of the total value. The relative positions of the various states and Alaska are listed in Table VI.

Table VI—Relative Volume and Value of the Fisheries of the United States and Alaska, Various Years\*  
(In thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN					RETURNS TO FISHERMEN				
Rank	State	Volume (000 lbs.)	Percent of total		Rank	State	Value (000 dollars)	Percent of total	
			United States and Alaska	Cumu- lative				United States and Alaska	Cumu- lative
1	California	1,129,261	23.6	23.6	1	California	72,505	22.0	22.0
2	Massachusetts	647,613	13.5	37.1	2	Alaska	39,299	11.9	33.9
3	Alaska	172,889	9.9	47.0	3	Massachusetts	38,991	11.8	45.7
4	Louisiana	307,801	6.4	53.4	4	Louisiana	28,398	8.6	54.3
5	Maine	294,297	6.1	59.5	5	Washington	20,803	6.3	60.6
6	Virginia	275,675	5.8	65.3	6	Florida	16,967	5.1	65.7
7	Florida	267,944	5.6	70.9	7	Virginia	16,598	5.0	70.7
8	New Jersey	208,997	4.4	75.3	8	Maine	14,988	4.6	75.3
9	North Carolina	198,169	4.1	79.4	9	New York	14,768	4.5	79.8
10	Washington	174,161	3.6	83.0	10	New Jersey	9,745	3.0	82.8
11	Delaware	166,474	3.5	86.5	11	Texas	9,131	2.8	85.6
12	New York	147,810	3.1	89.6	12	Maryland	8,584	2.6	88.2
13	Texas	79,669	1.7	91.3	13	Oregon	7,065	2.1	90.3
14	Oregon	61,096	1.3	92.6	14	North Carolina	5,495	1.7	92.0
15	Maryland	58,982	1.2	93.8	15	Michigan	4,116	1.3	93.3
16	Mississippi	55,545	1.2	95.0	16	Ohio	3,471	1.0	94.3
17	Rhode Island	33,428	.7	95.7	17	Delaware	3,008	.9	95.2
18	Ohio	26,868	.6	96.3	18	Rhode Island	2,230	.7	95.9
19	Michigan	25,534	.5	96.8	19	Connecticut	2,158	.7	96.6
20	Connecticut	24,195	.5	97.3	20	Wisconsin	2,088	.6	97.2
21	Georgia	21,398	.4	97.7	21	Alabama	2,006	.6	97.8
22	Wisconsin	21,251	.4	98.1	22	Mississippi	1,748	.5	98.3
23	Illinois	15,759	.3	98.4	23	Georgia	1,350	.4	98.7
24	Arkansas	15,732	.3	98.7	24	South Carolina	899	.3	99.0
25	Alabama	11,977	.2	98.9	25	Pennsylvania	713	.2	99.2
26	South Carolina	10,856	.2	99.1	26	Illinois	653	.2	99.4
27	Minnesota	10,101	.2	99.3	27	Minnesota	593	.2	99.6
28	Iowa	7,778	.2	99.5	28	Arkansas	411	.1	99.7
29	Indiana	7,748	.2	99.7	29	Iowa	302		
30	Pennsylvania	4,436	.1	99.8	30	New Hampshire	170		
31	Tennessee	3,435	.1	99.9	31	Indiana	159		
32	Kentucky	1,622			32	Tennessee	104		
33	Missouri	928			33	Missouri	77	.3	100.0
34	Kansas	455			34	Kentucky	61		
35	New Hampshire	443	.1	100.0	35	Kansas	17		
36	Nebraska	145			36	Nebraska	16		
37	South Dakota	114			37	South Dakota	11		
38	Oklahoma	40			38	Oklahoma	4		
	Total	4,790,626	100.0	100.0		Total	329,702	100.0	100.0

\* Data are for 1949 except those for the Mississippi River and tributaries which are for 1931 and the South Atlantic area (North Carolina, South Carolina, Georgia and the East Coast of Florida) which are for 1945.

