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DEPARTMENT OF TRADE AND COMMERCE  
DOMINION BUREAU OF STATISTICS  
MINING, METALLURGICAL AND CHEMICAL BRANCH  
OTTAWA - CANADA

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CHEMICALS AND ALLIED PRODUCTS

THE FERTILIZER MANUFACTURING INDUSTRY, 1933.

Production from plants in Canada engaged primarily in the manufacture of fertilizers was valued at \$4,286,051 in 1933 compared with \$4,006,187 in 1932. In addition, fertilizer materials such as calcium cyanamide, ammonium sulphate, animal tankage, ground bone, fish fertilizers, etc., were made in establishments which have been classified under other industries; in 1933 the production of these commodities totalled about 87,000 tons valued at \$1,772,908 at the works as against 118,000 tons worth \$2,389,590 in 1932.

Only 20 plants in Canada produced fertilizers as their major product during 1933; 7 were in Ontario, 4 in New Brunswick, 2 in Nova Scotia, 3 in British Columbia, 3 in Quebec, and 1 in Prince Edward Island. Capital employed in these plants declined to \$15,918,787 in 1933 from \$17,083,478 and the number of employees dropped to 667 from 748 in 1932. Salaries and wages fell to \$776,647 from \$1,097,812 in 1932.

The total production of mixed fertilizers in Canada was 106,421 tons worth \$2,777,702 at the factories; this total includes 102,108 tons at \$2,626,030 made in fertilizer works and 4,313 tons at \$151,672 made in slaughtering and meatpacking plants and in glue factories. In 1932 the corresponding total was 95,857 tons at \$2,447,407 and in 1931, 113,632 tons at \$3,247,694.

Superphosphate was manufactured by 2 companies but in 4 different plants, one at New Westminster, B.C., one at Trail, B.C., one at Hamilton, Ont., and one at Beloeil, P.Q. Production figures cannot be published separately.

Imports and exports of fertilizer materials are shown in Table 11.

The Bureau has made a special survey of the Fertilizer Trade in Canada for the year ended June 30, 1933, and has issued a pamphlet giving details of actual sales in Canada by classes and by provinces. The pamphlet may be obtained free upon request to the Dominion Bureau of Statistics, Ottawa. Summary information as to sales of fertilizers has been reprinted in Tables 12 and 13 of this bulletin.

**Table 1 - PRINCIPAL STATISTICS OF THE FERTILIZER MANUFACTURING INDUSTRY, 1932 and 1933.**

Years and Provinces	No. of plants	Average		Salaries and wages	Cost of materials at works	Selling value of products at works	Value added by manufacturing
		Capital employed	number of employees				
		\$		\$	\$	\$	\$
<u>1932</u>							
New Brunswick .....	5	682,333	96	86,902	489,252	699,008	209,756
Ontario .....	7	2,283,001	163	181,755	538,228	948,218	409,990
Prince Edward Island	1)						
Nova Scotia .....	2)						
Quebec .....	2)	14,118,144	489	829,155	1,588,853	2,358,961	770,108
British Columbia ...	2)						
CANADA .....	19	17,083,478	748	1,097,812	2,616,333	4,006,187	1,389,854
<u>1933</u>							
New Brunswick .....	4	605,253	64	67,969	376,252	590,279	214,027
Quebec .....	3	808,988	41	66,818	367,736	501,871	134,135
Ontario .....	7	2,352,696	187	181,768	860,945	1,379,857	518,912
British Columbia ...	3	11,322,064	303	398,927	861,139	1,331,154	470,015
Prince Edward Island	1)						
Nova Scotia .....	2)	829,786	72	61,165	330,654	482,890	152,236
CANADA .....	20	15,918,787	667	776,647	2,796,726	4,286,051	1,489,325

**Table 2 - CAPITAL EMPLOYED, BY PROVINCES, 1932 and 1933.**

Provinces	Present value of lands, buildings, machinery and equipment	Inventory value of materials on hand, stocks in process, fuel and miscellaneous supplies on hand		Inventory value of finished products on hand	Operating capital (cash, bills and accounts receivable, etc.)	TOTAL CAPITAL EMPLOYED
		\$	\$			
<u>1932</u>						
New Brunswick ....	298,827	49,442		165,764	168,300	682,333
Ontario .....	882,850	703,071		61,832	635,248	2,283,001
Other provinces ..	10,455,701	1,616,744		1,043,626	1,002,073	14,118,144
CANADA .....	11,637,378	2,369,257		1,271,222	1,805,621	17,083,478
<u>1933</u>						
New Brunswick ....	208,037	90,784		116,224	190,208	605,253
Quebec .....	359,269	192,893		39,867	216,959	808,988
Ontario .....	909,003	605,565		239,888	598,240	2,352,696
British Columbia .	8,861,746	1,090,705		1,028,479	341,134	11,322,064
Other provinces ..	256,425	136,455		15,014	421,892	829,786
CANADA .....	10,594,480	2,116,402		1,439,472	1,768,433	15,918,787

