CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

SALIENT FEATURES OF THE GRAIN SITUATION IN CANADA

Specially Prepared
for the
WORLD'S GRAIN EXHIBITION AND CONFERENCE
Regina, Saskatchewan.
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SALIENT FEATURES
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GRAIN SITUATION IN CANADA

CONTENTS

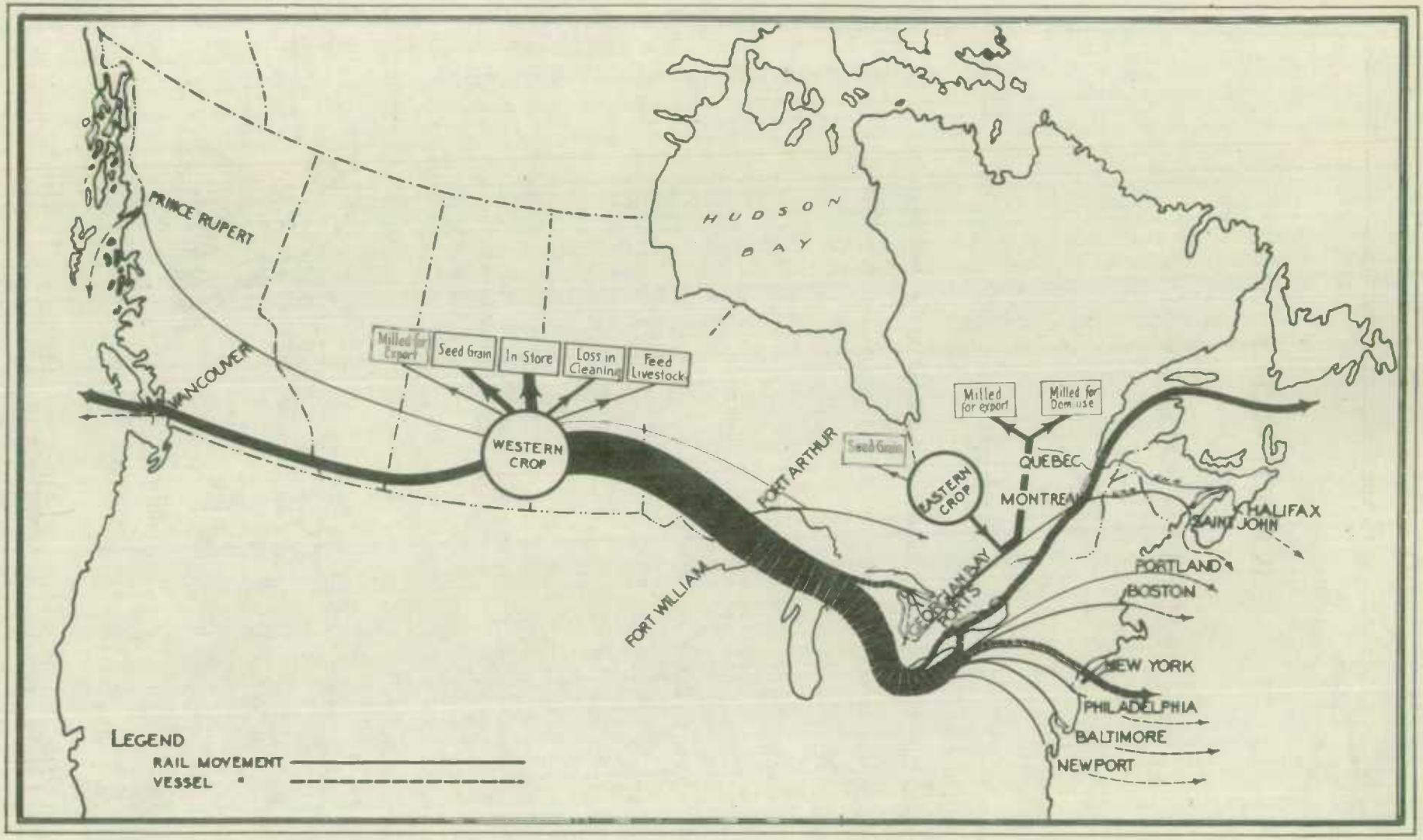

CHART SHOWING AVERAGE MOVEMENT OF CANADIAN WHEAT CROP, 1927-31

PREFACE.

Wheat is the leading commodity in the internal and external trade of the Dominion of Canada, and its efficient marketing is a matter of major concern to the Department of Trade and Commerce. The Department over which I preside is utilizing every facility to promote the welfare of the cereal industry in Canada, especially in fostering our relations with the consuming markets abroad.

One of the most important functions performed in respect to grain is the preparation and publication of statistics of yields and marketings. This function is performed for Canada by the Dominion Bureau of Statistics, which, among its many duties, is charged with the responsibility of compiling and issuing periodic crop reports and official estimates of agricultural production, as well as the statistics of our farm products at the various stages through which they reach their final markets whether in Canada or throughout the world.

I trust that the present bulletin will be of assistance in explaining the nature and scope of Canadian grain statistics, and will be helpful to those in attendance at the World Grain Exhibition and Conference in the interpretation of the official grain reports issued in this country.

H. H. Stevens

Minister of Trade and Commerce.

THE DOMINION BUREAU OF STATISTICS.

While Canada, under the French régime, has the distinction of having taken the first organized census in the world in the modern sense of the term, the later statistics of the scattered British colonies which now constitute the Dominion were scrappy and incomparable. Just prior to Confederation, there was a revival of interest in statistics under the auspices of Hon. D'Arcy McGee, then Minister of Agriculture of the Province of Canada, and his interest in the matter was probably a reason why the subject of "the census and statistics", was among those "exclusively assigned" to the new Dominion Government by the British North America Act and later placed under the Department of Agriculture for administrative purposes. The first, second, third and fourth Dominion censuses were taken by temporary organizations, but in 1905 a permanent Census and Statistics Office was created, which may be regarded as the progenitor of the Dominion Bureau of Statistics.

Subsequent to Confederation, various other statistical offices had arisen in the Dominion Government service as subordinate branches of particular Departments, notably in respect of trade statistics, railways statistics, mining statistics, fisheries statistics, forestry statistics, immigration statistics, criminal statistics, etc., but these statistics, as well as the statistics collected by provincial departments in the course of their administration, were often found to be quite incomparable with each other as well as with those of the Census and Statistics Office. Departments interested in production often paid scanty or no attention to the statistics of capital, labour, wages, etc., which might have been collected at the same time. In these circumstances the official statistics of Canada were found so inadequate and confusing that the Royal Commission on Statistics, which was set up in 1912 to investigate the situation, advised strongly in favour of a policy of centralization of the statistical services of Canada. This centralization was put into effect by the Statistics Act of 1918 and in the subsequent years the Dominion Bureau of Statistics as it now exists was constituted by the transfer from various Departments of the following branches: the Census and Statistics Office, fisheries statistics,

mining statistics, forestry statistics, dairy and food statistics, water and electric power statistics, the statistical branch of the Railways and Canals Department, the trade statistical branch, grain trade statistics, live-stock statistics, prices statistics and employment statistics, while four new branches were created dealing with public finance, internal trade, vital statistics and education, respectively. The new Bureau also fell heir to the statistical activities of the war-time Fuel Controller and the Board of Commerce. Under the terms of the Statistics Act, its mandate now embraces all official statistics "relative to the commercial, industrial, social, economic and general activities and conditions of the people".

In order that statistics may serve departmental requirements as well as those of general policy, machinery is created under the Statistics Act for close collaboration both between the Bureau and the several Departments of the Dominion Government, and also between the Bureau and the more important provincial executive departments.

The history of the Bureau since its creation has furnished indubitable proof of the expediency of the policy it reflects. Among the advantages flowing from the adoption of centralization have been a realization of the economies which it permits in respect of staff, equipment and in the elimination of duplication. Further, large scale operations have made possible the economical use of expensive electrical tabulating machinery, while central library, record and administration systems have also promoted economy. Even more important perhaps is the fact that the Bureau has brought all the chief statistical officers of the Government into close touch with each other and has favoured the bringing together of comparable statistics as in the fields of production, trade, transportation, prices, etc. Thus, in the existing statistical system of Canada, not only are the possibilities of error reduced to a minimum by the constant checking up of the statistics in one field with those in another, but the interpretation of statistics is greatly facilitated. For example, the estimates of the yield of grain are all the time being checked by the receipts of grain at the elevators, while the annual statistics collected on agriculture are checked by the comprehensive and elaborate investigations of the decennial census. The next following article in the present bulletin deals fully with statistical organization in the great field of agriculture, which may be taken as typical of the methods pursued in all other branches of work.

Thus the Dominion Bureau of Statistics aims to have, on almost any subject which comes to the attention of the Government and people of Canada and which lends itself to statistical measurement, the most accurate available statistics. In brief, the final objective of the Dominion Bureau of Statistics is the creation of a nation-wide conspectus covering all the more important phases of social and economic activity, and relating these to the general background of nature and history in the Dominion. A numerous series of weekly, monthly, and annual reports is issued, for information as to which either as a whole or on any particular subject application made to the Bureau will bring prompt response.

R. H. Coats

Dominion Statistician.

GRAIN STATISTICS IN CANADA.

The organization of agricultural statistics in Canada is essentially the result of evolution and co-operation. Less than a generation ago, the basic statistics of acreage and production were not only inaccurate but conflicting. Provincial and Dominion authorities issued independent estimates and the public was almost invariably confused. A series of conferences and commissions, the latest one as recently as 1924, has largely corrected this situation and the Statistics Act of 1918, with subsequent Amendments and related Orders-in-Council now provides the groundwork for effective development. This Act provides for national integration of agricultural statistics through the Dominion Bureau of Statistics at Ottawa and yet quite properly leaves the local organization in the hands of the provincial authorities, where supervision can be more intimate. Development on this basis has been rapid. Annual returns on acreage and live stock are now compiled in two provincial capitals, and monthly reports on the crops are prepared in four.

Acreages.

The basis of the acreage estimates is the June Survey conducted mostly through the rural schools, but also by direct mailing of cards to farmers in Alberta and British Columbia. The object is to obtain a representative sample of cards from 20 to 30 per cent of the farmers, from which estimates for the entire 100 per cent can be made. While there are better methods than this from the standpoint of accuracy, these would involve a much greater cost and, unless the staff was extremely large, a much longer period of compilation. During the present period when every possible economy is a necessary function of government, it is thought that the best results evolve from an improvement of the existing system.

Intentions Report.

The "Intentions" report for spring grains has now been compiled for three years at the same date. The acreages shown in this report for 1933 should not be expected to compare with those disclosed later by the June Survey. The intended acreages are only indicative of farmers' plans about the first of May and the actually sown acreages may be changed by many later considerations such as soil and weather conditions and price movements. In the two years for which intended acreages may be compared with those finally established, wheat

and oats "Intentions" have been low and barley, rye and flax (particularly the latter) have been high. An effort has been made to correct the 1933 "Intentions" for the probable bias.

Crop Reports.

Current reports on growing conditions are collected from a large list of correspondents distributed throughout the agricultural areas. These number about 15,000 and include technical agriculturists, farmers, railway and elevator agents, and rural bank managers and postmasters. In practice it is found that the separately compiled results of each class of correspondent have rather constant and peculiar characteristics or biases; thus the need of drawing information from more than one class in an effort to secure reliability. These reporters are worthy of very special tribute because of their painstaking devotion to public service without remuneration. Attention to the numerous schedules distributed from the Bureau requires a lot of time and no little ability. The crop-reporting season begins at the end of April with reports on winter-killing, the condition of fall wheat, fall rye, hay and clover meadows and on the intended acreages of the principal crops. This service continues monthly throughout the year, covering the various phenomena of growth in season.

Numerical Expression of Condition.

