Mr. Water

Published by Authority of the Hon. James A. MacKINNON, M.P., Minister of Trade and Commerce



CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

GENERAL MANUFACTURES BRANCH

REPORT

ON THE

STATISTICS STATISTIQUE CANADA

AND 18 1981

LIERARY

BIELIOTHEQUE

SUGAR INDUSTRY

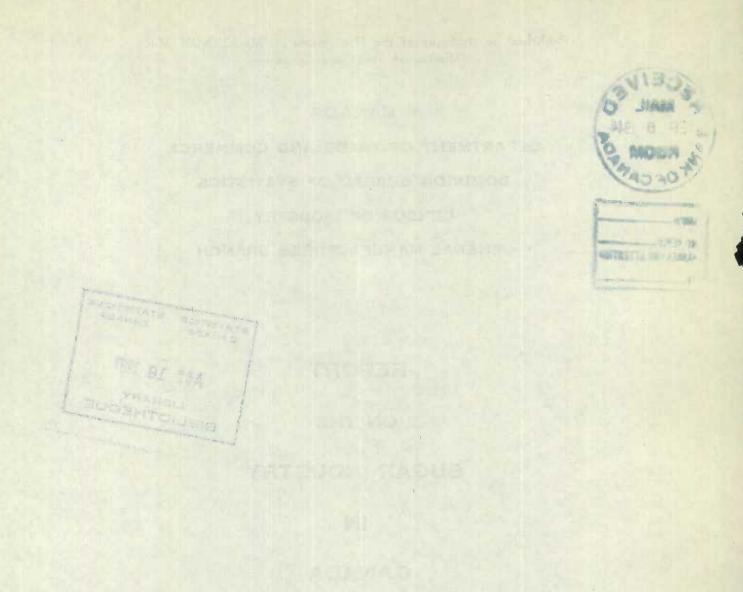
IN

CANADA

1943



OTTAWA 1944



525.27



This Bureau is co-operating in the conservation of paper on account of the present critical shortage thereof. If this bulletin is not needed by you, please notify the Dominion Statistician and your name will be removed from our mailing list.

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

GENERAL MANUFACTURES BRANCH

OTTAWA - CANADA

Dominion Statistician: S. A. Cudmore, M.A. (Oxon.), F.S.S., F.R.S.C. Chief, General Manufactures Branch: A. Cohen, B. Com.

THE SUGAR REFINING INDUSTRY IN CANADA, 1943

The output of the sugar refining industry increased by 69,437,805 pounds during 1943. The production of sugar of all kinds amounted to 870,557,020 pounds (741,289,010 pounds made from cane and 129,268,010 pounds from beets). The production of cane sugar increased by 129,236,665 pounds and that of beet sugar decreased by 59,798,860 pounds. Granulated sugar comprises over 86 per cent of the total sugar produced.

The production of beet sugar which reached an all-time high in 1941 with an output of 215,879,271 pounds, declined to 129,268,010 pounds in 1943. The percentage of beet sugar to the total produced was 23.6 in 1942, the highest since the inception of the annual census in 1917. The percentage in 1943, however, was only 14.8.

Prices of refined sugar at the factory were slightly higher in 1943 than in the previous year. Sugar of all kinds rose from 5.50 cents per pound to 5.72 cents. Granulated sugar rose from 5.52 cents to 5.75 cents, yellow sugar from 4.94 cents to 5.10 cents, while icing sugar rose from 6.23 cents to 6.40 cents.

The refineries are located as follows: Nova Scotia 1, New Brunswick 1, Quebec 2, Ontario 2, Manitoba 1, Alberta 2 and British Columbia 1. These refineries in 1943 reported a capital investment of \$44,144,876, a gross value of production of \$51,239,749, they employed 2,274 persons who received \$4,068,473 in salaries and wages, and paid out \$38,618,832 for raw materials. During 1943 several plants were shut down and their operations pooled with other refineries in the vicinity. This was due to the limited amount of raw sugar available as well as a shortage of labour.

Detailed statistics of production, capital invested, materials used, employment, etc., are given in the tables following. In order that there may be no disclosure of statistical information of individual plants, the statistics are given for the Dominion only.

Table 1. - Principal Statistics of the Sugar Refining Industry, Representative Years, 1917 - 1943.

