MONTHLY BULLETIN OF AGRICULTURAL STATISTICS

VOL. 32

OTTAWA, MARCH, 1939

No. 367

DOMINION STATISTICIAN: R. H. COATS, LL.D., F.R.S.C. EDITOR: MARGARET E. MACLELLAN, B.A.

VALUE OF AGRICULTURAL PRODUCTION AND VALUE OF FARM CAPITAL

GROSS VALUE OF AGRICULTURAL PRODUCTION

The gross value of commodities produced on Canadian farms in 1938 is estimated at \$1,020,217,000 as compared with \$1,039,492,000, the revised estimate of the gross value of production in 1937. This represents a decrease of \$19,275,000 or 2 per cent and is accounted for largely by a decrease of 5 per cent in the value of field crops. Decreases are also shown in the value of farm animals, fur farming and wool. These decreases are in part offset by increases recorded in the value of dairy, poultry and maple products, tobacco, fruits and vegetables, and honey. By provinces, the most significant change was in Saskatchewan where the value of all products was \$44.2 million or 47.8 per cent higher than the corresponding estimate for 1937. Slight increases were also recorded in the Maritime Provinces. For the other provinces, values declined by \$33.5 million in Manitoba, \$15.6 million in Ontario, \$14.2 million in Alberta, \$2.1 million in British Columbia and a third of a million dollars in Quebec.

Values for 1938, by provinces, in order of magnitude, were as follows, with the 1937 estimates in brackets: Ontario \$327,529,000 (\$343,137,000); Quebec \$188,580,000 (\$188,844,000); Alberta \$167,066,000 (\$181,274,000); Saskatchewan \$136,471,000 (\$92,309,000); Manitoba \$87,491,000 (\$121,029,000); British Columbia \$42,764,000 (\$44,839,000); Nova Scotia \$29,467,000 (\$28,561,000); New Brunswick \$27,473,000 (\$26,632,000); Prince Edward Island \$13,376,000 (\$12,867,000).

The estimates for 1938 are preliminary. Changes made in the estimates as previously published for the years prior to 1937 are the result of revisions in the production and farm price data for dairy products, tobacco, wool and honey.

NET VALUE OF AGRICULTURAL PRODUCTION

The net value of agricultural production has been calculated by deducting from the gross value, estimates of the value of the farm products used for seed, and for feed for live stock. These products include feed grains, fodder crops and milk fed to calves.

The net value of production represents the value of products raised on the farm which are available for sale off the farm or for consumption by the farm family and hired labour. No deductions have been made for any living or operating expenses.

A preliminary estimate places the net value of production in 1938 at \$727,565,000. Revised estimates for 1929 to 1937 are shown in Table III.

CURRENT VALUE OF FARM CAPITAL

The items included in the term "farm capital" are lands and buildings, implements and machinery including motor trucks and automobiles, and live stock including poultry and animals on fur farms. The 1931 values of lands, buildings, implements and machinery were reported by the decennial census taken at June 1 in that year. Changes in the total value of lands and buildings for the years 1932 to 1938 have been based on the value of occupied farm lands

reported annually by crop correspondents. Changes in the annual values of farm implements and machinery have been estimated on the basis of sales reported each year. The 1936 values of land and buildings, and implements and machinery in the Prairie Provinces were supplied by the quinquennial census of the Prairie Provinces.

The value of farm capital in Canada at June 1, 1938, totalled \$4,654,580,000 as compared with \$4,720,751,000 at June 1, 1937. Comparative data for the years 1933 to 1938 are shown in Table IV.

I.—Gross Value of Agricultural Production in Canada, by Provinces, 1934 to 1938

(T	hot	isan	d.	1301	lars	

Farm animals	Description	1934	1935	1936	1937	1938
Field crops	Canada—					
Farm animals	Field crops	549,080	511,873	612,300	556, 222	528,860
Dairy products	Farm animals					136,846
Fruits and vegetables	Wool.			1,861		1,498
Poultry products						
Fur farming.						53,748
Tobacco	Fur farming	4,534	5,516	6,532	6,802	6,200
Flax fibre	Maple products					3,850
Honey and wax	Flav fibro					
Total Solution Solution Total T	Clover and grass seed					2.990
Prince Edward Island Field crops	Honey and wax					3,027
Field crops 9,054 8,561 10,693 7,706 8,01 Farm animals 917 1,369 1,429 1,452 1,55 1,55 1,55 1,55 1,58 1,	Total	931,204	938,983	1,065,966	1,039,492	1,020,217
Farm animals						
Wool						8,018
Dairy products 1,456 1,387 1,632 1,758 1,87 Fruits and vegetables 136 154 172 190 19 Poultry products 609 825 823 762 81 Fur farming 762 863 933 946 85 Clover and grass seed 15 8 15 15 11 2 2 Total 13,034 13,189 15,728 12,867 13,33 Nova Scotia Total 13,034 13,189 15,728 12,867 13,33 Nova Scotia Total 13,034 13,189 15,728 12,867 13,33 Total 13,034 13,189 15,728 12,867 13,33 Nova Scotia 11,295 11,748 13,593 10,811 9,65 Field crops 1,995 11,748 13,593 10,811 9,65 Farm animals 1,995 <td></td> <td></td> <td></td> <td></td> <td></td> <td>1,591</td>						1,591
Fruits and vegetables. 136 154 172 190	Dairy products				1.758	1.879
Fur farming	Fruits and vegetables	136	154	172		191
Clover and grass seed	Poultry products					817
Total 1						850
Nova Scotia— 12,995 11,748 13,593 10,811 9,65 Farm animals 1,924 2,257 2,548 3,079 2,83 Wool 53 55 63 88 6 Dairy products 6,586 6,349 6,949 7,675 7,89 Fruits and vegetables 4,265 5,586 4,492 5,237 7,38 Poultry products 1,058 1,184 1,216 1,120 1,13 Fur farming 276 386 466 517 46 Maple products 64 46 25 26 2 Clover and grass seed - 4 - - - - Honey and wax 7 8 10 8 8 3,38 Wool 27,228 27,623 29,362 28,561 29,46 New Brunswick— 14,961 14,542 18,396 14,149 14,99 Farm animals 2,478 2,931 3	Honey and wax		1			í
Field crops 12,995 11,748 13,593 10,811 9,65 Farm animals 1,924 2,257 2,548 3,079 2,83 Wool 53 55 63 88 6 Dairy products 6,586 6,349 6,949 7,675 7,88 Fruits and vegetables 4,265 5,586 4,492 5,237 7,38 Poultry products 1,058 1,144 1,216 1,120 1,13 Fur farming 276 386 466 517 46 517 46 517 46 517 46 517 46 517 47 47 47 47 47 47 47 47 47 47 47 47 47 47 47 48 47 48	Total	13,034	13,189	15,728	12,867	13,376
Farm animals						
Wool	Field crops.					9,658
Dairy products. 6,586 6,349 6,949 7,675 7,88 Fruits and vegetables. 4,265 5,586 4,492 5,237 7,38 Poultry products. 1,058 1,184 1,216 1,120 1,13 Fur farming. 276 386 466 517 46 Maple products. 64 46 25 26 2 Clover and grass seed. 7 8 10 8 Total. 27,228 27,623 29,362 28,561 29,48 New Brunswick— Field crops. 14,961 14,542 18,396 14,149 14,91 Farm animals. 2,478 2,931 3,421 3,688 3,38 Wool. 46 56 73 81 6 Dairy products. 4,609 4,675 5,093 5,387 5,80 Fruits and vegetables. 908 1,044 1,164 1,317 1,28 Poultry products.	Wool					2,835
Fruits and vegetables	Dairy products				7,675	7.890
Fur farming 276 386 466 517 46 Maple products 04 46 25 26 2 Clover and grass seed - 4 - - - - Honey and wax 7 8 10 8 - <	Fruits and vegetables		5,586	4,492	5,237	7,382
Maple products 64 46 25 26 2 Clover and grass seed - 4 - - - - Honey and wax 7 8 10 8 Total 27,228 27,623 29,362 28,561 29,46 New Brunswick— Field crops 14,961 14,542 18,396 14,149 14,91 Farm animals 2,478 2,931 3,421 3,688 3,38 Wool 46 56 73 81 6 Dairy products 4,609 4,675 5,093 5,387 5,80 Fruits and vegetables 908 1,044 1,164 1,317 1,28 Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Clover and grass seed 14 11 15 12 Honey and wax 9 7 7						1,137
Clover and grass seed						465 24
Total. 27,228 27,623 29,362 28,561 29,46 New Brunswick— Field crops. 14,961 14,542 18,396 14,149 14,91 Farm animals. 2,478 2,931 3,421 3,688 3,38 Wool. 46 6 73 81 6 Dairy products. 4,609 4,675 5,093 5,387 5,86 Fruits and vegetables. 908 1,044 1,164 1,317 1,28 Poultry products. 1,139 1,291 1,323 1,247 1,29 Fur farming. 764 753 856 707 Maple products. 26 48 46 32 65 Clover and grass seed 14 11 15 12 Honey and wax. 9 7 7 12	Clover and grass seed.	-		20	20	29
New Brunswick— 14,961 14,542 18,396 14,149 14,99 Farm animals 2,478 2,931 3,421 3,688 3,38 Wool 46 56 73 81 6 Dairy products 4,609 4,675 5,093 5,387 5,86 Fruits and vegetables 908 1,044 1,164 1,317 1,28 Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Clover and grass seed 14 11 15 12 Honey and wax 9 7 7 12	Honey and wax	7	8	10	8	8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Total	27,228	27,623	29,362	28,561	29,467
Farm animals 2,478 2,931 3,421 3,688 3,38 Wool 46 56 73 81 6 Dairy products 4,609 4,675 5,093 5,387 5,86 Fruits and vegetables 908 1,044 1,164 1,317 1,28 Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Glover and grass seed 14 11 15 12 Honey and wax 9 7 7 12						
Wool 46 56 73 81 6 Dairy products 4,609 4,675 5,093 5,387 5,86 Fruits and vegetables 908 1,044 1,164 1,317 1,28 Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Clover and grass seed 14 11 15 12 Honey and wax 9 7 7 12						14,912
Dairy products 4,609 4,675 5,093 5,387 5,86 Fruits and vegetables 908 1,044 1,164 1,317 1,28 Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Clover and grass seed 14 11 15 12 Honey and wax 9 7 7 12	Wool					3,385
Fruits and vegetables. 908 1,044 1,164 1,317 1,28 Poultry products. 1,139 1,291 1,323 1,247 1,29 Fur farming. 764 763 856 707 65 Maple products. 26 48 46 32 6 Clover and grass seed. 14 11 15 12 Honey and wax. 9 7 7 12						5 800
Poultry products 1,139 1,291 1,323 1,247 1,29 Fur farming 764 753 856 707 65 Maple products 26 48 46 32 6 Clover and grass seed 14 11 15 12 Honey and wax 9 7 7 12	Fruits and vegetables	908				1,282
Maple products. 26 48 46 32 6 Clover and grass seed. 14 11 15 12 Honey and wax. 9 7 7 12	Poultry products		1,291	1,323	1,247	1, 297
Honey and wax 9 7 7 12	Nur Iarmino					650
Honey and wax 9 7 7 12	Manla products		4.%	46	32	fi.
Total 94 Att 97 979 99 994 00 00 00	Maple products.					
	Maple products. Clover and grass seed	14	11	15	12	

I.—Gross Value of Agricultural Production in Canada, by Provinces, 1934 to 1938—Continued [Thousand Dollars]

Description	1934	1935	1936	1937	1938
Quebec-					
Field crops	98,309 17,989	83,616 21,812	91,276 23,626	81,629 29,673	81,023 27,894
Wool	308	347	390	394	368
Dairy products	43,957	45,800	50,438	55,711	55,702 8,414
Fruits and vegetables	7,078 7,221	7,380 7,664	7,933 8,215	8,724 8,428	8,829
Fur farming	975	1, 165	1,258	1,249	1,200
Maple products	1,911	2,267 642	2,482 845	1,308	2,910 1,207
Flax fibre	100	160	143	199	399
Clover and grass seed	315 369	207 397	124 504	57 374	104 530
Total	179,364	171,457	187,234	188,844	188,584
Ontario					
Field crops	143,734	132,086	166,284	149, 100	127,810
Farm animals	34,089 342	43,344 417	46,732 533	50,885 593	51,095 345
Wool. Dairy products	68,304	73,305	81,830	87,647	89, 153
Fruits and vegetables	16,608	18.697	18,002	13,003	13,469
Poultry products	19,464	20,915 966	22,939 1,131	21,659 1,351	22,329 1,215
Maple products	1,040	1, 161	1,161	880	853
Tobacco	6,337 150	10,226	8,505 155	15,965 133	18, 293 120
Flax fibre Clover and grass seed	857	1,006	1,417	1, 168	1,690
Honey and wax	1,309	1,115	1,062	753	1, 157
Total	292,938	303,399	349,751	343,137	327,529
Manitoba—					
Field crops Farm animals	49,761 6,568	34,944	50,401 9,058	90,112	54, 649 10, 146
Wool	56	7,301	9,000	94	78
Dairy products	10,633	11,267	12,609	14, 083	15,363
Fruits and vegetables	1,295 2,946	1,894 3,538	1,313 3,626	1,662 3,643	1,445 4,190
Fur farming	272	402	561	664	600
Clover and grass seed	70 426	131 387	108 616	457 517	365 655
Total.	72,627	59,925	78,384	121,029	87,491
Saskatchewan		-			
Field crops:	96,473	119,644	141,793	51,850	100,759
Farm animals	13,777	16,303 138	18, 290 172	15, 691	12,662 134
Dairy products	14,743	14,832	15,819	17,132	15,669
Fruits and vegetables	2,362 5,879	3.301 7,178	1,318 0,552	6,319	275 5.872
Fur farming	207	255	344	378	340
Clover and grass seed	102	220 120	220 274	329 107	512 248
Total	133,725	161,991	184,782	92,309	136,471
Alberta— Field crops	111,044	93,687	103,603	134,429	118,303
Farm animals	18,645	21,382	22,067	22,585	23, 257
Wool Dairy products	257 13,894	317 14,015	414 15, 098	478 17,211	345 18,792
Fruits and vegetables.	1,996	2,942	1,202	1,207	958
Poultry products	3,893	4,459	4.138	4,229	4, 295
Fur farming	453 486	588 145	770 162	784 180	700 238
Honey and wax	155	104	174	171	178
Total	150,823	137,639	147,628	181,274	167,066

I.—Gross Value of Agricultural Production in Canada, by Provinces, 1934 to 1938—Concluded [Thousand Dollars]

Description	1934	1935	1936	1937	1938
British Columbia-					
Field crops	12,749	13.045	16, 261	16,436	13,728
Farm animals	3,051	3,379	3,808	4, 139	3,981
Wool	61	81	95	103	69
Dairy products	8,682	9, 126	9, 204	9,019	9,916
Fruits and vegetables	8,776	8,966	8,419	10, 154	9,536
Poultry products	3.246	3,380	4,412	4.359	4.982
Fur farming.	121	138	213	206	180
Tobacco	49	2	24	77	63
Clover and grass seed	151	86	93	126	66
Honey and wax	225	199	174	220	243
Total	37,111	38,402	42,703	44,839	42,764

II.—Gross Value of Agricultural Production in Canada, by Provinces and Items, 1938 as Compared with 1937

[Thousand Dollars]

	outer Donald	1		
Description	1937	1938	Increase (+) or De- crease (-) compared with 1937	Percentage change
Prince Edward Island Nova Scotia New Brunswick Quebec. Ontario Manitoba Saskatchewan Alberta British Columbia Canada	12,867 28,561 26,632 188,844 343,137 121,029 92,309 181,274 44,839	13,376 29,467 27,473 188,580 327,529 87,491 136,471 167,066 42,764	+ 509 + 906 + 841 - 264 - 15, 608 - 33, 538 + 44, 162 - 14, 208 - 2, 075	$\begin{array}{c} + 4.0 \\ + 3.2 \\ + 3.2 \\ - 0.1 \\ - 4.5 \\ -27.7 \\ +47.8 \\ - 7.8 \\ - 4.6 \\ \hline \end{array}$
Field crops Farm animals Wool Dairy products Fruits and vegetables Poultry products Fur farming Maple products Tobacco Flax fibre Clover and grass seed Honey and wax	556, 222 140, 989 2, 049 215, 623 41, 816 51, 766 6, 802 2, 245 17, 140 332 2, 344 2, 164	528, 860 136, 846 1, 498 220, 164 42, 952 53, 748 6, 200 3, 850 19, 563 519 2, 990 3, 027	-27,362 -4,143 -551 +4,541 +1,136 +1,982 -602 +1,605 +2,423 +187 +646 +863	- 4.9 - 2.9 - 2.7 + 2.1 + 2.7 + 3.8 - 8.8 +71.5 +14.1 +56.3 +27.6 +39.9
Total	1,039,492	1,020,217	-19,275	-1.85

III.—Net Value of Agricultural Production in Canada, 1929 to 1938

1 Citi		
1929	\$1.020.	223,000
1930	826.	415,000
1931	550.	307.000
1932	494.	324,000
1933	513.	306,000
1934	575.	541,000
1935	606.	870,000
1936	679.	341,000
1937	678.	953,000
1938	727.	565,000

IV.—Current Value of Farm Capital in Canada, by Provinces, 1933 to 1938

[Thousand Dollars]

			127704-0811	u Donney				
Province	Land and buildings	Imple- ments and machinery	Live stock*	Total	Land and buildings	Imple- ments and machinery	Live stock*	Total
		193	3			193	4	E L
Prince Ed. Island Nova Scotia New Brunswick. Quebec Ontario Munitoha Saskatchewan.	40.396 74,050 71,127 615.735 886.172 244,716 839,597	7,339 9,545 11,985 88,403 136,692 46,760 158,688	6,225 11,975 12,706 77,540 144,201 35,705 74,340	53,960 95,570 95,818 781,678 1,167,065 327,181 1,072,625	42,941 76,864 71,127 581,254 956,180 253,377 842,859	6,944 9,033 11,341 83,649 129,208 43,306 147,264	6.215 10,913 12,565 82,525 145,706 34,931 77,368	56,100 96,810 95,033 747,428 1,231,094 331,614 1,067,491
Alberta British Columbia.	530.400 123,007	102,616	65,035 16,365	698,051 151,211	526, 103 117, 103	96,657 11,283	70,520 16,911	693, 280 145, 297
Canada	3,425,200	573,867	444,092	4,443,159	3,467,808	538,685	457,654	4,464,147
		193	5		1936			
Prince Ed. Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	39,162 88,240 74,114 700,992 979,128 246,165 899,606 521,588 113,239	6,608 8,596 10,791 79,578 123,614 41,054 137,703 92,304 10,915 511,163	7,354 12,138 14,132 95,085 179,087 41,249 92,205 79,251 18,493	53, 124 108, 974 99, 037 875, 655 1, 281, 829 328, 468 1, 129, 514 693, 143 142, 647	39,162 99,623 83,008 649,820 1,026,126 224,848 797,795 517,003 117,089	8, 229 10, 331 76, 167 120, 563 40, 137 131, 994 89, 751 10, 699	7,674 13,372 15,188 100,899 194,942 45,314 97,274 82,138 20,689	53,162 121,224 108,527 826,886 1,341,631 310,299 1,027,063 688,892 148,477
Canada	3,062,234			1,715,491	0,002,262	193		1,040,101
		193						
Prince Ed. Island. Nova Scotia New Brunswick. Quebec. Ontario. Manitoba Saskatchewan. Alberta. British Columbia.	42,920 91,084 77,061 684,131 1,072,847 238,901 797,795 517,003 113,239	6,142 7,990 10,030 73,489 118,501 39,967 125,382 86,284 10,669	7,956 15,253 16,034 116,587 200,371 52,450 91,533 84,895 22,237	57, 018 114, 327 103, 125 874, 207 1, 391, 719 331, 318 1, 014, 710 688, 182 146, 145	684,131 1,049,526 224,848 797,795 503,569	7,930 9,830 72,350 119,000 43,600 119,800 86,300	8,031, 14,899, 15,971, 115,243, 198,714, 51,568, 80,408, 86,745, 22,474	59, 551 105, 343 105, 826 871, 724 1, 367, 240 320, 016 998, 003 676, 614 150, 263
Canada	3,634,981	478,454	607,316	4,720,751	3,584,877	475,650	594,053	4,651,580
	1							

^{*}Including poultry, and animals on fur farms.

DAIRY PRODUCTS

Statistics of the dairy industry of Canada are dealt with in the following sequence: Total milk production, showing the quantities used for domestic purposes, live-stock feeding, and manufacturing; the production of butter and cheese; the value of dairy production, showing separately the total value of all products; the income from dairy production; miscellaneous milk products, consisting principally of concentrated milk and ice cream; and, finally, the estimated consumption of butter and cheese. The data given in these tables for 1938 are preliminary, while those for previous years are revised. Special note should be made of the revisions in the quantities and values of "milk otherwise used" which have effected significant changes in the quantities and values of the total milk production of Canada as previously published. All estimates have been made by the Dominion Bureau of Statistics in co-operation with the provincial dairy commissioners.

Total Milk Production.—The data presented in Table I represent the complete distribution of milk production and indicate a total of 15,770,235,900 pounds in 1938, an increase of 443,508,300 pounds or 2·9 per cent over the previous year.

75568--2

Butter and Cheese.—The butter output of creameries in 1938 was 266,886,900 pounds and the estimated production of dairy butter amounted to 105,076,000 pounds, a total of 371,962,900 pounds. The latter represents an increase of 16,822,154 pounds or 4·7 per cent over that of the previous year. The production of factory cheese in Canada in 1938 amounted to 121,314,600 pounds, and together with the farm make of 1,101,300 pounds reached a total of 122,415,900 pounds. The latter figure, in comparison with the 1937 production, represents a decrease of 9,442,238 pounds or 7·2 per cent.

Total Value of Dairy Production.—The value of all dairy products in 1938 as shown in Table IV is estimated at \$220,163,527, an increase of \$4,540,265 or 2·1 per cent as compared with 1937.

Income from Dairying.—For 1938 the gross farm income from dairy production amounted to \$144,221,000 as compared with \$137,636,000 in 1937. The cash income from the dairy enterprise on farms in 1938 is estimated at \$118,652,000. Deducting this cash income of \$118,652,000 from the gross income of \$144,221,000 leaves \$25,569,000, the estimated farm value of dairy products consumed in the farm home.

Miscellaneovs Factory Products.—The production of concentrated whole milk products amounted to 122,180,000 pounds in 1938. Evaporated milk, included in this figure, represented 105,592,000 pounds. The production of concentrated milk by-products reached a total of 38,984,000 pounds, of which evaporated skim milk represented 25,921,000 pounds. All concentrated milk products (whole milk and milk by-products combined) amounted to 161,164,000 pounds valued at \$11,774,000, representing increases of 17·3 per cent and 15·7 per cent respectively over the quantity and value reported in the previous year. Ice cream production, also included in the miscellaneous group, totalled 5,723,232 gallons valued at \$6,965,444.

Apparent Consumption of Butter and Cheese.—The total consumption of butter in 1938, including both the dairy and creamery make, was 356,797,062 pounds. The consumption per capita in 1938 was 31.83 pounds, compared with 32.31 pounds in 1937. Cheese consumption reached a total of 40,555,515 pounds in 1938, which represented 3.62 pounds on a per capita basis. The per capita consumption in 1937 was 3.58 pounds.