The method adopted for expressing numerically the condition of field crops is an adaptation of the method which is recommended by the International Institute of Agriculture to all adhering countries. This method consists in the use of a percentage scale in which the number 100 represents the provincial average yield per acre over a long series of years, and correspondents are asked to judge whether the appearance of the crops at a given date indicates the promise of a yield per acre equal to, greater or less than this average. For example, if the average yield per acre of wheat in the province of the correspondent is, say, 20 bushels, and the appearance of the crop on June 30 is above the average and warrants the expectation of a crop of 21 bushels to the acre, 20 bushels being represented by the number 100, 21 bushels will be represented by 105. $\left(\frac{21 \times 100}{20} = 105.\right)$ Similarly, if the crop is below average and the yield is expected to be only 19 bushels, the percentage reported will be 95. $\left(\frac{19 \times 100}{20} = 95.\right)$ In practice, the calculations of the correspondent will be shorter

than this. Having formed a clear idea of the average yield in his locality, he will be able from the appearance of the crop to judge within reasonable limits the percentage above or below the average and will report accordingly. To enable correspondents to judge the average yield of each crop in their respective districts, the average yields per acre of the principal field crops for each province, calculated from the data furnished by crop correspondents, are furnished to them annually.

Production Estimates.

Three estimates of the production of cereal crops are made _ the first about September 10, the second about November 10, and the third about January 21. When the complete figures of marketing and disposition are available after the crop year closes on July 31 the estimates can be checked and adjusted. Because of the practically complete check on the disposition of farmers' supplies now provided, the final estimates may be placed within 1 per cent of actual production.

Telegraphic Reports.

An important part of the crop-reporting service is provided by the telegraphic reports. These are issued six times for the whole of Canada and fifteen times for the Prairie Provinces— the former appearing every two weeks and the latter every week during the growing season. The basic reports are submitted by about 82 correspondents strategically distributed across Canada and the report is issued from Ottawa on the same day that the wires are received. Officers of the Dominion and Provincial Departments of Agriculture form the backbone of this service, with specially selected private reporters in Manitoba and Alberta. Since 1930, every possible effort has been made to cover crop development and particular attention has been paid to entomological, pathological and meteorological conditions. The Dominion Meteorological Service co-operates in this latter regard. Western hail insurance companies give reliable information on hail damage.

Internal Movement.

Concurrent with these statistics of crop production, comprehensive data are collected on the marketing and disposition of grains. For the Western Inspection Division, this information is collected by the Board of Grain Commissioners while in the Eastern Inspection Division, it is compiled jointly by the Board and the Dominion Bureau of Statistics. Through this service, the grain is followed through the marketing and transporting process from the country elevator or loading platform to its final utilization. Records are collected and published weekly showing amounts in store, receipts and shipments at the various classes of elevators. Weekly statements of the visible supply are issued and these probably comprise the most complete, detailed and prompt enumeration of grain supplies issued by any country in the world. At March 31 and July 31 of each year, comprehensive figures on stocks of the five principal grains are collected and published.

To trace the utilization of wheat as flour and feed, monthly returns from the flour and grist mills of Canada are compiled in the Bureau. The General Manufactures Branch of the Bureau also prepares an annual report on flour-milling operations.

The following table shows the Crop-Reporting Schedule of the Dominion Bureau of Statistics for 1933-34: The calendar on page 14 shows dates upon which crop reports will be issued during the present cereal season.

Crop-Reporting Schedule.

No.	Date.	Day.	Time.	Subject.
	1933		E.D.S.	
1	May 10	Wednesday	4 p.m.	Intentions to Plant Field Crops, Winter Killing and Spring Condition of Fall Wheat, Fall Rye, and Hay and Clover Meadows. Progress of Spring Seeding.
2	May 30	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
3	June 6	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
4	June 9	Friday	4 p.m.	Condition of Field Crops at May 31, Canada.
5	June 13	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
6	June 20	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
7	June 27	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
8	July 4	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
9	July 11	Tuesday	4 p.m.	Condition of Field Crops at June 30 and Preliminary Estimate of Areas of Late-sown Crops, Canada.
10	July 11	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
11	July 18	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
12	July 25	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
13	Aug. 1	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
14	Aug. 9	Wednesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
15	Aug. 10	Thursday	4 p.m.	Preliminary Estimate of the Yield of Fall Wheat, Fall Rye, Hay and Clover and Alfalfa. Condition of Field Crops at July 31, Canada. Estimate of Areas Sown to Principal Grain Crops, Prairie Provinces.
16	Aug. 11	Friday	4 p.m.	Stocks of Grain in Canada at July 31 and Preliminary Statement of the Distribution of the 1932 Wheat Crop.
17	Aug. 15	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
18	Aug. 22	Tuesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
19	Aug. 29	Tuesday	4 p.m.	Telegraphic Crop Report, Canada.
20	Sept. 6	Wednesday	4 p.m.	Telegraphic Crop Report, Prairie Provinces.
21	Sept.11	Monday	4 p.m.	Preliminary Estimate of Yield of Principal Grain Crops and Condition of Late-sown Crops, Canada.
			E.S.	
22	Oct. 11	Wednesday	4 p.m.	Preliminary Estimate of Yield of Root and Fodder Crops, Canada.
23	Nov. 10	Friday	4 p.m.	Provisional Estimate of Yield of Grain Crops, Canada.
24	Nov. 15	Wednesday	4 p.m.	Provisional Estimate of Yield of Root and Fodder Crops, Canada. Area and Condition of Fall Wheat and Fall Rye.
25	Dec. 15	Friday	4 p.m.	Preliminary Estimate of Value of Field Crops, Canada.
	1934			
26	Jan. 19	Friday	4 p.m.	Final Estimate of Area, Yield and Value of Field Crops, Canada.
27	April 12	Thursday	4 p.m.	Stocks of Grain on Hand and of Merchantable Quality and Distribution of Wheat Crop, March 31, Canada.

CROP, REPORTING CALENDAR, MAY 1933-APRIL 1934

1933

MAY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE

S	M	T	W	T	F	S
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24/31	25	26	27	28	29

AUGUST

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
					1	2
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24/31	25	26	27	28	29	30

1934

JANUARY

S	M	T	W	T	F	S
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7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

FEBRUARY

S	M	T	W	T	F	S
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

MARCH

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

APRIL

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

For explanation of shaded areas see list on next preceding page

Publications of the Dominion Bureau of Statistics Relating to Grain.

(1) CANADIAN GRAIN STATISTICS.

Each week the Dominion Bureau of Statistics issues a mimeographed summary of current grain statistics. This report is compiled by the Bureau in collaboration with the Board of Grain Commissioners for Canada. Among the data included in this weekly publication are:-

Included Weekly.

Canadian Grain in Store, by Elevators.
Canadian Grain in Store, by Grades.
Comparative Statement of Grain in Store.
Receipts and Shipments of Canadian Grain.
United States Grain in Store, Receipts and Shipments.
Receipts, Shipments and Quantities in Store at Country Elevators, Western Division.
Receipts, Shipments and Quantities in Store at Interior Terminal Elevators.
Receipts, Shipments and Quantities in Store at Pacific Elevators and Vancouver Prices.
Daily and Weekly Average Prices of Grain at Fort William and Toronto.

Included Monthly.

Receipts and Shipments of Grain at Fort William and Port Arthur.
Receipts and Shipments of Canadian Grain at Country Elevators, and Platform Loadings also at Interior, Vancouver-New Westminster, Victoria, Prince Rupert and Churchill Elevators.
Inspections Western Division.
Inspections Eastern Division.
Exports of Grain, by Shipping Routes.
Exports of Grain, by Canadian Ports of Exit.
Exports of Grain, by Canadian Inland Ports and Flaxseed, by Ports of Exit.
Exports of Bran, Shorts and Oatmeal and Rolled Oats by Canadian Ports of Exit.
Exports by Countries of Destination.
Export Shipments of Canadian Wheat and Wheat flour in Transit from Atlantic Coast Customs District of the United States, by Countries of Destination and by Seaboard Ports.
Receipts of Canadian grain at Eastern Elevators, with Shipments by Destination.
Receipts of United States grain and Foreign Corn at Eastern Elevators, with Shipments by Destination.
Mill Grindings.
Mill Production.

"Canadian Grain Statistics" is issued on Friday of each week.

(2) THE MONTHLY REVIEW OF THE WHEAT SITUATION.

In the autumn of 1929, a peculiar train of circumstances descended on wheat markets throughout the world and created what is popularly described as a 'situation'. Canada, as the principal wheat-exporting country of the world, had a particular interest in this industry and a compendium of relevant, current data became a necessity. The first issue in September, 1930, consisted of only six mimeographed pages, but was introduced with the explanation that "The present scope of the review will be considerably expanded when a wider knowledge is gained of the data available and the various sources of information". This object has been attained; the present issues cover about thirty pages and, being rotaprinted in bulletin size, are well adapted for graphic presentation.

The Canadian Trade Commissioners stationed in those countries of the world mainly concerned with wheat production and consumption have co-operated since the publication was started. Prompt and reliable reports from Australia are now received by means of a monthly cable from the Canadian Trade Commissioner, Mr. D. H. Ross. Regular mailed reports dealing with the wheat situation in their respective territories are received from Mr. J. C. MacGillivray, Mr. A. B. Muddiman, Mr. Paul Sykes and Mr. L. M. Cosgrave. Through the co-operation of the Empire Marketing Board, the services of their representative at Buenos Aires, Mr. W. J. Jackman, are available; he cables a report on Argentine conditions every two weeks and sends a special report by air-mail each month. This latter is issued by the Bureau in mimeographed form so that the data may be quickly available to the public.

The Agricultural Branch also has the co-operation of the Internal Trade Branch of the Bureau, which contributes monthly data on prices and, more recently, on exchange movements.

The wheat situation is an extremely complex phenomenon — its ramifications extend into practically every field of endeavour. It is not confined to economic considerations, but extends into sociology on both the supply and demand sides of the common equation. In the "Review", the Bureau has attempted principally to bring the physical facts of the wheat situation into relief. The economic side is considered as far as

rational deductions permit, with no attempt to journey into the realm of prognostication. Rather, it is the object of this service to present the relevant facts, numerical or otherwise, in as complete and interesting a form as possible and to leave the less evident deductions to the reader. Graphical methods are employed when possible and, when time permits, special articles of an historical or analytical character are added to the usual discussion of the current situation.

(3) MONTHLY BULLETIN OF AGRICULTURAL STATISTICS.

The Dominion Bureau of Statistics issues a monthly publication called the "Monthly Bulletin of Agricultural Statistics". This publication constitutes a permanent, printed record of the various reports issued by the Agricultural Branch of the Bureau and contains much supplementary and related data as well. The main feature of the bulletin is a general survey of agricultural conditions throughout Canada from month to month, with particular reference to field crops, as described in telegraphic crop report summaries and comparative tables showing estimates of acreage, condition, yields and values of field crops. Each issue contains statements of exports and visible supplies of Canadian grains, and also international trade statistics showing exports, imports and the world's visible supply of wheat and flour. Records of prices of agricultural produce at principal Canadian markets, meteorological data for Canada and summaries of crop conditions in various countries are featured monthly.

The bulletin also includes annual statements of agricultural wealth and revenue of Canada, values of lands and live stock, average wages of farm help, index numbers of agricultural prices, Canadian trade in farm products, as well as an annual statement showing disposition of Canadian agricultural products. Annual statistics of the production and value of various commodities such as tobacco, honey, eggs, potatoes, sugar beets and beetroot sugar, maple sugar and syrup, flax fibre and hemp are published as they are compiled. Statistics of fruit and floriculture, the fertilizer trade in Canada, dairying and fur farming, when released from other branches of the Bureau, are published in the Monthly Bulletin of Agricultural Statistics in summarized form.