Salt-water sources produced the bulk of the United States and Alaska catch, yielding 4,592,025,000 pounds or 95.8 percent of the total volume, and having a value of \$311,987,000 or 94.6 percent of the total value. Most of the leading species listed in the table covering all varieties from all sources (Table I) were salt-water products. Fresh-water items leading in production were mussel shells, 37,255,000 pounds, catfish and bullheads, 28,789,000 pounds and lake herring, 21,934,000 pounds. These species ranked 20th, 23rd, and 27th in volume shown in Table I. In value, catfish and bullheads led all other fresh-water species with \$3,272,000 and placed 18th among all items in Table I, while whitefish, in 20th place in Table I, were the second, bringing \$3,066,000 to the fishermen of the Great Lakes Area. Salt-water varieties predominated among the shellfish and miscellaneous category as they composed 93 percent of the total volume and 99 percent of the total value. Shrimp, crabs, and oysters were the most important in volume, followed by clams and fresh-water mussels. In value, shrimp, oysters, and crabs were the three leading items, with the most important fresh-water item, mussel shells, ranking eighth. Table VII and VIII divide the United States and Alaska catch into fresh-water and salt-water groupings, in which fish and shellfish, etc., are shown separately.

Table VII--Relative Volume and Value of Salt-Water Fisheries of the United States and Alaska, Various Years 1/  
(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN						RETURNS TO FISHERMEN							
United States and Alaska	Salt-water fish	Species	Volume (000 lbs.)	Percent of total			United States and Alaska	Salt-water fish	Species	Value (000 dollars)	Percent of total		
				United States and Alaska	Salt-water fish	Cumulative					United States and Alaska	Salt-water fish	Cumulative
		Salt-water fish											
1	1	Menhaden	1,075,573	22.5	26.4	26.4	1	1	Tuna	54,126	16.4	25.7	25.7
2	2	Pilchard	633,540	13.2	15.5	41.9	2	2	Salmon	46,697	14.2	22.2	47.9
3	3	Salmon	484,206	10.1	11.9	53.8	5	3	Flounders	10,967	3.3	5.2	53.1
4	4	Tuna	335,680	7.0	8.2	62.0	6	4	Menhaden	10,905	3.3	5.2	58.3
5	5	Ocean perch (rosefish)	236,987	5.0	5.8	67.8	7	5	Pilchard	10,760	3.3	5.1	63.4
6	6	Sea herring	205,030	4.3	5.0	72.8	9	6	Ocean perch (rosefish)	9,820	3.0	4.7	68.1
9	7	Mackerel	143,091	3.0	3.5	76.3	12	7	Haddock	9,250	2.8	4.4	72.5
10	8	Haddock	134,971	2.8	3.3	79.6	13	8	Halibut	7,821	2.4	3.7	76.2
11	9	Flounders	125,707	2.6	3.1	82.7	15	9	Mackerel	4,705	1.4	2.2	78.4
12	10	Whiting	91,620	1.9	2.2	84.9	16	10	Mullet	4,255	1.3	2.0	80.4
14	11	Cod	71,012	1.5	1.7	86.6	17	11	Cod	4,030	1.2	1.9	82.3
15	12	Hake	57,014	1.2	1.4	88.0	19	12	Sea herring	3,177	1.0	1.5	83.8