1.-Total Milk Production of Canada, by Provinces, 1936 to 1938

	Smill I	Milk used in	manufacture	Mill	c otherwise us	ed
Province and Year	Total milk production	On farms	In factories	Fluid sales	Consumed in farm homes	Fed on farms
Canada—	1b.	lb.	Hb.	11).	16.	lb.
1936 1937 1938	15,324,413,500 15,326,727,600 15,770,235,900	2,566,072,400 2,544,045,400 2,472,166,400	7,525,268,100 7,650,571,200 8,052,261,500	2,790,015,000 2,727,861,000 2,812,871,000	1,630,738,000 1,602,770,000 1,656,617,000	812,320,000 801,480,000 776,320,000
Prince Edward Island 1936	143,147,600 142,320,700 148,587,100	40,549,400	52,282,200 55,657,300 64,197,700	12,765,000	26,214,000 24,429,000 25,569,000	7,360,000 8,920,000 8,960,000
Nova Scotia— 1936	462,744,300 469,789,500 500,901,600	151, 335, 000	149,019,300 152,725,500 172,018,600	90,605,000	56,804,000	15,040,000 18,320,000 18,360,000
New Brunswick— 1936 1937 1938	383,415,800 380,412,700 420,002,300	146,603,000	95,663,700	53,689,000	66, 257, 000	15,600,000 18,200,000 17,760,000

1.-- Total Milk Production of Canada, by Provinces, 1936 to 1938-Concluded

		Milk used in	manufacture	Milk	otherwise use	d
Province and Year	Total milk production	On farms	In factories	Fluid sales	Consumed in farm homes	Fed on farms
0.1	lb.	lb.	lb.	lb.	Ib.	lb.
Quebec— 1936. 1937. 1938.	3,786,432,200 3,902,468,500 3,974,986,700	342, 171, 000	2,046,925,200 2,110,443,500 2,188,543,700	928, 184, 000	359,243,000 370,230,000 376,846,000	146,720,000 151,440,000 156,920,000
Ontario— 1936. 1937. 1938.	5,698,508,900 5,613,532,700 5,694,384,700	618,683,000		1,148,047,000 1,085,872,000 1,101,903,000		225,880,000 223,640,000 224,920,000
Manitoba— 1936	1,153,775,700 1,177,131,200 1,245,833,300	240,667,000	608,972,200	123, 153, 000	130,379,000	71,160,000 73,960,000 75,280,000
Saskatchewan— 1936. 1937. 1938.	1,713,385,400 1,678,753,500 1,619,551,700	569,367,000	561,956,500	117, 117, 000	282,353,000	156,880,000 147,960,000 118,120,000
Alberta— 1936. 1937. 1938.	1,482,738,600 1,501,267,600 1,662,322,500	368,791,000	654,639,600	152,067,000	187,610,000	151,400,000 138,160,000 135,600,000
British Columbia— 1936	500, 265, 000 461, 051, 200 503, 666, 000	65,879,000	178, 172, 200	164,409,000	36,040,000 31,711,000 34,815,000	22,280,000 20,880,000 20,400,000

II.-Production of Butter and Cheese in Canada, by Provinces, 1936 to 1938

Province and Year		Butter			Cheeso			
Province and 1 ear	Dairy	Creamery	Total	Farm-made	Factory	Total		
Canada— 1936	lb. 109,026,000 108,084,000 105,076,000	lb. 250,931,777 217,056,746 266,886,900	lb. 359,957,777 355,140,746 371,962,900	1b. 1,229,300 1,232,300 1,101,300	lb. 119,123,483 130,625,838 121,314,600	lb. 120,352,783 131,858,138 122,415,900		
Prince Edward Island— 1936	1,862,000 1,732,000 1,559,000	2,068,065 2,131,508 2,500,500	3,930,065 3,863,508 4,059,500	300	296,354 461,583 449,400	296, 654 461, 883 449, 700		
Nova Scotia— 1936	6,500,000 6,455,000 6,520,000	5,754,887 5,874,068 6,716,400	12,254,887 12,329,068 13,236,400		=	30,000 20,000 30,000		
New Brunswick— 1936	6,674,000 6,260,000 6,554,000	3,502,529 3,623,787 4,519,100	10, 176, 529 9,883,787 11,073,100	5,000	419,022 597,162 539,500	424, 022 602, 162 544, 500		
Quebec— 1936	14,099,000 14,494,000 13,045,000	74, 487, 024 74, 557, 923 79, 214, 400	88,586,024 89,051,923 92,259,400	255,000 256,000 225,000	25,375,881 30,362,479 27,554,100	25,630,881 30,618,479 27,779,100		
Ontario— 1936 1937 1938 75568—24	26, 240, 000 26, 365, 000 24, 783, 000	81,396,261	112,945,979 107,761,261 112,676,100	132,000	88,457,007 93,867,645 85,959,900	88,589,007 93,999,645 86,085,900		

II.-Production of Butter and Cheese in Canada, by Provinces, 1936 to 1938-Concluded

Descion and Van		Butter			Cheese			
Province and Year	Dairy	Creamery	Total	Farm-made	Factory	Total		
	lb.	lb.	lb.	lb.	lb.	lb.		
Manitoba—	10.500,000	02 011 050	DO 511 DEG	107 000	0 140 707	0 007 501		
1936 1937	10, 200, 000	23,011,056 24,343,485	33,511,056 34,543,485		2,140,765 2,923,873	2,307,765 $3,091,873$		
1938	10,710,000		36, 413, 700		3,344,200	3,509,200		
100011111111111111111111111111111111111	10,110,000	20,100,100	50, 215, 100	100,000	0.011,200	0,000,200		
Saskatchewan—								
1936	24,400,000		48, 497, 537	253,000	511,995	764,995		
1937	24, 200, 000	23,571,938	47,771,938	254,000	343,449	597,449		
1938	23,305,000	23,524,300	46,829,300	210,000	421,000	631,000		
Alberta—								
1936	16,000,000	25,491,105	41, 491, 105	319,000	1,451,735	1,770,738		
1937	15,600,000	26,323,562	41, 923, 562		1,838,589	2, 159, 589		
1938	15,600,000	31, 239, 300	46,839,300		2,451,800	2,701,800		
					_,			
British Columbia—								
1936	2,751,000	5,813,595	8,564,595		470,724	538,724		
1937,	2,778,000	5,234,214	8,012,214		231,058	307,058		
1938	3,000,000	5, 576, 100	8,576,100	90,000	594,700	684,700		

III.-Total Value of the Dairy Production of Canada, by Provinces, 1936 to 1938

	Total all	Bu	tter	CI	heese	Miscel-	Milk
Province and Year	products*	Dairy	Creamery	Farm- made	Factory	laneous factory products	otherwise used†
Canada— 1936 1937 1938	\$ 198,671,764 215,623,262 220,163,527	\$ 20,006,000 22,622,000 20,957,000	\$ 57,662,160 61,217,332 66,089,700	\$ 162,028 171,027 151,027	\$ 15.565,813 17,965,123 16,597,500	\$ 18,070,763 22,743,780 25,025,300	\$ 77,601,000 78,087,000 81,287,000
Prince Edward Island— 1936	1,631,915 1,757,451 1,878,527	369,000 398,000 359,000	503,987 571,970 687,600	28 27 27	42,112 64,705 62,900	44,788 48,749 52,000	531,000 536,000 571,000
Nova Scotia— 1936. 1937. 1938.	6,949,035 7,675,424 7,889,700	1,625,000 1,743,000 1,695,000	1,454,663 1,677,460 1,873,900	4,000 2,000 4,000	1 3	714,372 - 838,964 747,800	2,737,000 2,915,000 3,123,000
New Brunswick— 1936. 1937. 1938.	5,093,494 5,387,378 5,799,600	1,602,000 1,627,000 1,639,000	851,038 952,143 1,165,900	1,000 1,000 1,000	58,918 84,668 75,000	230,488 291,567 300,700	1,985,000 2,031,000 2,245,000
Quebec— 1936. 1937. 1938.	50, 437, 572 55, 711, 347 55, 702, 500	2,961,000 3,189,000 2,740,000	17, 176, 664 19, 390, 003 19, 407, 500	35,000 36,000 31,000	3,306,850 4,128,268 3,719,800	1,897,058 2,585,076 2,634,200	22,899,000 24,193,000 24,889,000
Ontario— 1936	81,829,748 87,646,648 89,153,400	4,828.000 5,800,000 5,328,000	20,733,275 22,029,642 23,028,000	16,000 17,000 16,000	11,547,806 12,932,563 11,776,500	11, 181, 667 14, 484, 443 16, 020, 900	30,624,000 29,600,000 30,199,000
Manitoba— 1936. 1937. 1938.	12,609,035 14,083,012 15,363,300	1,811,000 1,989,000 2,088,000	4,873,368 5,954,436 6,168,900	21,000 22,000 21,000	273,988 394,773 448,100	614,679 596,803 1,039,300	3,927,000 3,994,000 4,370,000
Saskatchewan— 1936	15,819,364 17,131,917 15,669,000	3,782,000 4,356,000 3,729,000	5,095,182 5,686,510 4,940,100	33,000 35,000 26,000	72,266 50,709 56,800	522, 916 542, 698 566, 100	5,198,000 5,280,000 5,193,000

III.-Total Value of the Dairy Production of Canada, by Provinces, 1936 to 1938-Concluded

	Total all	Bu	tter	Ch	eese	Miscel- laneous	Milk	
Province and Year products*		Dairy	Creamery	Farm- made	Factory	factory	otherwise used†	
4.11	\$	8	8	\$	\$	\$	8	
Alberta— 1936	15,097,623 17,210,925 18,791,900	2,560,000 2,964,000 2,839,000	5,501,767 6,443,107 7,247,500	35,000 42,000 30,000	190,469 267,802 355,500	667,387 952,016 988,900	5,108,000 5,411,000 6,068,000	
British Columbia— 1936. 1937. 1938.	9,203,978 9,019,160 9,915,600	468,000 556,000 540,000	1,472,166 1,512,061 1,561,300	17,000 19,000 22,000	73,404 41,635 102,900	2,197,408 2,403,464 2,675,400	4,592,000 4,127,000 4,629,000	

IV.—Gross Farm Income, Value of Farm Consumption, and Cash Income from Dairy Production, 1936 to 1938

Province and Year	Gross income	Value of products consumed in farm homes	Cash income	
	\$	8		
Canada— 1936. 1937. 1938.	131,098,000 137,636,000 144,221,000	23,883,000 24,767,000 25,569,000	107,215,000 112,869,000 118,652,000	
Prince Edward Island— 1936 1937. 1938	1,143,000 1,190,000 1,281,000	441,000 427,000 428,000	702,000 763,000 853,000	
Nova Scotia— 1936. 1937. 1938.	4,793,000 5,160,000 5,539,000	1,241,000 1,333,000 1,406,000	3,552,000 3,827,000 4,133,000	
New Brunswick— 1936. 1937. 1938.	3,640,000 3,709,000 4,135,000	1, 172, 000 1, 132, 000 1, 252, 000	2,468,000 2,577,000 2,883,000	
Quebec— 1936. 1937. 1938.	34, 055, 000 37, 070, 000 38, 228, 000	3,994,000 4,488,000 4,499,000	30,061,000 32,582,000 33,729,000	
Ontario 1936	52,338,000 53,612,000 54,963,000	6,988,000 7,006,000 7,017,000	45,350,000 46,606,000 47,946,000	
Manitoba— 1936. 1937. 1938.	8,362,000 9,013,000 9,803,000	1.935,000 1,969,000 2,115,000	6,427,000 7,044,000 7,688,000	
Saskatchewan— 1936. 1937. 1938.	11,319,000 11,727,000 11,907,000	4,419,000 4,563,000 4,702,000	6,900,000 7,164,000 7,205,000	
Alberta— 1936. 1937. 1938.	10,079,000 11,067,000 12,682,000	2,928,000 3,089,000 3,319,000	7, 151, 000 7, 978, 000 9, 363, 000	
British Columbia— 1936. 1937. 1938.	5,369,000 5,088,000 5,683,000	765,000 760,000 831,000	4,604,000 4,328,000 4,852,000	

^{*} The data in this column include the total value of skim milk and buttermilk. For all Canada this amounted to \$10,065,000 in 1938, as compared with \$9,814,000 in 1937, and \$9,604,000 in 1936.
† Consists of milk sold for domestic use valued at plants, and milk consumed in farm homes and milk fed valued at farms. Pasteurizing and bottling costs, estimated at 1½ cents per quart are included in the value of milk sold.

V.-Production and Value of Miscellaneous Products of Dairy Factories, 1936 to 1938

Item		Production			Value	
rem	1936	1937	1938	1936	1937	1937
Concentrated Whole Milk Products— Condensed milk. Evaporated milk	1b.		lb. 9,686,000 105,592,000	\$ 724,175 4,585,838	\$ 1,004,567 6,161,142	\$ 853,000 7,121,000
Milk powder Cream powder Condensed coffee	71,074,564 2,735,74 45,244 85,860	5,454,997 36,336	6,795,000 29,000	351,890 15,403 11,006	833,480 12,962 11,443	1,038,000 10,000 11,000
Total	81,928,106	108,301,377	122,180,000	5,688,312	8,122,436	9,033,000
Concentrated Milk By-Products— Condensed skim milk Evaporated skim milk Skim milk powder Condensed buttermilk Buttermilk powder Casein Sugar of milk	4,515,713 185,655 18,529,782 921,783 2,210,953 1,335,910 186,423	726,993 18,492,326 576,914 2,542,081 1,572,314	670,000 25,921,000 1,243,000 4,339,000 1,498,000	233,402 4,889 1,237,059 21,594 103,936 134,518 11,186	259,911 19,524 1,422,768 11,916 147,230 181,953 11,296	261,000 18,000 1,994,000 26,000 251,000 173,000 18,000
Total	27,886,219	29,098,486	38,984,000	1,746,584	2,051,598	2,741,000
Ice cream	gal. 4,925,767	gal. 5,538,554	gal. 5,723,232	5,729,256 1,225,811	6,689,083 1,814,804	6,965,444 2,079,322

VI.—Consumption of Butter and Cheese in Canada, 1934 to 1938

Description	Unit of measure	1934	1935	1936	1937	1938
Butter-						
Stocks at January 1. Production—Creamery. Dairy. Imports.	lb.	22,026,655 234,852,961 109,918,000 2,873,562	32,422,719 240,918,799 114,161,999 148,541	*32,610,519 250,931,777 109,026,000 117,281	36,671,543 247,056,746 108,084,000 65,918	28, 495, 201 266, 886, 900 105, 076, 000 5, 231, 838
Total supplies Exports.	44	369,671,178 428,300		392, 685, 577 5, 128, 800	391,878,207 4,096,600	405,689,939 3,893,400
Stocks at December 31	44	369.242,878 32,422,719	379,955,058 32,302,519	387,556,777 36,671,543	387, 781, 607 28, 495, 201	401,796,539 44,999,477
Total consumption	No. lb.	336,820,159 10,824,000 31·12		350,885,234 11,028,000 31.82	359, 286, 406 11, 120, 000 32-31	356,797,062 11,209,000 31-83
Cheese-						
Stocks at January 1. Production—Factory. Farm-made. Imports.	lb.	15,973,921 99,346,617 1,011,300 946,401	17, 196, 375 100, 427, 390 1, 232, 148 1, 274, 130	119,123,483 1,229,300	130,625,838 1,232,300	28.559,446 121,314,600 1,101,300 1,386,645
Total supplies	46	117,278,239 61,167,800			157,294,373 88,955,300	152,361,991 80,989,100
Stocks at December 31	48	56,110,439 17,196,375		64,264,971 24,025,899	68,339,073 28,559,446	71,372,891 30,817,376
Total consumption Population Consumption per capita	No. Ib.	38,914,064 10,824,000 3.60	39.848.737 10,935.000 3.64	40,239,072 11,028,000 3.65		40,555,515 11,209,000 3.62

^{*} From January 1, 1936, stocks include carloads of butter in transit.

POULTRY PRODUCTS

The estimated number of farm poultry in Canada, as revealed in the Live Stock and Poultry Survey of June 1, 1938, was 57,237,000. The total value of the farm poultry population at June 1, 1938, based on average values reported by crop correspondents amounted to \$42,350,000. The numbers, values, and average prices of the different classes of poultry follow: Hens and chickens, 53,774,600 valued at \$36,793,000 or 68 cents per bird; turkeys, 2,039,600 valued at \$3,859,000 or \$1.89 per bird; geese, 807,000 valued at \$1,167,000 or \$1.45 per bird; and ducks, 615,800 valued at \$531,000 or 86 cents per bird. Compared with the corresponding figures for 1937 the total number of farm poultry declined 273,100 or approximately one-half of one per cent, while the value registered a decline of \$604,000 or 1.4 per cent.

The numbers of laying hens as shown in Table I are based on the survey figures quoted above. The total number in 1938 is estimated at 23,089,000, which is 42.9 per cent of the total number of hens and chickens on farms at June 1, and represents a decline of 772,000 or 3.2 per cent as compared with the number in 1937. The estimated production of farm eggs in 1938 was 213.399.000 dozens, which was 6.044.000 dozens or 2.8 per cent less than production in 1937. This decline was evident in all provinces except New Brunswick, Manitoba and British Columbia. These estimates indicate an average production of 111 eggs per hen in 1938 compared with 110 eggs in 1937. The advance in the production of eggs per hen is attributed to flock improvement, while the decline in the number of laying hens and the consequent reduction in the total production of eggs was caused by the short grain harvest in 1937 and higher feed prices during the fall and winter of 1937-38. estimated value of farm egg production amounted to \$40,653,000 in 1938, an increase of \$2,173,000 or 5.6 per cent over the corresponding estimates for the preceding year. The average price per dozen was 19 cents in 1938 as compared with 17.5 cents in 1937.

The estimated consumption of eggs and poultry is shown in Table III. Total consumption in 1938 amounted to 233,471,546 dozens of eggs and 200,839,206 pounds of poultry. The per capita consumption of eggs was 20.83 dozens in 1938 as compared with 21.49 dozens in 1937 and that of poultry was 17.91 pounds in 1938 compared with 18.14 pounds in 1937. The per capita consumption of poultry by classes is shown in pounds as follows: Hens and chickens 15.50; turkeys 1.58; geese 0.58; ducks 0.25.

The estimates shown in this statement were made by the Dominion Bureau of Statistics on the advice of the Provincial Departments of Agriculture and the Poultry Marketing Service of the Dominion Department of Agriculture.

I.—Production and Value of Farm Eggs In Canada, by Provinces, 1935 to 1938

Province	Year	Laying hens	Average production per hen	Total egg production	Average value per dozen	Gross farm value
		No.	No.	dozen	cents	\$
Canada	1935 1936 1937 1938	24,594,000 23,798,000 23,861,000 23,089,000	109 111 110 111	223,540,000 219,491,000 219,443,000 213,399,000	17 18·5 17·5 19	37,763,000 40,776,000 38,480,000 40,653,000
Prince Edward Island	1935	480,000	91	3,640,000	17	619,000
	1936	448,000	92	3,435,000	18	618,000
	1937	428,000	91	3,246,000	17	552,000
	1938	425,000	90	3,188,000	19	606,000
Nova Scotia	1935	575,000	91	4,360,000	22	959,000
	1936	527,000	92	4,040,000	23	929,000
	1937	519,000	93	4,022,000	21	845,000
	1938	495,000	93	3,836,000	22.5	863,000
New Brunswick	1935	619,000	95	4,900,000	20	980,000
	1936	598,000	94	4,684,000	21	984,000
	1937	573,000	94	4,489,000	20	898,000
	1938	584,000	93	4,526,000	21.5	973,000
Que bec	1935	3,280,000	112	30,613,000	19	5,816,000
	1936	3,428,000	114	32,566,000	20	6,513,000
	1937	3,431,000	116	33,166,000	19	6,302,000
	1938	3,286,000	116	31,765,000	21	6,671,000
Ontario	1935	8,265,000	119	81,961,000	19	15,573,000
	1936	8,286,000	121	83,550,000	21	17,545,000
	1937	8,210,000	120	82, 100, 000	19.5	16,010,000
	1938	7,820,000	120	78, 200, 000	21.5	16,813,000
Manitoba	1935	1,937,000	104	16,787,000	14.5	2,434,000
	1936	1,896,000	104	16,432,000	15.5	2,547,000
	1937	1,915,000	104	16,597,000	15	2,490,000
	1938	2,102,000	104	18,200,000	16	2,912,000
Saskatchewan	1935	5,208,000	99	42,966,000	12.5	5,371,000
	1936	4,365,000	99	36,011,000	13.5	4,861,000
W. L. College	1937 1938	4,330,000	98 99	35,362,000 32,315,000	13·5 14	4,774,000
Alberta	1935	3,025,000	101	25,460,000	12.5	3,183,000
	1936	2,757,000	100	22,975,000	13	2,987,000
	1937	2,972,000	99	24,519,000	12	2,942,000
	1938	2,779,000	100	23, 158, 000	13	3,011,000
British Columbia	1935	1,205,000	128	12,853,000	22	2,828,000
	1936	1,493,000	127	15,801,000	24	3,792,000
	1937	1,483,000	129	15,942,000	23	3,667,000
	1938	1,681,000	130	18,211,000	23.5	4,280,000

II.—Production and Value of Farm Eggs in Canada, 1929 to 1938

Year	Egg producing hens on farms	Average pro- duction per hen	Total egg production	Average value per dozen	Total value of egg production
	No.	No.	dozen	cents	\$
1929. 1930. 1931. 1932. 1933.	28,641,500 29,052,600 25,407,000 24,806,600 24,922,000	95 95 112 111 107	226,745,000 230,000,000 237,131,000 229,461,000 222,254,000	30 27 17 13 12	68,023,500 62,100,000 40,312,000 29,830,000 27,577,000
1934. 1935. 1936. 1937.	24,688,000 24,594,000 23,798,000 23,861,000 23,089,000	108 109 111 110 111	223,272,000 223,540,000 219,494,000 219,443,000 213,399,000	15 17 18-5 17-5 19	34,454,000 37,763,000 40,776,000 38,480,000 40,653,000

III.-Consumption of Eggs and Poultry in Canada, 1935 to 1938

	Total	Deduc	ctions	Apparent		Consump-
Product and Year	supply	Exports	Stocks at Dec. 31	consump- tion	Population	tion per capita
	doz.	doz.	doz.	doz.	No.	doz.
Eggs—						
1935	249,501,734	1,300,744	3,315,007	244,885,983	10,935,000	22.3
1936	244,222,790	1,203.814	4,749,444	238, 269, 532	11,028,000	21 · 6 21 · 4
1937 1938	245,286,002 239,145,946	1,602,011 1,842,538	4,742,248 3,831,862	238, 941, 743 233, 471, 546	11,120,000 11,209,000	20.8
1000,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100				22,200,000	
C-tal Boulton	lb.	lb.	lb.	lb.		lb.
Total Poultry— 1935	216,857,818	2.991.356	11,435,954	202, 430, 508	10,935,000	18-5
1936	224, 260, 154	4,919,317	16, 194, 650	203, 146, 187	11,028,000	18-4
1937	223,327,610	11,104,366	10,406,810	201,816,434	11,120,000	18-1
1938	216,577,130	3,512,765	12, 225, 159	200,839,206	11,209,000	17-9
Hens and Chickens—						
1935	183,074,060	2,101,695	7,896,438	173,075,927	10,935,000	
1936	191,899,338	3,428,369	11,399,911	177,071,058	11,028,000	
1937	190,043,611	9,842,235	6,123,611	174,077,765	11,120,000	15.6
1938	184, 142, 411	2,881,655	7, 497, 109	173,763,647	11,209,000	15.5
Turkeys—						
1935	22,365,015	663,448	3, 184, 849	18,516,718	10,935,000	
1936	21,731,149	1,259,513	4,463,690		11,028,000	1 - 4
1937 1938	22,588,790 22,618,584	1,068,753 488,642	4,118,184 4,379,717	17,401,853 17,750,225	11,120,000 11,209,000	
1900	22,010,004	400,042	4,010,111	17,700,220	11,205,000	1.6
Geese-			400 555	E 050 005	10 007 000	0.0
1935	7,653,124	82,650	199,777	7,370,697	10,935,000 11,028,000	0.0
1936	7,198,977 7,318,432	121,912 72,051	159, 232 70, 219	6,917,833 7,176,162	11, 120, 000	0.6
1937 1938	6,686,219	74,943	91.842	6,519,434	11, 209, 000	
1000	0,000,213	12,030	51,022	0,010,101	22,200,000	Ů,
Ducks-	0 50 50 50 50	110 500	484 000	0 407 -00	10 095 000	0.4
1935.,		143,563	154,890		10,935,000	
1936	3,430,690	109,523 121,327	171,817 94,796	3,149,350 3,160,654	11, 028, 000 11, 120, 000	
1937 1938	3,376,777	67,525	256.491	2,805,900	11, 209, 000	0.
100011111111111111111111111111111111111	0,120,010	01,020	200, 201	2,000,000	*1,200,000	0

Note.—The total supply of eggs includes the farm production, plus an estimated production of 20,500,000 dozens produced elsewhere, and stocks on hand at the beginning of the year. The poultry supply represents the estimated dressed weight of poultry sold off farms and killed for consumption on farms, plus stocks at the beginning of the year. The apparent consumption is obtained by deducting the exports during the year and the stocks at the end of the year, from the total supply.

75568—3

TOBACCO

A.—STATISTICAL REVIEW

Estimates of the area, production and value of commercial tobacco for the years for which data are available from 1720 to 1938 are shown in the tables which follow. The data are shown in summary form in Table I. Data for the years prior to 1912 were secured from the census records and include all tobacco grown. Table II shows the distribution by provinces for the years 1929 to 1938. In Table III, statistics in detail by types and provinces are shown for the years 1932 to 1938 with five-year averages 1932–36. Estimates for the 1938 crop are subject to revision when the entire crop is marketed. Estimates for previous years have been revised in co-operation with the Tobacco Division of the Department of Agriculture.