(4) REPORT ON THE GRAIN TRADE OF CANADA.

The Annual Report on the Grain Trade of Canada is compiled in the Agricultural Branch of the Dominion Bureau of Statistics in collaboration with the Board of Grain Commissioners for Canada.

Statistics are presented showing in detail the various channels and markets through which the grain passes from the farm to its final destination. Comparative data are included for countries other than Canada bringing the grain and cereal resources and trade of the world into review.

The first part of the report deals with the domestic movement of grain _ the production, inspection and handlings at country, interior terminal, public, semi-public and private terminals, also mill elevators in the Western Inspection Division (comprising Port William and Port Arthur and all territory West thereof) and at Eastern elevators. Handlings of United States grain in the Eastern elevators and of Canadian grain in the United States are covered. Records of prices at representative markets, and insurance charges are also included.

Revisions to date are made in rail freight rates from representative western points to Head of the Lakes and Pacific ports; lake and rail rates to Eastern Canadian ports on both domestic and export basis are also included.

The movement of grain from the Head of the Lakes to Buffalo and Montreal is segregated. An arrangement was completed in March, 1925, whereby the United States Department of Commerce furnishes the Bureau, monthly, with statements of shipments of Canadian wheat and wheat flour from United States ports by countries of destination. These additional data are valuable for the light they throw on the export movement of grain from Canada, by shipping routes and as to the countries finally importing the grain. The material in the report is brought into final review by means of charts and summaries.

An important portion of the data is supplied by the Board of Grain Commissioners for Canada. The tables relating to the international grain trade are based upon the statistics of the International Institute of Agriculture and other official sources. The Board of Railway Commissioners supplies the information relating to railway freight rates and revises the rates to include any change that has taken place according to the latest decision issued.

The first volume of Canadian Grain Statistics was issued by the Inspection Branch of the Department of Trade and Commerce in the year 1909. Nine years later all grain statistics were transferred to the Dominion Bureau of Statistics. The first volume issued by the Bureau was for the year 1918. A new departure was made in compilation. Instead of unrelated statements, the figures were assimilated to show the disposition of the various crops by means of a balance sheet covering both the Western and Eastern Divisions.

THE CANADIAN CENSUS OF AGRICULTURE.

Canada has the credit of being the first country to take a nominal census as it is known in modern times. The first census of the colony of New France was taken in 1666. Subsequently censuses were taken from time to time by the Governors, both before and after British occupation. The first Canadian Census Act is dated 1847, after the Union of Upper and Lower Canada. The census of 1871 was the first of the Dominion as a whole. In 1886 a census of Manitoba and the Northwest Territories was taken and since then a census of the Prairie Provinces has been taken every fifth year. This was deemed necessary because of the unusual increase in population, the rapid development of agriculture and the changing social conditions of these newer sections of the Dominion.

The amount of information elicited at the various censuses increased with the years; its compilation and tabulation has been made possible by the introduction of modern machines which permit the economical handling of large quantities of data.

The schedules of the census of 1871 devoted to agriculture contained 49 questions, some 20 of which were related to field crops. In 1931, a schedule containing about 600 questions was employed to secure information with respect to operator, tenure of land, value of farm property, farm facilities, mortgage indebtedness, crops and live stock.

A few selected tables will show the developments which have taken place in the past sixty years of Canadian agriculture. Previous to 1871, only a few farms existed west of the eastern boundary of the province of Manitoba and it was only in the last few years of the nineteenth century that the vast prairies of the Dominion were opened to agriculture. Table I shows the number and acreage of farms for each decennial census of Canada from 1871 to 1931.

Table I.- Numbers of Farms, Acreages Occupied and Improved, 1871-1931, and Acreages under Field Crops and under Wheat, 1870-1930.

Item.	1931.	1921.	1911.	1901.	1891.	1881.	1871.
Population	10,376,786	8,788,483	7,206,643	5,371,315	4,833,239	4,324,810	3,689,257
No. of farms	728,623	711,090	682,329	511,073	(1)620,486	464,025	(2) 379,374
Acreage occupied	163,254,959	140,887,903	108,968,715	63,422,338	60,287,730	45,358,141	37,074,641
Acreage improved	85,803,645	70,769,548	48,733,823	30,166,033	28,537,242	21,899,181	17,780,921
	1930.	1920.	1910.	1900.	1890.	1880.	1870.
Acreage under field crops	58,155,478	49,680,918	35,261,338	19,763,740	19,904,826	15,112,284	(3)11,820,358
Acreage under wheat	25,482,822	17,835,734	8,864,514	4,224,542	2,723,883	2,366,554	1,666,000

(1) Includes plots of less than 1 acre and a large number of timber lots, so that the decrease between 1891 and 1901 is only apparent. The actual number of farms had not decreased.
(2) The few farms of the Northwest Territories and British Columbia not included.
(3) Not including Prince Edward Island, Northwest Territories and British Columbia.

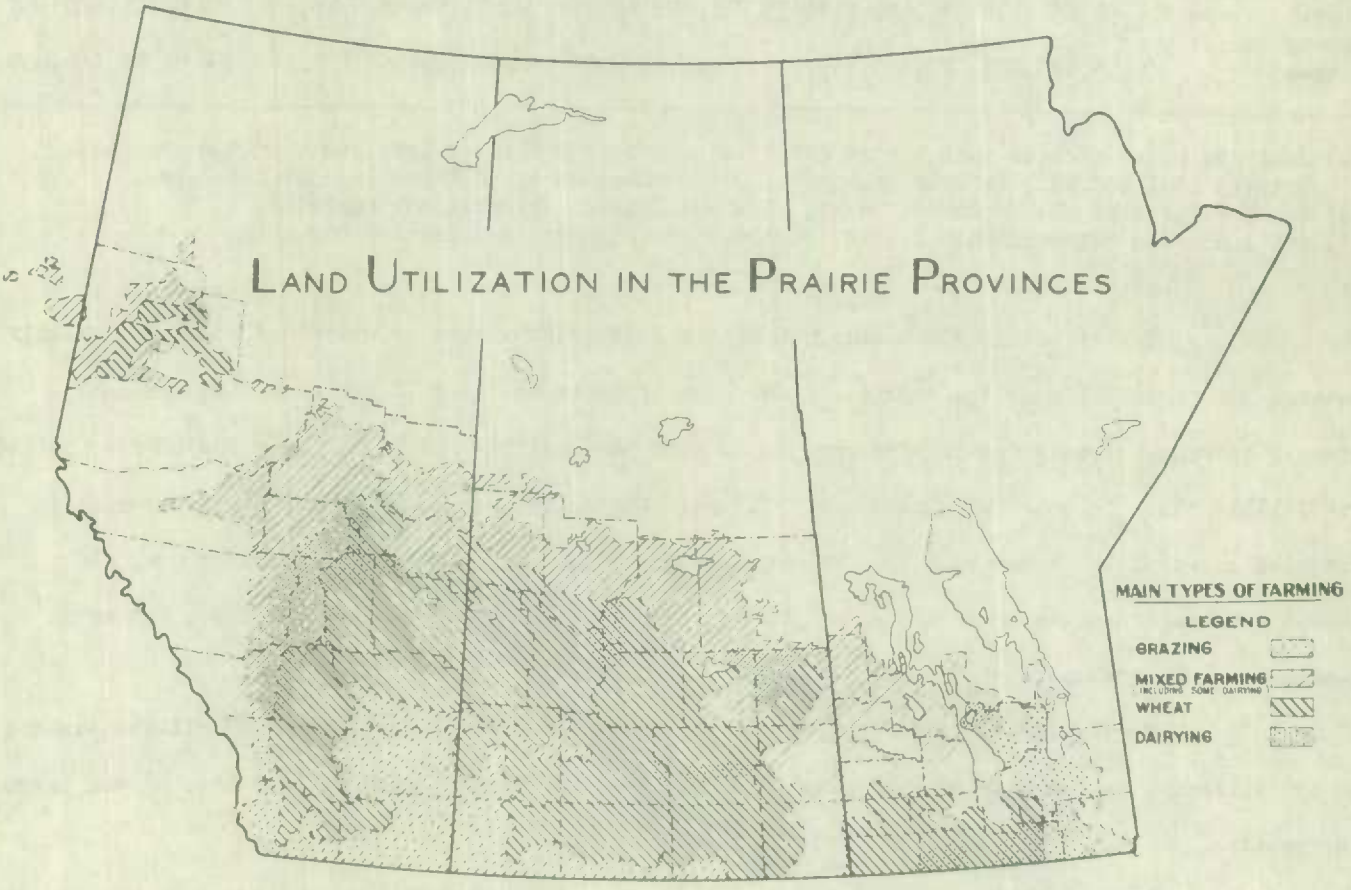
The effect of the opening up of the Prairie Provinces is evidenced more particularly between 1901 and 1911 when the increase in acreage occupied was over 71 per cent, and the next highest increase between two decades was 32 per cent between 1881 and 1891. Over the 60-year period (1871-1931) there is shown an increase of 92.1 per cent in the number of farms, 340.3 per cent in occupied acreage, 382.5 per cent in improved acreage, 391.9 per cent in acreage under crop and 1429.5 per cent in acreage under wheat. The coarser grains also show large increases, but not nearly as much as wheat.

In the same period, the production of wheat increased from nearly 17 million bushels to 370 millions, an increase of well over 2000 per cent, and barley, oats and rye also showed large increases.

A short review of production will show the influence of the opening up of the Prairie Provinces on the distribution of production of cereal crops in Canada. In 1870, all the wheat, barley, oats and rye produced in Canada were grown east of the Great Lakes. In 1900, 33 per cent of the wheat, 14.1 per cent of the barley, 10.9 per cent of the oats and 1.6 per cent of the rye harvested in Canada were grown in the Prairie Provinces; while in 1930, on the other hand, they produced 95.5 per cent of the wheat, 83.5 per cent of the barley, 58.3 per cent of the oats, and 94.6 per cent of the rye.

This statement does not mean that acreages under cultivation have decreased in the other provinces, but that the large acreages of virgin land of the Prairie Provinces made the growing of wheat and other cereals more economical.

As already stated, the rapid development of the prairies made the taking of a "quinquennial" census necessary in order to follow the rapidly changing conditions of these provinces. Table II will show the extent of the expansion of agriculture in the



middle western provinces of Canada in the last thirty years.

As already stated, the climate of the Prairie Provinces is more suitable for grain growing than for any other type of farming, while the large farms permit the use of modern machinery which makes the growing of cereal crops more profitable in these provinces than in the other provinces. Of course, to say that no other type of farming than grain growing is carried on successfully in the western provinces would be incorrect. Table III gives the number of live stock in the three provinces for each census year.

Table II.- Populations, Numbers of Farms, Acreages Occupied and Improved, 1901-31, and Acreages of Field Crops and Acreages and Production of certain Cereals, 1900-30, in the Prairie Provinces.

Item.	1931.	1926.	1921.	1916.	1911.	1906.	1901.
Population	2,353,520	2,067,393	1,956,082	1,698,220	1,328,121	808,863	419,512
No. of occupied Farms	288,079	248,162	255,657	218,563	199,203	122,398	55,176
Acreage occupied	109,782,602	88,929,994	87,931,804	73,300,135	57,642,844	(1)	15,412,411
Acreage improved	59,854,632	49,264,625	44,863,266	34,330,246	22,969,774	(1)	5,592,601
	1930.	1925.	1920.	1915.	1910.	1905.	1900.
Acreage under Field crops	40,354,208	33,216,453	30,235,114	22,986,357	13,607,697	6,338,325	3,600,119
Wheat acres	24,722,548	19,759,648	16,775,307	13,867,715	7,867,423	3,941,369	2,495,474
bu.	353,568,584	367,058,175	207,156,417	360,186,125	110,166,704	82,461,627	23,456,985
Barley acres	4,398,289	2,940,412	1,513,026	1,171,082	667,071	370,850	162,569
bu.	84,167,305	68,591,609	28,304,878	36,003,008	12,057,806	10,971,755	3,141,357
Oats acres	7,314,030	7,274,589	9,066,093	6,480,681	3,880,606	1,697,190	833,410
bu.	172,724,351	211,166,804	216,950,537	279,690,956	106,163,510	68,810,855	16,654,322
Rye acres	1,106,073	523,155	368,425	34,677	10,164	7,708	3,276
bu.	13,741,522	7,015,381	4,534,372	785,331	149,690	(1)	(1)

(1) Not available.