	Refineries	Capital	En-	Salaries	Cost of	Gross Value x
Year	Reporting	Invested			Materials Used	of Production
	No.	\$	No	\$	\$	
1917	8	31,818,133		2,324,828		61,429,787
1919	8	38,725,542	3,491	4,177,894	86,308,204	102,630,086
1920	8	46,719,034	3,118	4,632,814	103,689,088	119,086,731
1925	8	50,089,717	2,784	3,828,442	54,457,385	68,445,879
1929	8	43,534,115	2,325	3,686,037	35,640,124	47,151,960
1933	8	35,758,074	2,092	3,048,817	22,846,473	37,189,960
1934	8	55, 151, 249	2,030	2,919,662	24,099,994	36,007,208
1936	10	33,199,993	2,559	3,413,698	27,924,998	40,405,377
1937	10	35,413,781	2,332	3,318,861	. 29,013,057	40,916,044
1938	10	36,547,866	2,318	3,315,633	28,838,685	41,392,096
1939	10	40,511,884	2,399	3,467,367	33,728,967	49,896,763
1940	11	42,966,073	2,558	3,623,661	42,150,263	57,274,122
1941	11	43,915,168	2,642	3,834,639	46,067,190	62, 402, 709
1942	11	45,232,672	2,326	3,772,431	33, 283, 971	45,969,711
1943	10	44,144,876	2,274	4,068,473	38,618,832	51,239,749

x Selling value at the factory. Statistics since 1935 do not include excise taxes.

Table 2. - Comparison of Principal Statistics

Items		1942	1943	+	Increase Decrease
Refineries reporting	No.	11	10	-	1
Capital invested Employees on salaries -	\$	45,232,672	44,144,876	-	1,087,796
Total	No.	459	424	metalli-	35
Male	No.	353	305	and a	48
Female	Nos	106	119	+	13
Total Salaries	\$	1,162,006	1,185,276	+	23,270
Employees on wages - (monthly ave	erage)				
Total	No	1,367	1,850		17
Male	No	1,701	1,537		164
Female	No.	166	313	+	147
Total wages	\$	2,610,425	2,883,197	+	272,772
Cost of fuel and electricity	\$	1,225,955	1,191,889	0	34,065
Cost of materials used	\$	33,283,971	38,618,832	+	5,334,861
Gross value of production	\$	45,969,711	51,239,749	+	5,270,038
Value added by manufacture x	\$	11,459,785	11,429,028		30,757

x Gross value of products less cost of materials, fuel and electricity.

NOTE: Profits or losses cannot be estimated from census figures as no data are collected for certain expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

Production in Sugar Refineries

Table 3 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the years 1942 and 1943. The quantity of sugars produced in Canadian refineries during 1943 was greater than that of 1942 by 69,437,805 pounds and the selling value by \$5,799,590. The quantity of beet sugar decreased by 59,798,860 pounds but cane sugar increased by 129,236,665 pounds, making the increase as stated above. Molasses decreased in both quantity and value.

Table 3. - Sugar and By-Products

	1 9	4 2	1 9	4 3
Products	Quantity Pounds	Selling Value at Factory 1/	Quantity	Selling Value at Factory 1/
Sugar - Made from cane	612,052,345 189,066,370	32, 68 0,904 11,349,746	741,239,010 129 268,010	41,101,245 8,728,995
Total osconosososososos	801,119,215	44,030,650	870,557,020	49,830,240
Gramulated	686,520,185 82,639,909 19,384,615 2,189,263 10,385,243	37,913,185 4,085,518 1,207,884 127,923 696,140	754,756,906 84,124,579 20,251,130 2,035,555 9,388,850	43,422,107 4,290,186 1,295,945 126,275 635,727
Syrups (not including molasses)	8,827,805	316,316	9,412,517	376,800
Molasses - Made from cane	11,522,318 53,237,849	168, 2 83 695,549	15,612,913 37,537,480	248,660 476,173
Total	64,760,167	863,832	53,150,393	724.833
Beet pulp, wet and dried	204,694,000	602,742	169,242,000	307,376
Other products	PLS	156,171	-	
TOTAL VALUE OF PRODUCTS		45,969,711		51,239,749

^{1/} This does not include excise taxes.

Production of Sugar Beets and Beetroot Sugar.

The number of acres of sugar beets harvested, the total yield and average yield per acre and the total value of the crop delivered at the factory are shown in Table 4 for the years 1918 to 1945. Acreage of sugar beets harvested decreased by 9,688 acres, the total yield by 227,508 tons and the total value of the crop by \$1,842,277.

Table 4. - Area, Yield and Value of Sugar Deets in Canada and Production of Refined Beetroot Sugar Compared, 1918 to 1943.