Extending through the latter half of the nineteenth century and the first decade of the present century there was a slow but steady expansion in tobacco production. Following a large crop from an area of 25.826 acres in 1911, a decline set in which lasted until 1916. Increasing demand and rising prices resulted in increases in plantings during the next three years. The 1919 crop of 33,770,000 pounds was disposed of easily at prices ranging up to 65 cents per pound. A still larger crop in 1920, estimated at 48,000,000 pounds, and a sharp break in prices resulted in a large unmarketable surplus being carried over into the next year and production dropped to 13,249,000 pounds in 1921. A period of readjustment followed, during which there were alternate periods of expansion and contraction in the industry. The trend on the whole has been upward, with the years of peak production occurring in 1925 with 29,266,000 pounds, 1927 with 43,828,700 pounds, 1932 with 53,987,000 pounds, and 1935 with 55,470,400 pounds. Following the relatively small crop of 46,116,300 pounds in 1936, production jumped to 72,093,400 pounds in 1937 and again to 98,427,900 pounds in 1938.

The major development in the industry has taken place during the years since 1926 and has been due almost entirely to the phenomenal increase in the production of flue-cured tobacco, particularly in Ontario. Total plantings of the flue-cured type showed an uninterrupted expansion from 7,570 acres with a production of 6,239,800 pounds in 1927 to 28,063 acres with production totalling 27,847,000 pounds in 1932. Following the sharp break in prices in 1931 and 1932, when the average price of flue-cured dropped from 32·0 cents in 1930 to 16·4 cents in 1932, a system of voluntary acreage control was introduced in Ontario in 1933 and has been in effect since that date. Marketing of the crop is now controlled by the Flue-Cured Marketing Association of Ontario and under the stimulus of a minimum price fixed annually by the Association, cultivation of this crop has expanded rapidly. The 1938 crop of flue-cured totalled 75,395,200 pounds from 63,730 acres as compared with 55,374,000 pounds from 55,347 acres in 1937 and 24,596,500 pounds from 35,878 acres in 1936.

The gross farm value of the total commercial tobacco crop of 1938 is estimated at \$19,563,000 as compared with \$17,139,200 in 1937, the first time the value of the crop has exceeded the previous record established in 1919. The values used in these estimates are based on average farm prices. The outstanding feature of the price data in recent years is the very low level reached in 1932

when as a result of unfavourable marketing conditions and the general downward trend in prices the average price received for the 1932 crop was only 11.5 cents per pound. Average prices rose steadily during the next five years, partly owing to increased prices for all types of tobacco, but particularly as a result of the rapid expansion in the production of flue-cured tobacco, which commands a higher price than other types. Prices paid for the 1938 crop were generally lower than the corresponding prices in 1937 as a result of the very large production in 1938 and the carry-over from the large crop of the previous year.

A considerable amount of tobacco is grown locally in the province of Quebec for home consumption and does not enter the ordinary commercial channels. Statistics are not collected but the volume of non-commercial production has been roughly estimated at 5,000,000 pounds.

I.—Acreage, Production and Value of the Commercial Crop of Leaf Tobacco in Canada, 1720 to 1938

Year ¹	Planted Area	Average Yield per acre	Total Production	Average Farm Price	Gross Farm Value
	acres	lb.	Ib.	cents per lb.	\$
20			48,038	-	
84	-		166,054	-	
51-2	-	-	1,210,555	-	
70,	-	-	1,595,932	-	
80	***	-	2,527,962	-	
90	4,765	898	4,277,936		
00	11,906	946	11,266,732	-	
10	18,928	, 931	17,632,342	-	
11	25,826	1 150	0.000.000	-	
12	5,650	1,150	6,500,000		
13	11,000 9,750	1,136 1,026	12,500,000 10,000,000		
14	9,000	1,020	9,000,000	-	
15	5,891	1,000	5,943,000		
16	7.930	1,000	8,495,000		
17 18	13, 403	1.062	14, 232, 000		
19	31,586	1,069	33,770,000	46-0	15.548.
20	53,114	905	48, 088, 500	12.3	5,893,
20	36,891	885	32,660,061	18.4	4,375,
21	11,809	1,122	13, 249, 000	18.0	2,393,
81	16,628	_		_	-,,
22	25,762	1,007	25, 947, 600	17-0	4,547,
23	23,932	890	21, 297, 000	16.0	3,518,
24	21,317	878	18,710,700	23-3	4,358,
25	27,825	1,052	29,266,000	23.9	7,004,
26	33, 356	864	28,824,000	25.6	7,379,
27	44,028	995	43,828,700	20.5	8,978,
28	43, 138	973	41,955,800	16.2	6,811,
29	37,696	790	29,782,100	20-5	6,103,
30	41,444	886	36,716,400	19.5	7, 163,
30	48,352	909	43,971,300	17.9	7,884,
31	54,936	933	51,248,400	13.9	7, 105,
31	58,329	1 000			0.150
32	53,966	1,000	53, 987, 000	11.5	6, 178,
33	46,898	957	44,904,200	14.5	6,524,
34	40,962 47,117	946	38,734,900	18·6 19·6	7,218, 10,870.
35	54, 993	1,177 839	55, 470, 400 46, 116, 300	20.3	9,374.
36	69,028	1.044	72,093,400	23.8	17, 140.
37 38 ²	83,745	1, 175	98, 427, 900	19-9	19, 563.

¹ Figures in italics are census returns which include total tobacco crop. Data for 1720 and 1734 show production in New France and are from records of censuses taken during the French regime.

2 Subject to revision when total crop is marketed.

H.—Acreage, Production and Value of the Commercial Crop of Leaf Tobacco in Canada, by Provinces, 1929 to 1938

		Quebec			Ontario)	British Columbia			
Year	Area	Pro- duction	Value	Area	Pro- duction	Value	Area	Pro- duction	Value	
	acres	000 lb.	\$	acres	000 1ъ.	\$	acres	000 lb.	\$	
929	9,300	8,380	1,248,000	28,300	21,318	4,841,200	96	84	14,400	
.930	8,450	8,021	792,500	32,805	28,617	6,348,400	189	79	22,100	
931	7,330	6,340	335,900	47,360	44,770	6,750,700	246	138	18,600	
932	8,520	7,952	328,900	45, 106	45,760	5,786,400	340	275	62,900	
933	6,090	6,095	269,800	40,271	38,500	6,206,300	537	309	48,500	
934	8,175	7,070	831,600	32,329	31, 400	6,337,500	458	265	49,200	
935	5,425	5,965	641,400	41,675	49,490	10,226,300	17	16	2,400	
936	8,678	9,111	844,800	46, 191	36,883	8,504,900	124	122	24,300	
937	7,734	8,678	1,098,500	60,819	63,026	15,964,700	475	389	77,000	
938	9,950	10,875	1,206,500	73,415	87,158	18, 293, 300	380	395	63,200	

III.—Acreage, Production and Value of the Commercial Crop of Leaf Tobacco in Canada, by Types, 1932 to 1938, with Five-Year Averages, 1932-1936

Description	Year	Planted Area	Average Yield per acre	Total Production	Average Farm Price	Gross Farm Value
Flue-cured		acres	lb.	lb.	cents per lb.	\$
Canada	1932	28,063	992	27,847,000	16-4	4,559,200
	1933	30,548	891	27,214,700	19-5	3,298,000
	1934	24,727	894	22,100,900	24-7	5,445,200
	1935	30,922	1,138	35,199,300	24-5	8,622,400
	1936	35,878	686	24,596,500	29-3	7,195,500
Average	19 32 –1936	30,028	912	27,391,700	22·7	6,224,100
	1937	53,347	1,038	55,374,000	27·3	15,107,600
	1938	63,730	1,183	75,395,200	22·4	16,885,700
Quebec	1936	53	1,011	53,600	29·3	15,705
	1937	420	786	330,000	27·3	90,090
	1938	1,850	811	1,500,000	19·0	285,000
Ontario	1932	27,754	995	27,615,200	16·3	4,501,300
	1933	30,042	897	26,936,400	19·5	5,252,600
	1934	24,289	900	21,860,000	24·7	5,399,400
	1935	30,905	1,138	35,183,600	24·5	8,620,000
	1936	35,701	684	24,421,400	29·3	7,155,500
Average	1932-1936	29,738	915	27, 203, 300	22·7	6,185,800
	1937	52,452	1,042	54, 655, 000	27·3	14,940,500
	1938	61,500	1,195	73, 500, 000	22·5	16,537,500
British Columbia	1932	309	750	231,800	25·0	57,900
	1933	506	550	278,300	16·3	45,400
	1934	438	550	240,900	19·0	45,800
	1935	17	925	15,700	15·0	2,400
Average	1936 1932–1936 1937 1938	279 475 380	980 637 819 1,040	121,500 177,600 389,000 395,200	20·0 19·8 19·8 16·0	24,300 35,200 77,000 63,200

III.—Acreage, Production and Value of the Commercial Crop of Leaf Tobacco in Canada, by Types, 1932 to 1938, with Five-year Averages, 1932-1936—Concluded

Description	Year	Planted Area	Average Yield per acre	Total Production	Average Farm Price	Gross Farm Value
Burley-		acres	lb.	lb.	cents per lb.	\$
Ontario	1932	18,852	1,050	16.644,600	7·0	1,165,100
	1933	8,727	1,102	9.619,900	8·5	817,700
	1934	6,740	1,180	7,950,000	10·0	795,000
	1935	8,470	1,363	11,546,100	12·0	1,385,500
Average	1936	8,025 10,168 6,170 9,215	1,216 1,093 1,032 1,156	9,762,000 11,104,500 6,371,400 10,657,700	11·5 9·5 13·3 13·8	1,122,600 1,057,200 844,200 1,470,800
Dark-						
Canada	1932	1,500	1,000	1,500,000	8·0	120,000
	1933	1,502	1,294	1,943,600	7·0	136,000
	1934	1,300	1,223	1,590,000	9·0	143,100
	1935	2,300	1,200	2,760,000	8·0	220,800
	1936	2,465	1,095	2,700,000	8·4	226,800
Average	1932-1936	1,815	1, 158	2,098,700	8·1	169, 300
	1937	2,428	923	2,241,000	9·1	204, 100
	1938	3,000	1, 133	3,400,000	9·4	319, 000
Quebec	1937	231°	1,043	241,000*	10·0	24, 100
	1938	300	1,333	400,000	8·5	34, 000
Ontario	1932	1,500	1,000	1,500,000	8·0	120,000
	1933	1,502	1,294	1,943,600	7·0	136,000
	1934	1,300	1,223	1,590,000	9·0	143,100
	1935	2,300	1,200	2,760,000	8·0	220,800
	1936	2,465	1,095	2,700,000	8·4	226,800
Average	1932-1936	1,813	1,158	2,098,700	8·1	169,300
	1937	2,197	910	2,000,000	9·0	180,000
	1938	2,700	1,111	3,000,000	9·5	285,000
Cigar Leaf						
Quebec	1932	4,450	930	4,138,500	4·0	165,600
	1933	3,950	1,020	4,029,000	5·0	201,500
	1934	2,950	783	2,310,000	10·0	231,000
	1935	2,754	1,250	3,443,000	10·8	371,800
	1936	4,800	1,005	4,824,000	11·6	559,600
Average	1932-1936	5,781	992	\$,748,900	8. 2	\$05,900
	1937	4,827	1,212	5,852,000	12. 5	731,500
	1938	5,065	1,225	6,200,000	9. 9	616,000
Large Pipe—						
Quebec	1932	2,520	1,175	2,961,000	3·5	103,600
	1933	1,725	1,075	1,854,400	3·0	55,600
	1934	3,420	1,111	3,800,000	10·5	399,000
	1935	1,963	1,030	2,022,000	9·5	192,100
	1936	3,220	1,218	3,923,400	6·0	235,400
Average	1932-1936 1937 1938	2,570 1,396 1,960	1,133	2,912,200 1,710.000 2,400,000	6·8 10·0 8·5	. 197, 100 171, 000 204, 000
Small Pipe—						
Quebec	1932	1,550	550	852,500	7·0	59,700
	1933	415	510	211,600	6·0	12,700
	1934	1,805	532	960,000	21·0	201,600
	1935	708	706	500,000	15·5	77,500
	1936	605	513	310,400	11·0	34,100
Average	1932-1936	1,017	557	566, 900	13.6	77, 100
	1937	860	634	545, 000	15.0	81, 800
	1938	775	484	375, 000	18.0	67, 500

^{*}Including some Broadleaf.

B.—PRODUCTION AND MARKETING SURVEY OF THE COMMERCIAL TOBACGO CROP OF 1938

In co-operation with the Tobacco Division of the Department of Agriculture, the Dominion Bureau of Statistics issued on May 3 a report on the production and marketing of the 1938 commercial crop of leaf tobacco. Information on which this report is based has also been supplied through courtesy of the Flue-cured and Burley Marketing Associations of Ontario, the various companies which handle the crop, and the Bureau's crop correspondents.

SUMMARY

An all-time high in Canadian tobacco production was registered in 1938, when a commercial crop of almost one hundred million pounds was harvested. Revised estimates show a production of 98,400,000 pounds with a farm value of approximately \$20,000,000. This represents an increase of 26,300,000 pounds or 36.5 per cent over the 1937 production estimated at 72,000,000 pounds with a gross farm value of \$17,000,000. Production in 1938 more than doubled in volume and value the average production during the ten-year period 1927–1936. The total planted acreage is estimated at 83,745 as compared with 69,000 in 1937 and 55,000 in 1936.

Weather conditions throughout the growing and harvesting season were for the most part unusually favourable. Ample supplies of soil moisture resulted in an exceptionally good stand of flue-cured tobacco on the lighter soils in Ontario and the average yield of approximately 1,200 pounds per acre was the highest ever recorded in the province. Generally speaking, the quality of the crop was of fairly high order. This was particularly true of that portion grown in the Old Belt. The Quebec flue-cured leaf, although bright in colour was thin and lacking in body, due no doubt to abnormally heavy precipitation during the ripening period. The burley crop was of slightly better quality than the crop of the previous year. Cigar and pipe varieties in the northern Quebec areas were of good average quality, although not up to the standard of the 1937 crop. Cigar leaf grown in the Yamaska Valley was of very poor quality due to excessive precipitation during the growing and harvesting season.

As a result of the large crop and heavy stocks carried over from the previous season, prices of flue-cured tobacco averaged 22·4 cents per pound as compared with 27·3 cents for the 1937 crop. There will be a carry-over of flue-cured into the 1939-40 season estimated at 8 to 9 million pounds. In the case of burley tobacco, somewhat lower supplies than in the previous year resulted in an average price of 13·8 cents per pound as against 13·3 cents per pound for the 1937 crop. A large proportion of the crop of cigar leaf is still unsold and prices will probably average 2 to 3 cents lower than prices received for the previous year's crop.

PRODUCTION

Increased production in 1938 was evident in all varieties of tobacco grown in the three producing provinces with the exception of the small aromatic pipe varieties, production of which is confined to Quebec. The phenomenal expansion in the industry was largely due to the extension of the cultivation of flue-cured tobacco, which is concentrated in southern Ontario in the counties

of Norfolk, Essex, Elgin and Oxford. New growing areas extended into Brant and Middlesex during the 1938 season. Production of this type, which in 1927 in this province amounted to only 6,200,000 pounds from 7,550 acres, increased to 54,700,000 pounds from 52,450 acres in 1937 and again to 73,500,000 pounds from 61,500 acres in 1938. Of the 1938 acreage, 57,500 acres were allotted within the Flue-Cured Marketing Association and the remaining 4,000 acres planted by independent growers. The Old Belt allotment was 5,000 acres of which approximately 4,300 were planted. Considerable interest was shown in the cultivation of flue-cured tobacco in Quebec this season, and acreage expanded to 1,850 acres from 420 in 1937 and 53 in 1936. The Jolictte Flue-cured Tobacco Ccoperative Association was formed early in the season to take care of the crop which amounted to 1,500,000 pounds.

Of the 10,500 acres allotted for burley tobacco, only 9,215 acres were planted, all but 15 of which were within the Burley Marketing Association. The main increase in dark tobaccos was in Ontario where plantings of the One-Sucker type were increased by 500 to 600 acres over the area grown in 1937. There was a slight increase in the planted acreage of cigar leaf and an increase of 40 per cent in the acreage of large pipe, in Quebec, while the area under small pipe varieties declined by about 10 per cent.

The total acreages of various types grown in 1938, with bracketed figures for 1937, were as follows: Flue-cured 63,730 (53,347); burley 9,215 (6,170); dark 3,000 (2,428); cigar leaf 5,065 (4,827); large pipe 1,960 (1,396); small pipe 775 (860).

Production in pounds of the various types was as follows: Flue-cured 75,395,200 (55,374,000); burley 10,657,700 (6,371,400); dark 3,400,000 (2,241,000); cigar leaf 6,200,000 (5,852,000); large pipe 2,400,000 (1,710,000); small pipe 375,000 (545,000). The total production for all types was 98,427,900 (172,093,400).

CROP CONDITIONS

Ontario.—The early growth period, covering the transplanting season and field growth up to July 15, was exceptionally favourable on the whole for the tobacco crop in the Old Belt of Ontario. The average minimum temperature was only slightly lower than normal. Precipitation was higher than normal and fairly evenly distributed throughout the period in all parts of the district. Damage from wind and hail was practically negligible, except for a severe electric storm which occurred on July 10. This storm, including a few hail stones and a very severe wind and rain, damaged a few crops in Colchester South. The area which was severely damaged did not exceed 50 acres, but slight leaf breakage was general.

Although transplanting extended over a longer period than usual, it was begun early and the bulk of the crop was planted earlier than normal. Destruction from cutworms was negligible, but considerable damage was eaused by wireworms of the small stalk-boring type. Clover worms and heart worms were more numerous than usual. The stand obtained from all three types of tobacco was adequate to supply all the plants needed for transplanting and any replanting.

While weather conditions in the New Belt were unusual in some respects, rainfall was about normal. A killing frost occurred on the night of May 24, necessitating much replanting. A sandstorm on June 6 completely destroyed an estimated area of 5,000 acres and damaged an additional 5,000 acres. Soil moisture was abundant, but not excessive during the transplanting season. Rainfall was scanty in some sections between the middle of June and July 9, with the result that the tobacco developed an excellent root system, but some crops, particularly those planted early, suffered from drought. A timely rain occurred on July 9 and 10 over practically the whole district, but was accompanied by hail, which damaged an estimated 1,500 acres. Five hundred to six hundred acres, mainly in Kent County, were destroyed by excessive rainfall which occurred at topping time.

Harvesting operations were started by some growers on July 15, though topping was not general until the beginning of the week of July 18. Rapid growth resulted in a lower average of leaves per plant, but the majority of the leaves were of good size. Topping of the burley crop was begun on July 18, and harvesting of both burley and dark tobacco was earlier than normal.

Quebec.—As a whole the year 1938 was favourable for tobacco growing in the Northern District. Good seedlings were produced at an early date, and the prevailing warm weather promoted a rapid start and steady growth of the crop. Ninety per cent of the flue-cured tobacco was transplanted between May 20 and June 12, while transplanting of all types was nearly completed by June 20. Hailstorms which occurred on August 2, 25 and 27, damaged two hundred acres of the flue-cured crop and 1,200 acres of cigar and pipe types, while frost injured 40,000 pounds of flue-cured and 80 acres of cigar tobacco. With the exception of the portion damaged by hail, the general quality of the crop was better than average.

Excessive rainfall during August and September interfered slightly with the ripening of the crop, particularly the flue-cured, which was somewhat lacking in body and fine texture, although bright in colour. Priming flue-cured started about July 25, and was completed the last week of September. The curing season for the air-cured types was favourable, with the exception of a ten-day rainy period in late September.

In the Southern District, early season weather conditions were generally unfavourable for seedling growth, resulting in delayed field planting. Soil moisture was ample in early June but a warm, dry period from June 15 to 25 necessitated heavy replanting. During the first fortnight of July wide variations in temperature were unfavourable for the crop, but conditions were more favourable during the last part of the month. Wind storm on July 14 did considerable damage to the crop, and on July 29 a hail storm practically ruined many crops in the L'Ange-Gardien parish. During August, very favourable weather prevailed and the crop looked quite normal.

Black root-rot occurred in some seedbeds. Cutworms and wireworms were very active for a short time, but infestation was not widespread and grasshoppers were localized in regions of light sandy soil. There was some damage from pole sweat, as heavy rain occurred at the end of September; however, during October curing conditions were nearly ideal.

British Columbia.—Transplanting commenced May 13, became general May 28, and was practically completed by June 11. Generally the crop was well established, being early, clean and fairly uniform, in spite of warm, dry weather.

Hot, dry weather prevailed during July, and on the lighter soils the crop suffered. Harvesting was begun August 1, and was quite general by August 4. Ninety per cent of the crop was harvested by September 30. Curing conditions were good, and the quality of the flue-cured tobacco was fair.

During September the weather was very dry and sunny, with little wind. The cured leaf graded out more orange than bright and with considerable discard, the result of the dry season.

MARKETING AND PRICES

The flue-cured market in the New Belt opened on November 3. Owing to the unprecedented size of the crop and the heavy stocks of old leaf on hand from the large crop of the previous year, the market was particularly dull. This was in distinct contrast with the market in the fall of 1937, when, owing to heavy buying for both domestic and export account, the entire crop was disposed of easily at an average price of 27.3 cents per pound, which was 2.8 cents above the negotiated minimum. That portion of the 1938 crop sold on a cash basis, amounting to some 65,000,000 pounds, averaged very close to the negotiated minimum of 22.5 cents per pound. Arrangements were made through the Ontario Tobacco Sales Cooperative Ltd., to grade, process and pack the surplus of about 8,000,000 pounds of unsold leaf, part of which is owned by members of the Association. This tobacco has all been packed and some cash advances made to growers, but no portion of this surplus has as yet been sold. Practically the entire Quebec crop of one and one-half million pounds of fluecured tobacco was sold at an average price of 18.5 cents per pound. Some 350,000 pounds of the British Columbia crop was taken off the growers' hands through the medium of cash advance contracts whereby an average of about 9 cents per pound was paid in cash and 50 per cent of the original advance guaranteed when the crop is sold.

The burley market opened on December 6. In contrast to the dullness of the flue-cured market, sales were brisk and practically the entire crop of 10,657,000 pounds was bought up during the first three days at an average negotiated price of 13.8 cents per pound.

At least 90 per cent of the production of dark tobacco in Ontario is grown under contract with the various purchasing companies. About 80 per cent of the crop of some 3,000,000 pounds was marketed by February 15 at an average price of 9.5 cents per pound. The marketed portion of the Quebec crop brought 8 to 9 cents per pound, but about 75 per cent of the crop is still in the growers' hands.

Nearly 60 per cent of the cigar leaf production is still unsold and as the requirements of the cigar manufacturers for the year have already been met, the unsold portion of the crop will enter "large pipe" channels and prices will probably be low. The Yamaska Valley crop will not be marketed before midsummer and owing to the poor quality of the crop, prices will average 2 to 3 cents lower than in 1937.

About 50 per cent of the large pipe production, which is estimated at 2,400,000 pounds, has been sold at an average price of 8.5 cents per pound. The small aromatic pipe varieties brought 18 cents per pound.

Estimates of the area, production and value of the 1938 commercial tobacco crop are shown in detail in the table which follows.