Table III.- Numbers of Live Stock in Manitoba, Saskatchewan and Alberta, by Census Years, 1901-31.

Year.	Horses.	All Cattle.	Cows in milk or in calf.	Sheep.	Swine.	Poultry.
1931	2,053,824	2,982,377	1,198,745	1,283,732	2,391,226	25,347,830
1926	2,291,853	3,006,923	1,118,961	779,383	1,620,375	21,044,161
1921	2,294,403	3,374,174	1,049,384	739,902	1,055,245	17,751,609
1916	1,848,812	2,776,869	820,583	495,689	1,362,046	10,395,705
1911	1,194,995	1,808,931	484,145	285,130	712,222	8,432,423
1906	682,919	1,944,598	384,006	304,531	439,048	-
1901	340,329	941,625	244,216	182,616	200,375	1,717,019
Ratios per cent of total Live Stock in Canada.						
1931	65.9	37.4	34.0	35.4	50.9	38.9
1901	21.6	16.9	10.1	7.3	8.5	9.6

THE DEVELOPMENT OF WHEAT ACREAGE IN CANADA.

The trend of wheat acreage in Canada during the twentieth century has been almost continuously upward. As the older areas have reached their peak and commenced to decline, the districts further west and north have more than offset the decreases. The acreage of wheat in Manitoba exceeded that of Ontario before the turn of the century and during the first decade expanded more rapidly than the Ontario acreage declined. The Saskatchewan acreage first exceeded that of Manitoba in 1909, while the new province of Alberta had a greater acreage than Manitoba in 1917 and each succeeding year.

Ontario.- The wheat acreage of Ontario has tended irregularly lower during the past half-century. Between 1870 and 1892, the area under wheat held fairly constant between 1,400,000 and 1,700,000 acres. Decline first became apparent in spring wheat which fell from 651,302 acres in 1892 to 356,721 acres in 1893 and to 230,016 acres in the following year. Fall wheat also declined in these years, but recovered in the years 1896-1900. During the present century wheat acreage has fallen appreciably - from 1,488,000 acres in 1900 to only 636,000 acres in 1932.

The extent of wheat acreage in Ontario has depended largely on its ability to compete profitably with other crops for the land. Live-stock farming has developed rapidly and with it a demand for feed grains. Thus, the acreage of oats expanded quite steadily from 1880 to a peak in 1921, attracting over 1,700,000 additional acres in this period. Barley and rye have also been in periodic favour and have withdrawn many fields from wheat. Buckwheat enjoyed a marked popularity in counties such as Simcoe, Northumberland, Ontario, Victoria, Norfolk and Huron. With the development of hay and pasture crops, other small grains have been more popular than wheat as nurse crops. Wheat is now grown mainly as a cash crop. In former years, when country mills were more numerous, each farmer grew enough wheat to provide his own requirements of flour.

Prairie Provinces.- Wheat was first grown in Manitoba 120 years ago by the Selkirk settlers. The troubles of the early colonists were almost insuperable and agricultural progress was very slow. Settlement followed the waterways and when the census of 1871 was taken, it showed that the canoe still rivaled the cart as a means of covering the distance between farm and settlement. Three main waterways and two wagon trails were used in communication with the outside world. The first recorded shipment of wheat is supposed to have been made in 1876. In 1878 the St. Paul Railway entered Winnipeg and, from then on, wheat production played a large part in the economic history of the West. The census of 1881 revealed an area of 56,971 acres and a production of 1,153,328 bushels in the previous year. The economic production of wheat in western Canada is thus a movement of the past half-century.

In 1890, 17,884,629 bushels were grown on 1,010,430 acres, constituting over one-third of the total Canadian production and acreage. In 1900, the Prairie Provinces had over one-half of Canada's wheat area, seeding 2,495,474 acres. The next two decades witnessed the real establishment of western wheat-farming. The first impetus to the movement came with the expansion of the British and European markets and later the temporary exit of Russia and the decline of the United States in international wheat trade gave Canada the place of chief exporter.

The development of western Canada may be divided into three periods. The first of these began with the building of the Canadian Pacific Railway, about 1882 to 1885; the second with railway extension and immigration influx about 1903; and the third in 1924, at the conclusion of the economic depression and unfavourable weather conditions which followed the Great War.

On Sept. 14, 1880, the contracts were signed for the construction of the Canadian Pacific Railway. It started across the southern plains in 1882-3, was hindered by financial difficulties and the Riel Rebellion, but completed in 1885. It tapped the southern short-grass plains, where wheat presented the path of least resistance on the way to quick prosperity. Settlement in this period came mainly from eastern Canada and Great Britain,

and spread westward from the Red River Valley of Manitoba into Saskatchewan and along the fertile banks of the Souris, Qu'Appelle and Assiniboine Rivers. The development of this period was not as great nor as prolonged as that which began early in the present century. The United States was filling up cheap western lands at the time and provided a great counter attraction for the Dominion Government had not yet launched its land survey policy nor the encouragement of immigration which became so characteristic of later years. The Hudson Bay Company was making a last effort to retain the Canadian West for the fur trade. About the year 1895, the first period of western development came to an end.

The second period of rapid development is well shown by the immigration statistics particularly in the years 1903 to 1914. As the pioneer followed the water courses in settlement so the farmer followed (or in some cases, anticipated) the railways. The main line of the Canadian Pacific and its few branch lines adequately served the settled southern portion until the great rush of new settlement began in 1903. Settlement extended mainly into the park-lands of Saskatchewan and Alberta, although Manitoba continued to fill up rapidly during the first decade of this century. Colonization, railway construction and wheat acreage were inseparably related during this period of expansion which preceded the War.

Although the outbreak of the Great War brought an end to the rapid development in settlement and transportation of the previous decade, the period of the War was one of continued growth. Immigration continued from the neutral countries which more than offset the emigration to the battlefields of Europe. In spite of the farm labour shortage, only partly alleviated by urban volunteers and 'soldiers of the soil', the patriotic appeal for increased wheat acreage met with ready response. Food was needed in a quickly available form and the wheat crop offered the best means of securing it. The first wheat crop seeded after the declaration of war covered over 3½ million acres more than that of 1914 and the crop of 1918 was 5 1/3 million acres more, an increase of over 50 per cent. This was mainly accomplished by breaking new land and by some trespassing upon the coarse grain acreage. In the early years of the War, the wheat farmer was assisted by the weather and,

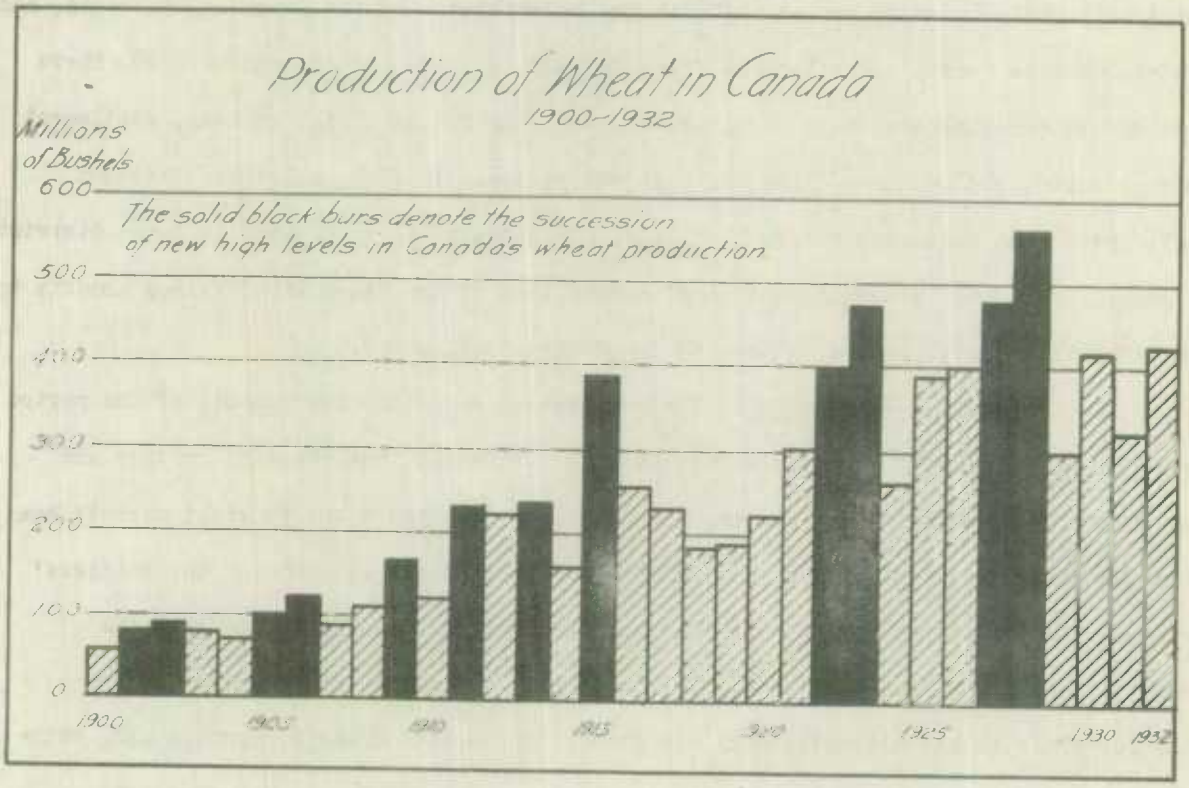
when the years of low rainfall began in 1918, rising prices more than offset the lowering yields. When government price control was lifted in 1918, the Canada Wheat Board was authorized by the Government to control the movement and sale of Canadian wheat for another year. The Grain Exchange began to operate fully again in 1920.

During this period, new agricultural development was most evident in the northern sections of the Prairie Provinces. The opening of the Peace River and Grande Prairie districts in north-western Alberta was accomplished by the Edmonton, Dunvegan, and British Columbia (now the Northern Alberta) Railway in 1915. At the end of 1910, there were only 46 householders in this region, but with the coming of the railway, settlement was very rapid, and continued into the post-war period. In 1919, about ten thousand people moved into this area and, by 1926, the population of this somewhat isolated district had grown to 42,784. Since the estimated arable land of the Peace River Valley amounts to about 15 million acres, there is room for much more development.

The Post-War Period.- The outstanding economic developments of the period since 1918 may similarly be centered around land settlement, railway construction and wheat production, although the growing importance of Canadian wheat in world markets has introduced the multiple changing factors of the international situation. The Soldiers' Settlement Board and the Canada Colonization Association did much to encourage the resumption of immigration, especially in 1920 and 1921. The opening of the western route for grain export attracted many new Alberta acres into wheat production and, withdrawing pressure from the Great Lakes route, lessened the usual autumn rush to the eastern seaboard.

The wheat acreage continued to expand until 1921, but declined and remained at lower levels until 1928, when a new development, not easily explained, added over 3 million acres to the prairie total and created a record figure in 1932. The years 1918-21 offered little in the way of encouraging weather to the wheat farmer but, while the prices remained high, this factor compensated for the low physical yield.