		1 007						
A medityman and a second	A		Yield		Average		and Value (a	
Year	Acres	Total	Per	Total	Price) of refined	
We Mannage or give or good	Grown	Yield	Acre	Value	Per Ton	Day of the St.	oot sugar	
	No.	Tons	Tons	\$	\$ cts.	Lb.	\$	\$ cts.
							1	per Cwt.
1918	18,000	204,000	11.25	2,593,715	12,71	50,092,835	4,358,077	8.70
1919	18,600	180,000	9.50	2,630,027	14.61	37,839,271	3,924,411	10.40
1920	34,491	343,000	9.94	5,307,243	15.47	89,280,719	12,856,424	14.40
1921	25,535	199,334	7.80	1,974,384	9,90	52,862,377	3,554,205	6.70
1922	14,955	127,807	8.55	966,521	7.56	29,911,770	1,645,885	550
1923	17,941	159,200	8.87	1,922,668	12.08	39,423,160	3,745,200	9.50
1924	31,111	295,177	9.50	1,704,791	5.78	85,770,709	6,192,645	7.30
1925	34,803	370,047	10.63	2,688,302	7,27	72,819,919	5,206,624	7.15
1926	30,073	267,754	8.90	2,286,761	8,54	70,388,105	4,269,076	6.08
1927	25,961	206,713	7,96	2,012,134	9.73	60,969,131	3,719,117	6.10
1928	34,523	244,930	7.14	2,041,465	8,33	64,653,348	3,340,571	5.17
1929	32,556	255,465	7,23	2,080,996	8,84	69,399,213	3,335,344	4.81
1930	40,532	397,576	9.81	3,278,625	8.25	94,624,701	4,529,944	4.79
1931	43,337	435,992	10,06	3,190,198	7.32	107,139,129	4,794,551	4.48
1932	44,817	505,671	11.28	3,113,942	6.16	132,016,859	5,789,205	4.38
1933	43,807	442,391	10.10	2,790,928	6,31	131,392,501	5,713,181	4.35
1934	38,495	412,672	10.72	2,599,982	6.30	114,002,950	4,714,624	4.14
1935	51,985	459,223	8.85	2,881,098	6.27	119,857,668	4,617,733	3.85
1936	x 50,444	555,969	11.02	3,510,922	6.31	156,066,242	6,103,264	3.91
1937	x 43,758	422,152	9.65	2,825,006	6.69	120,440,235	5,230,971	4.34
1938	x 45,194	498,102	11.02	3,403,635	6.83	143,013,847	6,001,380	4.20
1.939	x 57.316	586,444	10.23	4,417,372	7.53	169,320,345	8,063,332	4,78
1940	x 77,548	825,344	10.64	6,022,670	7.30	213,602,511	10,853,665	5.08
1941	x 63,925	708,616	11.08	5,781,151	8:16	215,879,271	11,659,825	5.39
1942	x 62,381	701,884	11.25	6, 454, 517	9.17	189,066,870	11,349,746	6.00
1945	x 52,693	474,378	9.00	4,592,240	9,68	129,268,010	8,728,995	6.75

x This is the number of acres harvested. The acreage seeded is slightly higher than these figures, being 64,768 acres in 1942 and 57,483 acres in 1943.

Table 5. - Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months, 1942 and 1943

	(Compiled by the Prices Branch)								
	S	ugar at Mo	ntreal			Sugar at Vancouver			
			Sugar	No. 1		Sugar			
	Sugar, Gr	anulated	Light	Yellow	Sugar C	ranulated	Yellow	per Cwt.	
	Standard,	per Cwt.	per	Cwt.	f.o.b.	Factory	f.o.b.	Factory	
	1942	1943	1942	1943	1942	1943	1942	1943	
Providence passed and the time to the state of the state	\$	\$	43	\$	\$	4	\$	\$	
January	6.89	6.89	6,61	6.63	6.89	6.89	6.51	6.51	
April	6.89	6,89	6.65	6.63	6.89	6.89	6.51	6.51	
July	6.89	6.89	6.63	6.63	6.89	6.89	6.51	6.51	
October	6.89	6.89	6.63	6.63	6.89	6.89	6.51	6.51	

Materials Used

The cost of materials used in the industry during 1943, as shown in Table 6, amounted to \$38,618,832. This is an increase from the previous year of \$5,334,861. Raw materials, consisting of raw cane and sugar beets, constitute almost 93 per cent of the total cost, other materials over 2 per cent, and containers of all kinds over 5 per cent. The average cost price of raw cane sugar laid down at the factory was \$3.87 per hundredweight in 1942 and \$4.02 per hundredweight in 1943. The cost at the factory of sugar beets was \$9.17 per ton in 1942 and \$9.68 in 1943.