IV.-Acreage, Production and Value of the 1938 Commercial Crop of Leaf Tobacco

Description	Planted Area	Average Yield per acre	Production	Average Farm Price	Gross Farm Value
	acres	pounds	pounds	cents per lb.	\$
Flue-cured—					
Quebec. Ontario British Columbia	1,850 61,500 380	811 1,195 1,040	1,500,000 73,500,000 395,200	19 · 0 22 · 5 16 · 0	285,000 16,537,500 63,200
Total	63,730	1,183	75,395,200	22 · 4	16,885,700
Burley-					
Ontario	9,215	1,156	10,657,700	13.8	1,470,800
Dark-	9 - 11			44	
Quebec (Northern District) Ontario	300 2,700	1,333 1,111	400,000 3,000,000	8·5 9·5	34,000 285,000
Total	3,000	1,133	3,400,000	9.4	319,000
Cigar Leaf—					
Quebec (Northern District) (Southern District)	3,190 1.875	1,254 1,173	4,000,000 2,200,000	11·0 8·0	440,000 176,000
Total	5,065	1,225	6,200,000	9.9	616,000
Large Pipe—					
Quebec (Northern District)	1,960	1,224	2,400,000	8.5	204,000
Smali Pipe—					
Quebec (Northern District)	775	484	375,000	18.0	67,500
Totai—Canada	83,745	1,175	98,427,900	19.9	19,563,000

RECAPITULATION BY PROVINCES

Quebec-					
Cigar leaf	5,065	1,225	6,200,000	9.9	616,000
Large pipe	1,960	1,224	2,400,000	8.5	204,000
Large pipe	775	484	375,000	18.0	67,500
Flue-cured	1,850	811	1,500,000	19.0	285,000
Dark	300	1,333	400,000	8.5	34,000
Total	9,950	1,093	10,875,000	11-1	1,206,500
Ontario-					
Flue-cured	61,500	1.195	73,500,000	22-5	16,537,500
Burley	9,215	1,156	10,657,700	13.8	1,470,800
Dark	2,700	1,111	3,000,000	9-5	285,000
Total	73,415	1,187	87, 157, 700	21.0	18,293,300
British Columbia—					
Flue-cured	380	1,040	395,200	16.0	63,200
Total—Canada	83,745	1,175	98,427,900	19.9	19,563,000

Note. - Estimates subject to revision when the total crop is marketed.

CLOVER AND GRASS SEED

Source: Markets Service of the Plant Products Division, Department of Agriculture.

The following information is compiled from reports supplied by the Plant Products Division field staff.

Red Clover.—The total production of this seed for 1938 is estimated at 6,272,000 pounds as compared with 1,075,000 pounds in 1937, 1,912,000 pounds

in 1936, 4,500,000 pounds in 1935, and 1,900,000 pounds in 1934. The increased production in 1938 was largely due to the mild winter of 1937–38 and to an exceptional catch of seeds in Ontario in 1937. The quality of the seed is generally good.

Alsike.—The commercial production of alsike for 1938 is estimated at 7,003,000 pounds as against 567,000 pounds in 1937, 5,230,000 pounds in 1936, 1,420,000 pounds in 1935 and 425,000 pounds in 1934. The production increased sharply to normal proportions after several years of short crops in the main alsike growing areas of Central and Western Ontario. The crop was also good in British Columbia. The quality of the seed is generally fair.

Alfalfa.—The production of seed of this important legume for 1938 is estimated at 4,053,000 pounds as compared with 4,143,000 pounds in 1937, 2,575,000 pounds in 1936, 1,100,000 pounds in 1935 and 1,650,000 pounds in 1934. The quality of the seed is good. Saskatchewan leads in production with 2,300,000 pounds, exceeding Ontario for the first time.

Sweet Clover.—The total yield of this seed for 1938 is estimated at 10,520,000 pounds in comparison with 8,305,000 pounds in 1937, 3,110,000 pounds in 1936, 3,750,000 pounds in 1935 and 4,000,000 pounds in 1934. The production was the largest on record, being almost double the average for the last five years. Manitoba was the largest producer, Ontario next, then Alberta and Saskatchewan. The quality of the seed is generally good.

Timothy.—The total production of timothy seed in 1938 is estimated at 4,218,000 pounds as compared with 7,467,000 pounds in 1937, 6,838,000 pounds in 1936, 12,000,000 pounds in 1935 and 5,000,000 pounds in 1934. The quality of the new crop is good. The main decrease in production in Ontario and British Columbia was, in part, due to the low prices received by growers in 1937.

Crested Wheat Grass.—The production of crested wheat grass seed increased in 1938 and is estimated at 1,685,000 pounds as against 642,550 pounds in 1937, 650,000 pounds in 1936, and 280,000 pounds in 1935. This seed is of good quality and mainly of Canadian Fairway strain which is highly regarded for its drought-resisting characteristics.

Brome Grass.—The total yield of brome grass for 1938 is estimated at 2,350,000 pounds as compared with 1,195,550 pounds in 1937, 810,000 pounds in 1936, 3,150,000 pounds in 1935. The production of this crop is confined to the Prairie Provinces and the increased yield in 1938 was the result of heavier precipitation in Saskatchewan and Alberta during the growing season. The quality of the 1938 crop was very good.

Western Ryc Grass.—Production of this grass seed for 1938 amounted to 85,000 pounds as compared with 20,000 pounds in 1937, 45,000 pounds in 1936 and 200,000 pounds in 1935. Saskatchewan and Alberta were the only producing provinces this year. Admixture with couch grass, to which western rye grass is related botanically, is mainly responsible for the declining popularity of this crop.

Canada Blue Grass.—The total yield of this grass seed, which is mainly produced in Southwestern Ontario, is estimated at 112,000 pounds in 1938 as compared with 300,000 pounds in 1937, 90,000 pounds in 1936 and 150,000 pounds in 1935.

Bent Grasses.—The production of bent grass seeds in the Maritime Provinces for 1938 is estimated at 7,100 pounds, consisting of P.E.I. Bent 3,500 pounds, Velvet Bent 600 pounds, Creeping Bent 3,000 pounds. The reduced production was largely due to wet weather conditions at the time of harvesting and to reduced acreage resulting from low competitive prices.

I.—Commercial Production and Value of Clover and Grass Seed, in Canada, by Types and Provinces, 1936 to 1938

	193	6	1937	7	193	8
Description	Production	Value	Production	Value	Production	Value
Red Clover	lb.	\$	lb.	\$	lb.	\$
Maritime ProvincesQuebec.Ontario.Alberta.British Columbia.	32,000 300,000 1,500,000 10,000 70,000	6,400 60,000 275,000 1,500 12,600	50,000 780,000 15,000 230,000	11,000 156,000 3,000 44,000	42,000 570,000 5,235,000 75,000 350,000	5,040 74,100 575,850 8,250 35,875
Total	1,912,000	355, 500	1,075,000	214,000	6,272,000	699, 115
Alsike						
New Brunswick. Quebec. Ontario. Alberta. British Columbia.	15,000 5,100,000 75,000 40,000	2, 250 615, 000 10, 250 7, 000	20,000 - 393,300 - 153,500	5,000 80,526 30,700	1,000 6,830,000 80,000 92,000	751.300 6,400 10,120
Total	5, 230, 000	634,500	566, 800	116, 226	7,003,000	767, 930
Alfalfa						
Ontario Manitoba. Saskatchewan Alberta. British Columbia	1,700,000 320,000 300,000 216,000 39,000	315,000 48,000 59,000 32,400 5,850	2,618,000 350,000 900,000 200,000 75,000	654,500 70,000 180,000 40,000 16,500	960,800 400,000 2,300,000 315,000 77,000	192,160 72,000 368,000 56,700 15,400
Total	2,575,000	460, 250	4,143,000	961,000	4,052,800	704,260
Sweet Clover	1,400,000	101,000	1,465,000	73,250	1,720,000	47,300
Manitoba	1,175,000 400,000 135,000	46,000 20,000 5,420	6,000,000 381,000 459,000	300,000 19,050 22,450	8,500,000 300,000 —	255,000 9,000
Total	3,110,000	172,420	8,305,000	414,750	10, 520, 000	311,300
Timothy						
Prince Edward Island. New Brunswick. Quebec. Ontario. Manitoba. Alberta. British Columbia.	200,000 75,000 1,536,000 2,627,000 100,000 600,000 1,700,000	9,000 3,375 61,440 105,080 5,000 30,000 68,000	250,000 75,000 1,145,000 4,507,000 70,000 420,000 1,000,000	10,000 3,000 45,800 180,280 3,500 16,800 35,000	100,000 35,000 600,000 2,457,000 - 856,000 170,000	5,000 1,750 30,000 110,565 - 29,960 5,100
Total	6,838,000	281,895	7,467,000	294,380	4,218,000	182, 375
Canada Blue Grass						
Ontario	89,600	5,376	300,000	24,000	112,000	12,320
Crested Wheat Grass						
Manitoba. Saskatchewan Alberta	500,000 150,000	125,000 42,000	62,550 380,000 200,000	18,765 114,000 60,000	65,000 1,250,000 370,000	6,500 100,000 44,400
Total	650,000	167,000	642,550	192,765	1,685,000	150,900

I.—Commercial Production and Value of Clover and Grass Seed, in Canada, by Types and Provinces, 1936 to 1938—Concluded

	193	6	193	7	193	8
Description	Production	Value	Production	Value	Production	Value
	lb.	\$	lb.	\$	lb.	\$
Brome Grass						
Manitoba	100,000 250,000 460,000	9,000 15,000 36,800	650,000 145,550 400,000	65,000 14,555 36,000	350,000 500,000 1,500,000	31,500 31,250 90,000
Total	810,000	60,800	1,195,550	115,555	2,350,000	152,750
Western Rye Grass						
SaskatchewanAlberta	30,000 15,000	1,350 810	20,000	1,520	60,000 25,000	3,300 1,250
Total	45,000	2,160	20,000	1,520	85,000	4,550
Fescues						
Alberta	10,000	2,500	6,000	1,800	10,740	1,074
Bent Grasses						
Maritime Provinces	29,000	11,850	20,500	8,350	7, 100	3,275

II.—Acreage of Commercial Crops of Clover and Grass Seed in Canada, by Types and Provinces, 1935 to 1938

Description	1935	1936	1937	1938
	acres	acres	acres	acres
Red Clover				
Prince Edward Island	25 160 3,007 30,840 97 1,807	350 3,040 10,667 102 690	550 7,300 170 2,200	4,207 38,300 600 2,904
Total	35, 936	14,896	10,220	46,011
Alsike				
New Brunswick. Quebec. Ontario. Alberta. British Columbia.	225 12, 200 225 385	160 40,800 650 402	3, 100 1, 235	39, 110 604 762
Total	13,035	42,012	4,515	40,488
Alfalfa		11		
Ontario. Manitoba. Saskatchewan. Alberta. British Columbia.	5,300 457 1,810 1,160 387	13,750 2,460 2,750 1,980 310	22,360 2,650 7,840 1,550 685	6,625 2,107 12,416 1,598 392
Total	9,114	21,250	35,085	23,138
-				

II.—Acreage of Commercial Crops of Clover and Grass Seed in Canada, by Types and Provinces, 1935 to 1938—Concluded

	1	}		
Description	1935	1936	1937	1938
	acres	acres	acres	acres
Sweet Clover				
Ontario. Manitoba Saskatchewan. Alberta. British Columbia.	7,085 8,200 2,260 732	2,150 6,950 1,950 815	8,230 25,650 1,760 2,640	6,560 27,950 1,125 4,850 1,500
Total	18,277	11,865	38,280	41, 985
Timothy				
Prince Edward Island	107	1,740	2,125	1 150
New Brunswick. Quebec. Ontario. Manitoba. Alberta. British Columbia.	1,803 35,240 52,940 912 13,250 10,912	860 13,535 23,622 887 5,560 15,120	832 10, 165 42, 570 650 3, 842 9, 110	1,150 395 6,120 19,950 - 6,200 1,200
Total	115, 164	61,324	69, 294	35,015
Canada Blue Grass				
	1 100	1 050	0.040	4 400
Ontario	1,100	1,950	2,840	1,120
Crested Wheat Grass				
Manitoba Saskatchewan. Alberta	3,110 2,900 1,410	4,750 1,460	760 3,120 1,912	810 12,805 3,120
Total	7,420	6,210	5,792	16,735
Brome Grass				
	0.405	1 110	7 700	0.440
Manitoba Saskatchewan Alberta	2,425 18,200 9,240	1,110 2,125 4,110	5,560 1,340 3,880	2,110 4,125 12,750
Total	29,865	7,345	10,780	18,985
Western Rye Grass				
Saskatchewan	2,100 310	360 200	280	450 195
Total	2,410	560	280	645
Fescues		480	100	
Alberta British Columbia	160	150	100	100
Total.	160	150	100	100
Bent Grasses				
Maritime Provinces	405	475	430	320

APICULTURE

This report contains statistical data on apiculture including estimates of the numbers of beekeepers and apiaries, the production of honey, and the value of honey and beeswax in Canada for the years 1924 to 1938. These data have been revised in co-operation with the Dominion and the Provincial Departments of Agriculture. While data for the earlier years are incomplete, these revised estimates present a reasonably accurate picture of the general trend of honey production over the past fifteen years.

PRODUCTION

Honey production is steadily increasing in Canada. The revised estimate of the 1938 crop shows a production of 37,268,700 pounds as compared with 23,196,600 pounds in 1937 and 16,839,800 pounds in 1924, the earliest year for which estimates for all provinces are available. The 1938 crop was not only of record proportions but was also of very good quality. The largest proportion of this production was in Ontario where a record crop estimated at 15,708,000 pounds of better-than-average quality honey was harvested. As evidence of the expansion which has taken place in this industry in the past fifteen years, the Ontario crop alone in 1938 was practically equal to the entire Canadian production in 1924. While production has increased in all provinces except Nova Scotia and New Brunswick, expansion since 1924 has been most marked in the Prairie Provinces. The combined production in these three provinces in 1924 amounted to 785,300 pounds. In 1938, production totalled 14,752,100 pounds. Honey produced in western Canada is of generally high quality due to the abundance of sweet clover in the Prairie Provinces. The almost phenomenal expansion in production in these provinces has been largely due to the introduction of sweet clover and the expansion in acreage of this crop.

Numbers of beekeepers and colonies have shown a gradual increase since 1924. This increase has been sharply marked in the Prairie Provinces, where there were over 8,000 beekeepers in 1938 reporting 97,000 colonies as compared with less than 2,000 beekeepers and 14,000 colonies in 1924. Numbers in all provinces totalled 27,400 beekeepers and 394,000 colonies in 1938 as compared with 22,200 beekeepers and 282,000 colonies in 1924.

Production of honcy in 1938, totalling 37,268,700 pounds, was distributed by provinces in order of magnitude as follows, with the estimates for the 1937 crop within brackets: Ontario 15,708,000 (8,000,000); Manitoba 9,539,900 (6,748,600); Quebec 5,108,200 (3,588,700); Saskatchewan 2,794,200 (1,142,500); Alberta 2,418,000 (2,160,000); British Columbia 1,584,100 (1,427,500); Nova Scotia 55,000 (46,100); New Brunswick 50,000 (67,000); Prince Edward Island 11,300 (16,200).

The production of becswax in 1938 was estimated at 446,850 pounds as compared with 286,650 pounds in 1937.

PRICES

While production of honey has more than doubled during the past fifteen years, prices have declined during the same period. The average price received by producers for the 1938 crop was estimated at 7.8 cents per pound as compared with 9.0 cents per pound in 1937 and 12.4 cents per pound in 1924. Total value of production, including beeswax, was estimated at \$3,027,400 for the 1938 crop as compared with \$2,163,700 in 1937 and \$2,183,100 in 1924.

Average prices paid to producers for the 1938 honey crop in cents per pound, with comparative estimates of prices for the 1936 and 1924 crops respectively within brackets, are as follows: Prince Edward Island 12 (12, 16); Nova Scotia

14 (16, 16); New Brunswick 14 (17, 15); Quebec 10 (10, 16); Ontario 7 (9, 10); Manitoba 6·5 (7, 25); Saskatchewan 8·5 (9, 21); Alberta 7 (7·5, 25); British Columbia 15 (15, 22).

The total value of honey and wax, estimated at \$3,027,400 in 1938, was distributed by provinces in order of magnitude as follows, with the corresponding estimates for 1937 within brackets: Ontario \$1,157,100 (\$753,100); Manitoba \$655,000 (\$517,200); Quebec \$529,500 (\$373,700); Saskatchewan \$247,700 (\$107,600); British Columbia \$243,400 (\$219,900); Alberta \$178,200 (\$170,900); Nova Scotia \$7,900 (\$7,600); New Brunswick \$7,200 (\$11,700); Prince Edward Island \$1,400 (\$2,000).

MARKETING

Reports indicate that at least 70 per cent of the Ontario crop of 1938 is now out of the hands of the beekeepers. Movement of Ontario honey interprovincially will be at least normal and it is expected that the export market will absorb a little more than normal. Prior to 1921 Ontario was practically the only province in which production was in excess of local requirements and the surplus was readily absorbed by the other provinces. Increased production in the western provinces has resulted in the development of export markets. Exports, particularly to the United Kingdom, have shown a steady increase from 1,721,965 pounds during the honey crop year ending July 31, 1926, to 2,842,923 pounds during the year ending July 31, 1938. Nearly all western Canadian honey is used as a table product. Manitoba honey is sold in all the western provinces. Normally it does not move eastward, except in the case of a poor crop in the East as in 1937, because prices in Ontario are generally lower. Saskatchewan and British Columbia do not as yet produce sufficient honey to meet local requirements and the surplus production in Alberta finds a market in these two prov-The 1938 Alberta crop moved into market channels rapidly and, although inces. prices were not as high as in previous years, all large lots were in the hands of the wholesalers by the end of November. Prices quoted for British Columbia are relatively higher than for the other provinces as there are very few commercial producers in this province and only a small proportion of the crop reaches the wholesale market.

Statistical data on which this report is based are shown in the following tables. Production of honey in 1937 and 1938 is shown by provinces in Table I. Numbers of beekeepers and hives, production and prices of honey, and values of honey and beeswax for the years 1924 to 1938 are shown for Canada, by provinces, in Table II.

I .- Revised Estimates of Canadian Honey Production, by Provinces, 1938 as compared with 1937

Province	1937	1938	Increase (+) or De- erease (-) compared with 1937
	lb.	lb.	lb.
Prince Edward Island. Nova Scotia. New Brunswick Quebec Ontario. Manitoba. Saskatchewan Alberta. British Columbia.	16,200 46,100 67,000 3,588,700 8,000,000 6,748,600 1,142,500 2,160,000 1,427,500	11,300 55,000 50,000 5,108,200 15,708,000 9,539,900 2,744,200 2,418,000 1,584,100	$\begin{array}{c} -4,900\\ +8,900\\ -17,000\\ +1,519,500\\ +7,708,000\\ +2,791,300\\ +1,651,700\\ +258,000\\ +156,600\\ \end{array}$
Canada	23,196,600	37,268,700	+14,072,100

II.—Numbers of Beekepers and Colonies, Production of Honey, and Value of Honey and Beeswax in Canada, by Provinces, 1924 to 1938

				Но	ney		77.1
Province and year	Bee- keepers	Colonies	Average production per hive	Total produc- tion	Average price to producers	Total value	Value of honey and wax
	No.	No.	lb.	lb.	cents	\$	\$
Canada— 1924 1925 1926 1927 1928 1929 1930 1931 1032 1933 1934 1935 1936 1937	22,200 22,600 22,300 22,800 22,700 22,300 24,200 24,600 23,100 24,300 24,800 26,300 27,900 27,400	282,000 309,400 307,500 323,800 335,700 345,900 362,100 350,500 349,300 328,200 328,400 357,000 370,800 370,800 386,400 393,900	60 65 63 72 66 67 68 72 61 77 82 75 86 60 95	16,839,800 19,977,400 19,525,600 23,230,800 22,224,600 23,164,000 24,486,500 25,106,400 21,169,300 27,062,800 26,814,800 31,938,100 23,196,600 37,268,700	12·4 12·1 11·8 11·0 9·2 8·3 8·0 7·5 9·2 8·3 8·6 9·2 8·3 8·5 9·2	2,084,900 2,413,600 2,406,900 2,752,600 2,440,600 2,127,900 2,037,600 2,000,900 1,588,400 2,165,500 2,479,700 2,228,500 2,701,200 2,067,700 2,891,000	2,183,100 2,527,300 2,520,300 2,555,600 2,255,5600 2,133,600 2,095,200 1,663,200 2,256,900 2,256,900 2,2574,700 2,822,900 2,163,700 3,027,400
Prince Edward Island— 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937	5 5 5 10 12 14 15 15 15 14 13 12 11	90 100 110 150 180 190 200 210 210 200 180 200 240 260 250	29 25 23 27 53 74 50 62 60 31 48 58 62 45	2,600 2,500 4,000 9,500 14,000 10,000 13,000 12,000 5,500 9,500 14,000 16,200 11,300	16·0 15·0 13·0 12·0 12·0 11·0 10·0 11·0 14·0 14·0 12·0 12·0	400 400 400 500 1,100 1,700 1,100 1,200 700 1,300 2,000 1,900 1,400	400 400 500 1,100 1,800 1,200 1,500 1,200 1,300 2,100 2,100 1,400
Nova Scotia— 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937.	200 200 220 250 270 270 260 260 260 250 250 250 260 260	1, 250 1, 250 1, 250 1, 450 1, 470 1, 470 1, 410 1, 480 1, 380 1, 360 1, 180 1, 160 1, 260 1, 280	64 60 39 34 38 42 57 39 35 51 37 40 52 37	80,000 75,000 52,900 47,900 55,200 63,700 79,800 57,100 48,500 69,000 51,000 47,100 60,000 46,100 55,000	16·0 15·0 15·0 13·0 12·0 12·0 11·0 11·0 11·0 11·0 11·0 14·0 16·0 14·0	12,800 11,200 7,900 6,200 6,600 7,600 8,800 5,700 5,300 9,000 7,100 7,500 10,200 7,400 7,700	13,400 11,700 8,300 6,500 6,900 7,900 9,200 6,000 5,500 9,200 7,300 7,700 10,400 7,900
New Brunswick— 1924	360 350 370 400 420 410 390 370 380 370 360 350 370 470 520	2,200 2,100 2,200 2,100 2,100 2,100 1,700 1,700 1,500 1,500 1,300 1,300 1,400	28 23 23 31 30 44 39 39 28 42 32 32 32 32 31	61,000 48,000 51,000 65,000 64,000 87,000 67,000 37,000 42,000 42,000 42,000 42,000 67,000 50,000	15·0 17·0 16·0 16·0 12·0 11·0 11·0 11·0 11·0 11·0 11·0 11	9,200 8,200 8,200 10,400 10,200 0,7400 6,700 4,100 5,500 8,800 6,700 7,100 11,400 7,000	9,600 8,600 10,900 10,700 10,900 7,700 4,300 4,300 6,900 7,300 11,700 7,200

II.—Numbers of Beekeepers and Colonies, Production of Honey, and Value of Honey and Beeswax in Canada, by Provinces, 1924 to 1938—Continued

