U. S. Department of the Interior, Oscar L. Chapman, Secretary Fish and Wildlife Service, Albert M. Day, Director

Fishery Leaflet 356

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FISHERIES OF NEW BRUNSWICK (CANADA)

Longetta be By Lewis Dean Brown, American Vice Consul

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History

European vessels have fished the waters off Canada's Atlantic Coast for over four hundred years. New Brunswick, a Maritime Province, developed a lucrative shipping industry in the late nineteenth century; the fisheries industry was one of the basic foundations of the maritime prosperity of that era.

The Maritime Provinces are adjacent to one of the world's greatest fishing areas. About four-fifths of the North Atlantic fishing grounds are off the 5,000 mile coastline of the three Maritimes. Included are the Bay of Fundy with 8,000 square miles of excellent fishing grounds where the strong tidal flow washes up subterranean plant life attracting many species of fish.

With the natural advantage of position the Maritimes have had large fishing industries. In New Brunswick, fishing has always ranked high among the province's industries. At the present time, it is in third place in economic importance, preceded by pulp and paper mills and lumbering.

1/ American Consulate Report No. 12, Saint John, N. B., Canada, March 15, 1949.

TABLE NO. 1 - FISH LANDINGS AND LANDED VALUES, NEW BRUNSWICK, 1944-48

		the same the	and the state of the		ANDED VALUES, NEW BRUNSWICK, 1944-48					1.0
SPECIES		44		4 5		1		47	1	48
	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE	POUNDS	VALUE
COD!/	14,251,700	\$ 512,599	16,812,100	\$ 570,837	22,213,400	\$ 728,102	21,417,200	\$ 465,693	24,349,700	\$ 586,916
HADDOCK	861,500	46,136	665,700	42,224	815,000	53,276	528,900	29,342	1,012,800	65,437
HERRING	39,0 97,900	327,382	33,170,400	358,884	55,392,000	657,974	48,875,200	543,064	56,741,400	503,564
SARD INES!	81,496,400	1,344,557	67,050,400	1,106,324	97,223,000	1,513,107	101,217,500	1,536,741	86,954,400	2,148,586
CLAMSE/ 37	7,756,200	186,624	4,475,000	98,207	5,781,400	121,872	6,911,900	149,899	7,806,000	177,899
LOBSTERSE/	7,199,300	1,610,046	7,542,000	1,927,542	9,179,800	2,597,302	6,859,500	1,580,461	8,056,600	2,096,483
SCALLOPSE	23,500	10,431	40,200	18,282	49,800	27,405	31,900	17,570	89,300	30,382
WINKLES -	34,800	1,044	48,100	1,250	34,900	1,047	30,800	924	35,800	1,254
ALEWIVES!	3,832,500 4,348,700	60,177 526,991	2,865,200 3,915,300	52,523 424,390	12,851,300 2,835,000	147,099	8,257,000 3,070,700	93,547 538,486	12,072,500 4,859,300	86,791 835,980
Towcop1/	1,045,600	22,344	497,700	9,704	744,800	15,806	741,600	15,758	732,900	19,941
EELS	51,700	2,299	55,800	2,870	97,000	7,202	258,200	4,483	63,900	5,578
PLAICE 1	452,400	12,437	601,700	15,041	460,000	8,015	158,200	3,281	683,600	18,222
OYSTERS2/	4,661,200	162,185	3,688,200	161,194	5,083,600	185,323	4,947,700	178,704	7,108,700	259,057
MUSSELS2/	34,800	1,044	48,100	1,250	623,400	6,608			-,,	205,007
POLLOCK1/	1,960,800	61,901	4,359,100	135,877	3,492,500	87,715	2,208,000	42,306	2,997,400	56,138
SALMON!	728,200	176,204	993,700	254,416	824,600	322,088	810,400	220,714	987,300	293,109
0	1,239,200	45,484	1,119,500	38,292	1,496,600	64,098	933,000	34,960	830,600	30, 125
CRABS2	35,000	175	130,000	325	43,000	107	-	-	-	-
BAR CLAMSS/	397,500	6,326	480,900	6,113	767,100	16,166	506,600	10,366	(INCLUDED	WITH CLAMS)
LIVERS!	472,900	14,471	267,900	6,995	628,200	20,984	605,500	25,016	1,084,200	56,661
HAKE!	3,651,800	106,908	2,640,800	71,495	2,318,200	59,682	2,224,400	35,912	2,712,900	51,839
DULSE2	51,600	9,670	104,200	10,646	342,600	12,593	17,200	3,784	36,000	5,626
MACKEREL!	2,297,200	96,480	2,926,800	124,031	2,184,800	109,679	3,247,900	124,862	1,722,500	63,884
STURGEONL/	4,500	502	8,000	1,542	4,500	526	24,700	1,856	-	-
HALIBUT 1/	4,300	828	7,100	1,287	12,600	2,166	9,500	1,835	3,100	610
QUAHAUGS2/	195,100	3,883	95,200	1,861	485,600	14,423	213,500	4,970	93,400	2,105
BASS3/	12,700	2,540	2,400	480	7,400	888	8,000	910	200	40
PERCH3/	700	7	1,000	10	-	-	2,400	92	200	20
PICKEREL ³ /	23,100	2,660	29,100	3,685	28,300	3,805	19,000	1,768	17,100	1,586
SUCKERS	73,200	4,276	78,300	5,305	70,700	4,961	20,900	772	14,500	876
WHITE FISH 2/	2,600	780	2,000	585	1,300	475	1,600	530	1,800	525
COARSE FISH2/	11,100	166	-	-	-	-	129,300	4,414	19,500	1,075
LAKE TROUT3/	-	-	-		-	-	2,700	1,190	-	12 2 4
OTHERS	44,600	629	700	20	-	-	3,000	90	3,500	740
TOTAL	Contraction of the Owner of the	5,249,162	154,762,800	\$5,384,103	226,092,400	\$7,176,128	214,293,900	\$5,674,300		\$7,401,049
1/ SEA 2/	SEA (SHELLF		3/ IN			the state of the s				
NOTE . YEARS IN THE					OCTOPER 31					

NOTE: YEARS IN THIS TABLE ARE PROVINCIAL FISCAL YEARS: NOVEMBER 1 - OCTOBER 31.

Sources: "ANNUAL REPORT OF THE DEPARTMENT OF INDUSTRY AND RECONSTRUCTION," 1945, 1947, FREDERICTON, NEW BRUNSWICK; H. J. ROBICHAUD, DIRECTOR, FISHERIES DIVISION, DEPARTMENT OF INDUSTRY AND RECONSTRUCTION, FREDERICTON, N. B.