16	13	Halibut	49,915	1.1	1.2	89.2	21	13	Sea trout or weakfish	2,988	.9	1.4	85.2
17	14	Mullet	44,013	.9	1.1	90.3	22	14	Croaker	2,506	.8	1.2	86.4
18	15	Alewives	40,630	.9	1.0	91.3	23	15	Whiting	1,994	.6	.9	87.3
21	16	Scup or porgy	29,071	.6	.7	92.0	24	16	Snappers	1,955	.6	.9	88.2
22	17	Pollock	28,832	.6	.7	92.7	25	17	Scup or porgy	1,780	.5	.8	89.0
25	18	Rockfishes	23,971	.5	.6	93.3	26	18	Shad	1,636	.5	.8	89.8
26	19	Sea trout or weakfish	23,656	.5	.6	93.9	28	19	Sea bass	1,561	.5	.7	90.5
29	20	Croaker	19,609	.4	.5	94.4	30	20	Sharks	1,529	.5	.7	91.2
32	21	Spot	16,484	.3	.4	94.8	33	21	Striped bass	1,157	.4	.5	91.7
33	22	Grayfish	14,749	.3	.4	95.2	34	22	Spanish mackerel	1,142	.3	.5	92.2
36	23	Sea bass	12,021	.3	.3	95.5	35	23	Rockfishes	1,100	.3	.5	92.7
37	24	Sablefish	11,830	.2	.3	95.8	36	24	Groupers	1,023	.3	.5	93.2
38	25	Shad	11,002	.2	.3	96.1	37	25	Sablefish	981	.3	.5	93.7
39	26	Groupers	10,107	.2	.2	96.3	38	26	Spot	975	.3	.5	94.2
40	27	Spanish mackerel	9,874	.2	.2	96.5	39	27	Hake	965	.3	.5	94.7
43	28	Snappers	8,444	.2	.2	96.7	40	28	Pollock	808	.2	.4	95.1
44	29	Lingcod	8,188	.2	.2	96.9	42	29	Yellowtail	779	.2	.4	95.5
45	30	Yellowtail	7,759	.2	.2	97.1	44	30	Alewives	751	.2	.4	95.9
48	31	Sharks	6,996	.1	.2	97.3	45	31	Grayfish	747	.2	.4	96.3
49	32	Butterfish	6,947	.1	.2	97.5	46	32	Lingcod	747	.2	.4	96.7
51	33	Striped bass	6,240	.1	.2	97.7	47	33	Drum	744	.2	.4	97.1
52	34	Drum	5,970	.1	.1	97.8	50	34	Butterfish	615	.2	.3	97.4
54	35	Bluefish	4,312	.1	.1	97.9	51	35	Bluefish	611	.2	.3	97.7
55	36	King whiting	4,237	.1	.1	98.0	52	36	King mackerel	584	.2	.3	98.0
56	37	King mackerel	4,235	.1	.1	98.1	54	37	Pompano	500	.2	.2	98.2
58	38	Anchovies	3,724	.1	.1	98.2	56	38	Swordfish	438	.1	.2	98.4
		All other	73,457	1.5	1.8	100.0	61	39	Barracuda	370	.1	.2	98.6
		Total	4,080,704	85.2	100.0	100.0			All other	2,985	.9	1.4	100.0
		Salt-water shellfish, etc.							Total	210,484	63.8	100.0	100.0
7	1	Shrimp	173,384	3.6	33.9	33.9	3	1	Salt-water shellfish, etc.				
8	2	Crabs	155,164	3.2	30.3	64.2	4	2	Shrimp	33,489	10.2	33.0	33.0
13	3	Oysters	77,519	1.6	15.1	79.3	8	3	Oysters	29,536	9.0	29.1	62.1
19	4	Clams	37,644	.8	7.4	86.7	10	4	Crabs	9,970	3.0	9.8	71.9
24	5	Lobsters	27,544	.6	5.4	92.1	11	5	Lobsters	9,491	2.9	9.4	81.3
28	6	Scallops	19,804	.4	3.9	96.0	14	6	Clams	9,295	2.8	9.1	90.4
35	7	Squid	13,794	.3	2.7	98.7	15	7	Scallops	7,792	2.4	7.7	98.1
		All other	6,471	.1	1.3	100.0	55	8	Sponges	471	.1	.5	98.6
		Total	511,321	10.6	100.0	100.0	58	9	Squid	411	.1	.4	99.0
		Total salt-water fish and shellfish, etc.	4,592,025	95.8	-	-	60	9	Ahalone	398	.1	.4	99.4
									All other	650	.2	.6	100.0
									Total	101,503	30.8	100.0	100.0
									Total salt-water fish and shellfish, etc.	311,987	94.6	-	-