Province				Но	ney		N. l
and year	Bee- keepers	Colonies	Average production per hive	Total produc- tion	Average price to producers	Total value	Value of honey and war
	No.	No.	lb.	lb.	cents per lb.	\$	\$
Quebec-					per au-		
1921	6,320	64,420	53	3,398,000	-	-	570,300
1922 1923	7,560 7,200	85,160 83,990	40	3,393,800	_	-	549,800
1924	7,420	89,830	46 48	3,886,700 4,351,600	16.0	695,600	658, 100 728, 400
1925	7,730	100, 160	42	4, 190, 400	15.0	616,300	645, 400
1926	7,780	96, 240	40	3,833,600	16.0	600,100	628, 400
1927	7,890 7,930	101,900	43	4,348,200	16.0	678,400	710,400
1928 1929	7,970	105,710 106,330	38 38	4,024,900	15·0 11·0	610,800 435,200	639,600 455,700
1930	7,820	108,280	41	4,402,800	10.0	455,300	476,800
1931	7,740	103,900	54	5,633,400	10.0	595, 100	623, 100
1932	7,530	94,890	28	2,651,200	8.0	216,300	226,500
1933	5,800 5,560	70,530 53,760	57 68	4,024,900 3,654,800	11·0 9·8	447.800 356,700	462,400
1935	5,800	60,000	67	4, 013, 600	9.5	380,800	369,500 397,100
1936	6,800	71,500	75	5,395,600	8-9	482,900	503,500
1937	7,300 6,800	69,800 70,100	51 73	3,588,700	10-0	358,900	373,700
1555	0,000	70, 100	10	5, 108, 200	10.0	510,800	529,500
Ontario—							
1024	10,000	160,000	68	10.880,000	10.0	1,088,000	1,139,300
1925 1926	9,800 8,700	167,000 165,000	76 76	12,692,000	10.0	1,269,200	1,329,000
1927	8,500	162,000	82	12,540,000 13,284,000	10.0	1,254,000	1,313,100 1,251,900
1928	8,000	168,000	80	13,440,000	8.0	1,075,200	1, 125, 900
1929	7,500	172,000	79	13,588,000	7.0	951,200	996,000
1930	9,400 9,250	175,000 178,000	69 73	12,075,000 12,994,000	6.5	784,900	821,900
1932	9,100	182,000	58	10,556,000	7.0	844,600 738,900	884,400 773,700
1933	9,000	190,000	75	14, 250, 000	7-4	1,054,500	1,106,000
1934	8,500	187,000	80	14,960,000	8.4	1,256,600	1,309,100
1935	8,300 8,200	193,000 195,000	74 65	14,282,000	7.4	1,056,900	1,114,900 1,062,300
1937	8,100	200,000	40	8,000,000	9.0	720,000	753,100
1938	8,300	204,000	77	15,708,000	7.0	1,099,600	1, 157, 100
Manitoba—							
1921	390	5,310	85	450,000	25.0	112,500	117,800
1922	720	11,050	91	1,000,000	18-0	180,000	188,500
1923	960	13,590 10,840	112	1,521,000	15.0	228,200	238,900
1925	1,400	19, 160	60 107	651,000 2,054,000	15·0 15·0	97,600 308,100	102,200 322,600
1926	1,760	21,450	82	1,762,000	15.0	264,300	276,700
1927	1,990	30, 240	122	3,694,000	13.0	480,200	502,800
1928	1,960 2,000	29,680 33,320	97 103	2,887,000	13.0	375,300	393,000
1930	1,960	43,340	117	3,426,000 5,055,000	9-0	411,100 455,000	430,500 476,400
1931	1,750	31,000	119	3,676,000	7.0	257,300	269,400
1932	2,350	32,780	180	5,886,300	7.0	412,000	431,400
1933	2,600 3,130	28,000 41,700	136 112	3,800,000 4,669,200	8.0	304,000	317,700
1935	3,300	51,420	97	4,978,000	7.0	409,300 366,900	425,700 387,200
1936	3,440	51,310	159	8,135,500	7-0	585,400	616,400
1937	3,550 3,360	55, 190 56, 650	122	6,748,600	7-0 6-5	489,300	517,200
1000	0,000	50,050	100	9,539,900	0.9	620, 100	655,000
Saskatchewan-							
1918	-	9	122	1,100	21.0	200	200
1919	_	6 40	100 70	2,800	28·0 30·0	200 800	200 800
1921	_	70	83	5,800	30-0	1,700	1,800
1922		230	70	16,000	29-0	4,700	4,900
1923	80	1 200	52	21,700	25.0	5,500	5,800
1924	410 540	1,200	66 78	79,300 162,200	23.0	18,100 36,800	18,900 38,500
1926	870	1,590	107	170,300	22.0	37,800	39,600
1927	930	3,800	132	501,000	21.0	104,200	109,100
1928,	1,180	5,170	82	422,300	18.0	77,300	80,900

II.—Numbers of Beckeepers and Colonies, Production of Honey, and Value of Honey and Beeswax in Canada, by Provinces, 1924 to 1938—Concluded

Province				Но	ney-		Value of
and year	Bee- keepers	Colonies	Average production per hive	Total produc- tion	Average price to producers	Total value	honey and wax
	No.	No.	lh.	lb.	cents per lb.	8	8
Saskatchewan-con.	1,240	6,430	63	404.900	18.0	74,100	77,600
1930	1,350	7,320	94	685,600	15.0	102,800	107,600
1931	1,470	7,310	83	609,500	12.0	73,100	76,600
1932	1,720	8,800	48	420,100	11.0	45,500	47,600
1933	1,900	8,820	105	925,500	10.4	96,300	99,700
1934	2,350	11,220	58	647,200	11.0	71,200	73,500
1935	2,700 3,000	14,100 17,100	75 154	1,051,400 2,636,300	11.0	115,700 263,600	120,000 273,600
1936 1937	3,900	23,700	48	1,142,500	9.0	102,800	107,600
1938	4,000	23,780	118	2,794,200	8.5	237,500	247, 700
Alberta-	160			55,000	25.0	13.800	14,500
1924 1925	140	2,040	56	115,000	20.0	23,000	24, 100
1926	150	2,560	84	215,000	17.0	36,600	38,300
1927	200	3,450	87	300,000	20.0	60,000	62,800
1928	200	4,150	81	336,000	20.0	67,200	70,400
1929	150	4,560	114	522,000	15.0	78,300	82,00€
1930	170	4,450	222	990,000	10-0	99,000	103,700
1931	190	5,500	166	915,000	10.0	91,500	95,800
1932	320 320	5,700 5,800	96	550,000	8.0	90.000	46,100 93,600
1933		9,390	160	1,500,000	10.0	150,000	155,300
1935	1,000	13,060	84	1,100,000	9.0	99,000	103,500
1936,	1,150	12,180	152	1,850,000	9.0	166,500	173,500
1937	1,240	13,730	157	2,160,000	7.5	162,000	170,900
1938	1,090	15,230	159	2,418,000	7.0	169,300	178,200
British Columbia-							
1924	2,410	14,600	46	679.300	22.0	149,400	156,400
1925	2,430	15,500	41	638,300	22.0	140,400	147,000
1926	2,470	16,990	53	898,300	22.0	197,600	206,900
1927	2,640	18,710	53	986,700	22.0	217,100	227,400
1928		19,210	51	985,700	22.0	216,900	227, 100
1929		19,540	51	989,400	16.0	158,300	165,800
1930,	2,820	20,440	55	1, 121, 300	11.0	123,300	129,100
1931	2,940	21,410	53	1,144,400	11.0	125,900	131,800
1932		21,930 22,010	46 53	1,007,200	12.0	120,900 157,200	126,600 161,400
1933	3,080	22,260	68	1, 104, 400	14.5	219,300	224,600
1935		22,750	57	1, 291, 200	15.0	193,700	198,900
1936	3,080	21,000	54	1, 129, 700	15.0	169,500	173,800
1937	3,080	21,020	68	1,427,500	15.0	214,000	219,900
1938		21,020	75	1,584,100	15.0	237,600	243,400

III.—Exports and Imports of Honey, for Canada, for the Crop Years ended July 31, 1934 to 1938, and for the Eight Months ended March 31, 1939

37 Jin Turke 94	Expo	rts	Imports	
Year ending July 31	Quantity	Value	Quantity	Value
	lb.	8	lb.	\$
1933-34 1934-35 1935-36 1936-37 1937-38 1938-39 (eight months ended March 31)	2,110,979 2,300,572 2,228,429 2,668,581 2,842,923 4,205,122	183,662 210,006 170,019 225,387 240,539 323,653	31,644 47,334 29,744 32,510 131,059 23,825	3,252 3,730 2,365 3,790 12,661 3,560

IV.—Imports of Package Bees into Canada, 1927 to 1938

Calendar Year	Dollars	Calendar Year	Dollars
1927	70,912	1933	67,897
1928	64,334	1934	149, 161
1929	60,551	1935	166, 123
1930	69,866	1936	175,815
1931	57,873	1937	193,312
1932	52, 271	1938	190, 272

The trade in honey during the twelve months ending July 31, 1938, was somewhat heavier than during the previous honey crop year. Exports amounted to 2,842,923 pounds with a valuation of \$240,539 as compared with 2,668,581 pounds valued at \$225,387 during the year previous. Exports for the eight months ending March 31, 1939, amounted to 4,205,122 pounds as compared with 2,541,443 pounds during the eight months ending March 31, 1938, an increase of 48 per cent in volume and 35 per cent in value. Imports amounted to 23,825 pounds valued at \$3,560 during the eight months ending March 31, 1939, as compared with 117,044 pounds valued at \$11,300 during the eight months ending March 31, 1938.

Imports of package bees were valued at \$190,272 in 1938 as compared with \$193,312 in 1937. Imports are from the Southern States and are largely for replacement of colonies lost through disease and winter-killing.

FUR FARMING

Source: Fur Statistics Branch, Dominion Bureau of Statistics

The number of fur farms reported for the whole of Canada in 1937 was 9,179, an increase over the preceding year of 1,037. Following are the numbers of the various kinds of fur farms included in the total for 1937: Fox farms, 7,602; mink, 1,425; raccoon, 83; muskrat, 25; fitch, 19; beaver, 11; marten, 5; nutria, 4; fisher, 3; and badger, 2 farms. All farms which raise foxes are classified as fox farms, but in the miscellaneous group, the classification is made according to the kind for which the largest number is recorded. For example, a farm with 10 marten and 4 fisher would be classified as a marten farm, but if the numbers were reversed, the farm would be counted with the fisher farms.

The Dominion Bureau has an arrangement for co-operation with the provinces of Manitoba, Saskatchewan and British Columbia, whereby the returns are collected by the provincial game departments and then forwarded to the Dominion Bureau for compilation. This arrangement avoids the necessity for duplicate inquiries to fur farmers. For the other provinces, excepting Prince Edward Island and New Brunswick, the game departments furnish annual lists of licensed fur farmers, and these lists are used in the collection of returns by the Bureau. For Prince Edward Island the Bureau's list of fur farms, although inclusive of all the larger farms, is probably incomplete with regard to properties where not more than one or two pairs of foxes are kept. For New Brunswick, where, as in Prince Edward Island, licences are not required, the Bureau's list is believed to be nearly complete.

The amount realized from the sale of live fur-bearing animals in 1937 was \$1,030,888, and from the sale of pelts, \$5,779,498, a total revenue for the industry of \$6,810,386, compared with \$6,539,210 in the preceding year. More animals and pelts were sold in 1937 than in 1936, but average prices were lower.

The number of fur-bearing animals on the farms at the end of the year 1937 was 241,359, of which the silver fox population accounts for 153,822, or 64 per cent of the total, and the number of minks for 71,410, or 30 per cent. The chinchilla, a native of the Andes in South America, is recorded in the Canadian fur farming industry for the first time.

The following tables summarize the principal statistics of the industry for the years 1935 to 1937. The final report, to be issued at a later date, will contain statistics in greater detail and by county and district divisions.

I.—Number of Fur Farms, Value of Land and Buildings and Value of Fur-bearing Animals on Fur Farms at December 31, by Provinces, 1935 to 1937.

Province	F	ur Farms		Value of :	Land and H	Buildings	Value of	Fur-bearing	Animals
	1935	1936	1937	1935	1936	1937	1935	1936	1937
	No.	No.	No.	8	8	8	8	\$	\$
Prince Edward Island	771	730	1,216	884, 895	876,446	878, 934	1,192,410	1,088,647	945,542
Nova Scotia	853	958	1,002	314,687	337,422	319,305	557,447	608,202	510,769
New Brunswick	983	1,028	1.012	508,221	531,955	521,983	949,101	908,215	734,002
Quebec	2,408	2,570	2,541	1,173,107	1, 226, 657	1,348,655	1,910,659	1,910,811	1,797,806
Ontario	1,029	1,170	1,278	1,321,913	1,401,675	1,445,654	1,648,343	2,044,500	2,085,875
Manitoba	400	512	662	700,403	797,602	1,029,280	913,072	1,109,299	1,311,427
Saskatchewan	308	349	491	413,752	567,550	678,014	545,552	629,432	689,770
Alberta	463	514	587	905,913	972,632	1,047,408	1,085,050	1,164,714	1,186,450
British Columbia	272	304	380	356,184	367,747	400,788	373,916	362,635	402,646
Yukon Territory	8	7	10	11,750	17,350	17,150	6, 275	11,825	12,144
Total	7,496	8,142	9,179	6,590,825	7,091,586	7,687,171	9,381,825	9,838,280	9,676,431

II.—Value of Fur-bearing Animals and of Pelts Sold from Fur Farms, and Value of Fur-bearing
Animals on Fur Farms at December 31, 1935 to 1937.

Kind	Animals Sold			Pelts Sold			Animals on Farms, Dec. 31		
	1935	1936	1937	1935	1936	1937	1935	1936	1937
	\$	\$	\$	\$	\$	8	\$	\$	\$
Silver fox	562,480	542,888	517,782	4,437,301	4,950.290	5,019,487	8,495,851	8,345,552	7,474,741
Patch or cross fox	3,280	3,321	3,437	75,273	65, 182	48,899	65,684	61,784	46,937
Red fox	2, 110	1.293	1,449	14,301	12,734	8,382	16,149	13,567	13,018
Other fox	335	1,135	2,145	9,254	11, 151	10,586	20,750	21,163	32,924
Mink	73,402	272,560	497,965	323,263	652,940	681,475	695, 492	1,314,133	2,035,307
Raccoon	779	867	494	4,410	3,519	2,175	10,658	7,889	6,932
Marten	800	292	2,337	194	830	398	6,460	7,225	8,175
Fisher	3,255	5,930	2,100	626	1,512	245	16,425	13,885	12,790
Fitch	2,377	1,160	590	2,010	1,738	1.470	4,598	3,472	1,953
Nutria	115	880	2,200	50	3	-	1,065	1,320	4,265
Muskrat	15	446	222	3,213	6,438	3,739	20,852	23,194	12,335
Beaver	-	-	92	113	248	1,358	26,587	23,428	19,330
Others	484	-	75	987	1,853	1,284	1,254	1.668	7,724
Total	649,432	830,772	1,030,838	4,870,995	5,708,438	5,779,498	9,381,825	9,838,280	9,676,431

III .- Value of Fur-bearing Animals and Pelts Sold from Fur Farms by Provinces, 1935 to 1937.

Province	1935			1936			1937		
	Fur- bearing animals sold	Pelts sold	Total revenue	Fur- bearing animals sold	Felts sold	Total revenue	Fur- bearing animals sold	Pelts	Total revenue
	8	8	\$	\$	\$	8	8	8	8
Prince Edward Island	126.348	736,078	862,435	98,279	834,272	932,551	92,034	854,274	946,308
Nova Scotia	58,677	327,408	386,085	59,973	406,347	466,320	50,903	466,566	517.469
New Brunawick	80, 239	672,280	752,519	72,551	783,540	856,091	57,988	649,344	707,332
Quebec	143,444	1,021,713	1,165,157	170,242	1,087,992	1,258,234	200,033	1.049,013	1,249,046
Ontario	112,837	853,568	966,405	165,976	964,878	1,130,854	196,919	1,153,701	1,350,620
Manitoba	46,664	355, 757	402,421	89,650	471,413	561,063	183,100	480,479	663,579
Saskatchewan	33,850	221,198	255,048	47,748	295,864	343,612	63,318	314,631	377,949
Alberta	34,911	553,477	588,388	91,203	678,799	770.002	134,001	649,945	783,946
British Columbia	12,387	125,306	137,693	35,144	178,087	213, 231	52,392	153,439	205,831
Yukon	75	4,201	4,276	150	7.246	7,396	200	8, 106	8,306
Total	649,432	4,809,995	5,520,427	830,916	5,708,438	6,539,354	1,030,888	5,779,498	5,810,386

HOPS

Source: Statistics Branch, Provincial Department of Agricultur

Area, Production and Value of Hops in British Columbia, 1931 to 1938.

Item	Unit	1931	1932	1933	1934	1935	1936	1937	1938
Area	acres	925	6901	9841	1,156	1,123	1,062	1,074	1,150
Average yield per acre	lb,	1,330	1,147	1,502	1,216	1,572	1,509	1,406	1,538
Total production	lb.	1,230,250	791,159	1,477,425	1.405,700	1,765,600	1,602,800	1,510,000	1,769,000
Average price per lb	cents	29	30.5	33	32	29	32	31.5	31
Total value	S	356,772	241,245	491,220	449,824	513,800	512,900	475,700	547,900

¹ The average yield per acre is estimated on the basis of the total area cropped. The total areas planted were 990 acres in 1932 and 1,084 acres in 1933.

The total production of hops in British Columbia in 1938 amounted to 1,769,000 pounds of the value of \$547,900 as compared with 1,510,000 pounds of the value of \$475,700 in 1937, an increase of 17 per cent in production and 14 per cent in value.

Total exports of hops from Canada for the year ending December 31, 1938, amounted to 338,522 pounds valued at \$92,258 as compared with 173,440 pounds valued at \$47,831 in 1937. Imports in 1938 were 1,087,490 pounds of the value of \$298,535 compared with 1,454,948 pounds of the value of \$444,145 in 1937.

PREPARATION OF LAND IN THE PRAIRIE PROVINCES

The total acreage of land prepared as summer fallow, new breaking and fall ploughing in the Prairie Provinces in 1938 was estimated at 23,733,900 acres as compared with 22,234,400 acres in 1937, an increase of 1,499,500 acres or 6.7 per cent. A decrease of 420,100 acres, or 8.0 per cent in the total acreage of

prepared land in Alberta was more than offset by increases of 225,300 acres or 4·1 per cent in Manitoba and 1,328,300 acres or 11·5 per cent in Saskatchewan.

The main increase was in the area prepared as summer fallow in Saskatchewan, which was larger by 847,100 acres or 10·2 per cent than the corresponding area in 1937. Decreases in the other two provinces, estimated at 156,700 acres in Manitoba and 123,500 acres in Alberta, reduced the net increase for the three provinces to 566,900 acres.

The amount of fall ploughing in 1938 was greater than the area ploughed in the fall of 1937 by 491,000 acres in Saskatchewan, 371,000 acres in Manitoba and 40,000 acres in Alberta, a total increase of 902,000 acres or 13.2 per cent.

For new breaking, increases of 11,000 acres in Manitoba and 29,400 acres in Alberta were somewhat offset by a decrease of 9,800 acres in Saskatchewan, making a net increase for the three provinces of 30,600 acres.

Estimates of Summer Fallowing, New Breaking and Fail Ploughing, with Areas under Wheat and All Field Crops in Manitoba, Saskatchewan and Alberta, 1930 to 1939

		1					
		Summer	New	Fall	Total		Total
		fallow	breaking	ploughing	acreage	Area	area
Province	Year	of	of	of	prepared	under	under
		previous	previous	previous	in previous	wheat	field
		year	year	year	year		crops
		acres	acres	aeres	acres	acres	acres
Manitoba	1930	1,617,000	84,000	3,462,000	5,163,000	2,470,000	6,794,700
	1931	1,621,000	82,000	2,653,000	4,356,000	2,617,051	5,774,816
	1932	1,873,000	62,000	3,238,000	5,173,000	2,651,000	5,866,800
	1933	1,732,000	50,000	2,689,000	4,471,000	2,536,000	5,963,900
	1934	1,735,000	48,000	2,954,000	4,737,000	2,533,000 2,587,000	6,000,900 5,962,000
	1935 1936	1,711,000	53,000 56,000	2,990,000 2,485,000	4,754,000	2,556,600	6,081,100
	1937	1.974.000*	57,000	3,122,000	5, 153, 000	2,872,000	6,421,600
	1938	1,970,700	55,000	3,468,000	5,493,700	3, 184, 000	6,897,500
	1939	1.814,000	66,000	3,839,000	5,719,000	-	~
Saskatchewan	1930	6,415,000	793,000	3,871,000	11,079,000	14,326,000	22,868,300
	1931	6,908,000	599,000	2,334,000	9,841,000	15,026,185	21,973,754
	1932	7,275,200	240,000	3,305,000	10,820,200	15,543,000	22,333,900
	1933	7,257,200	166,900	2,051,000	9,475,100	14,743,000	21,306,000
	1934	8,579,400	173,300	2,851,000	11,603,700	13, 262, 000	19,771,820
	1935	8,911,200	135,900	3,440,000	12,487,100	13,206,000	20, 176, 200
	1936	8,205,800	159, 100	2,326,000	10,690,900	14,744,000	21,757,350
	1937	9,773,300*	160,000	3,141,000	13,074,300 11,587,500	13,893,000	20,483,600 19,960,300
	1938 1939	8,278,400 9,125,500	182,100 172,300	3,077,000	12,865,800	10,790,000	19,800,500
A 31	1930		818,000	2,718,000	6,605,000	7,164,000	12,561,400
Alberta	1931	3,069,000	619,000	550,000	4,384,000	7,942,856	13,420,980
	1932	3,250,000	200,000	225,000	3,675,000	8,201,000	14,028,700
	1933	4,003,800	255.000	150,000	4,408,800	7,898,000	13,909,400
	1934	4,075,000	221,000	175,000	4,471,000	7,501,000	12,878,900
	1935	4,278,600	248,600	175,000	4,702,200	7,500,000	13,451,450
	1936	4,272,800	257,900	225,000	4,755,600	7,537,200	12,743,150
	1937	5,107,300*	257,900	258,000	5,623,200	7,834,000	-13,408,S00
	1938	4,557,200	346,000	300,000	5,263,200	7,969,000	13,593,500
	1939	4,433,700	375,400	340,000	4,843,100	-	-
Prairie Provinces	1930	11,101,000	1,695,000	10,051.000	22,847,000	24,960,000	42,224,400
	1931	11.744.000	1,300,000	5,537,000	18,581,000	25,586,092	41,169,550
	1932	12,398,200	502,000	6,768,000	19,668,200	26,395,000	42,229,400
	1933	12,993,000	471,900	4,890,000	18,354,900	25,177,000	41,179,300
	1934 1935	14,389,400	442,300	5,980,000 6,605,000	20,811,700 21,943,300	23,296,000 23,293,000	38,651,600 39,589,700
	1935	14,900,800 14,251,600	437,500 473,000	5,036,000	19,760,500	24,837,800	40,581,600
	1937	16,854,600*	474,900	6,521,000	23,850,500	24,599,000	40,314,000
Marie Control of	1938	14,806,300	583,100	6,845,000	22,234,400	24,946,000	40,451,300
	1939	15,373,200	613,700	7,747,000	23,733,900	- 1, 510, 000	-0141111000
-	1000	20,010,200	010,700	,,,,,,,,,,,			

^{* 1936} quinquennial census returns.

THE FERTILIZER TRADE IN CANADA

July 1, 1937-June 30, 1938

Source: Mining, Metallurgical and Chemical Branch, Dominion Bureau of Statistics

Production of fertilizers and fertilizer materials totalled 677,488 short tons during the fertilizer year ended June 30, 1938, compared with 579,196 short tons during the preceding twelve months, according to the results of the annual survey made by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics in co-operation with the Federal Department of Agriculture. The total was made up of 246,676 short tons of mixtures and 430,812 short tons of fertilizer materials as against 229,888 tons of mixtures and 349,308 tons of fertilizer materials during the same period of 1936-1937. The list of vendors to whom forms were mailed was furnished by the Fertilizer Division of the Federal Department of Agriculture. To avoid duplication, the form was accompanied by this list with instructions not to include sales to manufacturers or dealers named therein.

Imports of fertilizers totalled 371,920 tons against 267,951 tons during the preceding fertilizer year. Among the more important items were natural phosphate rock, 148,174 tons; superphosphate, 104,171 tons; muriate of potash, 75,371 tons; nitrate of soda, 12,790 tons; sulphate of potash, 10,666 tons.

Exports of fertilizers totalled 290,126 short tons, made up of 254,869 tons of fertilizer materials and 35,257 tons of mixtures compared with 289,475 tons during the twelve months ended June, 1937, of which 263,141 tons were materials and 26,334 tons were mixtures. The principal fertilizer materials exported during the year were calcium cyanamide, 139,783 tons; ammonium sulphate, 71,863 tons; ammonium phosphate, 26,974 tons; and superphosphate, 11,016 tons. Exports of mixed fertilizers amounted to 35,257 short tons, a gain of 34 per cent over those of the previous year.

Sales.—Sales of fertilizer materials and mixed fertilizers, including exports and excluding sales for the production of mixed fertilizers, totalled 613,502 tons compared with 587,751 tons in the preceding year. Sales for Canadian consumption reached 323,376 tons, an increase of 8.4 per cent.

Tables III and IV show, in detail, the sales of fertilizer materials and of mixed fertilizers, by provinces and for export. A study of Table IV indicates the popular mixtures in use in the various provinces of Canada. The greatest demand was for a mixture containing 2 per cent nitrogen, 12 per cent phosphoric acid and 6 per cent potash and is commonly known in the trade as 2-12-6; sales of this fertilizer totalled 55,230 tons or 27 per cent of the total of all mixtures sold in Canada; of this amount, 33,399 tons, or 60.5 per cent, was sold in Ontario and 26.6 per cent was sold in Quebec, and the remainder consumed in the Maritime Provinces. This mixture is undoubtedly the general purpose field crop fertilizer of to-day in Eastern Canada. A 4-8-10 mixture was second in demand and totalled 31,035 tons, the greater part of which was consumed in Quebec, principally for potatoes and tobacco; it is also a popular potato fertilizer in Ontario and Prince Edward Island. Next in popularity was a 2-10-8 mixture, some 18,285 tons being sold, mainly in Ontario, for the production of flue-cured tobacco. A total of 12,587 tons of an 0-12-6 fertilizer was sold in Ontario, mainly for fall wheat and pastures, while the 2-12-10 mixture was fairly popular in both Ontario and Quebec for use on pastures, etc. Nova Scotia favoured a 9-5-7 mix for orchards, a 5-10-5 for potatoes, and a 2-12-6 for general field crops, while in New Brunswick, 4-6-10, 5-8-12, and 5-9-8 were the principal mixtures used for potatoes. The 2-10-4 fertilizer was used in this province for ordinary field crops. Manitoba used a total of 2,165 tons of

fertilizers, the principal one being ammonium phosphate. Saskatchewan used 2,877 tons of fertilizers and Alberta used 5,390 tons, the main item again being ammonium phosphate. The chief demand in British Columbia was for a 4-10-10 mixture as a garden and potato fertilizer and for 3-10-8 which was used mainly as a general farm fertilizer.