ABLE NO. 2 - QUANTITY CAUGHT AND VALUE MARKETED OF CHIEF COMMERCIAL FISHES, N.B., 1941 TO 1948

TAD	LE INU.	2 - QUANTITY	CAUGHI AND VAL	UE MARKETED OF	And the second se			And the second design of the local day in the second day in the second day is a second day of the second day is a second day of the	
PRODUCT	UNIT	1941	1942	1943	1944	1945	1946	1947	1948
SARDINES	BBL.	432, 165	316,568	389,268	404,348	334, 179	486,122	504,701	434,772
	\$	2,797,072	2,138,790	2,990,490	3,401,672	2,909,672	4, 169, 125	6,609,552	
LOBSTERS	LBS.	5,885,000	6,953,000	6,854,500	7,200,000	7,585,500	9,135,800	7,258,900	8,056,600
	\$	1,041,987	1,565,038	2,813,387	3,429,566	5,058,701	4,627,203	3,611,320	9.0
HERRING	LBS.	41,732,500	46,052,500	47,804,900	39,509,800	30,957,000	50,775,900	51,568,600	56,741,400
	\$	795,746	1,139,777	1,834,657	1,617,230	1,525,116	2,993,150	2,311,477	
COD	LBS.	13,899,900	13,782,400	15,625,500	15,305,600	14,794,500	22,634,000	20,409,300	24, 349, 700
	\$	408,139	574,615	908,669	982,370	1,047,282	1,488,187	1,270,942	8 0- a
SMELTS	LBS.	4,691,800	5, 184,600	3,515,300	4,348,700	3,920,800	2,878,300	3,070,900	4,859,300
	\$	408,972	524,208	580,688	691,084	598,976	585,690	838,559	
SALMON	LBS.	-	-	1,332,100	992,700	729,200	824,600	934,400	987,300
	\$	-	-	382,970	312,220	232,301	378,010	403,517	
CLAMS	LBS.	-	-	7,106,400	6,419,100	4,715,900	6,736,400	7,652,900	7,806,000
	\$	-	-	261,375	283,364	221,738	332,388	354,111	2 12 12
ALEWIVES	LBS.	-	-	4,470,800	3,932,500	7,294,000	12,988,700	8,435,100	12,072,500
	\$	-	-	158,778	136,964	232,889	495,930	351,314	이 아이
OYSTERS	LBS.	1,263,400	1,393,100	1,702,700	2,335,600	2,294,100	2,548,400	2,517,900	7,108,700
	\$	108,678	119,839	185, 168	242,953	258,827	281,667	296,790	
MACKEREL	LBS.	1,265,500	1,101,500	2,320,700	2,123,000	2,902,500	2,224,300	3,424,500	1,722,500
	\$	41,858	51,686	226,606	200,239	285,564	231,302	279, 169	
Hake	LBS.	-	-	3,786,000	3,396,300	2,655,200	3,098,900	2,747,200	2,712,900
	\$	-	-	202,880	184, 193	160,511	154,022	133,702	
POLLOCK	LBS.	855,500	965,900	2,438,700	1,962,700	4,365,500	3,493,200	2,300,400	2,997,400
	\$	23,279	32,804	1 16,972	77,971	264,504	141,016	91,075	- 11
SHAD	LBS.		-	1,547,700	1,189,500	1,271,200	1,472,000	1,071,100	830,600
	\$	-	-	68, 129	63,861	79,697	92,062	80,732	- B
HADDOCK	LBS.	•	-	761,700	868,100	1,074,900	823,700	529,600	1,012,800
	\$	•	-	78,617	66,996	82,189	57,446	52,981	-
TOTAL, CHIEF COMMERCIAL FISH	\$	5,625,731	6,146,757	10,809,386	11,690,683	12,958,967	15,916,198	16,685,241	•
TOTAL, ALL FISH	LBS.	177,986,400	162,338,700	118,520,800	175, 172, 500	155,696,400	222,076,400	216,740,200	221,091,200
	\$	6,484,831	7,132,420	11,128,864	11,968,692	13,270,376	16,422,201	17, 131, 690	21,000,000

Sources: "Fisheries Statistics of Canada 1945," Dominion Bureau of Statistics, Ottawa, 1948. "Fisheries Statistics of Canada 1946," Dominion Bureau of Statistics, Ottawa, 1949. "Advance Report on the Fisheries of New Brunswick 1946," Dominion Bureau of Statistics, Ottawa, 1948. "Advance Report on the Fisheries of New Brunswick 1946," Dominion Bureau of Statistics, Ottawa, 1948. "Advance Report on the Fisheries of New Brunswick 1947," Dominion Bureau of Statistics, Ottawa, 1948. "Advance Report on the Fisheries of New Brunswick 1947," Dominion Bureau of Statistics, Ottawa, 1948. H. J. Robichaud, Fisheries Division, Department of Industry and Reconstruction, Fredericton, N. B. Capital investment in fisheries has increased steadily in the past decade. For the past four years an increase of \$3,000,000 is noted, making a total investment of over \$12,000,000.

New Brunswick's fisheries are the third ranking industry of the province. Approximately 11,000 are employed as fishermen and an additional 5,000 persons work in 120 fish processing plants.

In 1948 production increased for all major varieties of fish caught. With higher prices obtainable, the landed value increased 31 percent (\$1,776,000) over that of 1947.

The total catch and landed values for the province's fisheries are shown in the table below. Data for years earlier than 1944 are not available as the Fisheries Division of the New Brunswick Department of Industry and Reconstruction was not operative before that date.

Table No. 2 indicates the catch and marketed value of chief species for the period 1941-48. In this table production figures are for the calendar year, with the exception of the 1948 statistics, which have been taken from the previous table. From the table it can be noticed that off-shore species (lobster, sardine, and herring) make up the greatest part of the New Brunswick catch. The quantity of groundfish caught has increased in 1948 as the result of the operation of draggers from Caraquet. It is expected that the groundfish catch will continue to rise in future years as these draggers increase operations.

Table No. 3 shows the place of New Brunswick fisheries in the Canadian industry. As previously stated, decline in proportional importance is attributable chiefly to the growth of the Pacific Coast fisheries.

The following table indicates the catch and marketed value of New Brunswick's fisheries in various periods. For comparative purposes, the respective statistics for Canada as a whole are included.

YEAR	NEW BRU	NSWICK	CANA	
19-1-2	QUANTITY	MARK ETED	QUANTITY	MARKETED
	(LBS.)	VALUE	(LBS.)	VALUE
1890		\$ 2,699,000	-	\$ 17,715,000
1900	-	3,770,000	-	21,558,000
1910		4,134,000		29,965,000
1915		4,737,000	-	35,861,000
1920	128, 179, 300	1,423,000	825,399,400	49,241,000
1925	, ,	4,799,000	994,464,500	47,942,000
1930	124,391,300	4,854,000	1,106,294,200	47,804,000
1935	138,421,900	3,950,000	941,211,300	34,428,000
1936	158,668,600	4,339,735	1,093,459,300	39, 165, 055
1937	138,080,800	4,447,688	1,075,266,900	38,976,294
1938	127,440,500	3,996,064	1,065,503,300	40,092,976
1939	158,329,600	5,082,393	1,063,773,500	40,075,922
1940	144,568,500	4,965,618	1,213,577,100	45,118,887
1941	177,986,400	6,484,831	1,198,865,200	62,258,997
1942	162,338,700	7,132,420	1,206,208,800	75,116,933
1943	181,520,800	11,128,864	1,235,824,100	85,594,544
1944	175,172,500	11,968,692	1,179,145,600	89,439,508
1945	155,696,400	13,270,376	1,337,180,900	113,871,100
1946	222,076,400	16,419,983	1,318,633,500	121, 124, 732
1947	214,293,900	17,131,690	6	-
1948	221,091,100	21,000,000	65	-

TABLE NO. 3 - CATCH AND MARKETED VALUE, NEW BRUNSWICK FISHERIES

Sources: "The Maritime Provinces in their Relation to the National Economy of Canada," Dominion Bureau of Statistics, Ottawa, 1948.

"FISHERIES STATISTICS OF CANADA, 1946," DOMINION BUREAU OF STATISTICS, OTTAWA, 1948. "ADVANCE REPORT ON THE FISHERIES OF NEW BRUNSWICK, 1947," DOMINION BUREAU OF

STATISTICS, OTTAWA, 1948.