When wheat prices fell in 1920 and 1921, many of the marginal lands returned to their pre-war purposes. In the following years and up to 1928, the position of the western wheat grower was improved by larger yield and better prices. In common with other endeavours and with other countries, the Canadian wheat grower suffered from the



unfavourable conditions of late 1929 and 1930. The crop of 1929 was reduced by bad weather and was sold on a declining market, while the crop of average size harvested in 1930 commanded still lower prices. Despite these reverses, the acreage expanded appreciably in 1931, and although the harvest of that year was again meagre, the acreage rose to the record level of 27,182,000 acres in 1932.

THE ROUTING OF CANADIAN GRAIN FOR EXPORT.

In this brief survey, an endeavour has been made to portray the movement of Canadian grain from Canada by the different shipping routes. The bulk of the grain in Canada is produced in the Prairie Provinces and there are three outlets that this grain may take in order to reach its overseas destinations. Firstly, it may go by the Eastern all-Canadian route, secondly, by the United States Atlantic seaboard ports, and thirdly, by the all-Canadian Pacific Coast route. (See frontispiece to this bulletin.)

Grain passing along the all-Canadian Eastern route after leaving the western country elevators arrives at the Head of the Lakes; thence it may go by lake vessel to Georgian Bay and Lake Huron ports (Port McNicoll, Tiffin, Midland, Collingwood, Owen Sound, Goderich and Sarnia) and by rail to Montreal, Sorel and Quebec or the Maritime ports of Saint John and Halifax; or it may go to the Lower Lake ports (Port Colborne, Toronto, Kingston and Prescott) and thence by vessel or rail to Montreal, Sorel or Quebec, or on to the Maritime ports by rail.

During the past two years some export of wheat has taken place through the new port of Churchill, Manitoba, on Hudson Bay. The possibilities of this new Eastern all-Canadian route are being carefully explored.

The Canadian grain movement by United States ports is from the Head of the Lakes (Fort William and Port Arthur) to Buffalo, thence by the Erie Canal to Albany or New York, or by rail to the United States Atlantic seaboard ports of Portland, Boston, New York, Baltimore, Philadelphia and Norfolk. Until the crop year 1924-25, this route handled a large percentage of the Canadian export grain, but since that time there has been a decided change to the all-Canadian Eastern route. A small movement of Canadian grain is also shipped in bond through Duluth-Superior.

Normally almost all the grain exported by the Eastern routes during the season of navigation on the Great Lakes and St. Lawrence moves by the all-water route from the Head of the Lakes to Montreal, Sorel or Quebec; or by the Lakes to Buffalo, and thence by the Erie Canal to New York. After the close of navigation on inland waters, grain stored at the Georgian Bay ports is moved by rail to Saint John or Halifax, while grain stored at Buffalo moves by rail to New York or other United States Atlantic seaports.

Transportation costs on the two all-water routes are kept in close correspondence by competition, while the Canadian railways keep the cost of rail movement from the Georgian Bay ports

to Saint John and Halifax on a parity with the cost of movement by rail from Buffalo to New York City. Normally grain does not move by rail while water routes are open.

In the case of exports of grain through the ports of Vancouver, Prince Rupert, Victoria and New Westminster, the grain is shipped by rail to the above ports and unloaded into the elevators for shipment by vessel to ports in the Orient or via the Panama Canal to the United Kingdom or continental Europe.

The foregoing is an outline of the routing of Canadian grain from the wheat fields of Canada, but there are certain details entering into the movement before its final passage from the Eastern Canadian and United States ports which should be further explained.

The export grain statistics show that various amounts leave Canada through the Eastern ports of Montreal, Sorel, Quebec, Saint John and Halifax, the figures being taken from the Canadian export entries filed with the Customs Department. No recognition, however, is taken in the official customs figures of the amount of grain re-routed from United States Lake ports to Montreal. This latter movement is comparatively new extending back only to the crop year 1925-26. The question may arise as to how this movement is arrived at and why it should be included in the Canadian Atlantic exports. The grain which is exported directly from the Head of the Lakes to overseas countries via Buffalo and other United States lake ports, and thence re-directed to Montreal or Quebec, has already been credited to the ports of Fort William and Port Arthur as exported via United States Atlantic ports while in reality it leaves Canada through Montreal or Quebec; it has merely stopped at Buffalo in transit, and should be deducted from the amount shown as exported by United States ports. This would leave a balance that would eventually pass through United States Atlantic ports overseas or be used in the United States for grinding in bond or be otherwise consumed.

The United States Customs Department shows the amount of Canadian grain cleared from their ports, which of course is less than the quantity originally billed from Canada by the amount consumed in the United States or re-routed to Canadian ports.

Distribution of Canadian Wheat, Crop Year 1931-32.

Canada is divided into two grain divisions, the Western and Eastern. The former extends from the Pacific Coast to a line running vertically through Fort William, while the Eastern Division includes all that portion east of this line.

Western Division.

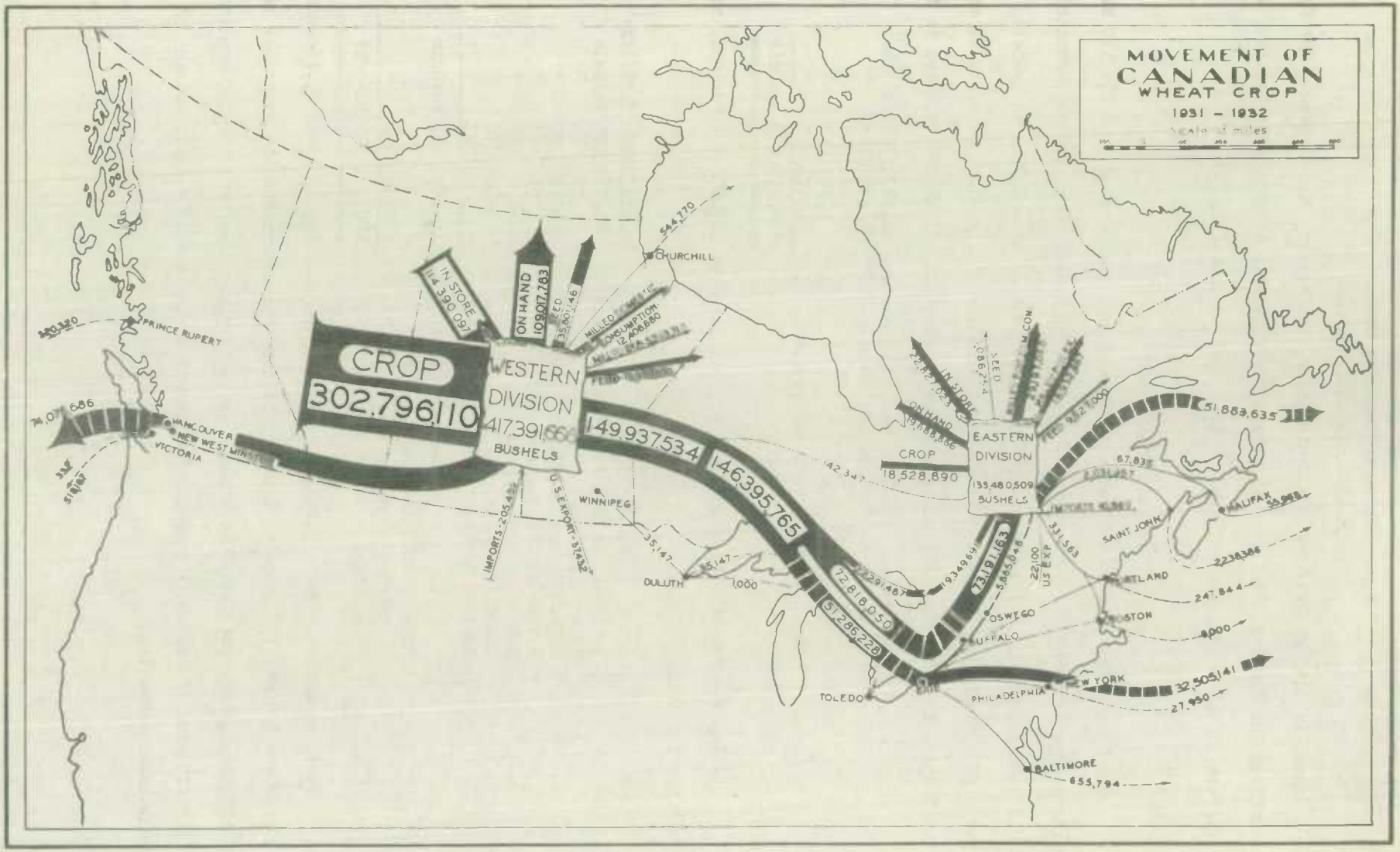
The 1931 wheat crop in the Western Division was estimated at 302,796,110 bushels, the carry-over from the previous year was 114,390,097 bushels, and imports amounted to 205,459 bushels, making a total available for distribution of 417,391,666 bushels. Over 57 per cent (241,223,865 bushels) was disposed of commercially, i.e. as exports, shipments to the Eastern Division and mill grindings for consumption and export outlined as follows:-

Exports	128,271,591	bushels
Shipments to Eastern Division	95,251,884	"
Milled for home consumption	12,406,680	"
" for export	5,293,710	"
Feed for live stock and poultry	16,975,000	"
Total	258,198,865	bushels

The exports from the Western Division, amounting to 128,271,591 bushels, moved through the following ports:-

Ports.	To Overseas Countries.	
Fort William and Port Arthur, Ontario.	48,360,103	bushels
Vancouver, B.C.	74,076,686	"
Prince Rupert, B.C.	320,320	"
Victoria, B.C.	518,187	"
New Westminster, B.C.	332	"
Churchill, Manitoba	544,770	"
Western border Ports of Exit	35,705	"
Total to Overseas Countries	123,856,103	bushels
Exports to United States for consumption	4,415,488	"
Total	128,271,591	bushels

Seed requirements were 35,801,146 bushels, the quantity in store at the end of the crop year was 109,017,783 bushels, loss in cleaning and unmerchantable grain was calculated at 5,632,008 bushels and 2,493,000 bushels respectively. The foregoing gives a summary of the distribution of the wheat crop of the Western Division with a small balance of 6,248,864 bushels unaccounted for.


MOVEMENT OF
CANADIAN
WHEAT CROP
1931 – 1932
CROP
302,796,110
WESTERN
DIVISION
417,391,668
BUSHELS
IN STORE
114,390,091
ON HAND
109,017,783
CONSUMPTION
12,406,680
149,937,534
146,395,765
CHURCHILL
544,770
PRINCE RUPERT
VANCOUVER
NEW WESTMINSTER
VICTORIA
WINNIPEG
DULUTH
IMPORTS 205,43
35,147
1,000
TOLEDO
72,818,050
51,286,228
EASTERN
DIVISION
133,480,509
BUSHELS
CROP
18,528,890
ON HAND
IN STORE
FEED 9,527,000
51,883,635
67,83
SAINT JOHN
HALIFAX
2,238,386
247,844
8,000
OSWEGO
BUFFALO
PHILADELPHIA
NEW YORK
32,505,141
27,950
BALTIMORE
655,794
142,347
13,191,163
5,885,048
331,563
22,100
U.S. EXP.

Movement from West to East.

Western Inspection returns show that 258,866,000 bushels or 85.49 per cent of the wheat crop passed inspection. The elevators at the Head of the Lakes reported receipts of 149,856,610 bushels. There were no rail shipments from the Western Division via Armstrong, Ontario (not touching the Head of the Lakes) and the amount moved by rail from elevators at Fort William and Port Arthur (not including amount ground there) was 61,423 bushels. The total amount shipped by rail from the Western Division was 142,347 bushels. Deducting the first amount from the last, a balance of 80,924 bushels is shown to have moved eastward, which, in addition to the unloadings of 149,856,610 bushels at the Head of the Lakes makes 149,937,534 bushels. Lake vessel shipments amounted to 146,395,765 bushels.