**Table 3 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1932 and 1933.**

Provinces	AVERAGE NUMBER OF EMPLOYEES					Salaries	Wages	TOTAL SALARIES AND WAGES
	On salaries		On wages		TOTAL			
	Male	Female	Male	Female				
<u>1932</u>								
New Brunswick ....	21	2	73	...	96	35,115	51,787	86,902
Ontario .....	46	10	107	...	163	92,749	89,006	181,755
Other provinces ..	97	11	381	...	489	188,279	640,876	829,155
CANADA .....	164	23	561	...	748	316,143	781,669	1,097,812

Table 3 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1932 and 1933 (concluded)

Provinces	AVERAGE NUMBER OF EMPLOYEES					Salaries	Wages	TOTAL SALARIES AND WAGES
	On salaries		On wages		TOTAL			
	Male	Female	Male	Female				
						\$	\$	\$
<b>1933</b>								
New Brunswick	8	1	55	...	64	23,200	44,769	67,969
Quebec	13	3	25	...	41	34,321	32,497	66,818
Ontario	49	10	128	...	187	98,455	83,313	181,768
British Columbia	54	7	242	...	303	113,742	285,185	398,927
Other provinces	18	3	51	...	72	28,864	32,301	61,165
CANADA	142	24	501	...	667	298,582	478,065	776,647

Table 4 - WAGE-EARNERS, BY MONTHS, 1932 and 1933.

Months	1932			1933		
	Male	Female	TOTAL	Male	Female	TOTAL
January	715	...	715	507	...	507
February	668	...	668	543	...	543
March	659	...	659	537	...	537
April	766	...	766	524	...	524
May	853	...	853	829	...	829
June	417	...	417	446	...	446
July	307	...	307	425	...	425
August	496	...	496	432	...	432
September	501	...	501	445	...	445
October	513	...	513	402	...	402
November	481	...	481	442	...	442
December	363	...	363	485	...	485
AVERAGE	561	...	561	501	...	501

Table 5 - FUEL AND ELECTRICITY USED, 1932 and 1933.

Kinds	Unit of measure	1932		1933	
		Quantity	Value	Quantity	Value
Anthracite coal	short ton	28	400	18	264
Bituminous coal - Canadian	short ton	1,827	10,287	944	4,725
Imported	short ton	33	160	36	159
Coke	short ton	19	155	19	109
Gasoline	Imp. gal.	640	159	2,794	803
Fuel oil	Imp. gal.	...	...	180	19
Electricity purchased	K.W.H.	13,018,909	37,849	195,983,722	316,770
TOTAL	xxx	...	49,010	...	322,849

Table 6 - POWER EQUIPMENT, 1932 and 1933.

Kinds	1932		1933	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines	...	...	1	20
Gasoline, gas and oil engines	3	52	3	60
Total Primary Equipment	3	52	4	80
Electric motors operated by purchased power	453	15,579	536	18,850
Total Power Equipment	456	15,631	540	18,930
Total Electric Motors	453	15,579	536	18,850
Boilers	2	30	...	...

Table 7 - MATERIALS USED IN THE FERTILIZER MANUFACTURING INDUSTRY, 1932 and 1933.

Materials	1 9 3 2		1 9 3 3	
	Quantity	Cost at	Quantity	Cost at
	short tons	works	short tons	works
		\$		\$
Ammonium phosphate .....	335	18,458	618	24,388
Ammonium sulphate .....	13,633	339,074	10,497	240,718
Basic slag .....	3	41	31	706
Bone meal (crude) .....	276	10,177)	182	3,377
Bone flour (steamed) .....	12	345)		
Calcium cyanamide .....	1,279	34,386	1,035	27,823
Calcium nitrate and nitrochalk .....	...	...	123	5,770
Dried blood .....	37	2,409	78	2,859
Fish meal or scrap .....	285	7,822	169	4,336
Lime or land plaster .....	620	3,526	597	4,253
Kainit and potash manure salts .....	4,152	74,711	4,914	92,422
Phosphate rock .....	41,114	316,518	21,961	164,614
Potassium chloride (muriate of potash) ..	7,876	287,443	8,320	322,439
Potassium sulphate (sulphate of potash)..	1,366	54,821	1,515	63,184
Sodium nitrate .....	1,431	56,910	2,167	64,409
Superphosphate .....	36,005	366,462	59,443	657,123
Sulphuric acid, 66° Be .....	67,004	213,451	79,631	772,334
Tankage .....	1,688	24,272	1,528	27,016
Whale meat, bone and blood .....	...	...	4	124
All other materials .....	...	537,325	...	69,473
Containers (barrels, bags, etc.) .....	...	267,682	...	249,358
<b>TOTAL .....</b>	<b>...</b>	<b>2,616,333</b>	<b>...</b>	<b>2,796,726</b>

Table 8 - PRODUCTS OF THE FERTILIZER MANUFACTURING INDUSTRY, 1932 and 1933.