H. J. ROBICHAUD, DIRECTOR OF FISHERIES, DEPARTMENT OF INDUSTRY AND RECONSTRUCTION, FREDERICTON, N. B., (1948 ESTIMATES).

Sardines

For the first time in recent years of New Brunswick's fishing industry, the sardine became the most valuable landed species, replacing the lobster. Total catch of 86,954,400 pounds (434,772 bbls.) is valued at \$2,148,586; 1947's 504,701 barrel catch was worth \$1,540,453. High prices, which have averaged \$25 a hogshead compared with \$15 in 1947, account for the sharp rise in landed value of the 1948 catch.

Table No. 4 shows the catch and value of the province's sardine catch for recent years. From this table it is evident that 1948 landings have been average in quantity, but with a much higher landed value.

YEAR	QUANTITY	VALUE, LANDED	VALUE, MARKETED
	(BBLS.)		
1920	197,000	-	¥ 860,000
1926	172,000	-	1,172,000
1933		-	623,000
1939	315,000	-	2,299,000
1941		-	2,797,072
1942		-	2,138,790
1943		-	2,990,490
1944		\$1,344,557	3,401,672
1945		1,102,787	2,909,798
1946		1,513,453	4, 169, 125
1947	504.701	1,540,009	6,609,552
1948		2,148,586	-

TABLE NO. 4

Sources: 1920-39, "The Maritime Provinces in the Relation to the Economy of Canada," Dominion Bureau of Statistics, Ottawa, 1948. 1941-1948, from Previous tables.

Sardines are caught chiefly in the Charlotte County district, which runs along the coast from the Maine border to the Saint John County line. This district accounts for about 98 percent of the total annual New Brunswick catch.

The major part of the Charlotte County catch is exported fresh to the United States, where a large proportion is processed in plants along the Maine coast. The remainder (about 40 percent) is processed in sardine plants of Charlotte County. Ten canneries were operating in 1946; two more were under construction in 1947. Additional equipment was installed in four other plants during 1947-48. As a result it is expected that an increased proportion of the Charlotte County catch will be processed within the province each year. Table No. 5 shows the disposition of the sardine catch for 1945-47. Later figures are not yet available. Local sources state that the 1948 production will be about 900,000 cases of canned sardines. Value of canned sardines was slightly over \$2,000,000 in 1945; for 1947, the marketed value of canned sardines rose to \$5,683,213. It is expected that the value of the estimated 900,000 cases, produced in 1948, was over \$6,000,000. The canned sardine has become New Brunswick's most valuable single fish product.

TYPE	UNIT	1945		1946		1947	
CAUGHT AND LANDED MARKETED:	BBL.	QUANT ITY 334, 179	VALUE (\$) 1,102,787	QUANT ITY 486, 122	VALUE (\$) 1,513,453	QUANT ITY 504,701	VALUE (\$) 1,540,009
FRESH AND SALTED	BBL. CASE*	219,967 474,176	725,890	342,657 641,841	1,052,517 3,116,608	308,397 914,117	926,339 5,683,213
TOTAL VALUE	49 <u>-</u> ,	-	2,909,798	-	4, 169, 125	-	6,609,552

TABLE NO. 5 - DISPOSITION OF SARDINE CATCH. 1945-1947

*ONE BARREL OF FRESH PRODUCES 4 TO 5 CASES CANNED. EACH CASE OF 25 LBS. EQUALS 100 TINS OF 1/4 LB. EACH.

Source: "Advance Report on the Fisheries of New Brunswick, 1946" "Advance Report on the Fisheries of New Brunswick, 1947"

As stated before, New Brunswick's sardine industry is concentrated in Charlotte County. Here, in the narrow channels of Passamaquoddy Bay, an arm of the Bay of Fundy, strong tides ebb and flow. The surging waters stir up the bottom, washing marine plants and microscopic organisms to the surface. The sardines swarm in these feeding grounds throughout the year; in late July and August the schools are augmented as other sardines swim north along the Maine coast to the Bay of Fundy.

The local fishermen build elaborate stationary weirs of stakes and twine. Old brush weirs have been almost completely discarded by the modern fishermen.

In Charlotte County approximately 200 weirs are in operation; each represents an investment of \$3,000-\$4,000. As the weirs are operative only in the warmer months of the year, some fishermen are experimenting with purse seining for sardines. This development, which was legalized in 1944, has not proved completely successful.

A portable floating weir, made entirely of twine, has recently been developed by a Cutler, Maine fisherman. This weir is intended for use in quiet backwaters where tidal flow is not great. The weir is assembled in sections at a likely spot, the bottom is weighted, the pound is guyed off, and the sides and wings supported by cork buoys. This new weir has the advantage of being transportable and thus able to follow the fish; it cannot, however, be used in waters where tidal flow is great.

9

Some New Brunswick fishermen are planning to experiment with the floating weir in 1949. It cannot be expected to replace the stationary weir, however, as the latter can be operated in any shallow waters.

The Charlotte County sardine processing industry is headed by Connors Brothers, Limited, at Black's Harbor. This company, which is controlled by Senator A. Neil McLean, is believed to operate the largest single sardine cannery in the world. The company controls the town of Black's Harbor and employs several thousand local people. Connors Brothers' products are packed into over 150 brands; it markets its sardines throughout the world, with exports to 96 different countries in recent years.

Lobsters

The 1948 New Brunswick catch of 8,056,600 pounds was 500,000 pounds higher than that of 1947, but did not attain that of the record year of 1946. Prices remained high, and fishermen received over \$2,000,000 for their catch.

Production of canned lobster and lobster paste continued to decline. The greatest part of the 1948 catch was sold fresh, with the major part exported to the United States.

In former years, the provincial surplus was marketed principally in the United Kingdom, which purchased canned meat. Since the cessation of U. K. purchases of luxury items, the lobster shippers have had to seek new markets. These markets have been found in central Canadian cities and the eastern seaboard of the United States.

Table No. 6 shows the lobster catch of New Brunswick in recent years. Table No. 7 gives the pack since 1926, and Table No. 8 indicates the disposition and marketing of the crop in recent years.

YEAR	QUANTITY	LANDED VALUE	MARKETED VALUE
	LBS.		 Sector 1
1920	6,400,000	-	\$1,091,000
1926		-	1,136,000
1933		-	830,000
1939	8,100,000	-	1,003,000
1941	5,885,000	-	1,041,987
1942	6,953,000		1,565,038
1943	6,854,500	- 1	2,813,387
944	7,200,000	\$1,610,046	3,429,566
1945		1,940,120	5,058,701
1946		2,589,057	4,627,203
1947		1,651,630	3,611,320
1948		2,096,483	-

TABLE NO. 6 - LOBSTER CATCH AND VALUE

SOURCES: SEE TABLE NO. 4

YEAR	QUANTITY, New Brunswick	QUANT ITY, CANADA	PERCENTAGE OF CANADIA
-1.88 aWord	CASES	CASES	Will I block and a start of the
1926	24,041	123,519	19%
1927	18,866	113,937	17
928	19,468	111,986	17
1929	27,146	127,516	21
1930		139,109	23
1931		146,338	24
1932		166,799	21
933		122,062	21
934	23,815	116,144	20
1935	18,275	99,905	18
936		88, 102	23
1937	26,957	88,581	30
1938	23,060	92,004	25
1939	25,706	85,693	30
940	15,021	58,996	26
1941	13,430	58,517	23
942	17,436	63,535	27
943	17,427	62,475	27
944	17,444	66,834	26
945	16, 196	65,525	25
946	19,041	71,280	27
1947	12,080	UNKNOWN	

TABLE NO. 7 - LOBSTER PACK, NEW BRUNSWICK

NOTE: STANDARD CASES OF 48 LBS.