A computation was made of the plant food value in the mixed fertilizers and in fertilizer materials sold, by provinces. These data are set forth in Tables V and VI.

The names of the concerns which reported are listed in Table VII. An analysis of the records shows that 20 plants made mixed fertilizers; 26 plants manufactured fertilizer materials; 6 made both materials and mixtures; there were 29 importers and 15 exporters.

I.—Total Sales of Fertilizer Materials and Mixed Fertilizers for the Fertilizer Years ended June 30, 1937 and 1938

	(Short tons					
	Fer	tilizer mat	erials	Mixed fertilizers			
Provinces	1937	1938	Percentage increase + decrease -	1937	1938	Percentage increase + decrease -	
Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba, Saskatchewanand Alberta British Columbia	tons 10,759 11,161 16,133 22,526 31,330 9,110 5,974	tons 12,923 9,416 16,058 24,878 28,812 9,691 4,996	p.c. + 20·1 - 15·6 - 0·5 + 10·4 - 8·0 + 6·4 - 16·4	tons 11,292 23,421 19,699 36,237 92,770 170 7,694	tons 8,692 22,444 22,561 49,118 105,101 741 7,945	p.c. - 23·0 - 4·2 + 14·5 + 35·5 + 13·3 + 335·9 + 3·3	
Canada Exported	106,993 263,141	106,774 254,869	- 0·2 - 3·1	191,283 26,334	216,602 35,257	+ 13·2 + 33·9	
Grand Total	370,134	361,643	- 2.3	217,617	251,859	+ 15.7	

H.—Production in Canada, Imports and Exports of Fertilizers, as Reported by the Manufacturers and Importers during the Years ended June 30, 1937 and 1938

(Short tons)

		1937			1938	
Items	Manu- factured	Imported	Exported	Manu- factured	Imported	Exported
Mixed fertilizers Sulphate of ammonia. Calcium cyanamide. Calcium nitrate. Nitrate of soda. Superphosphate* Basic slag. Nitrochalk. Natural phosphate rock. Bone meal or bone flour. Muriate of potash. Sulphate of potash. Sulphate of potash Tankage. Tankage. Sheep manure. Dried blood. Whale products. Fish meal.	229,888 79,556 162,509 66,967 - 1,055 - 1,862 - 654 840 3,714	135 6,932 185 100 12,301 10,436 495 74,982 122 49,486 7,516 50 1,424 680	26, 334 72, 495 151, 268 187 9, 103 9 31 -33 96 16	246,676 107,123 161,029	1,495 4,082 665 12,790 104,171 5,688 49 148,174 446 75,371 10,666 2,156 819 40 80 605	35,257 71,863 139,783 56 284 11,016 5
Ammonium phosphate Soya bean meal Other materials	32,151	3,653	25,142	56,990 250	2,873 40 1,710	26,974
Total	579,196	267,951	289,475	677,488	371,920	290,126

^{*}Contains 16%, 18%, 20%, 45% and 48% superphosphate.

III.—Sales of Fertilizers, except for Manufacturing Purposes, during the Year ended June 30, 1938

(Short tons)

									1			
Fertilizers	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total sold in Canada	Export- ed from Canada	Grand Total
Nitrate of soda.	341	2,381	1.823	387	567	1	1	22	201	5,727	284	6,011
Sulphate of am- monia	2,286	1,358	1,955	2,331	749	13:	9	63	672			81,299
Calcium cyana- mide	1	385	7	101	834		_	-	66	1,394	139,783	
Nitrochalk	9	3.		2		_		-	_	14	_	14
Calcium nitrate.	~	-	-	-	-	-	-	-	10	10	56	66
Superphosphate.	7,941	1,823	8,669	15,992	21,583	19	95	179	970	57,271	11,016	68,287
Natural phos- phate rock	20	_	_	67	102			_	1	199		190
Basic slag	24	2,964	475	3,301	3	_	-		79	6,846	5	6,851
Bone meal or bone flour		108	39	54	279	13	-	24	541	1,058	6	1,064
Bone phosphate	_	-	-		-	-	-	-	1	1	-	1
Muriate of pot-	2,301	362	2.882	1.610	1, 193	1	-	_	382	8,731	718	9,449
Sulphate of pot-	-	1,	171	275	110		-	1	110	648	32	786
Tankage	-	2	23	-	329	1	-	8	248	611	531	1,142
Sheep manure	-	26	14	126	465	17	-	-	89	737	-	737
Dried blood	-	-	-	2	25	16	-	100	106	249	227	476
Whale products.	-	-	-	-			-		373	373	252	625
Fish meal	0-	-		15-	1	-	-	-	691	692	3,122	3,814
Ammonium phosphate,	-	3	-	3	1.395	1.944	2,513	4.546	314	10,718	26,974	37,692
Other fertilizer materials	-	-	-	627	1,177	12	-	90	142	2,048	_	2,048
Total fertilizers	12,923	9,416	16,058	24,878	28,812	2,040	2,618	5,033	4,996	106,774	254,869	361,643
Total mixed fer- tilizers	8,692	22.444	22,561	49, 118	105, 101	125	259	357	7,945	216,602	35,257	251,859
Grand Total,	21,615	31,860	38,619	73,996	133,913	2,165	2,877	5,399	12,941	323,376	230,126	613,503
Grand Total, 1937	22,051	34,582	35,832	58,763	124,100		9,280		13,668	298,276	289,475	587,751

1V .- Mixed Fertilizers Sold during the Year ended June 30, 1938

(Short tons)

Formulae	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada	Export- ed from Canada	Grand Total
N P2O5 K2O												
0 10 6.	-	-	-		- 2	-	-	-	167	167 188		167
0 10 10 0 10 16	-	_	_	186	- 2		-		245	245	_	245
0 12 6.	-	-	-	-	12,587	-	-	-	-	12,587	-	12,587
0 12 10		-	- 1	5	3,503	-		-	65	3,573 426		3,573 426
0 12 14 0 12 15		-	_	- 2	426 2,197	-			_	2,199	-	2,199
0 16 6	19	144	48	1,459	1,258	-	1	-	29	2,958	10	2,968
2 8 4		-		209	871	- 1	-	-	***	1,080	-	1,080
2 8 5 2 8 6	-		_	60	104			-		68	-	60
2 8 10	-	-	-	220	1,981	-	-	-	-	2,201	-	2,201
2 8 16.	-	-	-	6	1.017	-	-	-		1,023	-	1,023
2 8 28. 2 10 4.	58	1,346	2,323	- 6	52	1	-		_	3,733	258	3,991
2 10 8	90	- 1010	- 00	-	18,191	-	Bro Bro	-	94	18,285	-	18,285
2 10 10. 2 12 2.	-	-	-	-	194	-		-	-	191	-	154
2 12 2 2 12 6	1,822	3.416	1,846	14,729	33,399			-	18	55, 230	194	55, 424
2 12 8	-		- 1,040	367	51	-	_		-	418	-	418
2 12 10	-	-		4, 100	6,522	106	251	331	**	10,622	8	10,630 688
2 19 0 2 16 6	-	- 6		521	3,914	100	251	331	92	4,534	-	4,534
3 7 10	-		-	-	- 1	-	-	-01	57	57	-	57
3 8 4		~	-		36	-	-	44	No.	36	30	66
3 8 5 3 8 15	-	-		658	229		_			229 658	_	279 658
3 9 5	-		-	-	977	-	-		-	977	-	977
3 10 5	-	**	-	-	1.413	~	-		-	1,413	-	1,413
3 10 6 3 10 8		-	_	-	2,563 2,101	-	- **	3	2,277	2,563 4,381	32	2,595 4,381
3 12 8	-	-		**	228	-	_		-	228	-	228
3 10 20	-	-		111	-	-		-	-	111	_	111
4 6 10 4 8 4	178	1,300 1,964	4,510 81	50 162	3	-	-	-		5,862 2,388	236 224	6,098
4 8 6.	110	1,804	- 01	39	1,966	-	_	_	-	2,005	-	2,005
4 8 7	209	1,687	276	32		-	-	-	-	2,204	860	3,064
4 8 10. 4 8 13.	4,436	1.716 597	1,804 2,913	16,955	6, 117	6	1	-		31,035 4,696	3,254	34,289 4,810
4 8 13 4 8 15	1,182	281	51919	237		_	_	_		237	- 114	237
4 9 4	-	-	-	-	143	-	-	-	-	143	- 44	143
4 10 8 4 10 10	1	13	460	1,149	63	2	2	3 6	2.688	586 3,846	286	872 3,846
4 10 10 4 12 4	2	3	6	35	326	_			2,000	374		374
4 12 6.	-	-		25	431	2	-	-	- 01	458	1	459
4 12 8 4 16 20	-			5	65	_	-	-	**	70	66	78 66
4 24 12.	-	-	- 1	170	82		-	_	_	252	-	253
5 8 7	-	24	27	848	1,118	-		-	-	2,017	208	2,225
5 8 10 5 8 12	-	64	1,506 2,745	490 2,385	80	-	_		_	2,076 5,196	6,540 8,187	8,616
	649	1,983	2,693	2,383	-	_	-		-	5.325	3.901	9,226
5 10 5.	94	3,931	290	4	274	1	-	1	210	4.885	208	5,013
5 10 10 5 12 2		-	786	870 42	16	-	-	-	-	1,656	1.695	3,351
6 7 4	_	-		42	10	_	_		612	612	~	612
6 7 10 .	-	-	-	-	-	-	-		263	263	-	263
6 8 10 6 10 10	-	_	-	2,373	120		3	-	874	2,493 877	~	2,493 877
	_		-	61.		_	_0	_		61	-	61
7 5 2	-	1	-	32	48	- 1			16	98	2	100
7 11 0 7 13 6		-	_1	_1	3	_			48	53	2.424	2,424
8 16 14	-	-	-		-		-	-	-		1,142	1,142
8 16 29	-	3	183	145	-	-	-	~	-	331	5,232	5,563
9 5 7 10 5 2	- 6	4,246	21 42	224	45	-		-	-	4,536 82	- 1	4,536 83
Other mixtures	34	-		65	320	- 6	-	13	188	626	144	770
	0.000	99 111	99 704	40.440	107 100	400	0.70			010 000	97.95	974 075
Total	8,692	22,444	22,561	49,118	105,101	125	259	357	7,945	216,602	35,257	251,859

V.—Nitrogen, Phosphoric Acid and Potash contained in mixed fertilizers sold in Canada, during the Years ended June 30, 1937 and 1938

(Short tons)

		19	37		1938				
Provinces	Total tonnage	Nitrogen	Phos- phoric acid	Potash	Total tonnage	Nitrogen	Phos- phoric acid	Potash	
	tons	lb.	lh.	lb.	tons	lb.	Ib.	lb.	
Prince Edward Island Nova Scotia Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alherta British Columbia	170	2,265,660 1,543,380 2,507,400 3,666,480 105,660	3,924,160 3,261,540 7,118,840 20,369,249 43,640	2,082,780 3,096,900 3,728,400 6,772,540 12,725,720 22,720 1,208,580	22,444 22,561 49,118 105,101 125 259 357	2,142,820 1,808,660 3,196,800	3,814,780 9,883,260 23,471,540 45,980 97,060 135,400	3,022,820 4,209,500 8,555,320 15,546,520 3,100 1,440	
Total Canada				29,637,640 6,113,600			44,369,420 7,100,820		
Grand Total	217,617	14,296,740	43,455,489	35,751,240	251,859	16,382,880	51,470,240	42,288,260	
Miscellaneous (no analysis given)	787		-	_	-	_	-	-	

VI.—Nitrogen, Phosphoric Acid and Potash contained in fertilizer materials sold in Canada, during the Years ended June 30, 1937 and 1938

(Short tons)

		19	37		1938				
Provinces	Total tonnage	Nitrogen	Phos- phoric acid	Potash	Total tonnage	Nitrogen	Phos- phoric acid	Potash	
	tons	lb.	lb.	lb.	tons	lb.	lb.	lb.	
Prince Edward Island Nova Scotis New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	16,133 22,526 31,330 9,110	1,489,500 1,235,100 1,160,940 1,463,660 1,853,380	2,306,360 2,292,800 3,641,920 8,443,800 10,135,260 7,773,900	374,180 2,727,780 2,180,440 1,583,980 5,380	9,416 16,058 24,878 28,812 2,040 2,618 5,033	1,480,340 1,373,180 1,104,320 1,217,966 440,170 561,420	7,353,640 9,594,600 1,883,840 2,467,760 4,353,120	368.320 3,053,880 1,887,520 1,450,700 1,340	
Total Canada	106,993 263,14]	9,087,920 105,042,140	35,867,360 18,643,300	9,246,640 111,360			34,641,040 19,213,160		
Grand Total	370,134	114,130,060	54,510,660	9,358,000	361,643	109,467,606	53,854,200	10,307,544	

VII.—Reporting Companies

Nature of Trade*	Names	Addresses
m.m.f.; i. d. m.s.a.; e. d.; i. m.o. d. d. m.m.f.; i. m.o.; e. m.o.; e. m.o.; e. m.f.; o.; i. d. m.m.f.; i.; e. m.m.f.; i.; e.	Agricultural Chemicals, Ltd. Aldershot Distributing Co-op. Co. Ltd	Aldershot, Ont. Sault Ste. Marie, Ont. Charlottetown, P.E.I. St. Thomas, Ont. Winona, Ont. Levis, Que. Vancouver, B.C. Calgary, Alta. Edmonton, Alta. Regina, Sask. Winnipeg, Man. Vancouver, B.C. Chatham, Ont. West Toronto, Ont. Montreal, Que. St. John, N.B.

VII.-Reporting Companies-Concluded

Nature of Trade*	Names	Addresses
,	C. A. H.	Duffele N.V. II C.A
d.; i.	Case, A. H.	Bunalo, N.Y., U.S.A.
m.m.i.; 1.	Chase, Geo. A	London England
m m f.i.e	Colonial Fortilizer Works	Windsor N.S.
man an sa sa	Consolidated Mining & Smelting Co. of Canada.	Trail, B.C.
e.: i.	Ltd.	
m.o.; e.	Consolidated Whaling Corp	Victoria, B.C.
d.	Co-opérative Fédérée de Québec. Deep Bay Fishing and Packing Co., Ltd Dominion Steel & Coal Corp. Ltd	130 St. Paul St. E., Montreal, Que.
m.o.; e.	Deep Bay Fishing and Packing Co., Ltd	Vancouver Island, B.C.
m.s.a.	Dominion Steel & Coal Corp. Ltd	Sydney, N.S.
m.o.; e. d.	Dumart's Limited. The T. Eaton Co., Ltd. Gainers Limited. George, W. J. Company.	Winnings Man and Toronto Ont
m.o.	Guiners Limited	South Edmonton, Alta.
i.	George, W. J. Company	120 King St. E., Toronto.
m.o.; i.	I he trione regulizer to	I Y MILCOUVEL, D.C.
i.	Grose Fertilizers and Chemicals Ltd	West Toronto, Ont.
m.s.a.	Hamilton By-Product Coke Ovens, Ltd	Hamilton, Ont.
m.o.	Harris W. Co., Limited	200 Keating St., Toronto, Ont.
	International Agricultural Corp	108 Stock Exchange Blug., Dunalo,
m.m.f.; i.	Grose Fertilizers and Chemicals Ltd	71 St. Peter St. Ougher Oug
m.m.f.; i.; e.	International Fertilizers, Ltd	Saint John, N.B.
m.m.f.; i.; e.	Island Fertilizer Co., Ltd	Charlottetown, P.E.I.
d.	King Calcium Products	Campbellville, Unt.
d.	Lincoln Supply Co	St. Catharines, Ont.
d.	Mac Donald, Kenneth & Sons	Ottawa, Ont.
d.	Macrae's Grocery & Feed	Mission City, B.C.
d.; i.	Manchester Products	St John N B
m.m.f.; m.o.	Marquis (Estate F. Canac Marquis)	3 rue Courcelette, Quebec, Que.
22222222	Marquis (Estate F. Canac Marquis). Milwaukee Sewerage Commission. Mineral Colloids (Canada) Ltd.	Milwaukee, Wis., U.S.A.
d.	Mineral Colloids (Canada) Ltd	137 Wellington St. W., Toronto.
m.m.f.	Misner, J. H. Ltd	Port Dover, Ont.
m.s.a.	Montreal Coke Manufacturing Co	P.O. Box 1660, Montreal, Que.
d.	Mount MacKay Feed Co. Nelson Bros. Fisherics, Ltd. New Brunswick Agricultural Societies.	Vangouver B C
m.o.; e.	New Brunswick Agricultural Societies	East Centreville, N.B.
m.c.; e.; i.	Anrib American (Sangilled Co.	I Vingara Falls Unt.
d.	Paterson R. Downing	189 Water St., Saint John, N.B.
d.; i.	P.E.I. Potato Growers' Assoc., Inc	Charlottetown, P.E.L.
i.	Potash Company of Canada	814 Royal Bank Bldg., Montreal,
2	n (4) - mi - 4 Ca	Que.
d.	Pratt's Plant Food Co	Chiengo II S A
m.m.f.	Rotch Products Limited	Vancouver, B.C.
d.	Pulverized Manure Co	Davidson St., St. Catharines, Ont.
	Ltd.	
m.o.	Schneiders Limited, J. M	321 Courtland Ave. E., Kitchener
2 . 7	Cash and Date	Ont.
d.; i. m.m.f.; i.	Scott and Peden	Victoria, B.C. Welland, Ont.
d.	Spangery' Seed Dept	Vancouver, B.C.
m.s.a.	Spencers' Seed Dept	Hamilton, Ont.
m.m.f.; i.	Stone, Wm. and Sons, Limited	Ingersoll, Ont.
m.m.f.; i.; e.	Summers Fertilizer Co., Ltd. Swift Canadian Company, Limited. Toronto Chemical & Fertilizer Co.	St. Stephen, N.B.
m.m.o.	Swift Canadian Company, Limited	Keele & St. Clair, West Toronto, Ont.
m.m.f.; i.	Toronto Chemical & Fertilizer Co	P.O. Bur 150 Colors Alto
m.o.; m.m.f.	Union Packing Company Ltd United Farmers' Co-operative Co., Limited	P.O. Box 159, Calgary, Alta.
m.m.f.; i. d.; i.	United Fruit Companies of Nova Scotia, Ltd	Kentville, N.S.
d.; i.	Witts Fertilizer Works	Norwich, Ont.
d.; i.	Webb, Ed. & Sons, Ltd	

*m.—Manufacturing.
m.a.p.—Manufacturing ammonium phosphate.
m.c.—Manufacturing eyanamide.
m.m.f.—Manufacturing mixed fertilizers.
m.o.—Manufacturing organics.
m.s.a.—Manufacturing sulphate of ammonia.
m.s.p.—Manufacturing superphosphate.
e.—Exports.
i.—Imports.
d.—Dealer.

THE USE OF FERTILIZERS IN CANADA

By C. H. Robinson, B.A., Dominion Agricultural Chemist

The importance of fertilizers in practically all phases of agricultural activities is recognized generally. Results of soil investigational work and reports of fertilizer trials conducted by agricultural institutions and fertilizer manufacturers are ample proof that the application of these materials to the soil is essential to satisfactory crop production on many farms in Canada. Continued cropping gradually depletes the soil of plant nutrients and under the best conditions of farm management it is safe to say that much more of the elements of fertility is removed than is returned to the soil in the form of farm by-products such as manure. In other words, on the ordinary farm there is an unfavourable balance between plant food removal and plant food return in so far as soil fertility is concerned. The use of fertilizers is the chief means of correcting this unfavourable balance and of maintaining soil fertility. In addition to the maintenance of permanent productiveness in a community, the addition of the small amounts of readily available plant food constituents furnished by fertilizers frequently helps the crop over critical periods of growth brought about by adverse seasonal conditions.

Probably the greatest problem in the use of fertilizers to-day is that of determining what plant food constituents are required and at what rate per aere they should be applied to produce maximum crops. In an endeavour to assist the farmer in this regard representatives of agricultural institutions, manufacturers and dealers meet periodically, review results of their investigational work with fertilizers and prepare recommendations which are made available to the farming public. It is interesting to note, however, that in recent years more attention is given to other means of obtaining a knowledge of the fertilizer requirements of the soil of the individual farm. Through the medium of the soil survey, the soils of a district are classified according to type and any fertilizer trials conducted on these have a greater significance when the farmer knows to which type his soil belongs. Rapid chemical tests used in the field for estimating the amount of available plant food constituents in the soil are growing in popularity and as more knowledge is gained in regard to their adaptability to different soil types the value of these quick tests is Another aid to the determination of fertilizer requirements is increasing. that of observing plant deficiency symptoms. Recent studies of plant behaviour, when any one element is lacking in the soil solution, have given information which is of considerable value in diagnosing plant food deficiencies in the soil. This work has been carried on to a large extent in greenhouses, under controlled conditions, the fertilizing constituents being fed in solution and the crop grown in sand cultures. It has been found possible to correlate certain well marked leaf symptoms with plant food deficiencies in the nutrient solution; consequently when similar symptoms are observed in the field they indicate which element or elements of fertility are inadequate in that soil for normal plant development.

The chief function of applying fertilizers to the soil is to furnish the growing crop with available nitrogen, phosphoric acid and potash. It has been found, however, that if the greatest returns are to be had from the fertilizer, other soil conditions such as organic matter content, soil reaction, tilth, etc., must be satisfactory. Also certain minor and trace elements, for example, sulphur, magnesium, boron and manganese may be required in special instances. Recent experimental work has shown the importance of supplementing the fertilizer treatment with an application of small amounts of boron where physiological disorders, such as "cork" in apples, crown rot in sugar beets, and brown heart in turnips, are apt to occur.

Further information relative to the best placement of the fertilizer with respect to the seed of various crops has been obtained. This has resulted in a gradual change in the design of seed and fertilizer drills. It is now possible to obtain machines which can be relied upon to sow the fertilizer at definite depths and at desired distances from the seed. Proper placement of the fertilizer means economy in its employment since smaller rates of application may be used.

THE FERTILIZERS ACT

By G. S. Peart, Plant Products Division, Department of Agriculture

The present Fertilizers Act has been in effect since 1922 and since then the quality of fertilizers sold in Canada has improved noticeably, both in higher content and quality of the plant foods and in physical condition. Those who recollect the condition of the fertilizer trade of twenty years ago will recall that not much headway was being made in the use of fertilizers in Canada at that time, and that this was due largely to lack of confidence amongst farmers as to the value of the fertilizers offered them. At that time the Department received innumerable complaints from farmers against the fertilizers sold them by the companies then in the fertilizer business.

This led to an investigation and it was found that most of the complaints were justified. The complaints were mainly that the fertilizers did not give results, and that often they retarded germination or damaged crops. The investigation revealed that a great many of the fertilizers sold at that time contained too little plant food to give results when used in reasonable amounts. Some of the fertilizers contained as little as 5 per cent of total plant food as compared with the average to-day of 18 per cent. It was found also that harmful amounts of cyanamide were sometimes used in mixed fertilizers, that is, over fifty pounds to the ton of mixture, the present limit; and that potash of some origins contained injurious amounts of borax. Other unsatisfactory conditions disclosed by the investigation were that the guaranteed analysis was not always met and less effective products were substituted, such as potash manure salts for muriate of potash, and basic slag mixed with natural rock phosphate for basic slag. In some instances also, organic products such as tankage were deodorized with salt which had the effect of making the plant food non-available.

As a result of the investigation, the present Fertilizers Act was designed to prevent the unsatisfactory conditions described. All fertilizers sold in Canada to-day are standardized under the Act, as to plant food content and other qualities, so that they are bound to give good results if used in a reasonable manner and for the purposes intended. The minimum plant food content allowed is 14 per cent and all fertilizers must be sold under brand names which are easily understood and which indicate the analysis of the fertilizer. Harmful ingredients are not permitted and advertising is kept within the bounds of reasonable claims based on experimental evidence.