NOTE - Figures in this table are for the Fertilizer Manufacturing Industry which includes only the concerns that are chiefly engaged in the manufacture of fertilizers (see directory). For the total output of mixed fertilizers in Canada, see Table 10.

Products Made	Unit of measure	1 9 3 2		1 9 3 3	
		Quantity	Selling value	Quantity	Selling value
			at works		at works
			\$		\$
Complete fertilizer .....	ton	90,867	2,285,314	102,108	2,626,030
All other products (x) ...	xx	...	1,720,873	...	1,660,021
<b>TOTAL .....</b>	<b>xx</b>	<b>...</b>	<b>4,006,187</b>	<b>...</b>	<b>4,286,051</b>

(x) Includes superphosphate, ammonium sulphate, ammonium phosphate, etc.

Table 9 - PRODUCTION OF FERTILIZERS AND FERTILIZER MATERIALS IN OTHER MANUFACTURING INDUSTRIES, 1932 and 1933.

Industries	Products	1 9 3 2		1 9 3 3	
		Quantity	Selling value	Quantity	Selling value
		short tons	at works	short tons	at works
			\$		\$
Acids, alkalies and salts ..	Calcium cyanamide	85,680	1,688,037	44,497	828,920
Slaughtering and meat packing	Mixed fertilizers	4,390	143,093	3,815	141,803
	Animal tankage ..	8,524	194,574	10,996	310,956
	Bone, raw, ground	2,222	52,404	2,717	70,379
Coke and gas .....	Ammonium sulphate	11,050	212,182	16,723	318,973
Adhesives .....	Mixed fertilizers	600	19,000	498	9,869
Fisheries .....	Herring fertilizer	5,678	79,639	7,598	83,016
	Other fish fertilizer .....	64	661	387	8,992
<b>TOTAL .....</b>	<b>...</b>	<b>...</b>	<b>2,389,590</b>	<b>...</b>	<b>1,772,908</b>

Table 10 - TOTAL PRODUCTION OF MIXED FERTILIZERS IN CANADA FROM ALL INDUSTRIAL GROUPS, 1921 - 1933.

NOTE - Figures in this table represent the total Canadian production of mixed fertilizers regardless of the industries in which produced.

Calendar Years	Quantity	Selling value at works	Calendar Years	Quantity	Selling value at works
	Tons	\$		Tons	\$
1921 .....	46,900	2,399,855	1928 .....	76,180	3,017,648
1922 .....	40,843	1,818,136	1929 .....	75,164	3,098,567
1923 .....	37,587	1,366,343	1930 .....	78,158	2,548,226
1924 .....	38,126	1,539,003	1931 .....	113,632	3,247,694
1925 .....	47,076	1,663,129	1932 .....	95,857	2,447,407
1926 .....	56,888	2,043,093	1933 .....	106,421	2,777,702
1927 .....	72,112	2,552,421			

Table 11 - IMPORTS INTO CANADA AND EXPORTS OF FERTILIZERS AND FERTILIZER MATERIALS, Calendar Years 1932 and 1933.

	Unit of measure	1932		1933	
		Quantity	Value \$	Quantity	Value \$
<b>IMPORTS -</b>					
Tankage .....	ton	1,533	21,621	971	7,355
Bone dust, charred bone, bone ash, bone meal, and bone flour .....	ton	2,284	133,841	1,245	47,452
Fish offal or refuse .....	ton	516	11,941	190	5,188
Ammonium sulphate .....	ton	13,811	280,026	4,156	100,415
Basic slag, crushed or ground .....	ton	7,665	72,119	4,599	46,546
Cyanamide .....	ton	25	975	(cwt)1	4
Kainite, and other German potash salts .	ton	4,352	69,035	4,189	71,340
Potash, muriate of, crude .....	ton	14,662	477,397	14,018	497,890
Potash, sulphate of, crude .....	ton	1,345	57,132	2,447	103,202
Soda, nitrate of .....	ton	18,534	565,096	15,786	414,879
Superphosphate .....	ton	60,699	532,799	54,437	503,474
Fertilizers, compounded or manufactured, n.o.p. ....	ton	2,503	62,809	2,926	63,707
<b>EXPORTS -</b>					
Tankage .....	ton	10,635	166,480	13,190	314,134
Bone dust and meal .....	ton	43	735	59	1,003
Fish meal .....	ton	16,657	520,199	7,538	287,392
Fish offal or refuse .....	ton	787	26,420	425	15,870
Ammonium sulphate .....	ton	38,741	701,707	62,383	1,081,392
Cyanamide .....	ton	64,118	1,652,910	56,923	1,234,007
Fertilizers, manufactured .....	ton	21,118	604,353	21,334	585,085

Table 12 - COMPARATIVE TABLE SHOWING TOTAL SALES OF FERTILIZER MATERIALS AND MIXED FERTILIZERS FOR THE FERTILIZER YEARS ENDING JUNE 30, 1932 and 1933.