	Tab	le 6 Mater	ials Used		
		1 9	4 2	1 9	4 3
Kinds of Materials	Unit of Measure	Quantity	Cost Value at the Refinery	Quantity	Cost Value at the Refinery
Raw cane sugar Sugar beets Cornstarch Boneblack Vegetable char Infusorial earth Lime	Pound Ton Pound " " "	629,893,608 701,884 678,542 1,542,014 251,653 3,007,180 565,472	24,408,760 6,434,517 39,245 73,776 29,452 75,295 3,488	773,915,653 474,378 723,258 1,822,220 196,476 3,451,142 8,107,126	\$1,137,050 4,592,240 41,663 148,440 23,800 89,075
Limestone Sulphur Acids (sulphuric, hydrochloric, muriatic and	Ton Pound	36,553 283,780	92,981 7,411	20,817 208,768	47,076 62,538 4,913
phosphoric) Soda ash Filtering materials,	11_	853,902 378,112	25,296 8,762	1,010,773	31,924 8,257
Other chemical materials Containers (boxes,	5	tenda mulai	13,462 68,558	-	14,785 9,497
bags, etc.) All other materials and supplies			1,810,252		2,099,425
TOTAL COST OF MATERIALS USED			192,716 33,283,971		38,618,832

Capital Invested

Table 7. - Capital Invested in the Sugar Industry

Items of Capital	1942	1943
	44. 47. 77.	indir.
Fixed Capital -		
Present value of land, buildings, fixtures,		
machinery, tools, etc.	22,127,569	21,727,170
Working Capital -		
Inventory value of materials on hand,		
stocks in process, fuel and miscellaneous		
supplies on hand	4,878,429	8,597,765
Inventory value of finished products on hand	9,098,988	7,768,730
Operating capital (cash, bills and accounts		
receivable, prepaid expenses, etc.)	9,127,691	6,051,211
TOTAL CAPITAL INVESTED	45, 232, 672	44,144,876

Employment Statistics

Employment statistics are given in Tables 8, 9 and 10. Wage-earners in 1945 numbered 1,537 males and 313 females, with a payroll of \$2,883,197 while salaried employees numbered 305 males and 119 females, with salaries totalling \$1,185,276. Compared with 1942 there was a decrease of 52 in the number of persons employed and an increase of \$296,042 in the salaries and wages paid. The maximum employment of wage-earners was reached in October with a total of 2,744 and the minimum in February with a total of 1,262.

Table 8. - Employment for Canada by Number, Sex and Remuneration.

Year			oloyees Total	(Mont	hly Ave	rages) Total	Sa	Total Em laries a Female	nd Wages Salaries
	No.	Female No.	Saluries \$	Male No.	Female No.	Wages \$	No.	No.	\$
10%0	345		*			37			
1936 1937	349	63 65	1,169,529	2,064	37 89	2,244,169 2,137,277	2,409 2,178	150 154	3,413,698 3,318,861
1938	364	61	1,163,988	1,809	84	2,151,645	2,173	145	3,315,633
1939	546 420	60 81	1,137,767	1,888	105 108	2,279,600	2,234	165 189	3,467,367 3,623,661
1941	378	98	1,187,467	2,043	123	2,647,172	2,421	221	3,834,659
1942 1945	353 305	106	1,162,006 1,185,276	1,701	166 313	2,610,425 2,883,197	2,054	272 432	3,772,431 4,068,473

Table 9. - Number of Wage-earners Employed by Months and Sex.

Months	1 9	9 4 2	19	4 3
	Male	Female	Male	Female
anuary	1.750	113	1,488	176
ebruary	1.527	162	1,060	202
larch	1,466	139	1,138	226
pril	1,499	115	1,168	244
ay	1,522	148	1,236	263
ine sassessessessessessessessessessessessess	1,203	116	1.349	285
11y 30,2230446886666202222222222	1.315	150	1,450	306
ugust	1,291	154	1,417	332
eptember	1.865	203	2.141	452
ctober	2,376	227	2,268	476
ovember	2,419	238	2,238	442
ecember	2,162	217	1,470	367
Monthly Average	1,701	166	1,537	313

Table 10. - Average Weekly Earnings and Number of Wage-earners in the Month of Highest Employment with their Regular Hours of Work.