SOURCES: "FISHERIES STATISTICS OF CANADA, 1946"

"ADVANCE REPORT ON THE FISHERIES OF NEW BRUNSWICK, 1947"

TABLE NO. 8 - DISPOSITION OF LO	DBSTER CATCH	. 1945-47
---------------------------------	--------------	-----------

TYPE	UNIT 19		4 5	1 9	1946		47
		QUANTITY	VALUE(\$)	QUANT ITY	VALUE (\$)	QUANTITY	VALUE (\$)
CAUGHT AND LANDED MARKETED:	CWT.	75,855	1,940,120	91,358	2,589,057	72,589	1,651,630
IN SHELL	CWT.	67,485	3,600,587	57,464	2,495,747	51,276	2,399,257
MEAT	CWT.	4,166	619,624	4, 194	610,786	5,567	603, 394
CANNED	CASE	16,196	777,112	19,041	1,268,700	12,080	556,369
TOMALLEY	CASE	2,493	61,378	7,044	251,970	2,388	52,300
TOTAL VALUE,				10. P	1.		
MARKETED	5 6 P. 36	1 N. A. S. A	5,058,701		4,627,203		3,611,320

NOTE: 200 LB. FRESH PRODUCE I CASE CANNED (48 TINS OF 12 OZ. EACH). 500 LB. FRESH PRODUCE ONE CWT. OF MEAT.

SOURCE: SEE TABLE NO. 5.

Lobsters are trapped all along the New Brunswick coast. The 46 lobster canneries of the province are not restricted to any single county, as is the case with the sardine packing industry.

The fresh lobster industry, however, is centered in St. Andrews. St. Andrews, a small town on a neck of land extending into Passamaquoddy Bay and near the Maine border, is known as the "Live Lobster Capital of North America." Here was established the first lobster ranch in the world, where live lobsters are kept throughout the year to insure a steady supply.

On Deer Island, 7 miles from St. Andrews, a huge pond has been built. A dam with a lattice top, permitting free movement of tidal waters, was thrown across a small inlet to create a pond one-half mile long and 300-400 feet wide. This pond has been subdivided by slat partitions into cages where different size lobsters can be kept.

One million pounds of lobster can be stored in this pond. The caged lobsters are fed herring: 2 lbs. per day for each 100 lbs. of lobster. Since the lobster has the habit of eating his weaker fellows, only 90 lbs. are recovered for every 100 lbs. of lobster caged.

Actual shipment is made from St. Andrews. Here lobsters are brought from the Deer Island "ranch" and kept in 156 tanks, which can hold 250,000 lbs. of live lobster. These tanks are fed with sea water pumped in from Passamaquoddy Bay.

The lobsters are packed in seaweed-filled wooden boxes, 50 lbs. per box. The boxes are lined with ice, so placed that the melting fresh water cannot get at the lobsters.

The future of the lobster industry in the province is undoubtedly tied in directly with the one major company in the area. It seems evident that the proportion of total catch marketed in the fresh state will continue to rise. With improved transportation and the advent of air cargo services, fresh lobsters can be marketed in a wider radius. The fresh lobster has always commanded a better price for the fishermen. As a result, fishermen will probably continue to sell more and more of their catch to live lobster handlers.

Herring

In 1948 the herring ranked as the fifth most valuable New Brunswick landed species, dropping behind smelts, which increased noticeably in value. The total herring catch of 56,741,400 pounds was, however, the highest in recent history.

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Herring continue to be marketed chiefly as canned round. The decline of popularity of the canned kippered snacks continued in 1948. Sales of herring scales also declined in value during 1948; the artificially high prices of 1946 were not obtainable, as the price war among American producers of pearl essence (actually scale essence) ceased.

Like that of the sardine, the herring industry is centered in Charlotte County, where the greatest part of New Brunswick's catch is taken and where most of the factories are located.

The herring is also caught in the same fashion as the sardine. From January through April 25, the fish are caught by purse seine. Throughout the remainder of the year, the weir is employed. Some gill-net fishing is done off Grand Manan Island, where the bloater industry is located.

Table No. 9 shows the catch and value of herring in recent years. Table No. 10 indicates the disposition of the catch. From Table No. 9 it may be noted that 1948 prices to fishermen for herring have been generally lower than in the previous two years. Much of the loss of landed value is traceable to the decline of scale sales to essence plants in Eastport, Maine.

The herring industry in New Brunswick is in a stage of transition. It has been casting about, experimenting in the past few years with new marketing techniques. An answer has not yet been found. The future will probably find bloater sales falling off since the public's taste for vinegar-cured fish is vanishing. The recently-developed kippered snack industry is finding difficulty in marketing its products. In 1947-48 an attempt was made to produce more tomato-sauce-packed fish; these have sold readily.

Primarily, the processing of the herring is limited by the small scale of operations, resulting from lack of organization among the fishermen and the small magnitude of canning operations. Improvement of technique, cutting of costs, modernization and economical operation of processing plants, and definite improvement in marketing are all needed.

YEAR	QUANTITY	VALUE, LANDED	VALUE, MARKETED
	LBS.		
1920	44,700,000	-	\$ 609,000
1926	42,300,000	-	529,000
1933	48,400,000	-	329,000
1939	47,800,000	-	579,000
1941	41,732,500	-	795,746
1942	46,052,500	-	1,139,777
1943	47,804,900	-	1,834,657
1944	39,509,800	-	1,617,230
1945	30,957,000	\$388,901	1,102,787
1946	50,775,900	582,582	1,513,453
1947	51,568,600	604,362	2,311,477
1948		503,564	-

TABLE NO. 9 - QUANTITY CAUGHT AND VALUES, HERRING

SOURCE: SEE TABLE NO. 4.

C		No. 10 - DIS		and the second s	And A street of part of the owner with the second		
PRODUCT	UNIT	19	45		46	the local division of	47
		QUANTITY	VALUE	QUANTITY	VALUE	QUANTITY	VALUE
HERRING, CAUGHT					1.		
& LANDED	LBS.	30,957,000	\$ 388,901	50,775,900	\$ 582,582	51,568,600	\$ 604,362
HERRING, SCALES,					111112.2013	ATOMS TI	price
LANDED	11	8	-		+ 1212	279,800	40,904
MARKETED:							1
FRESH, ROUND	99	4,539,100	63,358	8,178,700	133,161	11,335,400	201,428
FROZEN, ROUND	99	158,500	9,310	1,833,400	51,557	99,800	5,988
KIPPERED	99	124,800	12,574	385,000	54,985	447,200	52,306
VINEGAR CURED,						Level & ASC.	Salar and
ROUND	11	145,500	10,535	364,500	30,339	L IN THUS I	1
VINEGAR CURED,				1			51,536
FILLET	19	106,600	7,340	1,187,100	106,678	studiet wropf i e	
PICKLED	BBL.	10,836	167,996	10,982	169,674	6,658	91,676
SMOKED BLOATERS	LBS.	4,482,600	441,628	4,084,000	401,307	4,944,200	443,645
SMOKED BONELESS	99	371,400	69,278	1,171,100	231,076	194,900	38,980
CANNED, ROUND	CASES	53,457	279,373	99,659	494,105	117,645	637,984
CANNED, KIPPERED						1001 BL 1	ifanhat.
SNACKS	11	43,865	231,532	78,751	526,440	61,815	349,830
BAIT	LBS.	6,398,800	108,622	6,630,400	138,389	11,035,600	172,789
FERTILIZER	BBL.	9,340	9,317	19,560	8,605	10, 146	17,891
OIL, CRUDE	GAL.	89,346	21,814	47,571	18,261	95, 141	49,260
SCALES	LBS.	979,500	92,439	2,548,600	628,573	1,941,600	198,164
TOTAL VALUE				and the second			
MARKETED		-	\$1,102,787	-	\$1,513,453	-	\$2,311,477

SOURCE: SEE TABLE NO. 5

NOTE: 70 LBS. FRESH EQUALS I CASE OF CANNED. 200 LBS. FRESH EQUALS 100 LBS. OF SMOKED. 300 LBS. FRESH EQUALS I BBL. OF PICKLED. 200 LBS. FRESH EQUALS I BBL. OF BAIT. 200 LBS. FRESH EQUALS I BBL. OF FERTILIZER. 115 LBS. FRESH EQUALS 100 LBS. OF DRY SALTED.