1/ Data are for 1949 except those for the South Atlantic area (North Carolina, South Carolina, Georgia and the East Coast of Florida) which are for 1945.

Table VIII—Relative Volume and Value of Fresh-Water Fisheries of the United States and Alaska, Various Years <sup>1/</sup>

(Expressed by species in thousands of pounds and thousands of dollars)

CATCH BY FISHERMEN							RETURNS TO FISHERMEN						
Position		Species	Volume (000 lbs.)	Percent of total			Position		Species	Value (000 dollars)	Percent of total		
United States and Alaska	Fresh-water fish			United States and Alaska	Fresh-water fish	Cumulative	United States and Alaska	Fresh-water fish			United States and Alaska	Fresh-water fish	Cumulative
Total		<u>Fresh-water fish:</u>					Total						
23	1	Catfish and bullheads	28,789	.6	18.0	18.0	18	1	Catfish and bullheads	3,272	1.0	19.2	19.2
27	2	Lake herring	21,934	.5	13.7	31.7	20	2	Whitefish	3,066	.9	18.0	37.2
30	3	Carp	19,218	.4	12.0	43.7	27	3	Blue pike	1,568	.5	9.2	46.4
31	4	Buffalofish	16,573	.3	10.4	54.1	29	4	Yellow pike	1,555	.5	9.2	55.6
34	5	Blue pike	14,085	.3	8.8	62.9	31	5	Lake trout	1,355	.4	8.0	63.6
41	6	Whitefish	8,981	.2	5.6	68.5	32	6	Chub	1,294	.4	7.6	71.2
42	7	Sheepshead	8,096	.2	5.1	73.6	41	7	Lake herring	788	.3	4.6	75.8
46	8	Chub	7,732	.2	4.8	78.4	43	8	Buffalofish	752	.2	4.4	80.2
47	9	Yellow pike	7,121	.1	4.5	82.9	48	9	Carp	731	.2	4.3	84.5
50	10	Smelt	6,361	.1	4.0	86.9	49	10	Yellow perch	706	.2	4.2	88.7
53	11	Yellow perch	4,809	.1	3.0	89.9	53	11	Smelt	508	.2	3.0	91.7
57	12	Suckers	4,038	.1	2.5	92.4	59	12	Sheepshead	354	.1	2.1	93.8
-	-	All other	12,065	.3	7.6	100.0	-	-	All other	1,060	.3	6.2	100.0
		Total	159,802	3.4	100.0	100.0			Total	17,009	5.2	100.0	100.0
		<u>Fresh-water shell-fish, etc.:</u>							<u>Fresh-water shell-fish, etc.:</u>				
20	1	Mussel shells	37,255	.8	96.0	96.0	57	1	Mussel shells	422	.1	60.0	60.0
-	-	All other	1,544	(2)	4.0	100.0	-	-	All other	284	.1	40.0	100.0
		Total	38,799	.8	100.0	100.0			Total	706	.2	100.0	100.0
		Total fresh-water fish and shell-fish, etc.	198,601	4.2	-	-			Total fresh-water fish and shell-fish, etc.	17,715	5.4	-	-

<sup>1/</sup> Data are for 1949 except those for the Mississippi River and tributaries which are for 1931 and the South Atlantic area (North Carolina, South Carolina, Georgia and the East Coast of Florida) which are for 1945.

<sup>2/</sup> Less than .05 of one percent.

Seasonal Catch and Utilization of Fish and Shellfish

The subject of when fish are caught is always one of interest. The season varies with the species and the locality fished. Data on this variation are not collected as part of the regular annual canvasses of the fisheries made by the Service, but a study of seasonal variations of the catch was made for the year 1945. This study indicated that for the United States as a whole (including Alaska), the largest landings were in August and the smallest in February.

Percent of Catch and Utilization of Fishery Products by Quarters, 1945

Quarter	Fresh and Frozen	Canned	Cured	Byproducts	Total
	Percent	Percent	Percent	Percent	Percent
1st quarter	15.0	9.1	6.4	5.3	10.5
2nd quarter	30.9	9.7	34.5	16.8	21.0
3rd quarter	31.7	47.7	32.7	54.3	42.9
4th quarter	21.8	33.5	26.4	23.6	25.6
Total	100.0	100.0	100.0	100.0	100.0

Monthly Catch and Utilization of Fish and Shellfish, 1945  
(Round weight basis)

Month	Form Marketed				Total Catch	
	Fresh and Frozen	Canned	Cured	Byproducts <sup>1/</sup> and bait	1,000 Pounds	Percent
	1,000 Pounds	1,000 Pounds	1,000 Pounds	1,000 Pounds	1,000 Pounds	
January	74,000	66,000	2,000	62,000	204,000	4.4
February	88,000	34,000	2,000	11,000	135,000	3.0
March	126,000	12,000	3,000	2,000	143,000	3.1
April	129,000	16,000	8,000	19,000	172,000	3.7
May	207,000	37,000	17,000	48,000	309,000	6.8
June	232,000	66,000	13,000	167,000	478,000	10.5
July	210,000	239,000	13,000	209,000	671,000	14.7
August	207,000	220,000	14,000	280,000	721,000	15.8
September	167,000	128,000	9,000	263,000	567,000	12.4
October	174,000	202,000	7,000	175,000	558,000	12.2
November	136,000	131,000	12,000	86,000	365,000	8.0
December	91,000	79,000	10,000	67,000	247,000	5.4
Total	1,841,000	1,230,000	110,000	1,389,000	4,570,000	100.0

<sup>1/</sup> An additional 600 million pounds of waste from canning, dressing, and filleting operations was also used in the manufacture of byproducts.

Note:--Data partly estimated.