Every mixed fertilizer before being advertised or sold has to be registered under the Act and registration requires a complete disclosure of its ingredients, guaranteed analysis and plant food content. Registration is refused and sale of the product prevented when it fails to conform with the prescribed standards. This registration requirement is the first line of defence against bad fertilizers in Canada. Last year dozens of registrations were refused on account of too low analyses, bad ingredients or misleading brand names.

After registration the law requires that every bag or package containing the fertilizer be labelled with the name of the manufacturer, the brand name and the guaranteed analysis as registered. This provision protects buyers against being delivered a fertilizer of different analysis from the one bought. It is always possible through error or otherwise that a fertilizer of a lower analysis than the one actually purchased may be delivered to an unsuspecting buyer. Farmers are, therefore, advised always to check the analysis on the bags against the invoice before making payment.

The labelled guaranteed analysis also enables the Department to check the manufacturers as to whether they are meeting their guarantees. The inspectors under the Act take hundreds of samples each year for this purpose and the results of analyses are published annually so that buyers may be able to compare the records of the different manufacturers in meeting their guarantees. Copies of the annual report of analyses are free upon request to the Publicity and Extension Division, Dominion Department of Agriculture.

The results of analyses in recent years show comparatively few failures in meeting guarantee, such is the effectiveness of the enforcement of the Act and the co-operation from the manufacturers who realize that the extent of their trade depends on selling high quality fertilizers that can be relied upon to give results.

The use of fertilizers in Canada is rapidly increasing, as indicated by the statistics of consumption compiled annually and issued by the Dominion Bureau of Statistics. The trend is toward the greater use of the so-called complete fertilizers, which contain all three of the essential plant foods, nitrogen, phosphoric acid and potash, rather than single materials for separate application. This trend is becoming more pronounced as users realize that the three essential plant foods must be associated with one another in the soil to give best results.

CROP STATISTICS OF OTHER COUNTRIES

World's Wheat Production, 1931 to 1938

The following table, from the International Crop Report of February, 1939, gives the world's wheat production in 1938 as compared with each of the years 1931 to 1937 and with the five-year average 1926-1930.

I.-World's Wheat Production1 (million bushels)

Year	Europe ²	North America	South America	Asia ²	Africa	Oceania	Total ²	U.S.S.R.
Average— 1926–1930	1,342	1,315	300	518	117	164	3,756	836
1931 1932 1933 1934 1935 1936 1937 1938	1,437 1,489 1,746 1,549 1,576 1,481 1,554 1,845	1,277 1,213 849 816 922 863 1,069 1,293	263 286 345 290 198 297 247 378	570 503 555 554 577 603 617 680	131 140 124 153 136 115 129 136	197 225 186 140 153 157 194	3,875 3,856 3,805 3,502 3,562 3,516 3,810 4,483	753 742 1,018 1,117 1,132 1,135

¹ Not including China, Iran and Iraq.

WORLD EXPORTS AND IMPORTS OF WHEAT AND FLOUR

The total exports of wheat and wheat flour, expressed in bushels of wheat by conversion at the rate of 196 lb. of flour to 4½ bushels of wheat, were 270,849,000 bushels for the five months ended December 31, 1938, as compared with 219,505,000 bushels for the five months ended December 31, 1937. The imports of wheat and flour, expressed as wheat, were for the same period 227,266,000 bushels for 1938 and 191,142,000 bushels for 1937.

² Not including U.S.S.R. ³ Preliminary estimate.

II.—Exports and Imports of Wheat and Flour for the Principal Countries of the World, August 1 to December 31, 1937 and 1938

Wheat	Five n August 1-D	nonths ecember 31	Flour	Five m August 1-De	
	1937	1938		1937	1938
Exports— United States		000 bush. 25,534 81,146 20,281 18,136 13,017 4,034 58,089	Exports— United States	2,225 1,675 367 2,460 294 311 2,721	2,326 1,978 407 2,820 308 208 3,200
Total		220,237	Total	10,053	11,247
Imports— Germany Belgium France United Kingdom Irish Free State Italy Netherlands Sweden Switzerland Czechoslovakia Other countries	8,052 75,166 5,992 3,017 9,120 836	25, 452 18, 612 7, 194 84, 411 7, 333 4, 084 11, 699 1, 174 8, 250 651 32, 306	Imports— Germany Austria. Deimark Finland United Kingdom Irish Free State Norway Netherlands Other countries	301 76 47 82 1,947 27 139 297 1,660	41 61 122 146 1,840 25 252 307 3,006
Total		201,166	Total	4,576	5,800

WORLD'S VISIBLE SUPPLY OF WHEAT AND FLOUR

Source: Broomhall's Corn Trade News.

The following table gives the visible supply of wheat and flour in second hands in the United States, Canada and the chief ports of the United Kingdom and the continent, on the ocean and in Argentina and Australia.

III.-World's Visible Supply of Wheat and Flour

Description	January 1, 1939	February 1. 1939	February 1, 1938	February I, 1937	February 1, 1936
	000 bush.	000 bush.	000 bush.	000 bush.	000 bush.
U.S.A. wheat Canada wheat U.S.A. flour as wheat Canada flour as wheat	169,500 169,460 6,300 1,940	148,170 *156,920 6,190 1,850	115,360 54,950 6,300 1,760	87,960 96,290 3,250 2,070	114,530 231,000 5,720 2,110
Total North America	347,200	313,130	178,370	189,570	353,360
United Kingdom wheat stock	18,480 640	14,920 760	9,320 1,040	6,200 1,400	8,120 1,320
stocks	6,670 82,750	5,190 84,500 14,720	6,270 84,000 10,480	5,400 73,000 12,160	3,650 74,000 5,880
Argentina. Afloat for United Kingdom direct Afloat for Continent direct. Afloat for orders.	10,400 13,030 7,170 4,480	20,040 8,100 11,190	16,750 16,750 9,900 10,380	22,050 15,930 16,190	17,370 6,810 2,050
Totai	143,620	159,420	148,140	152,330	119,200
Grand Total	490,820	472,550	326,510	341,900	472,560

^{*}Includes 252,000 bushels of U.S.A. wheat in bond in Canada.

METEOROLOGICAL RECORDS FOR FEBRUARY, 1939

The records of temperature, precipitation and sunshine at the Dominion Experimental Farms and Stations for the month of February are given in the following table:—

Experimental Farm or Station	Degree	s of temperat	ture F.	Precipi- tation	Total hours	
	Highest	Lowest	Mean	in inches	Possible	Actual
Ottawa, Ont. Charlottetown, P.E.I. Kentville, N.S. Nappan, N.S. Fredericton, N.B. Ste. Anne de la Pocatiere, Que. Cap Rouge, Que. Lennoxville, Que. Farnham, Que. Lennoxville, Que. Farnham, Que. L'Assomption, Que. Normandin, Que. Harrow, Ont. Delhi, Ont. Kapuskusing, Ont. Morden, Man. Brandon, Man. Brandon, Man. Indian Head, Sask. Swift Current, Sask. Swift Current, Sask. Scott. Sask. Lacombe, Alta Lethbridge, Alta Manyberrice, Alta Beaverlodge, Alta Beaverlodge, Alta Fort Vermilion, Alta.	39 53 58 55 55 37 38 37 38 36 36 43 42 43 43 43 43 43 43 43 43 44 43 44 44 47 44 44 43 44 44 44 44 44 44 44 44 44 44	- 18 - 2 - 7 - 5 - 20 - 8 - 12 - 20 - 18 - 12 - 20 - 18 - 16 - 28 - 17 - 40 - 41 - 41 - 47 - 47 - 47 - 40 - 41 - 45 - 49	10·0 17·0 21·5 5 17·0 13·4 9·3 12·3 14·3 15·3 12·6 0·3 27·5 24·5 -1·7 -6·0 -11·5 -8·8 -8·8 -10·4 -10·5 3·3 3·6 3·6 3·3 3·6 3·6 3·7 4 4 5 6 6 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9	4 · 44 2 · 82 2 · 77 3 · 65 3 · 35 6 · 18 6 · 90 4 · 84 3 · 51 1 · 25 3 · 37 5 · 49 5 · 79 1 · 00 0 · 15 0 · 68 0 · 37 0 · 90 0 · 17 5 · 18 0 · 90 1 · 15 0 · 90 1 · 15 0 · 90 0	292 289 292 292 290 288 287 291 290 289 	79-2 117-9 94-1 96-6 122-2 105-7 80-5 68-8 70-5 81-9 110-6 112-6 93-7 115-8 146-1 151-1 93-2 106-0 113-9 121-2 77-9 125-6 66-4 125-6
Windermere, B.C. Summerland, B.C. Agassis, B.C. Sidney, Vancouver I., B.C.	41 44 53 47	-33 0 11 20	13.6 27.5 34.2 36.7	0·75 0·61 6·29 4·04	282 283 285 286	109-9 79-1 51-0 93-0

WEATHER OF THE YEAR 1938

At Representative Stations, compared with Normal Annual Averages for a Period of Thirty Years or More.

		Tempe	rature	values	of 1938		Pre	cipitat 1938	ion,		al for a		Suns	hine
Station	Mean Winter months	Mean Summer months	Mean	Highest	Lowest	Normal for 30 years or more	Rain	Snow	Total	Rain	Snow	Total	Total hours	Normal
Victoria Vancouver. Kamloops. Calgary Edinonton Battleford. Prince Albort. Qu'Appelle. Minnedosa. Winnipeg. Port Arthur Parry Sound. Southampton Toronto. Kingston. Ottawa. Montreal Quebec. Father Point. Chutham St. John Yarmouth. Halifax. Sydney. Charlottetown. Sherbrooke. Penebroke. Fredericton (Univ. N.B.).	42·2 41·0 29·1 19·5 13·6 7·2 7·2 10·1 8·6 8·3 14·4 23·8 27·3 30·4 27·6 19·7 24·5 20·4 19·4 20·2 26·8 32·0 30·0 25·0 22·1 20·9 22·1	59·1 63·6 69·6 60·6 62·8 63·2 63·4 63·5 66·0 67·2 66·2 66·3 69·6 66·2 67·4 60·5 60·5 60·5 60·6 60·6 60·6 60·6 60·6	50.3 51.6 49.3 38.5 36.6 38.5 38.6 38.6 38.6 38.6 44.9 48.4 44.7 37.3 44.6 44.9 44.3 44.1 42.8 43.4 43.9 43.4 43.9 43.4 43.9 43.9 43.9	84 88 1011 93 90 91 95 93 93 93 92 92 92 85 93 93 93 84 81 87 89 84 92 92	288 255 - 3 3 - 46 - 466 - 466 - 466 - 366 - 366 - 411 - 300 - 200 - 111 - 5 - 15 - 344 - 122 - 12 - 12 - 12 - 12 - 12 - 12 -	49.2 49.5 38.6 47.1 38.5 38.6 32.3 32.7 35.0 33.8 34.7 33.8 41.4 43.7 44.4 43.7 42.6 63.5 540.1 43.9 42.9 40.1 40.1 40.5	23-75 47-99 7-32 12-41 14-06 11-05 10-07 10-49 9-66 22-91 24-61 23-64 21-93 27-44 21-93 38-75 54-79 45-80 31-46 38-75 54-79 45-80 31-46 38-85	1.5 22.9 40.6 43.0 57.5 47.8 52.2 82.8 82.8 70.2 64.4 90.8 129.0 103.5 37.2 45.4 51.3 80.8 131.8 60.8 131.8 97.7 96.9 49.4 49.4 49.4 49.4 49.4 49.4 49.4	23 · 90 50 · 28 11 · 38 16 · 71 19 · 81 15 · 83 15 · 29 18 · 77 14 · 61 16 · 10 31 · 99 37 · 51 33 · 99 32 · 65 31 · 98 33 · 61 42 · 91 52 · 79 32 · 58 53 · 54 48 · 94 58 · 01 51 · 98 41 · 23 43 · 21 33 · 90 47 · 48	27.76 51.49 7.26 11.93 12.64 10.70 11.31 12.39 15.49 19.39 26.77 23.68 26.55 24.71 28.69 29.39 22.82 29.99 36.28 39.02 47.94 30.22 26.21 39.91 30.22 26.21 30.22 30.23	14.3 31-1.1 29.9 47-1 44.7 45.5 56.6 45.5 51.0 39.7 122-1 112-6 63-1 128-6 128-6 128-6 111-6 111-6 177.5 78-4 111-9 101-2 98-4 111-9 101-2 98-7 98-7 98-7 98-7	29-19 54-60 10-25 16-64 17-11 13-43 15-87 18-47 16-94 20-59 23-36 38-98 34-94 34-94 40-65 42-25 33-98 40-93 44-03 46-86 55-25 41-41 36-30 42-77	2,330 1,985 2,625 2,321 2,277 2,303 2,085 2,085 1,987 2,185 1,721 1,709 1,877 1,877 1,830 1,908	1,95 1,81: 2,09 2,22 2,14 2,37: 2,12: 2,16: 1,96: 2,01: 1,86: 1,86: 1,76: 1,83: 1,78: 1,95:

JOHN PATTERSON,

Controller, Meteorological Service of Canada,

Department of Transport, Toronto.

EXPORTS OF CANADIAN GRAIN, 1937-38 AND 1938-39

Source: External Trade Branch, Dominion Bureau of Statistics, Ottawa

I.—Exports of Wheat and Flour

Description	Febru	ary	Seven mon Febr	
7	1938	1939	1938	1939
Wheat— To United Statesbush.	196	3,985	226,817	18,581,380
	391	4,755	293,269	10,584,226
To United Kingdom and 'orders'— via United Statesbush.	-	8,000	11,580,799	111,122
sia Canadian Atlantic Seaboardbush.	1,310,312	443, 372	13,405,892 25,657,744	64,331 29,589,397
via Canadian Pacific Seaboardbush.	1,805,883	314,452	34,218,419	20, 673, 136
	1,022,405	3,397,035	5,355,275	18, 812, 281
	1,243,095	2,037,918	6,472,731	10, 917, 837
via Churchillbush.	-	2,001,010	603, 982 775, 953	916, 912 585, 969
Total to United Kingdom and 'orders'bush.	2,332,717	3,848,407	43,197,800	49,429,712
	3,048,978	2,357,411	54,872,995	32,241,273
To Other Countries via United States	2,020,010	486,258	114,710	974,398
via Canadian Atlantic Seaboardbush.	196,500 262,805	326,520 347,167 240,621	159,448 7,906,972 10,439,994	634,496 19,961,264 12,861,813
eia Canadian Pacific Seaboardbush.	309,391	1,060,516	2,268,108	5,824,865
	377,639	602,419	2,781,819	3,301,989
Total to Other Countriesbush.	505, 891	1,893,941	10, 289, 790	26,760,527
	640, 444	1,169,560	13, 381, 261	16,798,298
Total Wheatbush.	2,838,804	5,746,333	53,714,407	94,771,619
	3,689,813	3,531,726	68,547,525	59,623,797
Wheat Flour— To United States	2	1,028	18,510	58,664
To United Kingdom and 'orders'— sia United Statesbbi.	715	2,620	85,513 6,390	121,589 2,570
ria Canadian Atlantic Seaboardbbl.	4,000	2,369	39,993	8,120
	160,759	174,024	1,308,501	1,359,652
via Canadian Pacific Seaboardbbl.	920, 299	516,831	7,721,020	4,550,590
	6, 217	6,972	15,802	42,603
	33, 582	21,424	83,605	137,629
Total to United Kingdom and 'orders'bbl.	167,691	181,817	1,330,693	1,404,825
	957,881	540,624	7,844,618	4,696,339
To Other Countries— via United States	19,426	18,427	90,065	197,457
via Canadian Atlantic Seaboardbbl.	115,312	61,747	548, 127	680, 296
	62,675	66,888	625, 450	781, 449
	368,156	213,922	3, 852, 062	2, 855, 325
via Canadian Pacific Seaboardbbi.	22, 694	22,606	178, 886	205,479
	125, 217	68,031	986, 447	703,366
Total to Other Countriesbbl.	104, 795	107, 921	894, 401	1, 184, 385
	608, 685	343, 700	5, 386, 636	4, 238, 987
Total Wheat Flourbbl.	272,488	290,766	2,243,604	2,647,874
	1,566,582	886,944	13,316,767	9,656,915
Total Exports of Wheat and Flourbush.	4,065,000	7,054,780	63,810,626	106,687,052
	5,256,395	4,418,670	81,864,292	68,680,712

Note.—On the average, one barrel of flour equals 41 bushels of wheat.

II.-Exports of Barley, Oats and Rye

Grain	Februs	ry	Seven mont Febru	ths ended
Gram	1938	1939	1938	1939
Barleybush.	807, 901 528, 327	646, 074 303, 364	9, 647, 287 6, 499, 684	12,317,405 5,198,867
Oatsbush.	282,155	452,978	2,837,373	5,422,807
Ryebush.	141,851 8,609 7,488	145,994	1,465,822 406,866 351,484	1,738,770 836,947 371,254

VISIBLE SUPPLIES, INSPECTIONS AND SHIPMENTS OF CANADIAN GRAIN

I .- Quantities of Grain in Store during March 1938 and 1939

Distribution	Durum Wheat	Other Wheat	Oata	Barley	Flarseed	Rye
Week ended March 3, 1939	bush.	bush.	bush.	bush.	bush.	bush.
Country Elevators, Western Division	3,240,000 59,000	44,760,000 5,912,000 10,877,421 8,014,031 659,877 2,213,380	1,029,000 40,686 587,762	2,415,000 1,927,000 731 301,229	137,000 16,000 19	1,010,000 95,000 4,579
Churchill Elevator. Public, Semi-Public and Private Terminal Elevators—Fort William and Port Arthur In Transit Rail. Eastern Elevators U.S. Lake Ports U.S. Atlantic Seaboard Ports.	3,766,704 4,647,743 267,000 492,000	36,560,881 1,468,085 20,865,841 2,021,000 870,000	1,064,386 545,193 901,590	1,013,858 245,916 400,381	17.846 3,972 2,115	918,270 4,869 74,628 42,000
Total	12,472.447	134, 222, 516	8,643,617	6,304,115	176,952	2,149,346
Total same period, 1938	14,557,633	32,804,052	9,643,039	9,210,752	474,532	1,276,364
Week ended March 10, 1939 Country Elevators, Western Division Interior Private and Mill Elevators. Interior Public and Semi-Public Terminals. Vancouver—New Westminster Elevators Victoria Elevator. Churchill Elevator. Public, Semi-Public and Private Terminal	3,215,000 56,000	44,620,000 5,767,000 10,845,641 7,524,760 542,481 2,213,380	1,015,000 40,516 568,031	2,520,000 1,912,000 679 266,786	143,000 23,000 19	1,036,000 98,000 4,579
Elevators—Fort William and Port Arthur In Transit Rail Eastern Elevators U.S. Lake Ports U.S. Atlantic Seaboard Ports	3,783,643 4,540,614 231,000 488,000	36,669,281 2,009,344 19,954,097 1,759,000 879,000	1,127.849 642,111 777,089	1,048,528 316,985 406,782	18,925 2,115	919.799 10.749 66,359
Total	12,314,257	132,783.984	8,840,596	6,471,760	187,059	2,177,486
Total same period, 1938	14,631,122	32,379,849	9,724,615	9,054,792	474,299	1.277.856
Week ended March 17, 1939 Country Elevators, Weslern Division. Interior Private and Mill Elevators. Interior Public and Semi-Public Terminals. Vancouver—New Westminster Elevators. Victoria Elevator. Churchill Elevator. Public, Semi-Public and Private Terminals.	3,243,000 54,000	44.015,000 5,879,000 10,512,131 6,396,014 568,185 2,213,380	42.167 467,382	2,610,000 1,956,000 679 262,455	138,000 21,000 - 19 -	1,044,000 97,000 5,619
Elevators—Fort William and Port Arthur In Transit Rail. Eastern Elevators. U.S. Lake Ports. U.S. Atlantic Seaboard Ports.	3,800,760 4,491,006 223,000 506,000	36,715,081 2,715,827 19.043,284 1,689,000 683,000	1,188,622 812,122 738,559	1,099,183 335,477 414,907	18.967 9.074 2.115	926,424 9,972 60,187 42,000
Total	12,317,766	130,429,902	9,232,852	6,678,701	189,175	2,185,202
Total same period, 1938	14.735,580	31,266,620	9.708,769	9,018,532	460,593	1,290.366
Week ended March 24, 1939 Country Elevators, Western Division Interior Private and Mill Elevators. Interior Public and Semi-Public Terminals. Vancouver—New Westminster Elevators	3,220,000	41,940,000 6,117,000 9,129,332 7,017,800 586,711 2,213,380	1,096,000 40,906 415,299	2,605,000 2,024,000 679 259,906	137,000 21,000 - 19	1, 053, 000 100, 000 4,369
Churchill Elevator Public, Semi-Public and Private Terminal Elevators—Fort William and Port Arthur In Transit Rail. Eastern Elevators U.S. Lake Ports. U.S. Atlantic Seaboard Ports	3,827,275 4,395,404 223,000 424,000	36,820,360 5,847,258 18,515,592 1,257,000 663,000	1,241,543 813,468 643,118	1,181,218 422,846 227,328	19,071 3,765 2,115	916,394 18,311 52,504 42,000
Total	12,143,679	130, 107, 433	9,420,334	6,721,037	182,970	2,186,578
Total same period, 1938	14,431,230	30,383,130	9,760,125	8,892,148	446,019	1,276,753
Week ended March 31, 1939 Country Elevators, Western Division Interior Private and Mill Elevators Interior Public and Semi-Public Terminals Vancouver-New Westminster Elevators Victoria Elevator	3, 195, 000 52, 000	38,460,000 6,223,000 8,944,847 8,628,077 665,389 2,213,380	5,015,000 1,095,000 38,811 410,480	2,375,000 2,000,000 679 166,540	131,000 12,000 19	1,062,000 100,000 4,239
Churchill Elevator. Public, Semi-Public and Private Terminal Elevators—Fort William and Port Arthur In Transit Rail. Eastern Elevators. U.S. Lake Ports. U.S. Atlantic Seaboard Ports.	3,874,409 4,277,042 177,000 362,000	37,807,994 6,963,408 17,760,047 836,000 454,000	1,380,061 1,030,865 616,332	1,449,405 652,517 131,197	20,050 5,688 2,115	931,293 14,752 59,777 42,000
Total	11,937,451	128,956,142	9,586,549	6.775.338	170,872	2,214.061
Total sams period, 1938	14,493,068	30.015.442	9,535,224	8,701,520	444,663	1.278.939

II.—Inspection8 in the Western Inspection Division and Shipments from Fort William-Port Arthur by Rail and Water, August 1 to March 31, 1937-38 and 1938-39

Western Division	Wheat	Oats	Barley	Flaxseed	Rye
Inspections	bush, 93,841,033	bush, 16,728,577	bush. 20,337,481	bush. 233,063	bush. 1,149,271
SHIPMENTS	222,072,268	4,611,500	12,244,367	181,942	265,297

PRICES OF AGRICULTURAL PRODUCE

I.—Weekly Range of Cash Prices per Bushel of Canadian Grain at Winnipeg, basis in store Fort William-Port Arthur, February, 1939.

Source: Board of Grain Commissioners for Canada.