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New Brunswick's cod landings in 1948 reached their highest point with 24,349,700 pounds landed as compared with 20,409,300 pounds in 1947. This represents an increase of 14 percent. Prices, however, continued to decline as markets for dried and salted cod became more difficult to find. In 1948 the fisherman received but two-thirds of the price that he had been paid in 1944 when demand was keener, foreign buyers had more dollars, and competing fishing nations were not able to supply importers.

Cod fishing was greatly improved, however, in the province as a fleet of modern draggers contributed to the catch for the first time. With draggers supplanting small vessels and laborious handline techniques, costs have been cut. As a result, the New Brunswick fishermen expect to keep in the cod-supply picture despite lower prices obtainable for the catch.

YEAR	QUANT ITY	VALUE, LANDED	VALUE, MARKETED
104A	LBS.	TALOC, CARDED	THEOR MOUVEIEL
1920		-	\$ 274,000
1926			479,000
1933		-	210,000
1939		-	142,000
1941		•	408,139
1942		-	574,615
1943			908,669
1944		-	982,370
1945		\$521,479	1,047,282
1946		730,696	1,488,187
1947		510,806	1,270,942
1948		586,916	

TABLE NO. 11 - CATCH AND VALUES, COD

SOURCE: SEE TABLE NO. 4.

Dried and boneless cod accounted for three-quarters of the sales of cod in 1947; in that year the fresh and frozen fillet market collapsed. In the late fall, the business improved and has maintained a satisfactory pace throughout 1948. Markets for the filleted product are increasing in the New England area and in central Canada. Local dealers expect a continued demand for fish in this form; such demand should improve the price situation. Government officials are encouraging sale of fresh fish and hope for gradual abandonment of green salted and dried cod production. They believe that the New Brunswick industry will not be able to compete with Newfoundland, Iceland, and other large producers and marketers of dried and salted ground fish.

COD, CAUGHT & LANDED LBS. 14,794,500 \$ 521,479 22,634,000 \$ 730,696 20,409,300 \$ 510 LIVERS, LANDED "91,200 2,736 761,000 30,340 481,100 20 MARKETED: FRESH, DRESSED "2,113,500 119,752 1,710,100 100,382 1,134,100 51 FRESH, FROZEN "22,042,800 12,192 271,300 19,180 39,300 3 FRESH FILLETS "2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS "80,400 16,884 12,800 2,629 41,200 1 DRIED "1,125,300 175,949 2,507,600 344,048 3,310,700 50 BONELESS "696,400 163,614 1,045,200 303,834 1,564,100 404 LIVER GAL - - 900	PRODUCT	UNIT	UNIT 1945			1 9) 4	6	1 9	4	7
LANDED			QUANTITY		VALUE	QUANTITY		VALUE	QUANTITY	1	VALUE
LIVERS, LANDED " 91,200 2,736 761,000 30,340 481,100 20 MARKETED: FRESH, DRESSED " 2,113,500 119,752 1,710,100 100,382 1,134,100 51 FRESH, FROZEN " 132,000 12,192 271,300 19,180 39,300 3 FRESH FILLETS " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS, 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DRIED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVER S TON 11 550 - 465 SUN ROTTED COD 01L GAL 900 673 178 STEAM REFINED CRUDE, COO LIVER 01L GAL 14,495 26,740 13,359 41, DESTEARINATED MED IC INAL, COO LIVER 01L GAL 500 875 0THER PRODUCTS 31,029 - 2,262 -	COD, CAUGHT &									1.2	1
MARKETED: " 2,113,500 119,752 1,710,100 100,382 1,134,100 51 FRESH, DRESSED " 132,000 12,192 271,300 19,180 39,300 3 FRESH, FROZEN " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,764 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DRIED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 Livers " 246,200 7,325 752,300 28,980 489,100 20 SOUN MCAL GAL -	LANDED	LBS.	14,794,500	\$	521,479	22,634,000	\$	730,696	20,409,300	*	510,806
MARKETED: " 2,113,500 119,752 1,710,100 100,382 1,134,100 51 FRESH, DRESSED " 132,000 12,192 271,300 19,180 39,300 3 FRESH, FROZEN " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,764 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DRIED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 Livers " 246,200 7,325 752,300 28,980 489,100 20 SOUN MCAL GAL -	LIVERS, LANDED	79	91,200		2,736	761,000		30,340	481,100	10.0	20,949
FRESH, FROZEN " 132,000 12,192 271,300 19,180 39,300 3 FRESH FILLETS " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,980 489,100 20 BODY MEAL TON II 550 - - 46 5 SUN ROTTED GAL - - 900					,						1.11
FRESH, FROZEN " 132,000 12,192 271,300 19,180 39,300 3 FRESH FILLETS " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,980 489,100 20 BODY MEAL TON II 550 - - 46 5 SUN ROTTED GAL - - 900	FRESH, DRESSED	**	2,113,500		119,752	1,710,100		100,382	1,134,100		51,236
FRESH FILLETS " 232,300 47,471 206,900 36,670 204,100 19 FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,960 489,100 20 BODY MEAL TON 11 550 - - 46 5 SUN ROTTED GAL - - 900 673 178 CRUDE, COD LIVER OIL GAL - - 500 875					12,192	271,300		19,180			3,100
FROZEN FILLETS " 2,042,800 388,931 1,717,700 326,256 297,400 48, 6,090 CANNED CASES 6,090 48,664 12,784 112,402 13,138 109, 112,402 GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64, 500 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DRIED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404, LIVERS " 246,200 7,325 752,300 28,980 489,100 20, BONY MEAL TON II 550 - - 46 5, SUN ROTTED GAL - - 900 673 178 CANDE, COD COD CRUDE, COD - - 900 673 13,359 41, DESTEAR INATED - - - 500											19,034
CANNED CASES 6,090 48,664 12,784 112,402 13,138 109 GREEN-SALTED LBS 324,700 34,754 995,500 143,256 723,000 64 SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,980 489,100 20 BODY MEAL TON 11 550 - - 46 5 SUN ROTTED GAL - - 900 673 178 COD 01L GAL - - 900 673 13,359 41, DESTEAR INATED - - - 14,495 26,740 13,359 41, DESTEAR INATED - - - 500 875 - -	FROZEN FILLETS	99				1,717,700					48,574
GREEN-SALTED LBS. 324,700 34,754 995,500 143,256 723,000 64, SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DRIED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,980 489,100 20 BODY MEAL TON 11 550 - - 46 5 SUN ROTTED GAL - - 900 673 178 STEAM REFINED GAL - - 900 673 13,359 41, DESTEARINATED - - - 14,495 26,740 13,359 41, DESTEARINATED - - - 500 875 - - MED IC INAL, COD - - - 500 875 - - - -					48,664		Ì.			1.1	109,397
SMOKED FILLETS " 80,400 16,884 12,800 2,629 41,200 1 DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501 BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404 LIVERS " 246,200 7,325 752,300 28,980 489,100 20 BODY MEAL TON 11 550 - - 46 5 SUN ROTTED GAL - - 900 673 178 STEAM REFINED GAL - - 900 673 13,359 41, DESTEARINATED MED ICINAL, COD GAL - - 500 875 - - UVER OIL GAL - - 500 875 - - - UVER OIL GAL - - 500 875 - - - OTHER PRODUCTS - 31,029 - 2,262 - - - <	GREEN-SALTED	LBS.				995,500					64,262
DR IED " 1,125,300 175,949 2,507,600 384,048 3,310,700 501, BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404, LIVERS " 246,200 7,325 752,300 28,980 489,100 20, BODY MEAL TON 11 550 - - 46 5, SUN ROTTED GAL - - 900 673 178 STEAM REFINED GAL - - 900 673 13,359 41, DESTEARINATED MED ICINAL, COD GAL - - 500 875 - - OTHER PRODUCTS - - - 500 875 - - -	SMOKED FILLETS	11									1,348
BONELESS " 696,400 163,614 1,045,200 303,834 1,564,100 404, LIVERS " 246,200 7,325 752,300 28,980 489,100 20, BODY MEAL TON 11 550 - - 46 5, SUN ROTTED COD 01L GAL. - - 900 673 178 STEAM REFINED CRUDE, COD LIVER 01L GAL. - - 14,495 26,740 13,359 41, DESTEARINATED MED ICINAL, COD LIVER 01L GAL. - - 500 875 - - OTHER PRODUCTS - - - 500 875 - -					175,949						501,681
LIVERS " 246,200 7,325 752,300 28,990 489,100 20, BODY MEAL TON II 550 46 5, SUN ROTTED COD 01L GAL 900 673 178 STEAM REFINED CRUDE, COD LIVER 01L GAL 14,495 26,740 13,359 41, DESTEARINATED MEDICINAL, COD LIVER 01L GAL 500 875 OTHER PRODUCTS 31,029 - 2,262 -	BONELESS				163,614						404,265
BODY MEAL TON 11 550 - - 46 5 SUN ROTTED COD 01L GAL. - - 900 673 178 STEAM REFINED CRUDE, COD		99	246,200								20,059
SUN ROTTED COD 01L GAL. STEAM REFINED CRUDE, COD LIVER 01L GAL. DESTEAR INATED MED IC INAL, COD LIVER 01L LIVER 01L GAL. - - INATED MED IC INAL, COD LIVER 01L OTHER PRODUCTS - 31,029 - 2,262		TON				-		-			5,039
STEAM REFINED CRUDE, COD LIVER OIL DESTEARINATED MEDICINAL, COD LIVER OIL LIVER OIL GAL - <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>100</td></td<>											100
STEAM REFINED CRUDE, COD LIVER OIL DESTEARINATED MED ICINAL, COD LIVER OIL LIVER OIL GAL - - 14,495 26,740 13,359 41, DESTEARINATED MED ICINAL, COD LIVER OIL OTHER PRODUCTS - 31,029 - 2,262	COD OIL	GAL.	-		-	900		673	178		178
LIVER OIL GAL										i. c	
DESTEARINATED MEDICINAL, COD LIVER OIL GAL	CRUDE, COD										
DESTEARINATED MEDICINAL, COD LIVER OIL GAL	LIVER OIL	GAL.	-		-	14,495		26,740	13,359		41,881
LIVER OIL GAL 500 875	DESTEARINATED					,		,			6.21
LIVER OIL GAL 500 875	MEDICINAL, COD										
OTHER PRODUCTS 31,029 - 2,262 -		GAL	-		-	500		875	-		10 m
			-		31,029	-		2,262	-		888
I OTAL VALUE,	TOTAL VALUE,										
	Manual manage		-	\$1	.047.115	-	\$1	.488, 187	-	\$1	270,942