		942	1 9	4 3
Number of Hours Worked	Number of	Employees	Number of E	mployees
per Week	Male	Female	Male	Female
30 hours or less	152	16	313	49
31 - 43 hours	326	69	371	125
4 hours	70	55	120	39
15 - 47 hours	79	11	85	21
8 hours	269	33	282	117
19 - 50 hours	97	14	63	12
1 - 54 hours	132	27	222	43
5 hours	47	6	165	8
6 - 64 hours	829	24	637	46
5 hours and over	894	17	365	13
AVERAGE HOURS PER WEEK	56.0	46.1	50.3	44.6
AVERAGE WEEKLY EARNINGS	\$31.67	\$16.90	\$30.27	\$20.10

Table	II Powe	r Equipment		
		1942	1	9 4 3
	-	Manufacturers		anufacturers!
Classes of Power	Number	Rating of		Rating of
OTTOROS OF YOUR	of	Horse-Power		orse-Power
	Units	Capacity		
	OULUS	Capacity	OUTES	Capacity
Steam engines and turbines -				
In use	38	16,468	25	12,401
Idle		790	10	2,787
			40	W9 101
Gasoline, gas and oil engines -	777	03.6	7.0	0.50
In use		816	32	836
Idle	3	45	3	45
Electric motors operated by				
purchased power ~				
In use	691	8,477	671	7,154
Idle	. 65	1,842	64	2,204
TOTAL POWER AVAILABLE FOR				200
	0.77	90 470	no ė	05 400
MANUFACTURING	831	28,438	805	25,427
Electric motors operated by power generated by the				tangtore at time glavable and the reference and environments are also and tacky
establishment - In use	1,762	20,672	1,584	17,297
Idle	117	1,410	156	2,005
Stationary boilers - In use	67	29,742	45	18,062
Idle		650	12	4,000
			-	
Table 12 Cons			etricity	
		9 4 2		4 3
Kinds of Fuel Me	asure Quan	tity Cost Val	ue Quantity	Cost Value
		\$		\$
Bituminous Coal, Canadian	Ton 5	4,949 278,6	114,348	748,452
" Imported	1 5	9,185 400,8	25,781	179,105
Lignite Coal	11 6	2,831 142.0	075 61,498	135,148
Coke	11	3,506 50,5	575 2,091	28,552
		0,762 6,4	80 18,343	5,506
THET WAT DOSCOSOSOSOSOS	" 4,49		90 506,765	26,809
Kerosene or coal oil	1 11	1,580 4	03 2,444	590
uaa :		1,617 1.7	05 1,967	2,058
(Natural "	11 11	2,914 1,4	.57 1,649	1,177
TOTAL COST OF FUEL	-	1,135,8	13	1,127,397
Electricity purchased				
(including service charges) Kw.H	f. 11,32	5,356 90,1	42 7,266,986	64,492
TOTAL COST OF FUEL AND ELECTRICITY		1,225,9		1,191,889

⁽x) Includes gasoline used in cars and trucks.

List of Sugar Refineries

NOVA SCOTIA

Acadia Sugar Refining Company, Limited, Dartmouth (Operations pooled with "Atlantic Sugar Refineries, Ltd." in 1943).

NEW BRUNSWICK

(1) Atlantic Sugar Refineries, Limited,

Saint John

QUEBEC

(1) Canada & Dominion Sugar Company, Ltd., (1) St. Lawrence Sugar Refineries, Ltd.,

1410 Montmorency St., Montreal.

4026 Notre Dame St. E.,

Montreal.

(Only operated in January, 1943 and pooled operations with "Canada & Dom-inion Sugar Co. Ltd.," for balance of year).

ONTARIO

Canada & Dominion Sugar Co., Ltd., Chatham.

(3) Canada & Dominion Sugar Co., Ltd., Wallaceburg.

(No refining done at Chatham in 1943. All manufacturing done at Wallaceburg).

MANITOBA

(2) The Manitoba Sugar Company, Limited,

(Fort Garry) Winnipeg.

ALBERTA

(2) Canadian Sugar Factories, Limited,

Raymond.

(2) Canadian Sugar Factories, Limited,

Picture Butte.

BRITISH COLUMBIA

(1) The British Columbia Sugar Refining Company, Limited,

Rogers Street, Vancouver.

- (1) Made cane sugar only.
- (2) Made beet sugar only.
- (3) Made both cane and beet sugar.