Contract Contr						W	eek	eı	nde	d						Mo	ntl	nly
Grain and Grade	ŀ	ebru	ary	7 4	Fe	bruar	y 11	F	ebr	uar;	y 18	F	ebru	ary	25	Av	era	ge
No. 2 Northern No. 3 Northern No. 4 Northern No. 5 No. 6 Feed No. 1 C.W. Garnet No. 2 C.W. Garnet No. 1 C.W. Amber Durum No. 2 C.W. Amber Durum No. 3 C.W. Amber Durum No. 2 C.W.	000000000000000000000000000000000000000	597 597 597 567 517 468 408 398 3818 5237 498 488 468 458	-0 (-0 : -0 : -0 : -0 : -0 : -0 : -0 : -0 :	60777777777777777777777777777777777777	000000000000000000000000000000000000000	$45\frac{7}{6} - 0$ $39\frac{7}{6} - 0$ $38\frac{7}{6} - 0$ $38\frac{7}{6} - 0$ $37\frac{3}{8} - 0$ $51\frac{7}{6} - 0$ $48\frac{7}{6} - 0$ $47\frac{7}{6} - 0$ $44\frac{7}{6} - 0$ $28\frac{3}{6} - 0$	61 5955 5677 46777 40777 49777 49777 49777 49777 49777 49777 45777	000000000000000000000000000000000000000	611 59 56 51 46 40 39 37 52 49 48 45 45 45	-0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -	611887838855538666188787878787878787878787878787878787	0 0 0 0 0 0 0 0 0 0 0 0 0 0	611-603-573-523-471-403-373-453-453-453-453-6	-0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -	624 613 583 484 415 401 383 463 464 291		0 0 0 0 0 0 0 0 0 0 0 0	c. 604 608 57 8 47 404 394 484 46 454 284
No. 3 C.W. No. 1 Feed Ex. No. 1 Feed No. 2 Feed Barley— Six-Row Two-Row.	0 0 0	26 1 - 25 7 - 24 5 - 39 1 - 39	-0 -0 -0	27 261 25 401	0 0 0	251-0 253-0 241-0 391-0	261 257 248 40	0 0 0	25 25 24 39	-0 -0 -0	26 26 26 25 40	0 0	261 243 243 401	_0 _0 _0	261 251 401		0 0 0	261 261 261 241 391 391
No. 3 C.W No. 4 C.W Flaxseed— No. 1 C.W No. 2 C.W No. 3 C.W	0	36 - 35 - 425- 385-	-0 -0 -1 -1	363 353 447 407	0 0 1 1 1	$36 - 0$ $35\frac{1}{4} - 0$ $44\frac{1}{4} - 1$ $40\frac{1}{4} - 1$	36 35 35 47 43	0 1 1	35 35 46 42	$ \begin{bmatrix} -0 \\ -0 \end{bmatrix} $	36 35 49 45	0 0 1 1	361-355	_0 _0 _	36%		0 0 1 1 1	361 351 471 431 311
Rye— No. 2 C.W.	0	401-	-0	415	0	403-0	41	0	40	3-0	413	0	411	-0	418		0	411

II.—Average Weekly Prices per Bushel of Grain in the United States, 1938-39 Source: Bureau of Agricultural Economics, U.S. Department of Agriculture

Don't die											V	Vee	k er	de	d											
Description	No 5		No 1		No 1		No 2			ec.	De 10		De 17		De 2		De 3		Jai 7	n.	Ja:		Jan 21		Ja:	
	\$	a.	\$	c.	- \$	c.	8	0.	1	c.	\$	C.	\$	c.	\$	c.	\$	c	8	c.	- 8	c.	\$	c.	8	0
Wheat, No. 2 Red																										
Chicago	0	67		-		-		-		-		69				69		-		-		74		72		7
St. Louis	0	66	0	66	0	67	0	65	(67	0	69	0	70	0	69	0	72	0	74	0	73	0	72	0	7
Corn, No. 2 Yellow—																										
Chicago	0	45	0	47	0	48		48		3 49		52		52		52		53		54		53		53		5
St. Louis	0	44	0	48	0	48	0	48	(3 49	0	51	0	52	0	53	0	53	0	54	0	53	0	53	0	5
Oats, No. 3																										
White-Chicago	0	25	0	26	0	26	0	27	1	28	0	29	0	29	0	29	0	31	0	31	0	31	0	31	0	3
St. Louis		26		27		27		28		30		31		31		30		30		32		33		31	0	3
Rye, No. 2-																										
Chicago	0	45		0		-	0	46		-		-	0	48		0-		-		-	0	51		-		-

III.—Weekly Range of Prices of Imported Grain and Flour at Liverpool, February, 1939

Source: Board of Grain Commissioners for Canada

Note.—Quotations are given in Canadian money at current rate of exchange

A. Weekly Range of Cash Prices per Bushel, February, 1939, with Averages for Month

Grain and Grade		Week ended		Monthly
	February 4	February 11 February 18	February 25	Average
Wheat-	\$ c. & c.	\$ c. \$ c. \$ c. \$ c.	\$ c. \$ c.	\$ c.
No. 1 Northern Manitoba	0 88-0 89	0 88— 0 88—	0 88-0 89	0 88
No. 2 Northern Manitoba	0 86-0 87	0 84-0 86 0 85-0 86	0 85-0 87	0 86
No. 3 Northern Manitoba	0 82-0 84	0 81-0 84 0 81-0 84	0 82-0 84	0 82
Danubian	0 64-0 68	0 64-0 67 0 62-0 65	0 60-0 62	0 62
Australian.	0 75-0 79	0 74-0 77 0 74-0 77	0 71-0 77	0 75
Oats—				
No. 1 Canada Feed	0 46-0 47	0 45-0 46 0 45-0 46	0 450 46	0 46
English White	0 43-0 46	0 45-0 46 0 43-0 46	0 43-0 46	0 45
Barley—				
No. 3 Canada Western	0 61-0 62	0 60-0 61 0 59-0 61	0 59—0 60	0 60
Soviet	0 61-0 63	0 60-0 61 0 59-0 61	0 59-0 61	0 60
Flour (per 280 lb.)—				
Top Patents ex mill	5 53—5 65	5 53—5 65 5 53—5 65	5 42-5 65	5 57
Bakers ex mill	4 47—4 59	4 47—4 59 4 47—4 59	4 36-4 59	4 51
Manitoba Patents	5 65—6 00	5 53—6 00 5 53—5 89	5 53—5 89	5 75
Australian	4 59-4 71	4 59-4 71 4 59-4 71	4 59-4 71	4 65

B. Weekly Range of Daily Closing Prices per Bushel of Wheat Futures, February, 1939, with Averages per Month

	Week ende	a		Ma	rel	1		N	lay			Ma	rel	1		M	ay			Jul	ly	
	week ende	u			Old	l co	nt	ract	8	П			П]	Ver	w c	ont	raci	8			
			S	c.	8	c.	1 8	c.	8	c.	8	c.	\$	c.	\$	c.	\$	c.	1 8	c.	1	8 c
February	4		0	661-	-0	671	0	663	-0	67¥	0	621-	-0	63 5	0 6	33	-0	64	0	643	-0	65
44	11		0	641	-0	661	0	651	-0	66§	0	60}-	-0	621	0 {	321	-0	63	0	64 -	-0	64
44	18,		0	64 -	-0	65	0	651	-0	66 <u>1</u>	0	603-	-0	618	0 (32 }	-0	634	0	641	-0	64
46	25		0	621-	-0	63 §	0	641	-0	65%	0	601-	-0	60 į	0 6	321	-0	623	0	64 -	-0	64
	Average		-	0	641			0	651			0	61			0	623			0	641	

IV.—Average Monthly Prices of Flour, Bran and Shorts at Principal Canadian Markets, 1938 and 1939

Source: Montreal, The Gazette; Toronto, Dealers' Quotations; Winnipeg, Minneapolis and Duluth, The Northwestern Miller

Market and Grade	September	October	November	December	January 1939	February	March
96. 4 1	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Montreal— Flour, first patentsperbbl.* Flour, Ont., delivered	5 36	5 23	5 15	5 13	5 05	4 89	4 61
Montrealper bbl.	3 10	3 18	2 99	3 00	2 96	2 93	2 85
Bran per ton Shorts per ton Toronto—	18 29 20 29	19 71 21 71	19 25 21 25	19 40 21 25	21 21 22 21	22 04 23 04	23 03 24 03
Flour, first patents (jute bags)per bbl.*	5 36	5 23	5 15	5 13	5 05	4 89	4 61
Flour, first patents (cotton bags)per bbl. Branper ton	5 27 17 75 19 75	5 13 19 80 21 80	4 98 19 00 21 00	4 93 19 75 21 00	4 98 21 00 22 00	5 05 22 00 23 00	5 05 23 00 24 00
Shortsper ton Winnipeg— Flour per bbl.	5 15	5 00	4 80	4 75	4 60	4 53	4 50
Branper ton Shortsper ton	15 50 17 50	16 00 18 00	16 00 18 00	16 00 17 63	16 40 18 20	18 00 19 00	18 00 19 00
Minneapolis	5 22- 5 32 13 38-13 63 14 50-15 00	5 15- 5 25 13 30-13 60 14 15-14 50	14 88-15 37	16 50	17 90-18 15	17 63-17 88	5 14- 5 1 19 62-19 7 19 88-20 2
Duluth— Flour per bbl.	4 90- 5 03	4 90- 5 10	4 85- 5 05	4 80- 5 00	4 80- 5 00	4 75- 4 95	4 53- 4 8

Nors.-The ton=2,000 lb. and the barrel=196 lb.

V.—Weighted Average Monthly Prices per cwt. of Live Stock at Principal Canadian Markets, 1938 and 1939

Source: Market Information Service, Dominion Department of Agriculture.

Market		Cattle			Calves			Hogs		Sheep	and L	ambs
Market	Feb. 1939	Mar. 1939	Mar. 1938	Feb. 1939	Mar. 1939	Mar. 1938	Feb. 1939	Mar. 1939	Mar. 1938	Feb. 1939	Mar. 1939	Mar. 1938
Montreal Toronto. Winnipeg Calgary Edmonton Moose Jaw	\$ e. 5 25 5 71 4 95 4 74 4 58 4 49	\$ e. 5 05 5 86 5 03 5 14 4 76 4 67	\$ c. 4 56 5 00 4 32 4 05 3 78 3 56	\$ c. 8 60 9 65 7 21 5 57 6 99 5 48	\$ c. 6 12 8 44 6 33 5 57 6 30 4 88	\$ c. 6 38 8 29 5 82 4 76 5 84 5 06	\$ e. 9 57 9 26 9 05 8 77 8 69 8 85	\$ c. 9 58 9 22 8 99 8 87 8 67 8 62	\$ c. 10 18 9 87 9 51 9 13 9 11 9 38	\$ c. 5 99 8 29 6 62 6 45 6 68	\$ c. 6 80 8 44 7 69 6 51 6 76 5 85	\$ c. 6 28 8 30 7 21 6 62 6 91

VI.-Average Prices per cwt. of Live Stock at Chicago, U.S.A., 1939

Source: Bureau of Agricultural Economics, U.S. Department of Agriculture.

Description										W	eek	end	led										
Description	Fel 4	٥. ا	Fel 11		Fel 18		Fe 2	b. 5	Mont Aver				Ma 1		Ma 18		Ma 2		Apr.	il	Mo Av		
Beef cattle— Steers, choice: 1,300-1,500 lb. 1,100-1,300 lb. 900-1,100 lb. 750-900 lb. Heifers, choice, 750-900 lb. Veal calves, choice.		30 78 00	11 12 12 11 10	02 20 90 95	12 12 12 12 12		12 12 12 12 11	50 50 52 08 00 50	12 12 12 11	24 26 34 94 99 51	12 12 12 12 11	62 62 62 12 00 42	12 12 12 12 11	75 48	12 12 12 12 11	78 78 75 50 18 50	12 12 12 12 10	68 65 50 88	12 12 12 12 12	42 42 28 12		12 12 12 12 12 10 10	64 64 64 38
Sheep— !ambs, good and choice Hogs— Average cost, all packer and shipper	9	02	8	82	8	91	8	78		88	8	92	8	96	8	96	9	31	9	43		9	12
purchases. Good and choice, 180-200 lb	8	66 02 74	7	58 96 66	8	88 14 86	8	98 32 96	1 8	777 3 11 7 80	8	74 12 80	8	68 04 71	7	42. 76 41	7	32 66 34	7	10 42 09		7	43 80 47

^{*}Carload lots-Montreal rate points.

VII.—Average Monthly Prices per cwt. of Live Stock at Principal Canadian Markets, 1938 and 1939

Source: Market Information Service, Dominion Department of Agriculture.

						1			
Classification	Dec.	Jan. 1939	Feb.	Mar.	Classification	Dec.	Jan. 1939	Feb.	Mar.
	\$ c.	\$ c.	\$ c.	\$ c.		\$ c.	\$ c.	\$ c.	\$ c.
Montreal—					Calgary—				
Steers, up to 1,050 lbgood medium	6 47	6 90	7 49 8 61	7 46 6 51	Steers, up to 1,050 lbgood medium	5 03	5 58 4 94	5 97 5 00	6 78 5 90
Steers, over 1,050 lbgood	4 67	4 99 6 96	5 40 7 48	5 32 7 43	common	- 3 41 5 02	4 00 5 55	4 00 5 96	5 18 6 36
medium	5 71	6 14	6 57	6 44	medium	4 27	4 95	5 00	5 96
Heifersgood	4 78 5 27	5 12 5 74	5 29 6 34	5 07 6 56	Heifersgood	3 40 4 32	3 94 4 89	4 00 5 00	5 04 5 47
Calves, fedgood	4 44 8 27	4 99 7 55	5 46 8 21	5 48 8 14	Calves, fedgood	3 61 5 25	4 00 5 50	4 00 5 88	4 77 6 21
Calves, veal. good and choice	6 31	6 00 10 80	10 52	6 82 7 70	Calves, veal,good and choice	4 50	4 75 6 37	5 20 7 43	5 25 7 37
common and medium	9 22 4 39	9 25 4 89	8 91 5 26	6 12 5 39	common and medium	3 52 3 34	4 00	4 80	5 00
Cowsgood medium Rullsgood	3 71	4 07	4 50	4 57	Cowsgood medium Bullsgood	2 53	3 12	3 75 3 25	4 11 3 46
Hogsgood	4 40 9 78	5 02 10 29	5 17 10 11	5 48	Stocker and feeder steers good	2 88 4 22	3 71 4 37	3 27 4 68	3 70 4 89
bacon butchers	9 28 8 78	9 75 9 06	9 61 9 05	9 64 8 99	Stock cows and heifersgood	3 25 2 90	3 50 3 50	3 25 3 27 2 25	3 43
heavies lights and feeders	8 77 9 04	8 75 9 31	8 91 9 92	8 77 9 98	Hogsselects	2 00 8 46	2 44 8 67	2 25 9 24	9 30
Lambsgood handyweights Sheepgood handyweights	8 90 4 00	8 42 4 18	8 53 4 68	8 95 5 24	bacon butchers	7 97 7 46	8 20		8 80
Sneepgood handy weights	2 00	9 10	1 00	3 24	heavies	6 96	6 70	8 73 7 72 7 23	7 82 7 30
Toronto-					lights and feeders Lambsgood handyweights	7 75 6 90	7 75 6 91	8 23 6 90	10 00 6 98
Steers, up to 1,050 lbgood medium	6 06 5 55	6 44	6 54	6 78 6 43	Edmonton-				
Steers, over 1,050 lbgood	4 81 6 54	5 46 6 73	5 41 6 94	5 89 7 15	Steers, up to 1,050 lb good medium	5 25 4 75	5 45 4 99	5 72 5 10	5 83 5 32
medium	6 01 5 38	6 31 5 87	6 44 5 89	6 72 6 30	Steers, over 1,050 lbgood	4 00	4 15 5 43	4 20 5 69	4 61 5 82
Heifersgood	8 00	6 42	6 47	6 74	medium	5 25 4 75	4 99	4 89	5 30
Calves, fedgood	5 53 7 78	6 02 8 22 7 47	6 08 7 81	6 36 8 08	Heifersgood	4 00 5 21	4 14 5 25	4 00 5 46	4 50 5 62
Calves, vealgood and choice	6 54 9 78 7 53	10 09	6 85	7 29 9 65	Calves, fedgood	4 48 5 50	4 75 5 50	4 86 5 50	5 10 5 50
Cowsgood	7 53 3 93	7 99	8 12 4 74	7 34 4 96	Calves, vealgood and choice	4 50 6 61	4 50 6 86	4 50 7 94	4 50 7 20
Bullsgood Stocker and feeder steersgood	3 40 4 20	3 84 4 95	4 21 4 68	4 40 5 28	Cowsgood	5 06 3 04	5 60 3 81	6 37	5 89 4 22
Stocker and feeder steersgood	5 44 4 74	5 60 5 00	5 52 5 08	5 97 5 38	Bulls medium	2 69 2 93	3 42	3 33 3 18	3 72 3 60
Hogsselects	9 61	9 67	9 72	9 70	Stocker and feeder steersgood	4 08	4 65	4 50	4 82
bacon butchers	9 12 8 51	9 22 8 12	9 23	9 20 8 65	Stock cows and heifersgood	3 25	3 50 3 38	3 50 3 50	3 87 3 63
beavies lights and feeders	8 42 7 81	8 02 8 22	-	8 20 8 50	Hogsselects	8 55 8 05	8 61 8 10	9 25 8 75 7 73	9 24 8 74
Lambsgood bandyweights common, all weights	9 10 6 72	8 88 6 75	8 80 6 78	8 76 7 10	hutchers heavies	7 55 7 06	7 15 6 61	7 73 7 22	7 71 7 21
Sheepgood handyweights	4 14	4 93	5 01	4 90	lights and feeders Lambagood handyweights	6 01	6 06 7 12	6 73 6 87	6 65 7 32
Winnipeg—			-		common, all weights Sbeepgood handyweights	5 55 3 25	6 24	6 00	6 00
Steers, up to 1,050 lbgood	5 50	5 99	5 99 5 36	6 28	Moose Jaw-	0 20	4 00	1 00	_
medium common	4 73 3 85	5 22 4 32	4 49	5 59 4 75	Steers, up to 1,050 lbgood	4 46	4 76	5 16	5 39
Steers, over 1,050 lb good medium	5 39 4 58	6 07 5 32	6 00 5 32	6 26 5 65	medium	3 53	3 91	3 68	4 30
Heifersgood	3 90 4 86	4 43 5 48	4 45 5 40	4 70 5 72	Steers, over 1,050 lbgood medium	4 32 3 75	5 00 3 88	5 75	_
Calves, fedgood	4 12 6 71	4 70 6 75	4 62 6 74	4 98 6 61	Heifersgood	3 89	4 38	4 61	4 76
medium Calves, vealgood and choice	5 34	5 64 8 50	5 65 8 70	5 65 7 53	Calves, fedgood	3 07 4 78	3 61 4 97	3 50 5 75	3 86 5 16
common and medium	5 87	5 84	5 86	5 26	medium Calves, vealgood and choice	3 63	3 50	6 11	6 08
Cowsgood medium	3 60 2 97	4 34 3 55	4 34	3 98	common and medium	3 96	6 01	4 22	4 45
Bulls	3 52 4 64	4 37 4 98	3 67 5 03	4 26 5 38	Cowsgood medium	3 21 2 60	3 70 2 99 3 36	3 84 2 81 3 12	4 13 3 38
Stock cows and heifersgood	3 57 3 50	3 92 3 73	5 03 3 84 3 95 2 95	4 10 4 07	Bullagood Stocker and feeder steers good	2 67 4 02	4 62	3 12 4 55	3 16 4 50
Hogsselects	2 59 9 06	3 73 2 87 9 04	2 95 9 53	3 25 9 51	Stock cows and heifersgood	2 75 3 46	2 93	-	3 26
bacon butchers	8 56 8 07	8 54 7 58 7 01	9 03	9 01	common Hogsselects	2 00 8 85	2 25 9 11	9 48	9 40
heavies	7 58	7 01	8 03 7 48 9 47	8 07 7 52	bacon	8 36 7 87	8 61	8 00	8 90 7 92
lights and feeders Lambsgood handyweights	6 91 7 95	9 07 8 07	7 71	9 54 8 14	butchers heavies	7 37	7 72 7 08	7 83	7 38
Sheepgood handyweights	6 12 3 29	6 25	6 25 3 52	6 28 3 50	lights and feeders Lambsgood handyweights	8 24 6 42	8 27 6 86	8 40	8 70

VIII.—Wholesale Prices of Produce on the 15th of the Month at Principal Canadian Markets, 1938 and 1939

Source: Dealers' Quotations

					1				
Description	Unit	Jan. 1939	Feb. 1939	Feb. 1938	Description	Unit	Jan. 1939	Feb. 1939	Feb. 1938
		\$ c.	\$ c.	\$ c.			\$ c.	\$c.	\$ c.
Halifax— Hams, 12 to 18 lb	lb.	0 24	0 27	0 26	Winnipeg— Hams, smoked, 12 to 16 lb	lb.	0 26	0.28	0 26
Bacon	bbl.	0 25 27 00	0 26 27 00	0 31 33 50	Bucon, smoked, 6 to 8 lb Pork, mess, barrelled	14	0 26 0 17	0 27	0 26 0 16
Barrelled mess pork, P.E.I Beef careass, steer	lb.	0 14 0 16	0 14 0 16	0 11	Beef carcass, good steer, 450	16	0 11	0 12	0 10
Lamb, spring Lard, pure	46	0 12	0 12		to 650 lb Lambs, good, 37 to 48 lb	64	0 18	0.18	0 16
Butter, fresh-made creamery prints	46	0 26	0 26	0 36	Lard, tierces	64	0 08		0 34
Cheese, new	doz.	0 18 0 28	0 18 0 27	0 18 0 29	Cheese, Manitoba triplets	46	0 15	0 24	0.16
Potatoes, Canada White, Grade A	90 lb.	1 25	1 15	0 75	Eggs, grade A, large	doz. 90 lb.	0 26 0 72	0 24 0 75	0 28 0 48
St. John- Hams	lb.	0 28	0 28	0 26	Regina— Hams, smoked, Dominion,	11-	0.07	0.00	0.90
Beef carcass, country beef	44	0 28	0 28	0 26	Bncon, smoked, Dominion,	lb.	0 27		
steersLamb	16	0 11 0 16	0 10 0 17	0.17	6 to 8 lb Beef carcass, good steer and	84	0 27	0 28	0 30
Lard, pure	tt	0 12 0 24	0 11 0 26		heifer, 550 to 750 lb Lambs, good spring	14	0 12	0 13 0 17	0 12 0 17
Cheese, new	doz.	0 17	0 17 0 26	0 18 0 29	Lard, in tierces, approx. 360	44	0 10	0 10	0 12
Potatoes, Canada, Grade I Hay, pressed, car lots, No. 1.	80 lb.	1 05 12 00	1 10	0 60 13 00	Butter, finest creamery prints	44	0 23	0 23	0 34
					Cheese, Sask. Stiltons Eggs, grade A, large	doz.	0 20 0 22		0 20 0 24
Montreal-					Potatoes, Manitoba White, No. 1	90 lb.	0 85	0 92	0 90
Hams, No. 1, smoked, light, 12 to 16 lb.	lb.	0 23	0 24	0 22					
Bacon, smoked, light, 6 to 8		0 21	0 21	0 22	Calgary—				
Pork, mess, barrelled Beef carcass, good steer, 400	6.6	0 12	0 13		Hams, smoked, Dominion, 12 to 16 lb.	lb.	0 28	0 29	0 26
to 600 lb Beef, plate, barrelled (200 lb.)	bbl.	0 13 16 00	0 14 15 00	0 10 16 00	Bacon, smoked, Dominion,	44	0 25	0 25	0 29
Lambs, choice	lb.	0 15		0 17	Barrelled mess pork	bbl.	31 00		31 00
Butter, first grade, creamery	14	0 25	0 24		to 650 lb. Lambs, good, 37 to 48 lb	lb.	0 12 0 16	0 12	0 H 0 H
Cheese, new, large	ďoz.	0 14 0 26	0 14	0 15	Lard in tierces, Shamrock, approx. 360 lb.	44	0 10		
Eggs, grade A, large	80 lb.	1 10	1 23	0 55	Butter, Glendale creamery	t£.	0 23	0 23	0 35
No. 1 Timothy hay, extra, No. 2	ton	7 50	7 50		Cheese, Royal Canadian Half	16	0 17	0 17	0 19
					Stiltons, new Eggs, grade A, large. Potatoes, Alta. Gems, No. 1	doz.	0 20	0 24	0 85
Toronto-					Potatoes, Arta, Genis, No. 1	80 ID.	0 82	0 82	0 00
Hams, No. 1, smoked, light.	lb.	0 25	0 26	0 25					
6 to 8 lh,	46	0 25	0 25	0 24					
Pork, mess, barrelled Beef, carcass, good steer, 450	61	0 14		0 14	16 lb	lb.	0 23	0 23	0 25
to 650 lb. Beef, plate, barrelled (net,	16	0 12	0 13		Bacon, smoked, 6 to 8 lb Pork, mess, barrelled	66	0 25 0 16	0 24 0 16	0 26 0 16
200 lb.)	bbl.	17 00 0 18	0 16	0 16	Beef, carcass, good steer Spring tambs, good	66	0 10 0 17	0 17	0 11 0 16
Lard, tierces	46	0 09	0 09	0 11	Lard, tierces	f4	0 10		
prints	16	0 24	0 24 0 14	0 36 0 16	Cheese, mild, Ontario,	64	0 24	0 26	0 37
Cheese, whole, new, cheddar Eggs, grade A, large Potatoes, Ontario White	doz. 90 lb.	0 24 1 22	0 27	0 26 0 58	Stilton. Eggs, grade A, large	doz.	0 22 0 22	0 22 0 22	0 23 0 22
Timothy hay, baled, No. 2	ton	10 50				ewt.	1 35	1 35	1 02

STATISTICS CANADA LIBRAR, BIBLIOTHÉQUE STATISTIQUE CANADA 1010756887