TABLE NO. 12 - DISPOSITION OF COD CATCH. 1945-47

OTE: 300 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF FRESH FILLETS. 105 LBS, OF FRESH PRODUCE EQUALS ONE CASE OF CANNED. 200 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF GREEN SALTED. 300 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF SMOKED FILLETS. 200 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF SMOKED. 300 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF DRIED. 400 LBS, OF FRESH PRODUCE EQUALS 100 LBS, OF DRIED. The New Brunswick dragger fleet is stationed at Caraquet, Gloucester County. Twelve ships are now operating out of that port; another vessel is being employed experimentally in the Bay of Fundy.

The diesel-powered dragger is a pocket-sized edition of a beam trawler. Each vessel costs about \$25,000 of which \$6,000 is provided by Federal subsidy. Much of the remaining cost is obtained on easy-term loan from the Provincial Government.

The dragger takes three-day trips to the banks, which are 50 miles from Caraquet in the Gulf of St. Lawrence. During fishing operations, the net (a wide-mouthed cone-shaped bottom trawl) is lifted every 45 minutes. Each "set" can take up to 7,000 lbs. of fish. A successful voyage accounts for 40,000-50,000 lbs. of fish. It is estimated that one-half of the 1948 cod catch was taken by the 12 vessel dragger fleet.

The dragger requires fewer men to catch an equal amount of fish, as compared with older methods of hand and set-lining. Expansion of the dragger fleet will cut down employment of fishermen along the Gloucester County coast; it is expected, however, that the development of the filleting industry will absorb these fishermen into plants in that area.

Traditionally, New Brunswick's cod has been green-salted and dried for export to Caribbean countries with Cuba as chief customer. As stated before the Caribbean market is slowly closing down. New Brunswick shippers hope to enlarge the trade with the United States. Such enlargement necessitates the marketing of fresh and frozen fish. Nearness to the market gives New Brunswick a competitive edge over other cod-producing areas; this advantage should stimulate the change from older methods of marketing to newer, more profitable ones.

Smelts

The 1948 New Brunswick catch of smelts was much higher than that of 1947. The increase resulted chiefly from the greater number of fishermen engaged in smelt fishing through the ice. The excellent prices of 1947 (\$17.60 per 100 lbs.) were repeated in 1948.

YEAR	QUANTITY	VALUE, LANDED	VALUE, MARKE TED
	LBS.		19889A J 0110
1920	4,000,000	-	\$ 565,000
1926		-	851,000
1933			315,000
1939			305,000
1941		- °.	408,972
1942		 A 1 	524,208
1943		-	580,688
1944	, , ,	-	691,084
1945	, , ,	\$425,018	598,690
1946		397,082	585,690
1947		542,217	838,559
1948		835,980	

TABLE NO. 13 - CATCH AND VALUES, SMELTS

SOURCE: SEE TABLE NO. 4.

The high prices of 1947 and 1948 encouraged ice-fishing. The long winter of 1947-48, with months of cold weather, also encouraged the industry, which operates when rivers and shores are frozen. In 1948-49, the smelt fishing season of December 1-February 15 has seen warm weather, the breakup of some rivers, and a slightly lessened supply. Despite poorer fishing conditions and a price decrease, the 1948-49 total production should be high, as many more fishermen have been employed in smelt fishing. Because of decreased orders from the United Kingdom, the New Brunswick timber cut has declined, thus forcing many men into smelt fishing this season, as the only alternative income supplement.