Provinces	Fertilizer Materials		Mixed Fertilizers	
	1932	1933	1932	1933
	short tons	short tons	short tons	short tons
Prince Edward Island .....	12,866	7,025	3,127	6,200
Nova Scotia .....	15,151	11,320	11,605	12,036
New Brunswick .....	14,336	20,200	14,344	12,927
Quebec .....	24,463	19,593	14,295	10,333
Ontario .....	14,067	15,868	37,835	37,924
Manitoba, Saskatchewan and Alberta .....	5,616	2,842	5,233	72
British Columbia .....	6,365	5,521	5,680	4,541
CANADA .....	92,864	82,374	87,119	84,033
Sold for Export .....	64,992	121,839	20,467	15,503
GRAND TOTAL .....	157,856	204,213	107,586	99,536

Table 13 - SALES OF FERTILIZERS, EXCEPT FOR MANUFACTURING PURPOSES, DURING THE YEAR  
 JULY 1, 1932, to JUNE 30, 1933.  
 (short tons)

Fertilizers	Sold in Canada	Sold for export from Canada	TOTAL SALES
Nitrate of soda .....	4,568	353	4,921
Sulphate of ammonia .....	9,603	50,799	60,402
Cyanamide .....	1,478	67,432	68,910
Nitrochalk .....	124	1	125
Calcium nitrate .....	836	...	836
Superphosphate .....	44,894	1,377	46,271
Phosphate rock .....	107	...	107
Basic slag .....	4,166	2	4,168
Bone meal and bone flour .....	2,234	30	2,264
Muriate of potash .....	7,328	606	7,934
Sulphate of potash .....	478	...	478
Tankage .....	1,413	579	1,992
Sheep manure .....	405	...	405
Dried blood .....	437	85	522
Whale products .....	428	...	428
Fish meal .....	1,006	...	1,006
Ammonium phosphate .....	2,253	547	2,800
Other fertilizer materials .....	608	28	636
TOTAL FERTILIZER MATERIALS .....	82,374	121,839	204,213
Total Mixed Fertilizer .....	84,033	15,503	99,536
GRAND TOTAL - 1933 .....	166,407	137,342	303,749
GRAND TOTAL - 1932 .....	179,983	85,459	265,442

DIRECTORY OF FIRMS INCLUDED IN THE FERTILIZER MANUFACTURING INDUSTRY, 1933.

NOTE - This Directory gives only the names of the firms which have been included in the Fertilizer Manufacturing Industry, and is not intended to be a complete list of the concerns which manufacture mixed fertilizers or fertilizer materials.

<u>Names</u>	<u>Location of Plants</u>
<u>PRINCE EDWARD ISLAND</u> -	
The Island Fertilizer Co. Ltd.	Charlottetown
<u>NOVA SCOTIA</u> -	
Colonial Fertilizer Company	Windsor
Canadian Industries Limited	Halifax
<u>NEW BRUNSWICK</u> -	
Canada Packers Limited	Saint John
Higgins, A.W., Co. Inc.	Saint John
International Fertilizers Ltd.	Saint John
Summers Fertilizer Co. Inc.	St. Stephen
<u>QUEBEC</u> -	
Canadian Industries Limited	Beloeil
International Fertilizers Limited	Quebec
Lavigneux, Arthur	Montreal
<u>ONTARIO</u> -	
Agricultural Chemicals Limited	Port Hope
Canada Packers Limited	Toronto
Canadian Fertilizer Company Ltd.	Chatham
Canadian Industries Limited	Hamilton
Scottish Fertilizers Limited	Welland

DIRECTORY OF FIRMS INCLUDED IN THE FERTILIZER MANUFACTURING INDUSTRY, 1933.  
(concluded)

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NOTE - This Directory gives only the names of the firms which have been included in the Fertilizer Manufacturing Industry, and is not intended to be a complete list of the concerns which manufacture mixed fertilizers or fertilizer materials.

Names

Location of Plants

ONTARIO - concluded

William Stone Sons, Limited, and  
National Fertilizers Limited  
Witts Fertilizer Works

Ingersoll  
Norwich

BRITISH COLUMBIA -

Canadian Industries Limited  
Consolidated Mining and Smelting Co. of  
Canada, Ltd.  
Globe Fertilizer Co. Ltd.

New Westminster  
Trail  
Vancouver

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