Shipments by lake and rail during the crop year 1931-32 were as follows:-

Lake Shipments -

To Canadian Ports	95,109,537 bushels
To United States Ports	51,286,228 "
Total	146,395,765 bushels

The movement by lake vessel from the Head of the Lakes shows a net decrease of 28,670,722 bushels from the previous year. A noteworthy feature is that the amount to Canadian ports increased 12,702,645 bushels, while a decrease is shown to United States ports of 41,373,367 bushels.

Rail Shipments -

To Canadian Domestic Ports (Eastern).....	120,287 bushels
To United States Domestic Ports	60 "
To United States Seaboard Ports (Western).	6,000 "
To United States Seaboard Ports (Eastern).	16,000 "
Total	142,347 bushels

Canadian bonded wheat received at Duluth-Superior amounted to 35,147 bushels all of which was shipped out by vessel.

According to elevator returns, the receipts at Lake Huron and Georgian Bay ports were 22,291,487 bushels, while the shipments amounted to 19,349,691 bushels by rail and 725,827 bushels by vessel. The distribution of the rail shipments was as follows:-

To Montreal	5,391,226	bushels
To Maritime Ports	1,913,359	"
To Other Canadian Ports	4,018,012	"
To United States Seaboard Ports....	139,340	"
To Other United States points.....	20,040	"
To Local and Mill	7,867,714	"
Total	19,349,691	bushels

Vessel shipments were 674,057 bushels to local and mill points and 51,770 bushels to St. Lawrence ports.

An amount of 72,818,050 bushels was shipped direct to Canadian Lower Lake and St. Lawrence ports, of which 53,562,509 bushels moved to Port Colborne, Montreal, Quebec and Sorel.

The shipments by vessel from the Head of the Lakes to United States Lake ports amounted to 51,886,228 bushels, distributed as follows:-

To Buffalo	50,143,531	bushels
To Erie	673,006	"
To Toledo	323,191	"
To Fairport	146,500	"
Total	51,286,228	bushels

Eastern Division.

The wheat crop in the Eastern Division was estimated at 18,528,890 bushels, the carry-over from the previous crop year 19,688,866 bushels, which with an import of 10,869 bushels and 95,251,884 bushels received from the Western Division makes a total available for distribution of 133,480,509 bushels.

The bulk of this wheat was exported to overseas countries, 54,178,128 bushels moving from Canadian Seaboard ports and 331,563 bushels through the Canadian inland ports of exit to the United States Atlantic Seaboard ports, making a total export of 54,509,691 bushels from the Eastern Division to overseas countries via Canadian and United States ports.

Exports via Canadian Eastern ports, with comparative figures for the previous year were as follows:-

Ports.		
Montreal	45,606,960	bushels
Quebec	47,674	"
Sorel	6,229,000	"
Total, St. Lawrence Ports	51,883,634	bushels
Halifax	55,968	bushels
Saint John	2,238,386	"
Charlottetown	103	"
North Sydney	36	"
Total, Maritime Ports	2,294,493	bushels
GRAND TOTAL	54,178,127	bushels

Wheat exported from the Eastern Division to the United States for consumption, according to customs returns, amounted to only 22,100 bushels and left Eastern Canada through inland ports of exit. An additional amount of 331,563 bushels moved overseas through the following ports of exit in Ontario and Quebec:-

Coaticook, Quebec	296,000	bushels
Niagara Falls, Ontario	19,229	"
Bridgeburg, Ontario	16,000	"
Kingston, Ontario	334	"

Mill grindings for home consumption were estimated at 29,197,080 bushels, while an equivalent of 18,932,467 bushels was exported as flour. This, with the previous exports as given, makes 102,661,338 bushels disposed of commercially. Seed requirements were calculated at 1,086,254 bushels, feed for live stock and poultry 9,527,000 bushels and the quantity in store at the end of the crop year was 22,827,023 bushels. Loss in cleaning and unmerchantable grain was estimated at 344,637 bushels and 333,100 bushels respectively.

According to the elevator figures, Port Colborne received 24,924,040 bushels by vessel and 64,645 bushels by rail. Toronto, Kingston and Prescott receipts amounted to 17,096,280 bushels by vessel and 86,778 bushels by rail. This makes a total movement to Lower Lake ports of 42,020,320 bushels by vessel and 151,423 bushels by rail.

Most of the wheat received at the Lower Lake ports of Port Colborne, Toronto, Kingston and Prescott is transhipped at Montreal, Quebec and Sorel. During the crop year 1931-32, 28,871,793 bushels were so moved.

Direct shipments by vessel from Fort William and Port Arthur to Montreal, Quebec and Sorel were comparatively large this year, the amount being 29,040,565 bushels. Wheat re-routed from United States' Lake ports to the St. Lawrence ports amounted to 5,865,048 bushels. This accounted for a total movement to the St. Lawrence ports of 63,773,970 bushels. Elevator returns at the St. Lawrence ports show 60,652,307 bushels received by vessel. The difference no doubt is accounted for by wheat in transit at the end of the crop year but not actually received at the elevators.

Canadian Export Movement.

During the crop year 1931-32 the total export of wheat amounted to 182,803,382 bushels. Of this amount 129,638,423 bushels were shipped via Canadian ports, while 5,865,048 bushels were transhipped from Buffalo to Montreal, making 135,503,471 bushels shipped via Canadian ports. Exports via United States ports were shown to be 48,691,666 bushels including 5,865,048 bushels transhipped. Deducting this amount leaves 42,826,618 bushels which actually went via United States ports. The balance, 4,473,293 bushels, was billed direct to the United States for consumption.

According to the United States Department of Commerce returns, 33,444,729 bushels were cleared from the following United States Atlantic seaboard ports:-

New York	32,505,141	bushels
Baltimore	655,794	"
Portland	247,844	"
Philadelphia	27,950	"
Boston	8,000	"

The difference between the actual clearances and the amount shown exported via United States by Canadian customs returns was 15,246,048 bushels. The amount re-routed from United States' Lake ports was 5,865,048 bushels and the quantity ground inland was 11,607,000 bushels.

TRANSPORTATION OF WHEAT IN CANADA.

The grain fields of Canada are situated in the middle of the continent and to get the grain to seaboard ports it may be transported by any one of the three chief routes (see frontispiece to this bulletin): 600 to 700 miles across the Rocky Mountains to Pacific ports, or about the same distance to the head of the Great Lakes and a further lake and river trip of over 1,200 miles to Montreal, or 1,250 miles by lake and rail or canal to New York or other United States Atlantic ports. To other Canadian Atlantic ports the distances are considerably greater. The rail distance from Regina to Vancouver is 1,100 miles. From Regina to the head of the Great Lakes it is 775 miles and from Regina to Montreal it is 1,770 miles..

The part the railways play in marketing the Canadian grain is quite apparent from these data and is unique in world commerce. Grain is grown in the eastern provinces but over 90 per cent of all the wheat carried by Canadian railways is grown in the Prairie Provinces.

Since the establishment of the western route via the Panama Canal, large quantities of grain have been exported from Alberta and western points in Saskatchewan via Vancouver. Grain from central and eastern Saskatchewan and Manitoba normally is shipped east by rail to Fort William and Port Arthur at the head of the Great Lakes, by boat from there to Georgian Bay ports and thence either to Montreal by rail or boat, or by boat to Buffalo and from there by rail or canal to New York or other Atlantic ports.

The comparatively short rail haul from Georgian Bay ports to Montreal of around 370 miles and other short hauls to milling centres, etc., reduce the average haul of all grain somewhat, but the average of from 600 to 675 miles is by far the longest haul for any commodity carried by the railways.

Table 1 below shows the tonnages of the different grains carried by Canadian railways during the past decade. Although grain constituted from 13 to 22 per cent of the total tonnage carried, the ratios of grain ton miles to total ton miles were approximately twice as high. This was due to the average haul being approximately twice the length of haul for all commodities.

To compete in world markets with grain from other exporting countries where the haul to the seaboard ports is short, freight rates in Canada have been exceedingly low, averaging around half a cent per ton mile. Table 2 shows the tonnage and revenue, the approximate average haul, ton miles, average revenue per ton and per ton mile and the ratio of revenue from grain to the total gross earnings from all sources earned by Canadian railways.

The grain traffic fluctuates considerably, loadings ranging from around half a million tons per month during January to May, increasing when navigation opens on the Great Lakes in April or May and reaching a peak in October of two to three million tons. There is relatively little return traffic for the railways and cars must be stored all throughout the west early in the summer. During the autumn months the railways are busy rushing the grain to the terminal elevators and hurrying the empty cars back for more grain.

The development of the western provinces and the extensions of the Canadian railways were concurrent, and one helped the other. In 1885 when the first trans-continental railway in Canada was completed there were only 10,773 miles of railway. By 1900 this had increased to 17,657 miles and by 1905 to 20,487 miles. During the next twenty years this mileage was almost doubled, reaching 40,352 in 1925 and on December 31, 1931, was 42,308 miles. The railway mileage in the Prairie Provinces showed an even more rapid growth. In Manitoba it increased from 2,780 miles in 1906 to 4,420 miles in 1932; in Saskatchewan from 1,951 miles in 1906 to 8,268 miles in 1932, and in Alberta from 1,235 miles in 1906 to 5,656 miles in 1932. With an average of 4.28 miles per 1,000 population, Canada was second only to Australia in mileage per capita and in total mileage it is exceeded only by the United States, India, Germany, France and the Union of Socialist Soviet Republics.

TABLE 1.

REVENUE FREIGHT CARRIED BY CANADIAN RAILWAYS.

Year.	WHEAT.			CORN.			OATS.			BARLEY.		
	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.
1932	11,193,188	84.27	18.51	387,754	2.92	.64	1,035,159	7.79	1.71	421,193	3.17	.70
1931	9,523,180	79.03	12.85	437,004	3.63	.59	1,165,758	9.67	1.57	613,237	5.09	.83
1930	9,889,323	77.79	10.28	663,070	5.22	.69	993,749	7.82	1.03	721,897	5.68	.75
1929	10,816,763	74.38	9.39	846,488	5.82	.74	1,347,478	9.27	1.17	1,048,602	7.21	.91
1928	17,997,862	79.82	15.17	858,760	3.81	.72	1,548,811	6.87	1.31	1,463,535	6.49	1.23
1927	12,295,949	76.94	11.60	751,924	4.71	.71	1,170,675	7.32	1.10	994,794	6.22	.94
1926	11,866,705	75.60	11.28	683,330	4.35	.65	1,533,970	9.77	1.46	1,089,949	6.94	1.03
1925	11,544,921	74.18	12.20	605,108	3.89	.64	1,797,319	11.55	1.90	1,090,653	7.01	1.15
1924	10,093,223	69.31	11.02	665,996	4.57	.73	2,193,245	15.06	2.39	888,393	6.10	.97
1923	12,307,178	75.98	12.04	875,156	5.40	.86	1,910,011	11.79	1.87	611,915	3.78	.60

Year.	RYE.			FLAXSEED.			OTHER GRAIN.			TOTAL GRAIN.		TOTAL FREIGHT.
	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Grain.	Per cent of Total Freight.	Tons Carried.	Per cent of Total Freight.	Tons.
1932	113,495	.85	.19	59,486	.45	.10	72,730	.55	.12	13,283,005	21.97	60,468,093
1931	148,748	1.23	.20	71,934	.60	.10	90,974	.75	.12	12,050,835	16.26	74,129,694
1930	239,879	1.88	.25	109,444	.86	.12	95,842	.75	.10	12,713,204	13.22	96,194,017
1929	288,606	1.98	.25	77,928	.54	.07	115,865	.80	.10	14,541,730	12.63	115,187,028
1928	453,093	2.01	.38	133,133	.59	.11	92,598	.41	.08	22,547,792	19.00	118,652,969
1927	531,681	3.33	.50	134,303	.84	.13	102,601	.64	.10	15,981,927	15.08	106,011,355
1926	239,520	1.53	.23	170,445	1.09	.16	112,747	.72	.11	15,696,666	14.92	105,221,906
1925	213,526	1.37	.23	208,809	1.34	.22	103,500	.66	.11	15,563,836	16.45	94,624,599
1924	424,461	2.92	.46	206,588	1.42	.23	90,571	.62	.10	14,562,477	15.90	91,599,639
1923	261,173	1.61	.26	130,804	.81	.13	102,510	.63	.10	16,198,747	15.86	102,258,933

TABLE 2.