About 85 percent of the province's catch of smelt is marketed as frozen, dressed fish. The remainder is sold as fresh, principally on local coastal markets. There is no canning or other processing of this species in New Brunswick.

Oysters

Although recent statistics are not available, it is believed that New Brunswick's oyster fisheries are the most valuable of any of the provinces, slightly exceeding those of British Columbia. New Brunswick produced 46 percent of the Dominion total in 1945 and 38 percent in 1946.

1948 production, as shown in Table No. 14, was 35,112 barrels, which represents an increase of 40 percent over the average of the four previous years. As the reputation of New Brunswick's oysters grows, it is expected that the marketing radius will be increased and that production will soar.

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YEAR	QUANT ITY	VALUE, LANDED	VALUE, MARKETE
	BBLS.		
1920	8,000		\$71,000
1926	13,000	-	93,000
1933			47,000
1939	10,000	-	55,000
1941	12,634		108,678
1942		•	119,839
1943		-	185, 168
1944	23,356	-	242,953
945	22,941	\$161,184	258,827
1946	25,484	183,398	281,667
1947	25, 179	193,380	296,790
1948		259,057	-

TABLE NO.	14 -	CATCH AND	VALUES.	OYSTERS
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SOURCE: SEE TABLE NO. 4.

The oyster represents one of the province's most promising species. Oyster consumption in Canada is stated to be low. In previous years, Canadian consumers have been content to import needed oysters from the United States. With the temporary embargo on imports of American shellfish, New Brunswick gatherers were stimulated to increase production. These producers, who have since banded into an Oyster Growers' Association, believe that they can hold and expand the market created for the New Brunswick oyster in recent years, despite renewed competition from the United States.

New Brunswick oysters are farmed chiefly along the northern coast of the province. Centers are located at Buctouche and Shippegan. In addition to the commercial oyster farms in these two areas, there are many public beds scattered along the coast. These beds are exploited by coastal fishermen, who count on the oyster as an added source of income.

The chief shipping ground in the province is located on Shippegan Island. Oysters are purchased from producers along the coast, held in sea-fresh condition until needed, and then shipped throughout Canada.

The New Brunswick oyster is principally marketed in the fresh state. Until 1946, no shucking was done on a commercial scale. Sales of shucked oysters still remain small, with 4,000 pounds, valued at \$2,800, sold in 1946 and 7,200 pounds, valued at \$6,308, marketed in 1947.

The New Brunswick oyster is not exported, as far as can be ascertained. It is sold through several large dealers to restaurants and wholesalers throughout Canada.

Salmon

The New Brunswick salmon is fished commercially and for sport. The fish has an excellent reputation with gourmets in the United States and Canada and sells readily at high prices.

The salmon is fished commercially in the Saint John River's mouth at Saint John and along the Miramichi River to the north, with approximately two-thirds of the total caught in the latter area. Commercial fishermen usually take the salmon in drift or trap nets. Angling is left for the sportsmen, who control valuable fishing rights on the Miramichi through various clubs.

Production and catch in recent years are indicated in the following table. It may be noted that the quantity taken in recent years is much smaller than that caught 15-20 years ago. Values have, however, increased noticeably, in a ratio with increased appreciation of the New Brunswick salmon by consumers and a decrease in quantities landed.

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YEAR	QUANTITY	VALUE, LANDED	VALUE, MARKETED
1920	. 12,000	-	\$276,000
1926		-	408,000
1933		-	299,000
1939	. 11,000	-	196,000
1943		-	382,970
1944		-	312,220
1945	7,292	\$168,028	232,301
1946	. 8,246	313,123	378,010
1947		261,602	403,517
1948		293, 109	1

TABLE NO. 15 - CATCH AND VALUES, SALMON

SOURCE: SEE TABLE NO. 4.

In 1948 the average fish landed at Saint John weighed 12 pounds and was sold by fishermen for 35ϕ per pound. In 1947 prices were slightly lower.

Consumption

The Fisheries Research Board estimates that the average Maritimer eats 35 pounds of fish a year; this amount is well above the national average. New Brunswick's 480,000 people would then consume about 17,000,000 pounds of fish annually, or only 8 percent of the province's production. These figures show the dependence of the New Brunswick fishing industry on markets outside the province.

Certain species, such as smelts, alewives, salmon, and most of the shellfish are consumed largely in the province or in the Maritimes. Other species, such as the sardine and lobster, are sold as exports. The future of the province's fisheries depends not so much on increased local consumption, which is Canada's highest, but on expansion of other markets.

Foreign Trade

Statistics are not available for the foreign trade of New Brunswick-produced fish and fish products. From the consumption estimates, it is apparent that New Brunswick fisheries rely on sales in the rest of Canada and abroad. Canada itself cannot provide a market for more than a small fraction of the province's production. By dividing total production by the population of Canada, it would show that each Canadian would have to eat 16 pounds of New Brunswick fish annually in order to consume all of that produced. This consumption would not account in any way for the fish products of other provinces.

In 1946 Canada produced over 1,300,000,000 pounds of fish valued at \$121,124,733. Of this amount \$88,679,000 represented exports. Estimates for 1948 show New Brunswick production valued at \$145,000,000, of which \$90,000,000 were exports. In other words, Canada exports between 60 and 75 percent of its fish. The average for New Brunswick is undoubtedly higher as the Canadian fish values include the inland fish of the central provinces, which are consumed locally.

Principal market for New Brunswick's fish is the United States, where the lobster, one of the two most important species, is sold. Other fish go to New England markets in fresh, frozen, and filleted forms. The New Brunswick fisherman and fish wholesaler is keenly interested in the American market; he realizes that on this market he must base his livelihood.

Other markets for New Brunswick fish are found in the Caribbean area, in Cuba and the British West Indies. These countries have been traditional markets for dried and salted fish of different kinds. Canned fish, principally sardines and herrings, find their way from New Brunswick to markets all over the world.

Wholesale Prices

Average prices received by fishermen are shown in the following table. The 1948 prices are not to be considered final, but are on an accurate enough scale to make comparison possible.

SPECIES	UNIT	1944	1945	1946	1947	1948
SARDINE	BBL.	\$3.30	\$3.30	\$3.11	\$3.05	4.94
LOBSTER	LBS.	.22	.26	.28	.28	.26
HERRING	LBS.	.01	.01	.01	.01	.01
Cop	LBS.	.04	.03	.03	.03	.02
HADDOCK	LBS.	.05	.06	.07	.06	.07
Наке	LBS.	.03	.03	.02	.02	.02
MACKEREL	LBS.	.04	.04	.05	.04	.04
SMELT	LBS.	. 12	.11	. 14	. 18	.17
OYSTER	BBL.	6,96	8,95	7.19	7.67	7.27
Polloak	LBS.	.03	.03	.03	.02	.02

TABLE NO, 16 - AVERAGE NEW BRUNSWICK LANDED PRICES OF CHIEF SPECIES

From the above table it may be noted that, in general, the prices of groundfish have been steadily falling. Haddock, an exception to this generalization in the above table, is caught only in a small quantity, and may be eliminated in formulating this statement. The gradual decline of groundfish prices is a result of the slow disappearance of wartime markets for dried fish. Undoubtedly, prices received by New Brunswick fishermen for the various species of groundfish can be expected to decline even further as competition increases for the few remaining markets.

Sardine prices have improved noticeably in 1948, as compared with previous years.

Wholesale prices of fish on the Saint John market are indicated in the following table, which lists variations during the latter half of 1948. Similar quotations for previous years are not available for comparison.