ALL GRAIN CARRIED BY CANADIAN RAILWAYS.

Year.	Tons.	Average Haul. (Miles) (1)	Ton Miles. (1) (2)	Revenue. (1)	Revenue per Ton. (1)	Revenue per Ton Mile. (1)	Per cent of Total Gross Earnings. (1)	Total Gross Earnings.
				$	$	Cents		$
1932	13,283,005	651	8,647,236,000	47,194,516.00	3.553	.541	16.09	293,390,415
1931	12,050,835	627	7,555,873,000	40,804,127.00	3.386	.540	11.38	358,549,382
1930	12,713,204	652	8,289,009,000	47,674,515.00	3.750	.575	10.50	454,231,650
1929	14,541,730	631	9,175,831,000	51,754,017.00	3.559	.564	9.69	534,106,045
1928	22,547,792	664	14,971,733,000	81,735,746.00	3.625	.546	14.50	563,732,260
1927	15,981,927	635	10,148,523,000	55,888,798.00	3.497	.551	11.29	499,064,207
1926	15,696,666	609	9,559,269,000	55,770,254.00	3.553	.583	11.30	493,599,754
1925	15,563,836	619	9,634,014,000	55,189,362.00	3.546	.573	12.12	455,297,288
1924	14,562,477	579	8,431,674,000	50,750,232.00	3.485	.601	11.38	445,923,877
1923	16,198,747	660	10,691,173,000	60,826,294.00	3.755	.569	12.72	478,338,047

(1) Approximate data. (2) Tons multiplied by miles transported.

FLOUR MILLING IN CANADA.

Flour milling is the oldest of all Canadian manufacturing industries and the most important industry connected with the field crops. In 1930, it stood third in Canada's leading industries, with pulp and paper holding first place, followed by slaughtering and meat packing. Since the days of the quern several centuries ago the milling industry has been subjected to progressive evolution.

Flour milling in Canada dates back to 1605, when the first permanent Canadian settlement was made by the French at Port Royal (now Annapolis, N.S.). In this year the first wheat ever raised in America was grown at this spot and here in the same year was erected the first water wheel, to turn a millstone for the grinding of wheat, on the North American Continent.

Hand and water-power mills developed steadily throughout the French régime in the settlements on the Atlantic seaboard and along the St. Lawrence river, providing flour and feed for the use of pioneers. Early census figures give the number of mills in New France during the French period as follows:-

1665	9
1685	41
1695	39
1721	90
1734	118

The coming of the United Empire Loyalists and the colonization of Upper Canada led to the erection of mills for the grinding of the grain produced in the new settlements. One of the earliest mills was built at Niagara Falls in 1786, while another mill was established in Napanee about the same year.

The Napoleonic wars in Europe caused a rapid increase in the prices of cereals, and an export business in wheat and flour from Canada grew up.

Large scale production from milling in Canada began with the competition between the two processes, stone and roller milling. Many of the small mills were unable to compete with the larger mills in the production of flour and either disappeared or were transformed into

chopping mills. The more complete transformation of the wheat into flour by the new process, and the consequent reduction of the amount of offal feed for live stock further stimulating the growth of chopping mills. With the cutting of forests in the settled districts more rapid evaporation caused reduction in water power for the small flour mills and further tended to their disappearance. By the 'eighties the roller process had secured a virtual monopoly of the flour-milling industry in Canada. Elevators sprang up at railway points and the grain was sold and shipped as grain to be ground at the large milling centres.

The last quarter of the nineteenth century brought about the settlement of the Prairie Provinces with railway communications to the Atlantic seaboard and wheat-raising became the primary occupation of many thousands of settlers who hurried in growing numbers to Manitoba, Saskatchewan and Alberta. The quality of the grain was such that it immediately found a ready market in both its raw and manufactured states.

The geographical distribution of the milling industry has been governed largely by the necessity of keeping as much as possible within easy access to the Atlantic seaboard, from whence a great deal of the export business is carried on. In the early times Montreal became the centre of the industry and has continued in this predominant position. The flour mills of Western Canada are situated where power is cheap and shipping facilities are most favourable. These strategic points are to be found at Fort William and lake Superior, at Keewatin and Kenora on the lake of the Woods, at Winnipeg, and at various other localities on the trunk lines of railways. It is interesting to note that the three mills at Medicine Hat obtain their power from natural gas which is used to drive electric motors.

Milling Statistics.

Statistical data are collected from mills both large and small throughout the Dominion and the generous response to questionnaires has made it possible to compile publications of value to the trade. A monthly report is published under the heading "Canadian Milling Statistics" showing the wheat and coarse grains ground, together with the resulting

products. Copies of this report are available separately or in conjunction with the "Canadian Grain Statistics" - a weekly report on grain supplies and movements. The yearly report of milling statistics appears in a section of the Annual Report of the Grain Trade of Canada. A list of mills with capacities is published in mimeograph form for distribution.

Milling Capacity.

The flour mills of Canada have attained a capacity far beyond the requirements of their domestic markets. The population of the home market, numbering approximately ten and one-half million, requires only about 41,750,000 ~~barrels~~ bushels of ~~flour~~ wheat. The quality of the hard spring wheat flour is widely known and the flour manufactured from soft winter wheat grown in Ontario has considerable reputation in British markets.

The distribution of the commercially important milling capacity may be shown by provinces as follows:-

Number of Flour Mills in Canada and Milling Capacity, by Provinces.

	Number of Mills.	Capacity in Barrels per day.
Prince Edward Island	18	706
Nova Scotia	16	168
New Brunswick	30	526
Quebec	352	13,614
Ontario	670	55,427
Manitoba	38	12,090
Saskatchewan	60	13,957
Alberta	75	14,166
British Columbia	6	1,394
Canada	1,265	112,048

The more important milling centres, with capacities, are located as follows:-

Important Milling Centres in Canada.

	Capacity in Barrels per day.		Capacity in Barrels per day.
Montreal, P.Q.	x 21,000	Vancouver, B.C.	1,100
Keewatin-Kenora, Ont.	14,800	London, Ont.	1,050
Port Colborne, Ont.	14,000	Brandon, Man.	x 950
Winnipeg-St.Boniface, Man.	8,500	Factoria, Sask.	x 850
Medicine Hat, Alta.	6,000	Chatham, Ont.	800
Peterborough, Ont.	x 5,500	St. Mary's, Ont.	700
Calgary, Alta.	5,200	Seaforth, Ont.	x 700
Saskatoon, Sask.	4,200	Stratford, Ont.	700
Moose Jaw, Sask.	4,000	Edmonton, Alta.	640
Toronto, Ont.	3,125	Lethbridge, Alta.	600
Fort William, Ont.	3,000	New Hamburg, Ont.	500
Goderich, Ont.	2,500	Souris, Man.	500
Portage la Prairie, Man.	1,500	Renfrew, Ont.	400
Brantford, Ont.	1,200	Woodstock, Ont.	350
Midland, Ont.	1,200	Preston, Ont.	325
		Tavistock, Ont.	325

x Milling centres with some idle capacities.

The following table shows the quantity of flour manufactured in Canada over a period of years:-

Wheat Flour Manufactured in Canada 1920-21 to 1931-32.

Year.	Barrels.	Year.	Barrels.
1931-32	14,631,504	1925-26	19,024,715
1930-31	15,967,696	1924-25	18,179,820
1929-30	15,757,850	1923-24	20,845,308
1928-29	20,872,094	1922-23	19,436,775
1927-28	19,074,007	1921-22	15,468,007
1926-27	17,861,911	1920-21	10,500,248

Exports of Flour.

As regards the exports of wheat flour from Canada during a series of recent years, the following table shows totals:-

Total Exports of Wheat Flour from Canada 1918-19 to 1931-32.

Year.	Exports in Barrels.	Year.	Exports in Barrels.
1931-32	5,383,594	1924-25	10,169,692
1930-31	6,701,663	1923-24	11,990,842
1929-30	6,778,023	1922-23	11,069,054
1928-29	11,308,775	1921-22	7,878,589
1927-28	9,865,754	1920-21	6,886,560
1926-27	9,247,824	1919-20	5,572,688
1925-26	10,896,654	1918-19	9,672,290

Total exports of wheat flour from Canada to the United Kingdom over a period of years are as follows:-

Exports of Wheat Flour from Canada to the United Kingdom 1918-19 to 1931-32.

Year.	Exports in Barrels.	Year.	Exports in Barrels.
1931-32	2,223,039	1924-25	2,685,217
1930-31	2,493,931	1923-24	4,112,356
1929-30	2,382,524	1922-23	4,697,745
1928-29	2,637,867	1921-22	4,587,429
1927-28	3,099,216	1920-21	3,625,425
1926-27	3,318,435	1919-20	2,733,744
1925-26	3,368,450	1918-19	6,274,298

Cheap Power Abundant.

One of the chief factors in the development of milling in Canada has been the abundance of readily available water power. Few of the big milling plants are now dependent upon steam, since water-driven electrical equipment has largely supplanted that means of operation. The country is rich in unused power resources that are certain to be brought into service in years to come.

Transportation.

In addition to the milling capacity described and an unlimited supply of wheat to sustain and support the same, Canada has railway and ocean shipping facilities that meet the needs of overseas markets to the fullest extent. The trans-continental railways provide ready access to both Atlantic and Pacific oceans from every settled part of the country, with eastern terminals for summer traffic located at Montreal, Quebec and Sorel on the St. Lawrence and the winter ports at Saint John and Halifax on the Atlantic seaboard, while Vancouver, Prince Rupert, Victoria and New Westminster supply excellent shipping facilities on the Pacific Coast. With the completion of the railway from The Pas to Churchill, the Hudson Bay route has been developed.

The electric railways and motor buses in Canada bring the rural districts into closer connection with the urban centres. The highways are becoming increasingly important as routes of transportation.

The waterways of Canada are superior to those of most other countries in the world, the Great Lakes and the St. Lawrence river forming an unrivalled system of inland water transportation.

SUMMARY OF DOMINION BUREAU OF STATISTICS PRICES AND EXCHANGE DATA.