KIND	UNIT	DEC. 16	Nov. 18			AUG. 12	JUL, 29
DRIED, COD	LB.	\$.12	\$.12	\$.13	\$.12	\$.12	\$.12
COD, BONELESS	10	.30	.30	.29	.29	.29	.29
COD, HEADLESS	11	.06	.06	.05	.06	.06	.06
FILLETS, FRESH		.1822	. 1822	. 1822	.1822	. 16 18	. 16 18
FILLETS, SMOKED	99	.2527	.2527	.2527	.2527	.2527	.2527
HADDOCK, DRESSED	99	. 18	. 18	. 18	. 18	. 18	. 18
FINNAN HADDIE	99	. 15 18	.2225	,2225	.2225	.2225	.2225
HERRING, SALT, #1		16-18	16-18	16-18	16-18	16-18	16-18
HAKE	LB.	.06	.05	.06	.06	.0608	.0608
HAKE, SALT	19	. 10	. 10	. 10	. 10	.08-,10	.0810
LOBSTER	97	.45	. 545	.5055	.55	-	
SMELT	14	.25	.25	.25	.25	.25	.25
OYSTERS	99	.09	.09	.09	-	-	-
MACKEREL	99	, 15	,13	. 10	-	.12	. 12

TABLE NO. 17 - WHOLESALE PRICES OF FISH, SAINT JOHN, N.B., SIX MONTHS, 1948

SOURCE: "MARITIME MERCHANT," HALIFAX, NOVA SCOTIA.

Fisheries Research

The Fisheries Research Board of Canada, which is supported and organized by the universities, the fish industry and the Federal Department of Fisheries, maintains three research biological stations in Canada. One of these stations is maintained at St. Andrews, New Brunswick, near the center of the sardine and lobster industries.

In 1948 the Fisheries Research Board has been experimenting with new methods of fishing. One of the new techniques is that of long-lining, in which a trawl line with thousands of hooks is played out and retrieved mechanically. Another is Danish seining, in which ropes are played out from the fishing vessel in a circular pattern. The ropes are gradually drawn together, thus frightening the fish into the seine. Mid-water trawls, purse seines, and newtype bottom trawls are also being tested.

New techniques will help the New Brunswick fishermen cut costs and increase production. New industries, which the Research Board is studying and stimulating, will widen the basis of New Brunswick fishing and add to the province's assets. Included here is a possible shrimp industry; inshore flounder fishing is also planned.

The Research Board is attempting to increase clam and oyster production, by advocating planting and scientific cultivation of beds. Rose-fishing in the Bay of Fundy is another new source. The lone dragger, which has been seining in the Bay, is experimenting with possible success in catching the rose-fish.

The Director of the Fisheries Research Board's experimental station at Halifax, stated on January 6, 1949, that scientists have perfected a new method of keeping fish fresh three times as long. In other words, fish can be preserved in the fresh state for as long as three weeks; at present, 5-6 days is the maximum time. The method includes a new type of refrigeration in fishing vessels and elimination of spoilage at sea plus the recently developed low temperature refrigerator freight car for long distance hauling.

With the new freight car, fresh fish can be delivered further, with less wastage. The problem of the retailer with inadequate cold storage still remains to be solved.

A Prince Edward Island lobster canner has developed an interesting method of canning live lobsters. The method, still in the experimental stage, enables live lobster shipments to travel further by express or freight. Experiments have indicated that lobsters can survive perfectly in the can for as long as 7 days.

Outlook

Historically, the Canadian Maritime fishing industry has staggered into depression times after the lush periods of wartime. Whether New Brunswick's industry is entering another phase of low prices and over-production is today's problem.

1948 values are among the highest ever recorded, but prices of some fish have fallen. Groundfish prices seem to be headed for lower levels than those that have prevailed in former years. Shell and shore fish prices are still firm, and the demand situation is generally good. These species are maintaining the value of the province's fish production.

In March and April the bulk of the Norwegian and Icelandic catch comes on the market. It is not known locally how successful the fisheries of those countries have been, but it is expected that their catches will be considerably larger than in previous years and that quoted prices will force down local export prices for dried and green salted fish. Undoubtedly, this will be the case. The international fisheries situation seems to be returning to normal. It cannot be expected that New Brunswick dealers will find other export markets for dried fish. Foreign markets will, if anything, contract because of competition from the other fishing nations and the lack of dollars in historic markets. The groundfish picture, as far as dried fish is concerned, appears poor.

On the other hand, local merchants expect considerable improvement in the fresh, frozen, and filleted fish market. With the development of fast freezing and the improvement of transportation, it is expected that the market radius will be expanded and that shipments of fillets and frozen fish to central Canada and the United States will increase in 1949. The manner in which fresh cod prices became firmer towards the end of 1948 is regarded as favorable and as indicative of higher marketed values caused by increased sales of fillets.

Groundfish represent the smaller part of the province's industry. The catch is not large, compared with that of Newfoundland or Nova Scotia. The sardine, herring, and lobster are more important. Here the industry seems to be in a good position, which should last for some years.

Exports of canned fish, particularly canned herring and sardine, are expected to encounter some difficulties in 1949. The Union of South Africa has become a leading importer of New Brunswickpacked sardines and herrings. With that market cutting its purchases in the dollar zone drastically, some losses will be felt by the Province's shippers. Sales of fresh sardines should hold up and other markets may open for canned varieties. In all, demand is expected to continue and future catches are expected to sell readily.

Lobsters will continue to sell, according to local sources, which believe that the market in the United States and central Canada is strong. Only an unprecedented collapse of the economic situation with resultant curtailment of luxury purchases could menace the lobster industry. Actually, the collapse of the British market aided the New Brunswick industry because it was forced into the marketing of fresh lobsters as opposed to canning. Fresh lobster marketing is advantageous in that it yields higher prices to fishermen and dealers.

In general, the outlook for the Province's fisheries appears favorable. In contrast to the years after World War II, the industry is continuing to progress. Capital is being poured into fishing with new vessels on the seas and improvement, expansion, and new construction of processing plants. Capitalization has risen steadily in recent years. From 1924 to 1938 the capital investment in New Brunswick, including primary fishing operation and processing plants, averaged \$5,500,000. In the period 1940-45 it rose over \$2,500,000 to a total of \$8,888,704 in 1945. The New Brunswick Fisheries Director estimates that capital investment has increased over \$3,000,000 since 1945 to a total of nearly \$12,000,000. Investment in the primary industry (vessels, boats, gear, piers, etc.) increased from \$4,526,095 in 1946 to \$5,431,425 in 1947. Investment continued to rise in 1948, although comparable statistics are not available.

Increase in capitalization denotes two things. First, the industry is modernizing its equipment and improving its techniques with the expected result of increased catches at lower unit cost. Second, increase of capitalization indicated confidence in the industry with the belief that the industry will be able to compete, even in future years when lower prices may be expected.

Will New Brunswick fisheries continue to enjoy "good times?" In the immediate future it would seem likely. In the long run, certain improvements are needed; a start has been made.

Transportation needs to be continually improved in order to enlarge the marketing radius for fresh fish. Fast freezing needs further development so that a higher proportion of the catch can be sold as neatly-packaged fillets. Increased use of draggers is indicated. With draggers a larger catch is landed at lower cost and the fish arrive at piers in better condition. The activities of the Fisheries Price Support Board will have to continue. This board stabilizes operations by purchasing surplus fish and guaranteeing fishermen and processors the difference between actual returns and prices, which guarantee cost of production.

With these improvements Maritime fish dealers believe that they will be ready for lower prices and that they will be able to maintain their production despite competition for markets.