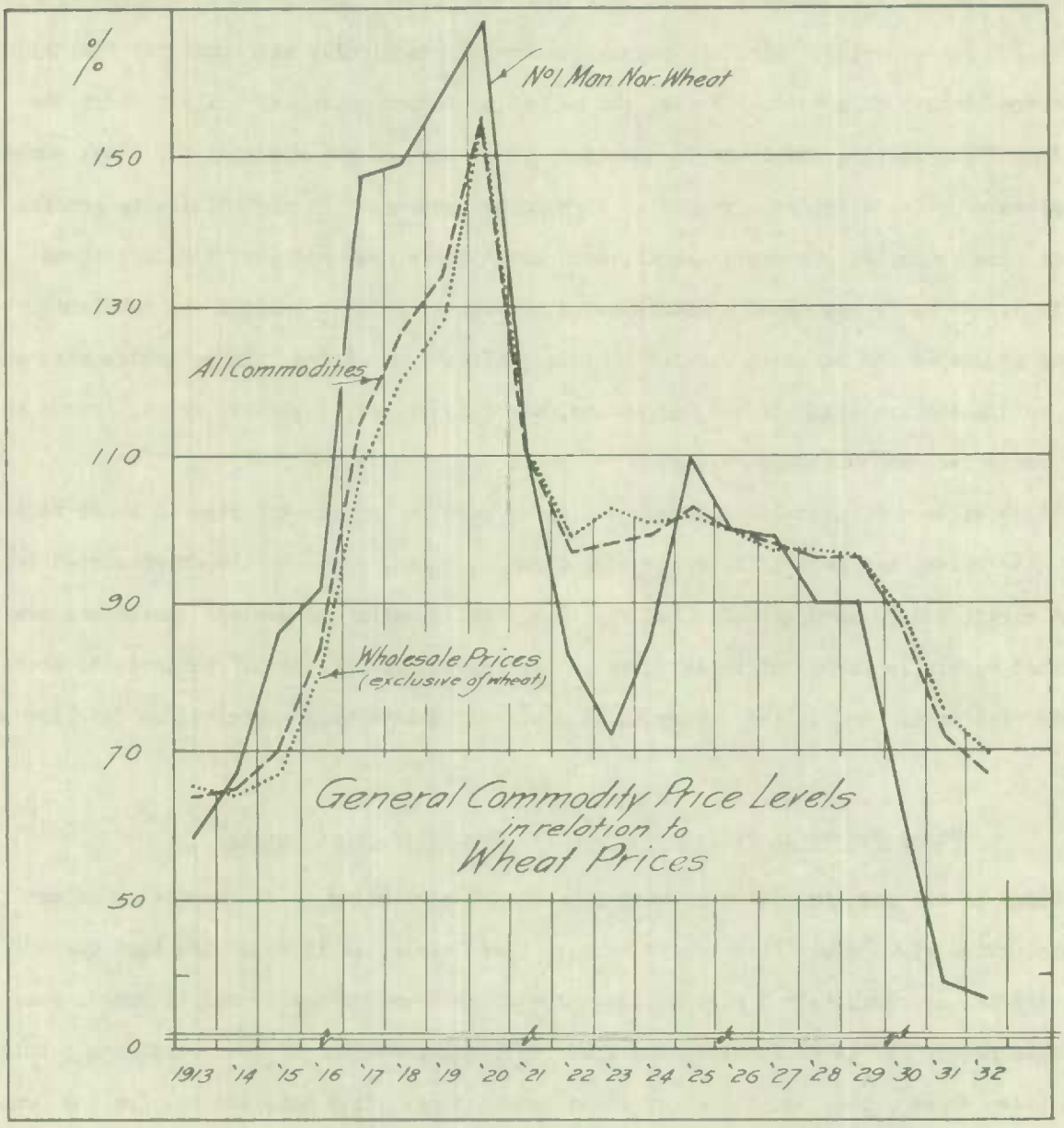
Wholesale price records of the Dominion Bureau of Statistics for basic commodities extend back to 1868. The scope of these data has been increased, particularly in recent years, and the early files covering roughly two dozen items, have grown to include approximately 700 price series, which are representative of practically all commodity fields. Prices are secured on a monthly basis, the majority of them coming directly through the mail from firms selling the items in question. They furnish the material for index numbers of wholesale prices which are grouped to show price movements for commodities in general, as well as farm products, producers' goods, consumers' goods, raw and partly manufactured materials, and fully and chiefly manufactured materials. These indexes are published monthly in one of the Bureau's regular bulletins "Prices and Price Indexes" which also contains information relating to cost of living, security prices, interest rates, prices in other countries, and exchange rates.

Since exchange fluctuations have grown to be such an important factor in trade relationships, the Bureau has kept daily records of Canadian dollar rates on the chief currencies of the world, quoted at Montreal. Monthly high, low, closing and average quotations are published regularly for 21 of these units in "Prices and Price Indexes" referred to above. Records of sterling and United States dollar quotations have been preserved as far back as 1914.

Wheat Prices in Relation to General Commodity Price Levels.

Wheat is the most important primary commodity contributing to the formation of our national price structure. When prices were at 1926 levels, it is estimated that wheat accounted for approximately 9 p.c. of the value of all commodities traded in Canada upon a wholesale basis. It is of interest therefore to learn something of the relationship existing between wheat prices and those for other commodities. With this end in view the Dominion Bureau of Statistics has constructed a special index number of wholesale prices covering the period 1913-32, which is identical with the Bureau's general wholesale price index series, except that wheat quotations are excluded from it.

This period is of more than usual interest, including as it does, two intervals of highly unstable prices separated by an intervening stretch of eight years when a fair degree of stability prevailed. Monetary factors are generally



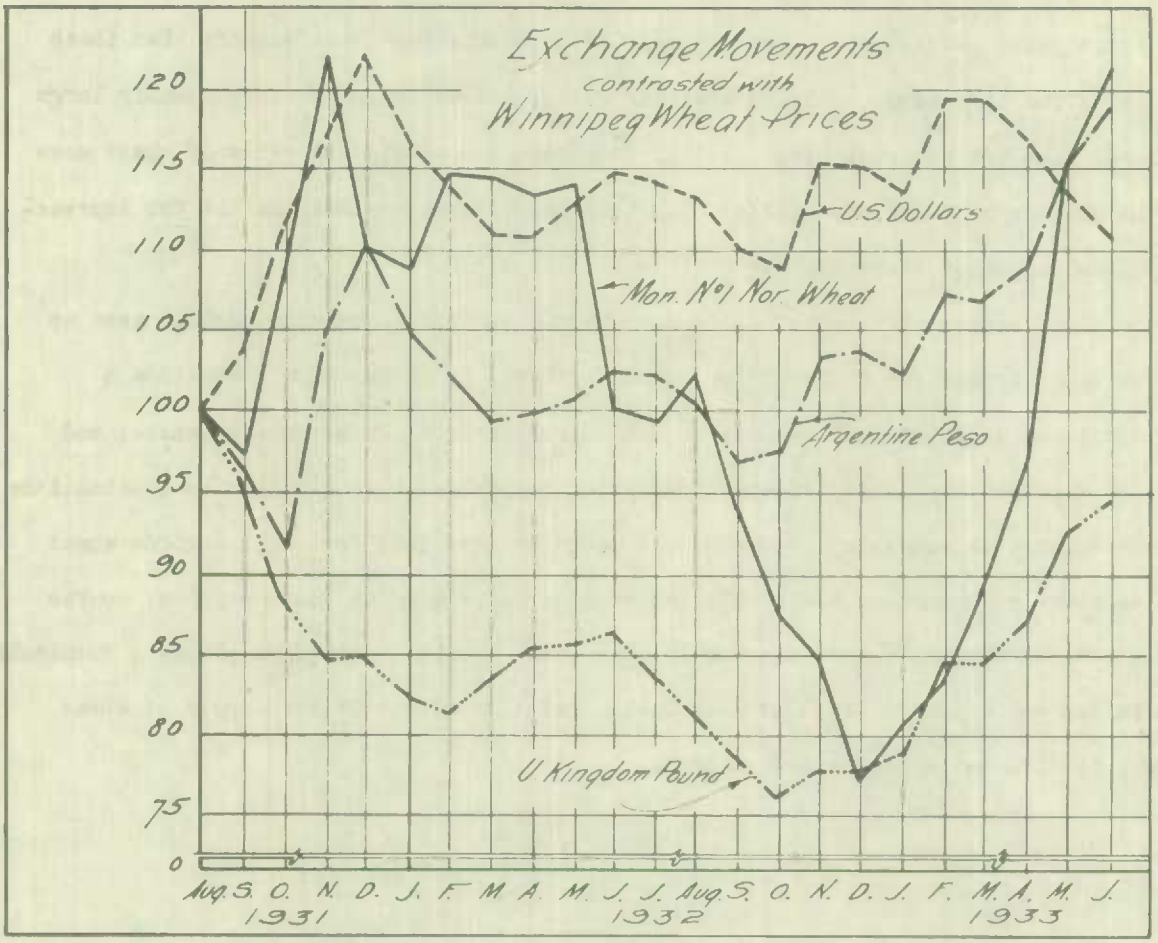
credited with causing the rapid rise which occurred during the war years and immediately after, as well as the drastic corrective movement in 1920-21. For the 1930-32 decline, however, over supply of basic commodities has been frequently blamed, although monetary causes are often cited by competent authorities.

An examination of the chart on page 47 reveals a fairly close parallel between wheat prices and other commodity prices for the period under observation. It is at once apparent that wheat, a primary commodity, has been in the van of general advances, and likewise has preceded large price recessions. Furthermore, its movements have been broader than those of the general run of prices. Only in the year 1923, however, when an exceptionally large crop followed upon the sharpest price decline in modern times, did the price of wheat move against the average of other commodities. In that year, wheat was responsible for depressing the general index of wholesale prices by well over 4 p.c.

The close agreement of wheat price movements with other commodity markets seem to be of major significance for at least two reasons: first, it gives wheat quotations a special importance in "long-run" studies for which prices data are extremely scarce; and secondly, it furnishes valuable evidence supporting the belief that broad price fluctuations are closely related to monetary phenomena. It is quite true that for short periods wheat prices have shown a remarkably exact reaction to changing stocks on hand, which of course themselves respond gradually to rising or falling price levels. This fact places a formidable obstacle in the way of any attempt to measure the relative effect of the supply of wheat and the supply of money as price determinants.

Exchange Fluctuations and Wheat Markets.

The intricate machinery of the international wheat market has been further complicated during the past two years by violent movements in exchange, which followed widespread abandonment of the gold standard. In addition to disturbing the regular channels of trade, these movements have affected considerably the



competitive position of large wheat-exporting countries. This fact is illustrated graphically in the chart above which shows the relative movements of No. 1 Manitoba Northern wheat prices along with sterling, peso, and U.S. dollar exchange rates at

Montreal. (Australian exchange movements compare closely with those of sterling.) Quotations in August, 1931, are taken as the base for these comparisons, because August was the last full month in which exchange markets were reasonably stable.

Although day to day fluctuations of the wheat market at Winnipeg and sterling exchange at Montreal often have displayed strikingly similar movements, it may be seen that over a period of months wheat prices followed a course which shows little resemblance to that of sterling. In the months of September and October, 1931, and December, 1932, this was particularly apparent.

Since September, 1931, there have been three broad movements in wheat prices. The first, in October and November, 1931, followed after a decline in Russian shipments and consequent improvement in the export situation. Commodity markets generally were active in this interval. For the next thirteen months the trend was definitely downwards. The beginning of this decline coincided with the marketing of the new Argentine and Australian crops, while in later months bountiful harvests in Europe and Canada were more than sufficient to offset the bullish influence of light yields of United States winter wheat. Just prior to the commencement of recovery in January, 1933, record low market levels were reached when new Argentine wheat competed freely with Canadian offerings for the limited export market then existing. A diminution of pressure from exporting countries and strength in sterling exchange paved the way for the rise which has continued since that time. Consistently bullish news concerning North American crops has played a considerable part in this latest movement.

Exchange fluctuations of nearly all currencies since September, 1931, have resembled closely those for sterling and the United States dollar. Until gold shipments were suspended by the United States, the Argentine peso moved in line with New York funds, but subsequently it has followed sterling, which in turn has maintained a fairly stable relationship with the gold bloc. The Canadian dollar until recently has pursued a middle course between sterling and the United States dollar, but in the past few weeks it has been quoted at a small discount in terms of both these units. The usual seasonal weakness in Canadian dollars during the late winter and spring months, and the summer revival coincident with trade improvement, shows clearly in exchange movements charted for 1932.